THE UNIVERSITY OF HULL

What Future for the *Shamba la Bibi?* Livelihoods and Local Resource Use in a Tanzanian Game Reserve

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Abbreviations and Acronyms

AWF	African Wildlife Foundation
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources (implemented in Zimbabwe)
CAWM	College of African Wildlife Management
C-BC	Community-based conservation
CCM	Chama Cha Mapinduzi, the ruling party of Tanzania
CITIES	Convention on International Trade in Endangered Species of Fauna and Flora
DANIDA	Danish International Development Agency
DFID	Department For International Development (British Government, ODA)
DGO	District Game Officer
EU	European Union
FCO	Fauna Conservation Ordinance
FR	Forest Reserve
FZS	Frankfurt Zoological Society
GCA	Game Controlled Area
GDP	Gross Domestic Product
GR	Game Reserve
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
IMF	International Monetary Fund
IUCN	World Conservation Union, formally the International Union for the Conservation of Nature
MaGR	Maswa Game Reserve
MGR	Mkomazi Game Reserve
MTNRE	Ministry of Tourism, Natural Resources and Environment
MRALG	Ministry of Regional Administration and Local Government
NCAA	Ngorongoro Conservation Area Authority
NGO	Non-Governmental Organisation
NORAD	Norwegian Agency for International Development
NP	National Park
PA	Protected area
PAWM	Planning and Assessment for Wildlife Management
PM	Project Manager
ODA	British Overseas Development Administration
RC	Regional Commissioner
RDD	Regional Development Director
RGO	Regional Game Officer
RHA	Resident Hunters Association
RNRO	Regional Natural Resources Officer
RNP	Ruaha National Park
SCP	Selous Conservation Project
SGR	Selous Game Reserve
SIDA	Swedish International Development Agency
SWRI	Serengeti Wildlife Research Institute
TANAPA	Tanzania National Parks (also TANAPA Community Conservation Service (CCS)
TAHOA	Tanzania Hunters Association
TAWICO	Tanzania Wildlife Corporation
TBCS	Tabora Beekeepers Co-operative Society Ltd.
TGTS	Tanzania Game Tracker Safaris

TRIDEP	Tabora Rural Integrated Development Project
TTC	Tanzania Tourist Corporation
TWPF	Tanzanian Wildlife Protection Fund
UGR	Ugalla Game Reserve
UNCED	United Nations Conference on Environment & Development
UNEP	United Nations Environment Program
UNESCO	United Nations Educational, Scientific and Cultural Organisation
USAID	United States Agency for International Development
VWC	Village Wildlife Committee
WCA	Wildlife Conservation Act of 1974, the principle legislation governing Tanzanian wildlife conservation.
WMA	Wildlife Management Area
WWF	World Wide Fund for Nature, formally the World Wildlife Fund

In order to protect their identity, the names of persons referred to in the text have been changed to pseudonyms, similarly names of the villages, sub-branches of the Tabora Beekeepers Co-operative Society, and the seasonal camps at the centre of the research have also be changed.

During the time of field research, the rate of exchange was roughly Tanzanian Shillings. 323.0 to $US 1.00 (1992), T.Shs. 487.0 to $US 1.00 (1993), and T.Shs. 525.0 to $US 1.00 (1994).

Erratum

Formatting errors in text:

Chapter 7, the last footnote is 228 and first footnote of Chapter 8 is 230.
Chapter 9 ends on page 335 while Chapter 10 starts on 356.
Chapter 10 ends on page 367, page 367 is repeated at the beginning of Chapter 11.
Chapter 11 ends on page 344, page 344 is repeated at the beginning of Chapter 12.

Introduction

Research Issues

This thesis is about wildlife conservation and people's livelihoods in Tanzania. Through an ethnographic study of a protected area known as Ugalla Game Reserve, it looks at the manner in which different groups of people view and use the locality to make a living. By focusing on two activities established in the reserve, beekeeping and fishing, it seeks to identify how the existence and management of a protected area may - or may not - contribute to people's lives and well-being. Emphasis is placed in the study on the need to understand how local resource use and practices of resource allocation engage with wildlife management as carried out by representatives of the state and of international conservation bodies. In short, how externally generated conservation planning meets with internal responses, and the nature of local social processes and idioms of understanding that give rise to these responses.

The research takes as its starting point the so-called 'people-oriented' approaches to wildlife conservation. Such initiatives have been seen as a means of going beyond the 'conventional' forms of wildlife management that grew up in southern Africa during the colonial era, and which were perpetuated by independent African governments. These conventional approaches have been widely criticised for their failure to achieve the objective of conserving wildlife, while their preservationist orientation has been held to be inherently inequitable, ignoring the lives and livelihoods of rural African people.

Recent initiatives, which have linked conservation to rural development, started to become popular in the 1980s, drawing into conservation ideas associated with global environmentalism, social movements for human rights, and participatory approaches to development. These three strands together contributed toward making visible 'the fact that the fate of most of the world's biological diversity lay in the hands of the poorest people in the third world', in the words of one commentator, and also that these people could provide solutions to conservation problems rather than being perceived solely as 'the problem' (Western & Wright, 1994a). Approaches to

people-oriented conservation encompass an attempt to transform 'conservation from above' into 'conservation from below', moving away, rhetorically at least, from government institutions and foreign donors to local institutions and actions by the rural people who are themselves most affected. In Tanzania, these people-oriented approaches are commonly referred to as 'community-based conservation' and to date several different programmes and projects have been initiated in the country. Indeed it can be said that the concept of community-based conservation has entered into national-level policy and planning to the extent of becoming a new orthodoxy.

My initial determination to carry out this research began with a dissatisfaction with the biological science and Economics biases that appear to be prevalent in much of the documentation on people-oriented approaches to conservation; also a gut feeling that one needs to look beyond the oft-used concept of 'community' so as to understand people's actual lives and relationships both to natural resources and to conservation-related planning. One can be sympathetic to the fundamental premise of people-oriented approaches, namely that rural people need to be drawn into conservation in such a manner that their livelihoods are supported and enhanced, enabling them to contribute to the maintenance of natural resources and the land-use planning which affects their lives; however, the way in which these approaches are implemented has, it seems to me, many shortcomings. It appears essential to analyse the conservation process itself, for despite new ideas that have been heralded as a way forward for wildlife management, there seems to be a lack of discrimination by many within the conservation community, carrying the danger that development-oriented conservation planning instituted at the international level acts in reality, in the actual implementation within national contexts, as a vehicle for the perpetuation of older, practices, assumptions, and values.

In a country like Tanzania, it is easy for representatives of Government departments and conservation bodies to become adept at using a language appropriate to community-based approaches to conservation, but the use of this language in itself does not necessarily mean that ideas are being carried into practice. Indeed a concept may be used in reality to serve very different ends to the interests of rural African people, or to the preservation or wise management of wildlife. This opens up two fields of enquiry for studies examining the protection of biodiversity: first, the need to critically examine the nature of conservation policy (c.f. Gibson, 1995). Second, the need to consider how these policies are implemented. These fields of enquiry encompass the actions and practices of different individuals and social groups,

including bureaucrats, scientists, and members of the donor community; in short, a context that is all too often left as an untouched 'black-box'.

This study uses the case of Ugalla Game Reserve to illuminate the significance of people's practices with regard to protected area conservation in ways, it is hoped, others may find relevant for conservation-oriented development planning. To some, this PhD thesis may appear to follow the 'actor-oriented approach' in rural sociology; certainly the language used is influenced by this perspective, as are some of the theoretical insights it draws on concerning development intervention and the role of people's agency in planned change. Nevertheless, it will be recognised that this is not an 'orthodox' actor-oriented piece of research, in part at least because it is concerned with environmental policy implementation, a field of study yet to be fully explored by those working within this approach.

At this point it is appropriate to explain the meaning of the title: 'What Future for the *Shamba la Bibi*? Livelihoods and Local Resource Use in a Tanzanian Game Reserve'. When I was first introduced to the group of beekeepers with whom I stayed in Ugalla Game Reserve, they welcomed me with a speech that said they were very pleased to be visited by a representative of Queen Elizabeth who was interested in the '*Shamba la Bibi*'. In Kiswahili '*shamba*' means a farm, while '*bibi*' literally means grandmother and is a common term of respect. It was later explained to me that they meant the Queen's Game Reserve and during the course of fieldwork I regularly heard Ugalla described in this way. While carrying out archival research, I found a document in the Tanzanian National Archives which referred to the Selous Game Reserve as the '*Shamba la Bibi*' and traced the origin of the term to the first reserves created in German East Africa in the 1890s, as, according to the archive, hunting reserves for the Kaiser's wife.[1] The people I met in Western Tanzania interpret '*Bibi*' to refer to the British Queen not to the wife of the Kaiser. After 35 years of Independence, this inherently colonial term seemed apt as a way of capturing the associations that rural people make between the conservation of wildlife and the colonial era, serving as a sharp reminder of how deeply entrenched established conservation ideas, meanings, and practices are at the local level.

It should be mentioned that at many points in the following discussion I refer to 'protected area conservation' in preference to the more specific terms 'wildlife conservation' and 'wildlife

[1] Game Reserves, TNA.Mss.11551, Volume 1.

management', or to the recent phrase 'biological diversity conservation'. Here the term 'protected area' is used to encompass all categories of nature sanctuary where the management of wildlife takes place. In Tanzanian conservation parlance, 'wildlife' is taken to imply all non-domesticated non-marine fauna (although there is often a bias towards large mammals) and 'wildlife conservation' is used to embrace "(i) species and ecosystem conservation in the broad array of Tanzania's biological diversity, through the gazettement of protected areas in critical sites, (ii) attempts to manage the human use of species and ecosystems in a sustainable way, such that species are harvested at rates not exceeding the intrinsic rate of increase of their populations" (WSRT, 1995: 5).[2] There is a close connection, therefore, between wildlife, biodiversity issues and the management of protected areas; however, 'wildlife conservation' is in some instances too narrow to encompass the wide range of natural resources that form the basis of people's interests in the area of study, or to capture the attraction certain groups of people hold to working in a protected area specifically, thus the preference for the term 'protected area conservation'.

As to the reference to livelihoods and local resource use in the title: to take the latter term first, 'local resource use' is a general expression that encompasses resource exploitation taking place in the reserve, be it local sports-hunting, timber-cutting, fishing, cattle-keeping, bush-meat and trophy hunting, honey hunting or beekeeping. The term livelihood is more specific, and in its definition I follow the Shorter Oxford English Dictionary as 'the means by which people, directly or indirectly, make their living'. This encompasses people's manner of life whatever their relative standing in society. In the context of this discussion, beekeeping and fishing in the reserve are taken to contribute to the living of certain people whose livelihoods, as a totality, are based on multiple productive activities. If we are to understand the nature and dynamics of local resource exploitation in Ugalla Game Reserve, we need to analyse the ways in which different people use, manage, and give meaning to their environment in the process of making a livelihood.

Throughout this study, people who keep bees in Ugalla Game Reserve are referred to as 'beekeepers' and those who fish as 'fishermen'. These categories are used in order to facilitate a reading of the thesis, however analytically they create problems, the reasons for which are

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[2] 'To gazette' or bring an announcement to public attention through an official journal, was a term first adopted in African countries in colonial times. Although it is not in common parlance in Britain, in many ex-British colonies it continues to be used, as in this case, to refer to land brought within the jurisdiction of a particular wildlife authority through an Act of Parliament, as well as more extensively.

two-fold, the first is that Chapter 4 analyses how such categories have developed, it is therefore confusing to reproduce the very terms under critical scrutiny. The second is that people carry out many different livelihood activities and are not simply beekeepers or fishermen. If a man is asked his occupation by a researcher the reply is invariably 'I'm only a farmer', it will then transpire that he describes beekeeping and fishing as a 'mixed farming'. In Ugalla, people clearly categorise one another as 'beekeepers' and 'fishermen', but these terms are relative and relational, for in other places or at other times of year, a 'beekeeper' may fish, farm, hunt, act as a labourer, tailor, or carpenter, etc.

To locate the topic and approach of this thesis in relation to existing literature, let us consider different perspectives concerning the social and political aspects of protected area conservation in sub-Saharan Africa. The first perspective is that of studies that explain human resource conflicts in terms of the population increase / land availability ratios. Yeager & Miller (1986), for example, analyse the "man : land : wildlife equation" in Kenya and Tanzania in these terms. The notion of population growth is linked to that of the carrying capacity of the land, with reference to such outcomes as poverty, incipient rural over-crowding, urbanisation and migration. To take an illustration of their view: "[c]ontemporary Tanzanian policy makers have made some attempts to stabilise each side of the man : land : wildlife equation on behalf of income-earning tourism and agricultural development...[but their actions]...have been meagre, ideologically based, and developmentally dysfunctional. As a result many of Tanzania's human and non-human inhabitants face immediate threats to their existence...[creating]...a downward spiral of misery and death" (Ibid.: 66). Here we see the application of a neo-Malthusian argument, one that appears to be gaining in popularity together with recent concerns over biodiversity loss (cf. Wilson, 1992: 254; Ehrlich & Ehrlich, 1991). In the contribution of Yaeger & Miller, the administrative boundary of a protected area is presented as a clear-cut feature of the landscape: on the inside is a vacant-lot of natural resources, on the outside, a population which exerts active pressure upon the boundary through resource use for subsistence needs. The state delineates a protected area and state representatives become decision-makers controlling and regulating the uses its natural resources are put to.

One can compare this account to a study by Matzke (1975; 1977) which, although dated, is one of few socio-geographical analyses to have been carried out in a protected area in Southern Tanzania. In an exploration of the changing relationships between people and wildlife in the Selous Game Reserve, Matzke sets out to advance the hypothesis that human populations have

occupied spaces critical for the maintenance of wildlife species, and in effect they have precluded habitation of these spaces by wildlife (cf. Kjekshus, 1977; Ofcansky, 1981). His conclusions support the argument that human occupation has depressed the presence of some large mammal species, although not of all species.

Although the views of Yaeger & Miller and of Matzke are very different, they have in common a tendency to reduce human agency to driving 'mechanisms' or inherent 'pressures': in the one case people are perceived as a homogeneous population, motivated by the driving force of poverty, in the other, the 'human-wildlife interface', has a dynamic propelled by human and animal strategies for survival.[3] In neither instance do the authors portray people as aware and discriminating individuals able to utilise and deploy resources with discretion, and with whom bureaucrats must interact in the implementation of policy. The perspective of these authors points to the relevance for conservation planning of an understanding of the complex and differential linkages that human individuals and groups hold with a protected environment.

A second perspective on conservation issues is that of Richards (1994; 1996a/b) who provides us with a very different notion of the 'space' associated with a protected area, in this case the Gola Forest on the Sierra Leone-Liberia border. In a discussion on conservation and globalization issues, the forest is represented as a conceptual space emerging from and interacting with local knowledge, social institutions and conflicts over resources. In this view of the forest, people's need to subsist and survive is located in dynamic interaction with global markets and the remnants of the Sierra Leonean state. Here the 'nature' that conservationists seek to protect is beyond the edge of the state but at the same time an arena where contests arise over control of the state, as a rebel group of 'embittered educated revolutionaries' seeks revenge for the insults, real or imagined, of modernity (Richards, 1996b: 1). Richards argues that this group of insurgents "treat the forest, the history of resource struggles taking place within forests, and the character of forest social institutions, as a 'spur' to a series of practical judgements about the risks and benefits of political action based on violence" (Ibid., 7). Interestingly, the forest is not a retreat from modern life as it has on occasion been represented in colonial visions of African nature but, instead, part of a contested modernity.

[3] Agency refers to the capacity of the actor to process experience, to deal with life situations, and to solve problems, being both "knowledgeable" and "capable". The concept does not refer to an individual's daily intentions, but rather to their capability of doing things at all (Long, 1989: 223, citing Giddens, 1984: 1-16).

Elsewhere, Richards (1996a) concentrates on the forest and the market, and, again, the forest is placed outside the state: "rain forests provide a zone of opportunity 'beyond the pale'" (Ibid., 149). They are part of a global market place in which 'unbridled individualism' in forest resource exploitation - principally of diamonds - takes place and an influx of global telecommunications is possible. The examples of violence and diamond mining are both used by Richards to argue that there is a radical disjunction between the interests and ideas of conservationists and those of local people. This study draws attention to the importance of having a very clear conception of how what is taking place in a protected area relates to external processes.

A parallel, although very different study to the work of Richards, is that of Gibbon (1996) who examines the nature of resource exploitation in the context of market-led development in Tanzania. Gibbon argues that there has been a breakdown in state regulation of natural resources, which, in recent years, has been coupled with the growth of export markets for them. The nature and dynamic of the resource exploitation taking place is characterised by the concept of 'wild capitalism'. Richards and Gibbon have shown that there are negative characteristics in the interrelationship between state, markets and the conservation of natural resources, which constitute a very interesting political dimension, and their case studies underline the need for conservationists to understand the nature of the inter-relationships. Taking the case at the centre of this study, Ugalla Game Reserve, it is by no means an arena of extreme violence or statelessness, but there are limitations on the state's capacity to regulate what takes place in the area (due to lack of financial resources, political will, or inattention on the part of individual bureaucrats, etc.), and thus it provides a good setting to explore how and to what extent the market becomes a key organisational form for people to use their local knowledge in order to exploit resources.

Another anthropological work, also on the Gola Forest, sharing the attention Richards gives to local knowledge and practices, is by Leach (1994). Her research takes a gendered perspective to consider the implications of forest resource-use management practices for people-oriented conservation. Through an in-depth ethnographic study she examines how villagers interact with their environment amidst shifting local socio-economic and ecological conditions, together with changing pressures from the wider political economy. In her portrayal of the relationships between external development planning and local responses, she suggests that change introduces new interests, opportunities, difficulties, and dilemmas to which people have

responded in creative ways. Although villagers do have to confront environmental problems, their local knowledge and skills have been able to create new activities, drawing upon pre-existing tenure arrangements, with local institutions successfully managing the use of many valued natural resources. This leads her to argue that externally generated interventions have to 'lock into' local socio-political relations and idioms of understanding to have relevance for local people. She also makes the important point that although environmental control may be exerted through social institutions such as family, kinship and local government, this control is one outcome of the activities of these institutions not, in itself, their aim.

The generalised nature of the concepts that have emerged in thinking concerned with people-oriented conservation, together with an inherent tendency towards standardisation in policy formulation and implementation, indicates a danger that confronts participatory conservation programs; namely, that they may not adequately encompass the complexity of local social and political processes, their results thus falling short of expectations. The evident value of the studies of Richards and Leach in terms of their portrayal of the uniqueness and diversity of local situations highlights the need for further detailed case studies of localities and communities that form the loci for conservation-related development planning.

In reflecting on the success or failure of participatory conservation programs, consideration of gender relations is critical, as Leach makes plain for the West African context she describes (op. cit.). Access to resources, land tenure arrangements, productive tasks, etc., are differentially and unequally distributed between men and women, young and old, in ways which can have a profound influence on people's participation in planned change. Contrasting Leach's Sierra Leonean material with the circumstances of forest resource-use in protected areas in Western Tanzania suggests a very different picture. The reason for this is that, due to massive colonial and post-independence resettlement programs, villages are predominantly situated long distances from protected areas, so that these areas do not provide resources for domestic activities, i.e., the very tasks that are associated with the labour of women - collection of firewood or water, mushrooms and food plants, etc., or even the acquisition of building poles, and charcoal-making. Nor is there a pressure on land-use for agriculture in many areas. There is however an extreme paucity of studies on the gender relations of forest resource use in western Tanzania, as well as an apparent lack of concern over this dimension in policy-related literature on community-based conservation in Tanzania more generally (e.g. PAWM, 1994b; Leader-Williams et al., 1995a).

Working together with Fairhead, Leach has also examined conservation issues in another protected area in West Africa (Fairhead and Leach, 1994), in this case the Ziama Forest Biosphere Reserve in Guinea. Using a historical analysis they explore the way that apparently 'natural' conservation areas have been generated in interaction with people. Tensions between conservationists and local people are linked to the latter's desire to re-establish control over their ex-social domain. According to the authors, if historical connections between people and an area are over-looked, constructive dialogue between local inhabitants and conservation agencies whose thinking is ultimately supposed to be concerned with the public good can be undermined. Their discussion leads us to questions as to how one should explain resistance to conservation planning; for example, is such resistance a reaction to specific policies or does it arise because bureaucrats do not leave room for local people to interact generally with natural resources in a manner that is most beneficial and meaningful to them?

Studies carried out by four authors on the North and South Luangwa National Parks of Zambia offer further perspectives on protected area conservation (Abel & Blaikie (1986), Marks (1976; 1984), and Gibson (1995)).[4] Abel & Blaikie try to develop a methodology to assist us in analysing the use of wildlife resources in rural development. To this end, and from the viewpoint of political economy, they set down a framework of the major interest groups who are influential in the formulation of national park and wildlife policy: hunter-cultivators, safari hunters, conservation pressure groups, the bureaucratic bourgeoisie, and scientists. Each interest group is located by the authors in a relational position within the Zambian political economy with a description of their sources of power, interests and aims in relation to wildlife, and the means they possess to reach those aims (Ibid., 738). Although this study is now dated, it is helpful because few attempts have been made to generate a methodology for examining key wildlife policy issues.

The authors argue that contradictions within Zambian national park and wildlife policy arise from conflicts between different interest groups, resulting both in an incapacity to conserve wildlife and in subsequent hardship for rural communities. Their representation of a protected area is a structure of competing interests that are linked to the world economy through such interchanges as exist in the ivory trade. Here we have another approach that is not dissimilar from the perspective of Gibbon cited above. Unfortunately their structural emphasis limits

[4] See Fisher (1992) for a comparative discussion of conservation issues in the Luangwa Valley, Zambia and the Ngorongoro Conservation Area, Tanzania.

one's ability to see how local actors, social institutions, and organising processes interact with market-led interests; nor do the authors consider whether local actors have the capacity to situate externally generated demands for resources and products within local frameworks of thinking and acting and, as they do not do this, it must be difficult to develop local solutions to the problems they have identified.

In this respect Marks' study (1976) of Valley Bisa hunters in the Munyamadzi corridor of the Luangwa Valley presents us with a much greater social complexity than is portrayed by Abel and Blaikie. Marks illuminates a local situation that is not purely a product of interactions between interest groups. It is a complex, however, which interest groups outside the area have to comprehend if they are to engage effectively with local people. Here we come back to the issues raised by Leach concerning the manner in which conservation planning engages with social processes at the local level. It again raises the question of whether and in what way planning designs can be transformed through the organisational capacity and practices of local people. It is for this reason, that we can raise the issue of the need for further research on how conservation policies are implemented and the importance of taking into account the relationships between people and bureaucrats. This subject is only touched on here. There is indeed a need for further research, for the whole question is obscured from view in literature on African wildlife conservation and, moreover, there have been few in-depth academic studies in this environmental field.

A later study by Marks, 'The Imperial Lion' (1984), draws on his earlier work to put forward a conceptual framework for describing and analysing events in Central Africa as they impinge on the management of wildlife (c.f. Marks, 1979; 1994). His perspective is interdisciplinary and, owing to his extensive knowledge of the local situation, contrasts markedly with that of Abel and Blaikie. However he too places weight on the implications that external influences have for African environments and people, although instead of the world economy he stresses the influence of 'northern' scientific and cultural ideas, which he portrays in inherently negative terms.

Marks develops his analysis through a systemic approach to resource use and the circumstances of change, based on a model of resource systems formulated by Firey (1960). He uses it to promote the need for an integrated approach to conservation issues, combining different resource systems - ecological, politico-economic, cultural, and normative. Through the use of a

Venn diagram, he shows how possible resources and events within a geographical area inhabited by a 'local society' are drawn into a resource system. He places emphasis on people's cultural and cognitive frameworks, bringing the social malleability of wildlife resources to the fore in ways that, he argues, conventional approaches to wildlife conservation ignore.

This perspective is interesting because it puts forward a conceptual framework to further understanding of how elements of the environment are brought into the socio-cultural domain and themselves become the subject of conflict through the clash of different cultural meanings. It provides also a schema for analysing the relationships between the externally-led dynamics for change and the local situation. It does, however, suffer from the general limitations systemic analysis forces upon our understanding of reality; namely, it tends to simplify complexity in attempting to integrate disparate elements, while over-emphasising the importance of stability. It does not help us to explain the role practices play as a mobilising force in the interaction between people and resources. Given that, in general, conservation programs aim to change people's practices, this omission has important implications for conservation-related development planning.

Moving away from the anthropological perspective of Marks, Gibson (1995) analyses wildlife policy in Zambia between 1964 and 1991. He focuses on the case of a 'participatory' wildlife program implemented in the Luangwa Valley, exploring how individuals and groups compete to shape wildlife policy to benefit themselves (cf. Gibson & Marks, 1995). Gibson raises the question of why conservation bureaucrats in the 1980s designed institutions that ignored certain conservation goals. He argues that the decisions of program managers regarding budgets, personnel and expansion had less to do with good conservation than with their personal interests and protecting themselves from political uncertainty. This is linked to a brief examination of why rural residents did not respond to the conservation programs introduced there. Rather than desist from previous hunting practices, locals continued - while accepting the program's benefits; this, he argues, was at least in part because the program offered benefits in the form of 'public goods' (schools, roads, grinding mills, clinics, game meat, etc.) open to all, whether or not individuals hunted illegally.

The value of a study such as that of Gibson, dissecting the manner in which conservation policy is negotiated during the process of formulation, is that it offers a perspective which gives us an

insight into the way national interests are brought to bear in the process of policy formulation. One limitation, however, is that this perspective does not adequately encompass analysis of the process of policy implementation, and so does not provide an insight into how policy is transformed through local claims and negotiations. Without this, we cannot know the implications that a policy, whatever the circumstances of formulation, has for the lives of the people most affected.

Neumann (1992) in his study of the struggles that arise between Meru peasants and the state bureaucratic class in the Arusha National Park in Tanzania, links two bodies of work, studies of the representation of nature, on the one hand, and studies of the political ecology of peasant protest and resistance, on the other. His analysis focuses on how, for the purpose of national park conservation, the colonial state tried to appropriate resources of crucial importance to Meru household economies, and he links past actions on the part of the colonial government to present-day conflicts over 'illegal' resource use. This leads Neumann to argue that what was once a 'landscape of production' has been transformed into a 'landscape of consumption' for European tourists.

A similar perspective to that of Neumann is adopted by Moore (1993) who discusses peasant resource struggles in relation to the Nyanga National Park in Zimbabwe. By using an historical approach, Moore deploys a 'Gramscian metaphor' - viewing the landscape as a materially and symbolically contested terrain - for the purpose of analysing conflicts between peasantry and state. His conclusions take a dual approach in arguing that resource conflicts are simultaneously symbolic and material, as well as rooted in a particular historical context taking on different meanings for different actors.

Neumann and Moore both place emphasis on the structural dimensions of conflict over natural resources. The emphasis on the problems confronting the conservation of a protected area emerging through struggle between peasantry and state appears to override a conceptualisation of the 'interface' between human social practices and the environments within which natural resources are embedded.[5] Moreover, this view leaves out other key actors who may have an

[5] For elucidation of the concept of interface we can refer to Long (1989: 1-2) who defines a social interface as: "a critical point of intersection or linkage between different social systems, fields or levels of social order where structural discontinuities, based upon differences of normative value and social interest, are most likely to be found". To apply this concept to the relationships between people and their resources (non-human elements) it has to be adapted (Personal Communication with Alberto Arce, September 1997). It can be pointed out that the dynamic and potentially conflictual nature of the social interface is one, but not the only, property that can

influence in the sphere of wildlife conservation. Also, in the case of Moore, the creation of a dualism between the symbolic and material aspects of people's relationships to the environment appears to be unnecessarily limiting. His account tells us little about how actors link the symbolic and material realms together within their daily lives, and it is these lives which shape the uses, values, and meanings given to resources.

So far this discussion has made reference to three examples of different perspectives on resource-use issues and protected area conservation in Tanzania specifically (Yeager & Miller, 1986; Matzke, 1975 and Neumann, 1992). These examples in fact omit a large body of work on conservation in Tanzania approaching the topic through research on pastoral issues and, linking conservation to issues of analysis of range-land management, the impact of human sedentarisation, and relations between pastoral groups and the state (vide Monod, 1975; Jacobs, 1975; Homewood & Rodgers, 1984, 1987; Collett, 1987; Swantz, 1995).[6]

The greater proportion of this research has been carried out in the north of Tanzania - where protected areas, pastoralism and mass tourism are concentrated. In marked contrast, there is a paucity of research on protected areas and the social dimensions of conservation in the south of Tanzania.[7] Many of the key tourist game-viewing areas are associated with pastoral conflicts (the Serengeti, the Ngorongoro Crater, Mkomazi, etc.). Put simply, the reasons for this are due to the pastoral groups' claim that vast areas of land, once part of their transhumant pattern of

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characterise the encounter between people and their environment. It assists us to distinguish between 'natural resources', around which conflicts occur, and 'environment' which is the located dimension where human practices occur. The world around us is shaped and organised by people who define what is their 'environment' giving value and meaning to certain elements as 'natural resources', in order to direct their actions towards these resources. Without the alignment of actor's to the environment, and attribution of connections between value, meaning and resources, conflict cannot exist or arise, nor can people's everyday practices be imbued with meaning in the social construction of what is considered 'social' and what is considered 'natural', namely, the order that generates structural discontinuities and values, as well as individual and collective interests most likely to be expressed through claims, discourses and practices which the researcher has to locate according to their significance in the life of the people in question. This generates a dilemma, for the researcher has to negotiate a path between the synchronic and diachronic axis of an event. The interface between people and non-human environmental elements can arise as a critical point within the lives of people (e.g. see Chapter 3 on sleeping sickness resettlement concentrations around Ugalla). This issue has been pointed out because of the dramatic impact conservation policies can have on people's livelihoods, raising questions as to when conservation as a critical event is brought into people's lives, and how it serves to transform these lives through intended and unintended consequences.

[6] For a discussion and bibliography on wildlife conservation and pastoral issues in Northern Tanzania see Fisher, 1992.

[7] Reasons for this may be that the north houses the most well-known and visited protected areas in Tanzania, several of which are national parks, whereas many areas in the south are inaccessible and of lower conservation status.

land use, were enclosed by the colonial Government. This historical event is associated with heightened and running conflicts. Because pastoral issues diverge from the topic of this research, these perspectives will not be dwelt on at length, although reference needs to be made to the work of three authors.

Two studies that have been carried out in relation to Maasai groups, who live within the Ngorongoro Conservation Area are that of Århem (1984, 1985) and of Homewood and Rodgers (1991). Both studies are policy-related and discuss very specific management issues. Århem examines what he portrays as the central management issue of Ngorongoro Conservation Area Authority which is the conflict between conservation and pastoralist interests. This leads him to consider in what ways livestock-keeping in the area does or does not lead to environmental degradation. In his analysis he examines the different perspectives of the Ngorongoro Conservation Area Authority, the Maasai, tourists and external conservationists, respectively, and argues that rural development and wildlife conservation are two related forms of state intervention into the rural society of Tanzania, both being a part of the drive for modernisation. Furthermore, he emphasises how national park policy, which is seen as creating major problems for the Maasai in terms of loss of freedom and economic difficulties, is linked to markets through wildlife tourism.

Homewood and Rodgers (1991) also examine issues raised by conservation in the Ngorongoro Conservation Area, seeking to analyse the case from the point of view of, in their words, 'ecological fact and theory', linking applied biology to issues they hold to be pertinent to the management of the area - policies, politics and economics. According to the authors their analysis attempts to bridge the gap between the anthropological and development-oriented studies that fail to deal with the biological aspects of conservation arguments, and the biological studies that commonly ignore political and sociological realities that motivate and hamper management action.

The work of Århem and of Homewood and Rodgers addresses policy-relevant conservation issues in the Ngorongoro Conservation Area. Although the research of Århem is essentially ethnographic, both studies try to bring inter-disciplinary understandings to bear on the complex situation facing conservation managers and Maasai groups in the area. In this respect management issues are placed central to the analysis, however although Maasai perspectives are drawn on in the discussions, what seems missing from the accounts of both Århem and

Homewood and Rodgers is an actual analysis of how different groups of local people give meaning to conservation and use social resources available to them to negotiate the attempted implementation of conservation policy.

In the foregoing discussion, different perspectives on local resource use and the conservation of protected areas have been raised. This overview has focused attention on a number of key issues having a bearing on conservation policy and practice, indicating where there is a need for further research.

First, anthropological studies such as those of Richards, Leach, Marks and Århem describe a local complexity and diversity emerging from relationships people hold within a protected area, and the ways they use, value and give meaning to the environment. When this situation is set against the generalised nature of thinking on people-oriented conservation, and an inherent tendency towards standardisation in policy formulation, it raises questions as to whether the implementation of these approaches can fully encompass the complexity of local social and political processes or if they can incorporate the local knowledge that may be pertinent to policy formulation. It draws our attention to the need for further detailed case studies of the localities that form the locus for conservation-related development planning. This is one of the issues that this study will try to address.

A second issue that arises from the literature emerges from the way the environment, natural resources, and the 'space' within a protected area are depicted. Very typically, protected areas are represented as places in which natural resources (wildlife, scenic views, etc.,) are housed, protected by an administrative judicial system and managed by the state. A duality is created in that the 'natural environment' within the boundary is portrayed as distinct from what is outside, namely the domain of people and human social life. This representation emerges from planning models, and as such is not out of place, it is less appropriate, however, when it intrudes into academic discussions. Yeager & Miller, for example, portray a protected area as a physical space containing natural resources differentiated by state-led management from 'people's space'. Scholars who have sought to be more critical in their analyses include Richards, who describes a conceptual space beyond the state in which people use their local knowledge to interact with global markets, Fairhead and Leach who argue that a protected area is a social space in which history is an important part of people's claims to the area, to reinforce present social relations; Abel & Blaikie and Gibbon on the other hand, draw our attention to localities

that emerge from the relationships between different interest groups whose actions are shaped by the dictates of the world economy; and, as a final example, Marks represents a protected area in terms of resource systems that arise from the practices of local people, together with the practices of conservationists, which are embedded in northern scientific and cultural ideas.

These examples clearly show that different authors have dealt with the spatial features of protected areas in different ways, making us aware that there are multiple perceptions of what a protected area is, and different uses associated with the resources and locality. In this respect, the elements that constitute the 'space' emerge out of a multiplicity of different perspectives, which may or may not challenge the dominant management model. Another issue addressed in this thesis concerns the social and cultural character of the space within Ugalla Game Reserve, and questions the value of delineating the environment on the inside of a reserve from that which is on the outside.

A third point which emerges from this bibliographic review leads on to questions concerning whether, and how, conservation planning is situated and relocated through the knowledge, practices and organisational capacity of local people as, for example, is argued by Marks, Richards, Leach, Århem. In this respect, the nature of planning becomes an issue pertinent to the study of people's practices in Ugalla Game Reserve in order to understand how wildlife conservation is experienced in the area.

This takes us to the fourth point, which is that studies such as those by Gibson, Homewood & Rodgers, Århem, Neumann, and Moore raise the need to further examine the differential responses of local people to policy implementation. This implies the importance of taking into account the different institutions and the social complexity which exists at the local level and with which policy-makers and planners must engage.

Fifth, an issue highlighted by Richards, Leach and Gibbon, and associated with each of the points above, is the question of how to determine how relationships between the state, the market, and local resource-use have affected conservation. Given that the Government of Tanzania and multilateral donors have moved towards a neo-liberal ethos, it becomes particularly important to question to what extent the market has become an organising principle in shaping the way people exploit, manage and conserve resources.

One last issue generated by the literature review is that of gender relations and resource use. As will become apparent, a striking feature in the case of Ugalla Game Reserve is that the majority of activities in the area - including management - are male dominated and the role of women is virtually invisible. This implies the need for a different approach to the study of the gender relations of resource use in similar protected areas, for an individual researcher's capacity to carry out ethnographic research and draw women (real or imagined, present or absent) into this 'reality' is not easy. Although women are a mute presence in this thesis, it must not be forgotten that this female researcher had to operate in this context, enabling her to gain personal insight into issues related to the more overt presence of male activities in the forest, and the separations and relations this entails for women.

The Fieldwork Area

Ugalla Game Reserve is in western Tanzania, Figure 1.1 shows that it is surrounded by a number of game controlled areas, but located away from the main tourist area in the north where the Serengeti National Park, Ngorongoro Conservation Area and Mount Kilimanjaro are situated.[8] The fieldwork location was chosen because the beekeeping and fishing activities taking place in the reserve provide an ideal opportunity to examine how different people make their livelihoods in a conservation area.

[8] Source: Lamprey (1994), unpublished digital computer map data.

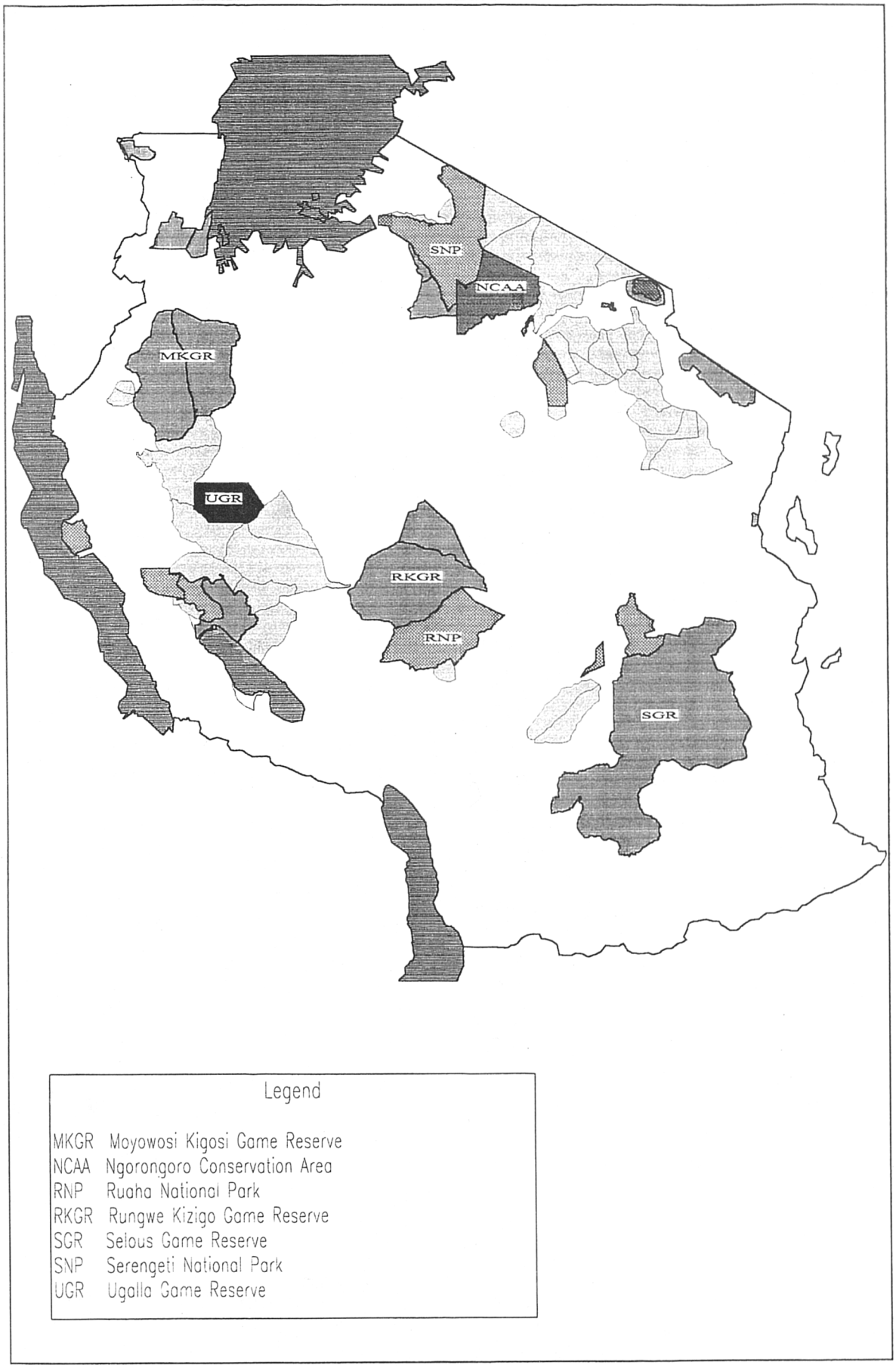

Figure 1.1 Ugalla Game Reserve in relation to selected protected areas in Tanzania

The example of Ugalla Game Reserve is made particularly interesting due to the ambiguous status of beekeeping and fishing vis-à-vis the Wildlife Department. According to statuary law, it is illegal to carry out either activity within a Game Reserve (Wildlife Conservation Act, 1974: Part 3 a, b). However, people have kept bees and fished in Ugalla since before the reserve was gazetted in 1954. The Wildlife Department accepts the situation because these occupations are so entrenched as to be valid forms of local resource use (with the proviso that they take place under license), to the extent that policies for their management are written into the Ugalla Game Reserve Management Plan (PAWM, 1994b). Intersecting with these semi-legitimate activities are bushmeat hunting, cattle-keeping, timber-cutting, honey hunting, and the extraction of other minor forest products, which are all illegal and unacceptable to the Wildlife Department, for reasons that will be examined later in the thesis. From outside the locality, foreign tourists engage in sports-hunting under permit from central government. Resident sports-hunting by Tanzanians (people of African, Arab, and Asian origin) and expatriate Europeans also occurs although it is illegal.

The number of interest groups associated with Ugalla Game Reserve, and the relative degrees of legitimacy accorded to them by the Wildlife Department, renders this an interesting case for examining how different forms of resource use have been circumscribed by the management practices of local bureaucrats. It is also an ideal means to gain an insight into how the complexity and contradictions of Tanzanian wildlife law, management policy, and management practices are experienced by local people. Aside from choosing the research site for conservation-related reasons, it was chosen also because the region immediately surrounding the reserve is an area where recent ethnographic research has not been carried out (vide Shorter, 1972; Abrahams, 1967a/b; Willis, 1966; Kakeya, 1976).[9]

The context of wildlife conservation in Ugalla Game Reserve has parameters pertinent to the value of this case as a comparative study:

First, photographic tourism by overseas visitors rarely takes place because the area is off the beaten track; there are no facilities, and one does not encounter a high density of spectacular

[9] The reason for this relates, in part at least, to the fact that the human population was resettled from large areas of the region between 1924 and the 1940s, with the land subsequently being gazetted under the forestry and wildlife laws. The Ethnographic Survey of Africa, for example, records no human population as inhabiting the region (Abrahams, 1967a). This suggests it is not an obvious place to carry out 'traditional' anthropological studies which focus on rural people living in villages.

game. The tourism which does take place is that of an elite international sports hunting clientele. Thus, problems which one might associated with mass tourism, such as negative cultural effects, are not an issue here.

Second, the reserve is continuous with an extensive area of sparsely settled miombo woodland gazetted under the wildlife and forestry laws. This means that human pressure for land use does not include human settlement or cultivation; instead we are dealing with issues concerning the extraction of forest products. One exception to this statement is in the north-western corner, which abuts a railway and where land is cultivated up to the boundary.

Third, there is little history of pastoralism in this area, which contrasts with the case of the north and centre of Tanzania where conservation issues and pastoral issues are closely entwined. Again an exception arises in the form of Sukuma pastoralists who enter the north-eastern corner in the dry season to water their cattle. It appears this started opportunistically in recent years and at present they do not hold or make claims to the area.

Fourth, the reserve is not associated nationally or regionally with heightened conflict between local groups, private entrepreneurs, bureaucrats, or foreign donors and the conservation of wildlife. For the purposes of this study, this means that Ugalla provides an attractive case because some state and donor-led management activities occur but at the same time forms of local resource use are deeply entrenched in the locality and accepted as such by the Wildlife Department. This was one of the main reasons why I chose this research site over and above other possible alternatives.

These four points make this study interesting, for our attention is drawn to issues not focused on in studies from the north of Tanzania (e.g. Århem, 1984, 1985; Homewood & Rodgers 1984, 1987, 1991; Brocklington & Homewood, 1996). Given the extent of land forested by miombo woodland and protected under the wildlife laws in the south and west of Tanzania, this focus may highlight interesting issues concerning the manner national conservation problems are presented and subsequent policy and solutions sought at the international level.

UGALLA GAME RESERVE AND THE ADMINISTRATION OF PROTECTED AREAS

It is helpful to situate the conservation of Ugalla Game Reserve in terms of the role conferred on it by planners within the national system of protected areas. Also to locate its administration and management in relation to the structure of pertinent state sectors, and financial aspects of the wildlife industry.

Bio-Geographical Impressions of Ugalla Game Reserve

In size, Ugalla Game Reserve spans an area of 4,800 km^2. Set in regional context, it is located within one of the largest tracts of wildlife habitat in Eastern and Southern Africa (PAWM, 1994b: 17). This tract covers approximately 150,000 km^2 of Western and Southern Tanzania and is composed of a mosaic of national parks, game reserves, and game controlled areas which are continuous with forest reserves.

Figure 1.2 is a map of Ugalla Game Reserve. A river runs from east to west through the area, during the wet season rises to cover a large flood plain up to a meter deep in water; in the dry season it contracts to form large self-contained pools.[10] Dotted over the flood plain are large termite mounds which, together with the river and groves of borassus palms found in the west, give the area a particular scenic character. Miombo woodland extends away from the river within which small water-holes are scattered. The terrain is largely flat and monotonous, although it is broken by hilly outcrops in the south and west.

[10] The rains begin in late October and fall intermittently until May when the dry season begins.

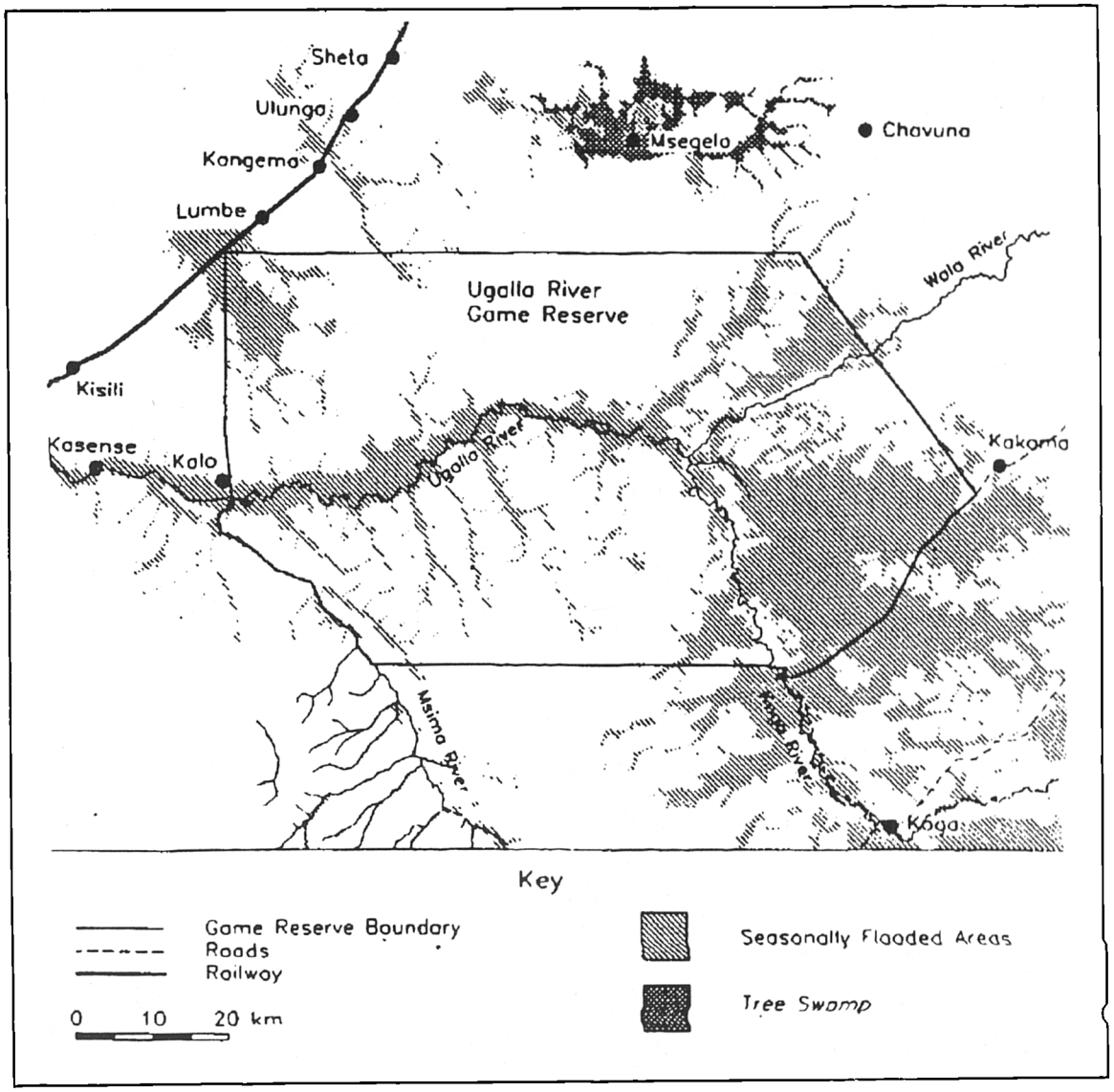

Figure 1.2 Ugalla Game Reserve[11]

Many animals are drawn to the river for water during the dry season, while after the start of the rains they disperse into woodlands surrounding the reserve. The region is well reputed for its populations of sable antelope, indeed the need for their protection was one of the main reasons Ugalla was gazetted as a protected area (Thomas, 1961). Bohor reedbuck and sitatunga live in the west of the reserve where puku have also been sighted, and creatures such as otter, hippopotamus and crocodile can be found the length of the river. Populations of buffalo, sable, topi, waterbuck, warthog and elephant all live in or enter the area, but are said to have declined appreciably in the last seventeen years due to poaching for meat or trophies (PAWM, 1994b; Rodgers, 1982).

[11] Source: PAWM 1992b, unpublished map.

In sum, Ugalla holds its status as a protected area because of its potential as a tourist attraction, and because of the role the area is held to play in protecting certain key species, in acting as a seasonal wildlife concentration area, and in comprising part of a much larger tract of wildlife habitat.

The National Context

Tanzania is internationally renowned for its wildlife and areas of outstanding natural beauty. Mount Kilimanjaro, the Ngorongoro Conservation Area, and national parks such as the Serengeti and Tarangire attract large numbers of foreign tourists each year, and a wealthy international hunting set. Ecologically, Tanzania is held to be of importance for the size of its wildlife populations, its biological diversity - in terms of richness, endemism and ecosystem diversity - and for critical habitats such as the great lakes, coastal forests, eastern arc mountains, montaine grasslands and wetlands.

From the Government's perspective, protected areas are held to be the basis for the protection of habitats and species, and the foundation of the wildlife industry (WSRT, 1995).[12] To this end, a substantial proportion of the country's land mass is devoted to conservation. If all land areas protected under the wildlife and forestry laws are combined, approximately 17% of the country is precluded from permanent human settlement and resource use for livelihood purposes (Ibid.: 1); in a further 10% of the country, people can coexist with wildlife within the boundary of a protected area. It can therefore be said that the Government holds wildlife and forestry conservation to represent an extremely significant form of land use (given that an estimated 27% of the country is devoted to conservation in a nation with a human population of 28 million, a land mass of 945,090 km^2, with an average population growth rate of 2.56% per annum).[13]

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[12] There are 5 categories of protected area on mainland Tanzania: national parks, game reserves, the Ngorongoro Conservation Area, game controlled areas, and partial game reserves. (To this list can be added forest reserves, protected under the forestry legislation, and marine reserves protected under the fisheries legislation.). In total the country has 12 national parks, 23 game reserves, 1 conservation area and 44 game controlled areas together with 570 forest reserves. Included in the previous figures are 4 protected areas that are designated by UNESCO and the IUCN as World Heritage sites and 2 as biosphere reserves. Although international designations do not mean stricter controls, they do imply that Tanzania has made commitments to conservation which are in line with international thinking.

[13] A total of 240,000 km^2 (= 25.4% of the country's land mass) is devoted to wildlife conservation, and a total of 136,653 km^2 (= 14.4 % of the country's land mass) to forestry conservation (WSRT, 1995: 20). Much of the land gazetted under the wildlife and forestry laws is coterminous.

Under existing legislation, the access people have to protected areas, and the potential uses to which species may be put, is restricted according to, a person's civil status (Tanzanian citizen, resident, tourist, refugee), the category of protected area, and the protection given to different species of fauna and flora (see Appendix 1 for a description of the different categories of protected area and list of all areas in Tanzania).[14]

The extent of land-use devoted to the protection of species in Tanzania, and the restrictions placed on local resource use in these areas, confronts the Government with a number of critical questions, such as: what priority should be given to wildlife relative to other forms of land use? How can illegal resource exploitation be prevented? What role can wildlife conservation play in national development? What resources should be allocated to wildlife management? How should income from wildlife be distributed? What role should and can foreign aid play in conservation?

The Institutional Context

The management of Ugalla Game Reserve is part of a national structure of state sectors with jurisdiction over natural resources. Protected areas are state owned and managed by the Ministry of Tourism, Natural Resources and Environment (MTNRE), based in Dar Es Salaam. Within the Ministry, management of wildlife resources is under the control of one section, the Department of Wildlife, *so this is the branch of Central Government charged with the role of* overseeing the implementation of sector objectives.

[14] Principal legislation is the Wildlife Conservation Act No. 12 of 1974, the National Parks Ordinance Cap.253 of 1948 and Cap. 412 of 1959, and the Ngorongoro Conservation Area Ordinance Cap.412 of 1959. The Forestry Ordinance of 1957 and Cap. 389 1958 is the principal legislation governing forest conservation, and the Fisheries Ordinance of 1970 Cap.6 is the principal legislation governing fisheries.

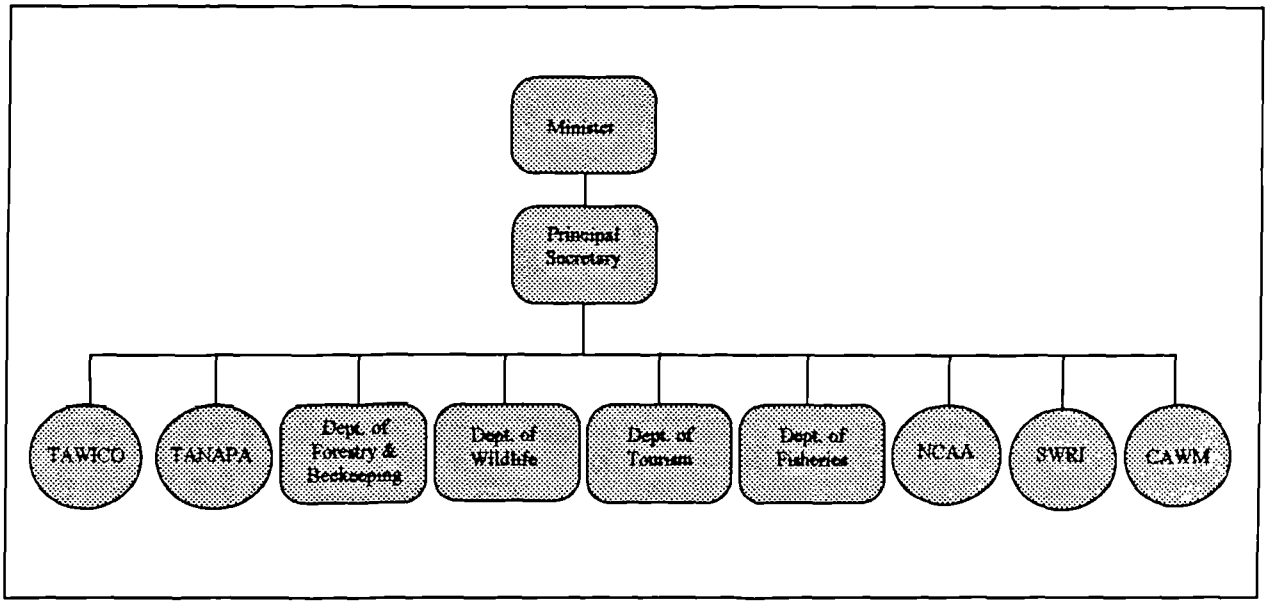

Figure 1. 3 Structure of the Natural Resource Sectors of the Ministry of Tourism, Natural Resources and Environment[15]

From Figure 1.3, it can be seen that the wildlife sector is divided between five major parastatal institutions: Tanzania National Parks (TANAPA), the Ngorongoro Conservation Area Authority (NCAA), the Tanzania Wildlife Corporation (TAWICO), the Serengeti Wildlife Research Institute (SWRI) and the College of African Wildlife Management (CAWM). Each of these is directed by a Board of Trustees.[16] The Departments of Fisheries, Tourism, and Forestry & Beekeeping are also part of this Ministry. The division of natural resource planning and management between different government departments and parastatals means that there is no single authority that can generate overall management planning for wildlife conservation (WSRT, 1995).

The Financial Context

How the wildlife sectors generate and distribute income is a critical dimension of the organisation of wildlife management. Funding is primarily through the central Treasury, the wildlife industry, and also through high levels of donor support. This donor support is particularly concentrated in certain institutional sectors like the Serengeti Research Institute or

[15] WSRT, 1995: 11.

[16] TAWICO was formed by the government as the mechanism for nationalisation of the wildlife industry, in structure and operation it is a state-owned company rather than a parastatal.

the College of African Wildlife Management, as well as specific programmes such as the Selous Conservation Project supported by Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).

The wildlife industry is dominated by tourist game viewing and sports-hunting, although income is also derived from the sale of trophies and meat gained from game cropping, and the live capture of birds and animals for export. The importance of the wildlife industry for the national economy is hard to quantify because aggregate statistical data does not exist, financial management in the industry is poor, and vast sums of money are generated by illegal means. However, a sectoral review by the Ministry of Tourism, Natural Resources and Environment puts forward data to suggest that the industry has expanded significantly since the mid-1980s and continues to do so (WSRT, 1995).

In terms of income generation, annual trends are not available, but in 1991, for example, the sectoral review states that game-viewing tourism generated a conservative US$ 20 million overall (US$ 7.25 million to the wildlife authorities and US$ 12.75 million to private lodge owners) and since then has increased substantially (WSRT, 1995: 167). Similarly, earnings in the hunting industry are held to have increased from between $US 4.6 million to $US 13.9 million during the period 1988-92.[17] According to these figures, game viewing and sports-hunting tourism are held to generate US$ 33 million. This includes income going to the private sector, but does not take into account income generated informally or illegally from wildlife. For example, one study of the economic value of different forms of wildlife has estimated the gross value of wildlife use to Tanzania in the late 1980s was US$128.5 million per annum, with illegal use said to account for US$ 60 Million (ITC/IUCN, 1989; cited in WSRT, 1995: 164).[18]

If we try to locate the above data in terms of overall national income, the Rolling Plan and Forward Budget for Tanzania segregates gross domestic product (GDP) data for the wildlife industry into 'tourism' (more than 80% of tourist revenues being wildlife related) and 'wildlife'.[19] Tourism is said to generated 1.42% of GDP, although this is considered to be a

[17] These figures are based on an extremely conservative estimate; a more generous estimate (using the same database for the same period of time) cites an annual turnover of $US 20 million in the hunting industry (US $6 million per annum accruing to the Tanzanian Government) (Lamprey, 1995: 10). According to these figures game viewing and sports-hunting generate in the region of US$ 40 million in total per annum.

[18] This included the international ivory trade which was banned (and subsequently declined) after the report was compiled.

[19] The Rolling Plan and Forward Budget is the major statement of the Government's development strategy, economic targets and budgetary projections (cited in WSRT, 1995: 89).

significant underestimate, 4% being far more realistic (WSRT, 1995: 89). Data for 1992 suggests that the tourist industry contributed £120 million of GDP. This is set in the context of a predicted growth of 32% per annum (1992-6), which taken in the context of an average 5-6% for the rest of the economy locates it as a major contributor to GDP growth. Other areas of the wildlife industry are held to have generated at least $15.6 million per annum. In general it is said that the wildlife sector makes an important contribution to GDP and to Government of Tanzania finances (WSRT, 1995: 95). However, although these figures reveal something of the way wildlife conservation is represented and valued by the Government, they tells us little or nothing about how income from the wildlife industry is distributed, nor do they reveal anything of the dynamics of the wildlife industry.

METHODOLOGY

The fieldwork for this thesis was carried out in Tanzania between September 1992 and December 1993, and June - July 1994. An initial period of four months was spent in Dar es Salaam identifying a research site, obtaining permits, buying a vehicle, making contacts, carrying out archival research and learning Kiswahili.

The empirical research can be divided into three broad phases; the first started in January 1993 and extended until May 1993. This involved preliminary interviews with people associated with the reserve and time spent in village contexts. Ugalla Game Reserve was at this time inaccessible due to wet season flooding, which was fortuitous because it enabled me to become acquainted with local officials and to identify who the individuals were who kept bees or fished in the reserve. As an outcome of this process of identification I was invited to stay in the reserve with a family group of beekeepers; if I had entered 'cold' at the start of the season it is unlikely that I would have been able to obtain satisfactory information. In the process of carrying out interviews with different people associated with Ugalla, I started to build up a cognitive map of the reserve which later informed my research in the area. The second fieldwork phase took place between June and December 1993 and was primarily devoted to carrying out ethnographic research on beekeeping and fishing in the reserve. The third phase was in June and July 1994, when I returned to complete, validate and compare the data I had gained during 1993 with circumstances in 1994.

My arrival in Tanzania coincided with a new management plan being written for Ugalla Game Reserve by members of the Wildlife Division's planning unit, Planning and Assessment for Wildlife Management (PAWM). As part of the planning process, a workshop was held in Tabora town from 24th to 26th November, 1992, followed by a series of regional-level meetings. As far as possible, I followed this planning process, attending the initial workshop, making records of meetings, formally interviewing representatives of the state and of the different co-operatives, and coming into contact with the different officials in informal contexts. In short, this facilitated my understanding of how management-led changes in the reserve were interpreted, taken up or rejected by beekeepers and fishermen.

Upon basing myself in Tabora town in January 1993, the first methodological problem I had to confront was the question of who the people were who procured their livelihoods in Ugalla Game Reserve. The answer to this question was not obvious: no-one lives in the reserve, there are no settlements near the area (except at the far north-western corner), and regional and district officials have little information. The window to start this process of identification arose at the planning workshop held in November 1992, as mentioned above. In the course of this workshop, I had gained a broad impression of the different interest groups associated with the reserve and learned that fishermen and beekeepers were organised through different co-operative societies. Because I wanted to identify the people who worked in the reserve according to two productive activities, beekeeping and fishing, I approached the co-operatives on arrival in January, and, through use of their lists of members, together with assistance from local residents, started to identify and meet men who were working in the reserve. This process was also facilitated by the use of an (incomplete) licensing database of beekeepers and fishermen held by the Ugalla Game Reserve management.

The information I obtained on beekeepers and fishermen led me to focus on three different groups of people, associating through their membership of different fishing or beekeeping co-operatives and living in geographically dispersed areas of Tabora Region. If Figure 1.4 is turned to, the regional capital, Tabora town (No. 10) can be easily identified, where I based myself and from where I gained access to other parts of the region.

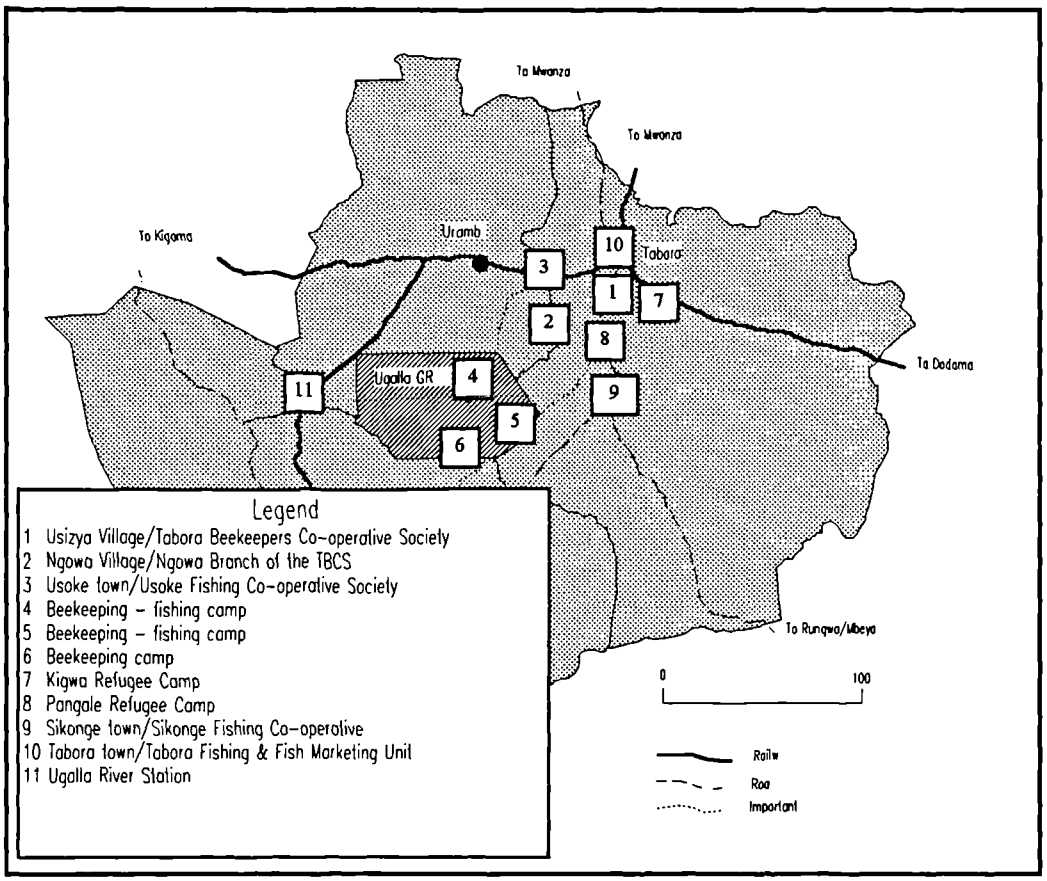

Figure 1.4 Research locations in relation to Ugalla Game Reserve & Tabora Town[20]

The three different groups of people were aggregated in three parts of Tabora Region: first, Pangale Refugee Camp, identified as No.8 on the map. The reason for this choice was that I wanted to carry out research on a group of refugee fishermen, and quite simply I could talk to refugees at Pangale without having to apply for a permit from the Ministry of Home Affairs. In August and September 1993, I also gained limited access to Kigwa Refugee Camp, No. 7.

The second group was of beekeepers attached to the Kwihara Branch of the Tabora Beekeepers Co-operative Society (TBCS) at No. 1 on the map. This branch is based in the same village, Usizya, as the main TBCS factory, therefore I simultaneously gained access to beekeepers and employees attached to the factory. The family of beekeepers I stayed with in Ugalla Game Reserve live in Usizya Village and this became the area where my research was most intensely focused. Work in this location also meant that I could readily interact with officials and other relevant parties who were based in Tabora town.

[20] Source of base map: Lamprey (1994), unpublished digital computer map data.

The third group of people were beekeeper members of Ngowa Branch of the TBCS in Kakola Ward, No 2 on the map. This area was chosen for purposes of comparison with the Kwihara Branch of the TBCS, for many highly reputed beekeepers live there, including the first Chairman of the TBCS, it is the site once occupied by a sleeping sickness settlement and the place where beekeeping extension work in Ugalla Game Reserve was initiated by the colonial Government. Visits and interviews were also held with the leadership and selected fishermen members of Usoke, Sikonge and Tabora fishing co-operatives, based at sites No.3, No.9 and No. 10 respectively.

In July 1994 I also made a visit to the village of Ugalla River Station, this acted as a vantage point from which to observe the social character of beekeeping and fishing activities in another area of Ugalla. Furthermore, someone who is locally held to have been an important chief of Ugalla lives in the village and I spent time collecting oral historical material from him. In each case above, personal relationships, the assistance I was given, and accessibility (due to the rains or the need for a permit) influenced the choice of research location.

Ethnographic Research in Ugalla Game Reserve: when carrying out research in the reserve, I deliberately focused on a small group of beekeepers in order to obtain good qualitative data. In June 1993, when beekeepers entered the reserve for the first honey harvest of the year and the fishermen went to fish, I was invited to stay with the then Chairman of Kwihara Branch of the TBCS, having become acquainted with him in Usizya village. Consequently, he and the men who work at his beekeeping camps, extended their living shelters to accommodate me, the only woman. Between the beginning of June and the end of July, I stayed with the members of this beekeeping group at Camps 5 (Igululu) and 6 (Nsontwa 1) in Figure 1.4. While living with this group I kept a fieldwork diary, observed camp life, recorded the interactions between this group of beekeepers and beekeepers or fishermen from other camps, made a detailed record of beekeeping activities, and engaged with the people I was with through the course of daily interactions. During this time the beekeepers and I moved between two different camps, one a beekeeping-fishing camp beside the Ugalla River, No. 5, and the other solely a beekeeping camp in the woodland away from the river, No.6. After July the beekeepers left the reserve and did not return until October - November to harvest their second honey crop. I again stayed with them, repeating the earlier style of research.

In June and July, when I was carrying out an intensive study on the beekeepers in the beekeeping/fishing camp, the activities of fishermen living in the camp were peripheral to my attention and when details of interactions were recorded this was from the perspective of the beekeepers. The reasons for this were twofold: on the one hand, given the level of detail I was recording on people's conversations, interactions and beekeeping activities, I simply couldn't give attention to the fishermen. On the other hand, there was some animosity between the beekeepers and fishermen which made it hard for me to 'jump' between the two groups.

After the beekeepers left the reserve I spent a month in July - August focusing on fishing in Camp 5 (Igululu). In form, at first I tried to echo the same style of research conducted with the beekeepers, however the character of the fishing camp and interactions between fishermen and myself were very different. For a start I had not spent the preceding months in contact with the fishermen in their home contexts as I had with the beekeepers, they associated me with the group of beekeepers I had been with, and although some people were very welcoming and helpful, others were antagonistic to my presence. This was portrayed in terms of white people being 'bad', and apparent jealousy that I had spent so much time with the beekeepers - implying that they had benefited from me financially. Whereas beekeepers tend to work in small family groups with, superficially at least, a sense of hierarchical authority based on kinship, age, and TBCS membership, many of the fishermen were young men aggregated into several small groups within the camp with petty in-fighting being a constant. This meant that I could not encompass all the activities that took place in the camp on a systematic basis, and also my discussions tended to be far more superficial. When I had stayed with the family of beekeepers I was clearly protected from both people and wild animals; the head of the camp, as a person who was respected and was Chairman of a local branch of the TBCS, ensured that beekeepers in the surrounding camps took good care of me. While staying with the fishermen this was not the case and, being a young woman on my own, this made me rather defensive.

In hindsight the problems that manifested around my presence, and my own feelings of unease, did reflect wider tensions between beekeepers and fishermen, and between different fishing groups and individual fishermen, and were therefore highly revealing of the relative natures of different types of work and relationships in the reserve.

When I entered the reserve at the beginning of June I had parked my car and seldom used it, focusing on beekeeping activities with the small group of beekeepers in two camps, as I

described above. On returning in late July I was far more mobile, and I visited the tourist hunting camps to discuss hunting and the attractions of Ugalla with the professional hunters and tourist visitors. I also travelled through the reserve going to different beekeeping and fishing camps to gain a different perspective on the area. However I found that entering any camp in the forest and trying to ask questions or gain information was pretty fruitless unless the people concerned had previously been introduced to me or had heard or seen me in the village or town context. Otherwise I would be greeted with extreme suspicion, apparently being associated with the Management of the reserve or other officials seeking to tax, ban or inform on people. In cases where individuals would talk to me there was a presumption that I represented a foreign aid organisation and brought money or equipment.

A Household Survey in Usizya Village: In September 1993 I carried out a household survey in Usizya Village to establish baseline socio-economic data against which to compare the information on the households of beekeepers and fishermen in the village. The sample group contained 60 out of 360 households (16.7 %), sampled simply by drawing a straight line on a map from the centre of one hamlet to the edge of another hamlet, visiting houses along the transect.[21] Because this was such a small sample and a very basic sampling technique was used, I decided not to present the data in quantitative format in this thesis. However the information does inform analysis of the socio-economic background to beekeeping and fishing.

Interviews with Female Members of Beekeeping Households in Usizya Village: Following the survey noted above, I carried out detailed interviews with female members of the households of beekeepers with whom I had been in contact in the reserve. I had encountered many of the women from the start of the fieldwork but not previously sought to gain systematic information.

The survey also acted as an entrée to interviewing women beer-brewers in the village. Here it should be explained that because beekeeping is almost solely a male occupation, the households I focused on were almost by definition male-headed; however, in the village as a whole there is a large number of female-headed households. Many of the women in these households rely on

[21] Usizya Village is composed of 4 hamlets (vitongoji) 2 of which are located together as one village, the 2 others are geographically completely separate. The figure of 360 households refers to 2 hamlets alone because this was where the survey was conducted. This figure was given to me by the village council, short of counting every household personally, I had no way of cross-checking it, however I am sceptical as to the figure's accuracy because it is calculated according to the number of 'ten-cell' household units in the village (23 + 13), which in reality do not all contain ten households.

income generated through the brewing of beer and the sale of cooked food. This gave me an interesting perspective against which to compare the households of beekeepers, it also provided data on honey beer brewing, for beer production is an extremely important local destination outlet for honey produced in the forests.

Archive Research: Archival analysis was carried out in the Tanzania National Archives, Rhodes House, Oxford, the East Africana section at The University of Dar es Salaam, the Catholic Mission in Tabora town, and the Wildlife Division of the Ministry of Natural Resources, Tourism and Environment. Primary sources were also found at the School of Oriental and African Studies, London, the Brynmour Jones Library, Hull, and the British Library, Yorkshire.

Research at the Tabora Beekeepers Co-operative Society & Ugalla Game Reserve in 1994: In June - July 1994 I returned to Tanzania and carried out further research at the Tabora Beekeepers Co-operative Society and a different beekeeping - fishing camp in Ugalla Game Reserve, No. 4 (Nsengawane) on the map. I also conducted detailed interviews with key informants on aspects of the history of Ugalla.

The methods used in the research overall were qualitative and based on ethnographic techniques: participant observation, structured and semi-structured interviews, oral histories, career histories, group discussions, document and archival analysis, a household survey, attendance of meetings, and also local mapping in the reserve and a vegetation survey based on transect techniques. During the phases of fieldwork described above a series of systematic interviews were held with different groups of people:

1. 150 beekeepers were interviewed in total to establish socio-economic data (age, gender, religion, ethnic group, family background, village, occupational history) and beekeeping data (no. of camps, beehives, membership of the TBCS, no. of helpers, markets for produce). The people this covered were (a) 30 members of the Kwihara Branch of the TBCS (in addition to those cited in (b) following); (b) all 45 beekeepers and 30 assistants of the five beekeeping camps described in Chapter Nine; (c) 30 beekeepers from Ngowa Branch of the TBCS, out of a total membership of 55; (d) 45 beekeepers interviewed ad hoc at the offices of the TBCS or in Ugalla Game Reserve. For comparative purposes these interviews covered people who kept

bees outside Ugalla Game Reserve as well as in the reserve, also, although the bias was towards people who were members of the TBCS, some non-members were interviewed.

2. All 45 beekeepers and 30 assistants who went to the camps of Msiri, Kwalungu, Nsontwa 1, Nsontwa 2 and Katala in June and October 1993 were interviewed in addition to the interviews in (1) on: (a) what they had accomplished in the beekeeping season of 1993; where produce had been sold; market related decision-making; where they located the hives around the camps, what materials were used, etc.; (b) group discussions were held in each camp to discuss, firstly, beekeeping knowledge and practices, secondly, why they chose to keep bees in Ugalla Game Reserve and be members of the TBCS and the problems which confront them, and thirdly, their perceptions of overseas markets for honey and wax.

3. Group discussions were held with skilled beekeeper members of the TBCS on: (a) beekeeping knowledge and practices, (b), the reproduction and regeneration of miombo woodlands and beekeepers' role in this process, (c), the role of the Tabora Beekeepers Co-operative in assisting beekeepers. This topics were also the subject of interviews with individual key informants.

4. Two sets of semi-structured interviews were conducted with female members from 26 households of beekeepers from Msiri, Kwalungu, Nsontwa 1, Nsontwa 2 and Katala camps. These interviews focused primarily on issues of resource use (agriculture, firewood, water, family members to support, health care). When I was not in the reserve, time was spent in the company of some of these women and their families.

5. 118 fishermen were interviewed in total to establish socio-economic data (age, gender, religion, ethnic group, family background, village, occupational history) and fishing data (fishing locations, membership of a co-operative, licensing details, net and canoe ownership, no. of helpers, markets for produce). These interviews were conducted with: (a) all 24 members of Pangale Refugee Camp Fishing Co-operative; (b), all 12 members of Kigwa Refugee Camp Fishing Co-operative; (c), all 36 members of Igululu Fishing Camp; (d), 8 committee members of Usoke Fishing Co-operative, 8 Sikonge Fishing Co-operative, and 5 of the Tabora Fishing and Marketing Unit; (e), 25 fishermen encountered ad hoc in Usizya Village and Ugalla Game Reserve. For reasons of space, most of this material is excluded from this thesis.

6. Formal interviews were conducted with the Project Manager of Ugalla Game Reserve (referred to in the text by the pseudonym, 'Mr Fundikira'), Mr Kalonga, the Tabora Regional Fisheries Officer, Mrs Kasuka, the Tabora District Fisheries Officer, Mr Mligo, the Tabora Regional Forestry Officer, Mr Malima, the Tabora Regional Game Officer, Mr Mayema the Tabora District Game Officer, Mr Mafuru Principal of the Tabora Beekeeping Institute, Mr Tupa, Camp Commandant of Kigwa Refugee Camp, Mr Ntenga retired Director of the Beekeeping Department, Father Mringi, priest at Usizya Village, members of the Village Council of Usizya Village, Mr Madaha, Manager of the Tabora Beekeepers Co-operative Society Ltd. Informal discussions and field visits also took place with many of these individuals.

7. Interviews with 7 Asian/Arab beeswax traders in Tabora town in 1993. As far as I am aware this was the total number of merchants trading in beeswax during the period in question. Also, interviews with 4 fishmongers in Sikonge and Tabora towns, who were the only traders who went to Ugalla Game Reserve in 1993.

8. In-depth interviews and collection of oral histories from Chief Mvulla Nsokoro, and 5 men born in the region of Ugalla before 1925 (I encountered no women who were born in the area).

Certain limitations to this study must be pointed out. First, 1993 and 1994 were extremely bad years for rain along the Ugalla River. This meant that data on people's resource use and decision-making was based on a situation where, for many households, the agricultural crop was extremely poor and when fishing and the honey harvest were also bad. In both 1993 and 1994 many fishermen simply did not go to the river and poor fish yields also meant that fishmongers stopped going to buy fish. To understand both occupations fully one needs to study them over a number of years, especially because flexibility is part of their character.

Retrospectively, I have become aware that this study does not present an optic on women and gendered resource use from their perspective. It was never my intention to focus on men, but this was dictated by the fact that forest occupations are almost solely male, and very few women and no children enter Ugalla Game Reserve. Furthermore, it was simply beyond my capacity to extend the research any further. Where possible I have tried to identify how women assist with food provisioning, child care, etc., but this is not based on detailed case studies. Indeed an ideal complement to this research would be a study that examines men's localised

seasonal migration from a female perspective. Another area which I did not encompass as I would have liked, due to lack of time, and which would complement this study, would be a focus on the lives and interactions of the district and regional level bureaucrats living in Tabora who make up a social group which plays an extremely important role in natural resource use and management in Ugalla as elsewhere in the region.

PRESENTATION OF THE THESIS

The topic of this thesis is wildlife conservation in protected areas and people's livelihoods. It is based on field research carried out between 1992 and 1994 in the Ugalla Game Reserve and its environs of western Tanzania. The importance of the topic is that in the situation of fast diminishing natural resources, ever-present and accelerating demands upon them, and, through depredations and unintended consequences of human action on the planet, reduction in the richness and variety of the biosphere, there is an urgent need to take some effective action to preserve this rich heritage.

Much of what has been coined 'our biological heritage' exists in Africa in areas of, until recently, relatively scanty populations living near subsistence level. People who are being taken vigorously into the 21st Century with tremendous, perhaps insuperable, problems to cope with. How can the natural world be retained for the future against the influences, human and non-human, deliberate and unintentional, which threaten its very existence? This is the problem which has come to occupy many people, the 'international community', more and more, and is of growing importance - as is substantiated materially in the increasing attention and aid for the purpose of biodiversity conservation flowing towards those countries.

This thesis attempts to outline the history of this problem in a specific place fortunately endowed with a variety of natural habitats and species, and of the solutions that have been devised and planned in the main from outside the country, Tanzania, where the particular research site is situated. It attempts to evaluate concepts and techniques that are employed in conservation actions, to see their limitations and virtues in relation to two particular occupational groups, beekeepers and fishermen of Ugalla. The hope is that this thesis may, in some way however small, contribute to our understanding of the urgent problems which ultimately concern us all as touching our very existence, or, at least, the quality and value of it. The chapters contained in this thesis are presented as follows:

Chapter 2 provides a brief introduction to 'people-oriented' approaches to wildlife and protected area conservation in Africa. These approaches have found widespread popularity in recent years and the case of Tanzania is no exception. This leads us to suggest that in order to situate fruitfully the relative merits of such concepts as 'community-based conservation' it is necessary to deconstruct the different elements which shape the conservation field in Tanzania, namely, the institutions of the international community, the state, the market, and science, as well as a western romanticism rooted in an attachment to wild animals and scenic protected areas.

Chapter 3 presents the historical perspective. It explores how the region and people of Ugalla were represented through a process of European exploration, settlement and colonisation. Travel accounts, ethnographic descriptions, cartography, and scientific exploration contributed to establishing a profile of the region which was later drawn on by colonial administrators, to facilitate their work and to justify their actions. In the early British colonial period, the forced resettlement of the entire human population occurred. This served to transform the natural environment and landscape of Ugalla in a fashion later found appropriate for the gazettement of the region as a protected area. Not only this, but resettlement acted as a critical event which established different parameters for a human presence in the area. Through a process of 'repositioning', the way in which people re-entered the region enabled them to develop new approaches to making a living.

Chapter 4 is also historical and describes how, once people had been evacuated from Ugalla and it was effectively transformed into a 'natural space', they started to re-enter it on different terms. The new environmental conditions, and the greater hold colonial administrators had established in the area, meant that people now became defined according to an economic classification of 'resource users'. In effect this made people visible according to different forms of production, such as hunting, fishing and honey collecting. Two of these categories became accepted by the colonial administration as legitimate forms of 'local resource use', namely fishing and beekeeping. The discussion then traces how the management of wildlife and these two forms of livelihood activity have been entwined in the region up to the present day.

Chapter 5 describes and gives details of each of the different interest groups who are associated with Ugalla Game Reserve today. These interest groups can be divided according to different productive and pleasure activities: beekeeping, fishing, tourist sports hunting, urban resident

sports hunting, village-level hunting, cattle-keeping, agriculture, and timber extraction. An account of the different interest groups who make claims over resources in Ugalla Game Reserve and their styles of operating, builds up a picture of the social complexity existing today which the Management must encompass in planning actions

Chapter 6 the discussion focuses on how a management plan devised by expatriate technical consultants and civil servants from the Wildlife Department has been put into effect. The way in which the manager of the reserve and other local officials operate at the local level is discussed using the concept of 'discretion'. This leads to the argument that their mode of operating can be characterised as 'personalistic', in the sense that the office the civil servant occupies, and the style of management which is used, is embodied in a person who represents the state in speech, writing, law enforcement practices, etc., in a manner which does not follow a blueprint of how a bureaucrat should operate.

Chapter 7 takes us into a discussion of how claims are made over access to Ugalla Game Reserve and its resources. Focusing on the example of fishermen who use the Ugalla River, the claim-making process is explored in some depth presenting a situation of enormous diversity, with some fishermen established in the area for many decades, who use a language of tradition to assert their right to control the access of other fishermen to the river, while other fishermen are more recent immigrants. For these people, the language of claim-making is couched in terms of the need for modernity and progress. This diversity creates problems for those wishing to manage the area, it is contrasted with the case of men who use the forests of Ugalla for beekeeping purposes.

Chapter 8 is the first of four chapters which concentrate on beekeeping in Ugalla Game Reserve. This chapter looks at beekeepers practices, providing details of how they use forest resources and the environment around them. This includes information on the way a beekeeping camp is established, on the uses key tree species are put to, on narratives and claims made concerning the impact beekeepers have on the forest environment, on representations of hive-making traditions, hive siting around a camp and in different camps, and lastly, on conceptions of how bees live and make honey within a hive.

Chapter 9 draws on the information presented in the previous chapter to examine how the market is associated with forms of local-level organisation. This is carried out through an

historical analysis of the changing role and demand for honey and beeswax in the region. Having elaborated on the history of these items, the focus is placed on the part a co-operative, the Tabora Beekeepers Co-operative Society, has played in linking beekeepers to the international market for honey over the last forty years.

Chapter 10 presents the life history of one man who sites his beehives at two beekeeping camps within Ugalla Game Reserve and is chairman of a local branch of the TBCS. At an individual level this account highlights features associated with both historical change and the contemporary situation in Ugalla Game Reserve, which are described in prior chapters.

Chapter 11, the illustration in the last chapter is used as a point of anchorage for analysis of the social composition and relationships between beekeepers who work at five camps in Ugalla Game Reserve. In this discussion, the focus is on how people come together to make a livelihood in the reserve. In particular it asks how the practices of men keeping bees involve the enactment and management of different sets of social relations so as to make a living possible. This leads into an elaboration of the interpersonal relationships, organising practices and actions that arise between men when in the reserve, and of the way this creates social networks across and outside the area.

The final chapter, 12, concludes the thesis, drawing together the analysis and evaluation of concepts and approaches and emphasising conclusions which have been suggested, in particular, that effective conservation schemes could benefit infinitely from an increase of attention paid to the social complexity existing at the local-level to people implementing projects among the ultimate recipients of aid and advice, as well as to their potential contribution; in short, could benefit infinitely from the application of social anthropology.

2

Wildlife Protection in Tanzania

Introduction

The protection of endangered species in Africa has roots in the Nineteenth Century and an age of exploitation that gave rise to ideas of progress where the struggle between man and nature was located as a driving force for advancing civilisation. Whether colonial interests were commercial or military, the exploitation of the natural world went hand in hand with an urge to preserve it, creating a deep-seated tension in the Western relationship toward 'nature' (Passmore, 1974). In this tension, science has been positioned as an indispensable element, closely accompanied by a faith in technological advance.

This history has generated strong assumptions concerning the need for the scientific management of African environments in order to maintain the renewable natural resources they contain. One of the fundamental concerns this generates is the question of what to do with people, primarily in the form of how to minimise their destructive impact on nature. In many parts of Africa, the solution to this issue has taken the form of gazetting land as protected areas and exerting control over the daily existence of rural people by managers (the state and international community) who act as a third-party, themselves separated, geographically and conceptually, from their own potentially detrimental impacts on the natural world.

Dual ideas, promoting the protection of living species from the risk of extinction and the conservation of nature in order to exploit its resources, can be traced through the history of wildlife protection in Africa (Anderson & Grove, 1987; Grove, 1994; Mackenzie, 1988).[22] In this respect, a contemporary study of wildlife management in protected areas has to examine how these ideas have survived or been transformed within the complex institutional field that constitutes conservation today. One needs to appreciate how different features associated with the protection of species combine, in order to realise how attitudes toward nature and the

exploitation of resources are generated and perpetuated. Of critical importance, touching on the fundamental issue referred to above, is to pinpoint how conservation programmes approach issues related to the human effects on the environment.

In the following discussion the issue of how 'people' are currently situated in African wildlife management is examined. This leads, in sections to follow, to a deconstruction of the different elements which constitute conservation in contemporary Tanzania, namely the local manifestations of the institutions which compose the international community, the state, the market, and science, as well as an aesthetic romanticism manifest in the desire to preserve species within natural areas and nature in a pristine form.

'COMMUNITY-BASED' CONSERVATION

State-led centralised approaches to conservation in Africa have come under increasing scrutiny over the last two decades. This is against the background of the sheer magnitude of natural resource management problems confronting African governments, including a sharp decline in wildlife populations, law enforcement which has become less practicable and more costly, and the escalation of conflict between local people and wildlife authorities. A key question facing those working in the sphere of conservation is how biodiversity (and in particular populations of large mammals) can be conserved given the existing constraints within a developing country such as Tanzania. One solution proposed by the international community has been to devolve control of wildlife resources away from central government to local people, local government and non-governmental organisations (NGOs) (Bell & McShane-Caluzi, 1984; McNeely & Millar, 1984; McNeely & Pitt, 1985; Ledec & Goodland, 1988; McNeely et al., 1990; Lane & Moorehead, 1994; West & Brechin, 1991; Western & Pratt, 1989; Western & Wright, 1994a). In recent documents, creating joint initiatives between central and local governments has been held to be a way to introduce more 'flexible' or 'collaborative' forms of wildlife (co-) management (Wells, 1996; Borrini-Feyerabend, 1996; Berkes, 1995) Superficially, this can be read as a move towards a more enlightened approach to conservation.

The, by now, well-rehearsed arguments for 'people-oriented' conservation take the line that rising populations, demand for agricultural land, and unsustainable resource-use practices leads

[22] This topic and an accompanying literature review is expanded on in Fisher, 1992.

to environmentally damaging resource-use exploitation. In these circumstances, the centralised form of existing wildlife management within protected areas cannot be adequately sustained, while political pressure for alternative forms of land use is likely to be heightened. If local people benefit from the presence of wildlife, it is argued, participating in the decision-making process may minimise over-exploitation of wildlife resources while contributing to local development.[23]

There is now a mounting body of work which charts the prospects, failures, and limitations of decentralised initiatives in African countries (Kiss, 1990; Wells & Brandon, 1992; IIED, 1994; ODA, 1996; USAID, 1993; Lutz & Caldecott, 1996) and critically questions the assumptions on which they are based (for examples, Leach, 1994; Leach et al., 1997; Gibson & Marks, 1995; Gibson, 1995; Berger, 1989; Murphree, 1994; Koch, 1994; Berkes & Farrat, 1988; Western & Wright, 1994; Hough & Sherpa, 1993; Pimbert & Pretty, 1995; Adams & McShane, 1992; Baland & Platteau, 1996; Berkes, 1995). Schemes are complex and difficult to implement. More critically, wildlife resources may contribute to rural development but there is little evidence to suggest that this will necessarily lead to a long-term change in people's practices, to the benefit of conservation. Despite these criticisms, 'community-based', 'people-oriented', 'participatory' conservation has become extremely popular in approaches to African wildlife management and is now institutionalised in many government and donor programmes, at a rhetorical level at least.[24]

Tanzania is no exception to the general trend, and a number of community-based conservation schemes have been initiated. The first practical conservation programmes were the Serengeti Regional Conservation Strategy, started in 1985, and the Selous Conservation Programme, started in 1988 (IUCN, 1986, 1987a; Baldus, 1989; Krishke et al., 1995). Since then, programmes and projects have been initiated by various different parties: private sector safari companies,[25] international NGOs,[26] bilateral donors,[27] multilateral donors.[28] Details of projects

[23] Ideas behind international conferences and strategies on the need to link conservation to development can be seen in: IUCN, WWF, UNEP, 1980; WCED, 1987; IUCN, WWF, UNEP, 1991; WRI, IUCN, UNEP, 1992; UNCED, 1992.

[24] 'Community-based' conservation is rarely defined but implies local-level, participatory, decentralised, wildlife resource management (Little, 1994: 350). It draws on ideas long established in other rural development fields but which have been slow to filter through into the conservation sectors (vide IIED, 1994 and Leach et al., 1997 for discussion and critical analysis of these concepts).

[25] Private sector ventures include: the Cullman Rewards and Benefits Scheme, the Cullman Wildlife Scheme, Oliver's Camp Community Based Conservation Initiative, Dorobo Tours and Safari's projects.

up to 1994 are listed in Appendix 3. State-led initiatives have been sectoral and supported by foreign aid: for example, Tanzania National Parks (TANAPA) allocates a proportion of its earnings for benefit-sharing through the mechanism of its Community Conservation Service; the Wildlife Division has institutionalised a Community-Based Conservation Service; the Ngorongoro Conservation Area Authority (NCAA) is supposed to contribute 20% of its net surplus to a village development fund; and the Forestry Division has implemented participatory initiatives in different parts of the country.

Two main planning units exist in the wildlife sector (or at least they existed at the time of fieldwork, 1992-4), both of which have been instrumental in promoting community-based conservation initiatives: the Planning and Assessment for Wildlife Management (PAWM) project, within the Wildlife Department and funded by the United States Agency for International Development (USAID) under the auspices of the African Wildlife Foundation (AWF) and the World Wide Fund for Nature (WWF), and a planning unit in TANAPA funded by the Swedish International Development Agency (SIDA) through the World Conservation Union (IUCN).[29]

In 1994, PAWM held a large workshop on community-based conservation, drawing together Tanzanian officials, expatriate technical advisors, representatives of NGO groups and experts from abroad. Ideas generated at this workshop were used by PAWM to formulate a policy for Ministry of Tourism, Natural Resources and Environment, Policy on Wildlife Conservation and Utilisation in Tanzania (PAWM, 1995c). This policy seeks to institutionalise a framework for community-based conservation initiatives and is intended to be comprehensive for all wildlife

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[26] Programmes and project initiatives supported by NGOs tend to be linked to both the state sector and bilateral donors. For example, USAID funding for PAWM is implemented through WWF and AWF; USAID funding for the planning unit of TANAPA is implemented through the IUCN; the WWF has played a major role in formulating a management plan for Mafia Island Marine Reserve, but this is in conjunction with the Wildlife Division; the East Usambaras Agricultural Development and Environmental Conservation Project started in 1987 was supported by the IUCN, the EC, and Tanga Regional Authority.

[27] Two major projects with a community-based conservation component are the Selous Conservation Project supported by GTZ (Deutsche Gesellschaft für Technische Zummenarbeit), and the Ruaha Ecosystem Wildlife Management Project supported by the British ODA. Both bilateral donors work in conjunction with the relevant Tanzanian wildlife sectors - TANAPA, the Wildlife Department, and the regional authorities.

[28] The World Bank has participatory components build into its aid support. In Tabora Region a large forestry programme has been initiated, although this is within the forestry not the wildlife sector. The World Bank is also involved in a conservation programme in the Kilombero Valley, although details are not known. A multi-million dollar support programme for the tourist sector (which is dominated by wildlife-related tourism) was pulled out of by the World Bank because the Tanzanian Government did not meet its preliminary agreements.

[29] The PAWM project funded by USAID started in 1991 and came to a close in 1995/6 (after the time of writing).

sectors (although not all natural resource sectors). Subsequently, the Wildlife Division established a 'Community-Based Conservation Service'. This and the above examples suggest that the language of 'community-based conservation' and associated policy and planning has become thoroughly embedded in the Tanzanian conservation field and is a feature important for support from the international community (for examples of the way in which the language of community-based conservation has become rooted in Tanzanian conservation discourses, vide PAWM, 1994a; Maige, 1995; Omar, 1995; Ndolanga, 1995; Mgumia, 1992; Chausi, 1995; Kiungi, 1992; Mapunda, 1992; Boshe, 1996; Tibanyenda, 1996).[30]

Planning behind the community-based conservation schemes promoted in Tanzania upholds and perpetuates the principle that the conservation of resources within a protected areas remains a viable form of wildlife management (PAWM, 1995c; WSRT, 1995; Leader-Williams et al., 1995a). This being the case, the principal legal status of different types of protected area is not challenged. The tenor of the envisaged approach to community-based conservation is conveyed in the Policy on Wildlife Conservation and Utilisation:

> "Community-Based conservation seeks to involve rural people and communities in taking joint responsibility for the sustainable management of wildlife and other natural resources among or close to where they live, and to share in the direct and indirect benefits of its management. The aim of community-based conservation is to promote the development of rural communities living among or close to wildlife and other natural resources outside unsettled protected areas. The underlying objective of community-based conservation is to demonstrate the positive role that wildlife and its habitats can have in land-use planning and in socio-economic development at local, regional and national levels" (PAWM, 1995c: 23).

The main thrust of this approach is to maintain the status quo in the sphere of wildlife management, while trying to ensure that some linkages are made between wildlife resources and rural development planning. In such an approach the concept of 'community' appears, stereotypically, to be a territorial group of people who play a functional, regulatory, role in the control of resource use for the common good.

Ideas on community-based conservation in Tanzania emerge from wider thinking on people-oriented conservation. Obviously, this is a field which encompasses a wide range of

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[30] For discussions by people involved in implementing community-based conservation schemes in Tanzania, see Baldus, 1991, 1994; Bergin, 1995; Boshe, 1996; Hartley, 1995; Krishke et al., 1995; PAWM, 1995c; Simons & Nicolasen, 1995; Snelson & Lebuya, 1990; Tibanyenda, 1996; also for schemes in other African countries that have been influential in the Tanzanian conservation field vide Mugisha & Infield; Western, 1982; McIvor, 1994; Murphree, 1994, 1995; Lewis et al., 1990; Wilde, 1994.

perspectives, but three crucial ideas at the heart of the concept should be emphasised (IIED, 1994):

First, the importance of understanding the needs and perspectives of local people. Essentially this is an advocacy of participatory development approaches, although the form participation takes can range from effectively empowering people, to 'passive' involvement. Typically these approaches aim to compensate local people for loss of access to natural resources by providing an alternative livelihood source. In recent discussions, it has been stressed that community's must have the rights to the ownership and tenure of wildlife resources in order for management to be sustainable (Murphree, 1994).

Second, the establishment of development-related conservation initiatives through drawing on the involvement and knowledge of local institutions, such as local government, NGOs, and co-operatives.

Third, it is argued that for conservation policies to work local communities need to receive sufficient 'benefits' from wildlife. A key assumption is that if alternative forms of livelihood are found, the economic incentive to exploit wildlife will be alleviated, leading people to change their practices, moving from the poaching of wildlife and the over-exploitation of wildlife habitats to the conservation of resources. Typically this element is promoted through the possibility of the 'direct' use of resources, or the 'indirect' receipt of income generated from a protected area, for instance, that based on the international tourist industry for game viewing and sports hunting.

These three critical ideas are linked to many other related areas of debate: property regimes that cover the resources (state, open access, community, private), land tenure issues, land use planning, management systems gender relations, differential socio-economic access to resources, the nature that income generation should take, and consideration of the respective roles of tourism, private sector, and state; and the place of donor support, and so on. It has been suggested that the reality of bringing together management, ownership, tenure rights, and the equitable distribution of costs and benefits is no easy matter (IIED, 1994).

At the heart of ideas of community-based conservation are questions of resource allocation such as who should have access to, ownership of, and management over wildlife (Murphree, 1994).

For those engaged in promoting the role of community wildlife management in Africa a key question is 'how can wildlife conservation be made sufficiently attractive to local people for them to adopt the practice as a long-term livelihood strategy'? (IIED, 1994: 61).

In principle, this approach could be radical, having wider political implications (Murphree, 1994; Bebbington, et al., 1993; Lynch & Alcorn, 1994). In practice, conservation programmes in African countries tend not to challenge the status quo. Emphasis is placed on stabilising land-use and increasing local incomes to reduce pressure upon further exploitation of wildlife resources. This has led to various 'integrated conservation development projects' in connection with 'core protected areas', 'buffer zones' around these areas, and contiguous rural areas where conservation related socio-economic development schemes can be implemented (Wells & Brandon, 1992; ODA, 1996; Lutz & Caldecott, 1996; McNeely, 1993). Value is still placed on species preservation in accord with scientific principles and established planning methods, and professionals continue to give specialist support to wildlife management (Kiss, 1990).

The above discussion suggests that rather than being invisible or unacknowledged - as it has been argued was the case with 'conventional' wildlife management - so-called local people have become the new subjects of conservation. On the face of it, people are very much present in the conservation field; however, this can be misleading.

The case against 'conventional' forms of wildlife management tends to state that wildlife management has been shaped by international and national agendas that are out of keeping with rural African peoples' lives, hence there is a need for change towards decentralised initiatives. The language of these approaches - normative and consensual, while urging radical transformation to give local people benefits from wildlife and key roles in decision making - masks situations where, in reality, previous power relations, priorities, values, forms of expertise and categories of knowledge often appear to be perpetuated. When these features do change if is generally due to an external dynamic.

The possibility that local people's needs, thoughts and desires may diverge from the global environmental agenda is not considered to be an option when biodiversity is at stake - and this is the crux of the issue. As Western, an advocate of community-based conservation in East Africa, has stated: "[t]he litmus test of community-based conservation is whether it improves

conservation - as distinct from the dispensation of social justice or redress of economic inequity - in rural areas" (Western, 1994: 304).

If one scratches the surface, attempts to render people visible may be seen as a bid to domesticate the agents who in the past have been designated as 'the problem' by conservationists. As categories and stereotypes in conservation projects, rather than as complex agents in their own right, people can be manipulated to enable new forms of intervention into African environments. In the process, life realities in rural Africa tend to be simplified into frameworks of understanding grounded within the natural sciences and Economics and forms of conservation planning driven by international agendas.

The superficiality of the social analyses that many conservation scientists, policy-makers and practitioners are working with is not necessarily obvious. As Szerszynski, Lash and Wynne argue, managerial resources in the new environmental agenda include social science, conceived in identical epistemic clothing to the natural sciences (Szerszynski, et al., 1996: 4). This is nowhere more apparent than in relation to African wildlife management the 'human dimension' having become an integral part of the sustainable conservation 'tool-kit' (vide Kemf, 1993; McNeely & Pitt, 1985; Western & Wright, 1994b for examples). This 'tool-kit' approach to the social and cultural in conservation is evident in relation to debates on the role of local knowledge in conservation (McNeely & Pitt, 1985; McNeely, 1995; Alcorn, 1995; Kleymeyer, 1994), on the relationship between protected areas and indigenous people (Colchester, 1995; West & Brechin, 1991; Lane et al., 1993), and on indigenous people as symbols of environmental issues (Conklin & Graham, 1995).

A key difficulty raised by these environmental approaches to people is that a global conservation language does not necessarily encourage localism. In rendering environmental and indigenous / local / tribal / traditional / native people's problems as an inter-linked totality, a jump is made from the small 'reality' of people's lives, to a more abstract global conception (Ingold, 1993). When it is assumed that for the natural world to survive one has to establish forms of professional, scientifically-driven management, non-local values, other people's agendas and simplified interpretations of problems can be inserted in the 'jump' between people's lives and the demands of planners (Richards, 1992; Colchester, 1995). Models that are generated in the process, can then be used as a powerful tool to react at the local level in terms that may not be those of local people living in or near a conservation area.

To summarise, remembering the introduction to this chapter, in approaches to people-oriented conservation initiatives (participatory / community-based) we see manifestations in contemporary form of the age-old problem confronting those who seek to protect wildlife and the environment, namely, how to locate people in relation to the natural world and resources which environmental managers seek to protect. In the thinking behind these approaches long-standing arguments and tensions between the desire to preserve and the desire to exploit nature have been replayed. It has been argued that, despite a radical language, these approaches tend not to challenge the role of the international community, of expert-led management itself, and of science in the manner they are planned and actually carried into policy in African environments. Furthermore, it has been suggested that in many cases the social insights associated with recent approaches to wildlife management in protected areas are in many cases superficial. So these same insights may provide the rationale for intervention into people's lives, at the local, implementation, level while in addition, the planning frameworks associated with 'community-based conservation', may serve to perpetuate established practices which have been found detrimental to people's well-being whilst, simultaneously, defeating the objectives of conservation. If these suggestions are sound, the question of the need to examine in greater depth the form that wildlife management in protected areas is taking is raised.

COMPONENTS OF A NATIONAL APPROACH

In the following discussion, four institutions that have been highly influential in shaping the form conservation programmes have taken in Tanzania are identified and explored. These institutions are the international community, the state, the market, and science. A fifth element can be added, that is, a western romanticism rooted in the nineteenth century but deliberately inflated and promoted in an era of mass tourism and global media. The way these aspects are drawn together in relation to conservation in Tanzania provides the setting against which notions of community-based conservation must be seen.

The Influence of the International Community

Community-based conservation programmes in Tanzania are located in the context of an international arena where environmental and developmental agendas are established. The conservation of African 'nature' is an issue given priority by scientific communities, northern publics, the world wide media, multilateral and bilateral donors, and international conservation

NGOs, amongst others. As Kiss, a representative of the World Bank working in the East African conservation field, has stated: "Africa's endowment of flora and fauna is unique and diverse...there is a strong international determination to preserve this heritage" (Kiss, 1990: 5; c.f. WWF, NC, WRI, 1993). Such thinking underlies donor agendas that seek to be highly influential in determining the form conservation planning takes in African environments. The importance conferred on Africa's biological diversity by different international agencies has multiple dimensions, scientific, political, aesthetic, economic, etc. In this sense, what is held to constitute 'nature' and the value it is given is socially constructed according to diverse agendas with a multiplicity of meanings.

Outside the continent, the ideas and actions of the international community make Africa visible in a global context. Foreign donors, NGOs, researchers, and the world-wide media, in particular, have the capacity to shape the manner African 'problems' are characterised (c.f. Jamison, 1996). In recent representations, people, animals and environments are positioned in relation to issues such as biodiversity loss, population growth, poverty, land degradation, desertification, and deforestation. The way these issues are constructed and the prominence given to them provides powerful stimuli and persuasive discourses for the creation and perpetuation of international agreements, policy generation, donor support, and research (c.f. Leach & Mearns, 1996; Hoben, 1995; Roe, 1991).

If we turn to the Tanzanian context specifically, the country is host to a community of conservation experts from multilateral and bilateral donors, NGOs and expert consultancy groups. This community has evolved rapidly, accompanying the apparent 'opening up' of Tanzanian society and economy that has occurred since the 1980s, as the country has moved away from the 'socialist' orientation of its post-Independence development ideology.

In the case of multilateral donor organisations giving assistance to environmental programmes such as the World Bank, United Nations Environment Programme (UNEP) and the World Conservation Union (IUCN), their offices in Tanzania act as satellites to the larger centres in Nairobi. A similar case applies to non-government organisations (NGOs) such as the African Wildlife Foundation (AWF). Natural resource programmes of bilateral donors like Norway (NORAD), Sweden (SIDA), Denmark (DANIDA), the United States (USAID) and Britain (DFID) are closely linked to respective embassies in Dar es Salaam; and there are larger programmes with separate bases, for instance, the German Government (GTZ) has offices for

its large Selous Conservation Programme beside those of the Planning and Assessment for Wildlife Management Project (USAID/AWF/WWF) at the Tanzanian Government 'Ivory Room' on the outskirts of the town (at the time of my own field research). Away from institutional bases, one has a number of expert consultants working freelance or as part of consultancy groups operating in the region. Other conservation organisations operating in Tanzania may be smaller and less mainstream but may, nonetheless, be highly influential with regard to national conservation measures.[31] The concentration of organisations and experts in the East African locality stimulates the creation of linkages and networks through which information, rhetoric, rationales and opinions contributing to justifications and descriptions of environmental activities are circulated.

On a more popular level, interest in regional conservation issues is apparent in the presence of wildlife conservation societies (with largely white and corporate membership) and the publication of journals such as Swara (Kenya) and Miombo (Tanzania). One also has a number of single country membership organisations in Europe and North America who give funding or research support to conservation in Tanzania: the Sierra Club in the USA, and expert organisations such as the World Watch Institute, the World Resources Institute, the New York Zoological Society, the Frankfurt Zoological Society, and the Royal Geographical Society, and others. Furthermore a vast media industry stimulates public interest in wildlife and protected areas such as the Serengeti, Ngorongoro and Kilimanjaro. The way in which wildlife and African conservation issues are made accessible to a vast international audience makes it significant as participants in the conservation process. Organisations such as those listed above form the main bodies which generate and disseminate the knowledge that constitutes and stimulates an urge for the conservation of species and natural areas in Tanzania.

The conservation NGOs, international agencies, and donor governments working in East Africa all have policy remits and conservation programmes linked to national policy formulation and planning in host countries. In the context of Tanzania, these conservation bodies align with one another and with the different state sectors in overlapping and sometimes contradictory ways. Such complexity is an integral part of the makeup of donor involvement in the wildlife sectors and, given the politics this involves, raises questions as to what extent this actually facilitates

[31] For example, Friends of Animals, Ele Friends, the Environmental Investigation Agency, Amnistie pour les Elephants, and Greenpeace all played a strong role in generating a ground-swell of European public opinion in support of a complete ban on the trade of African ivory in the 1980s.

the goal of protecting biodiversity, and whether this aim becomes obscured in the different agendas of donors and state representatives (c.f. Gibson, 1995).

Representatives of the international community are also present in Tanzania through the conduct of scientific research. The natural sciences, in particular, have been influential in imbuing wildlife conservation with certain values, assumptions, and understandings. In Tanzania, some researchers are local, but international projects and overseas scientists dominate the scene and these scientists are linked to institutions, organisations, funding bodies and governments in other parts of the world. This is very apparent in the case of research institutions such as the Gombe Stream Chimpanzee Research Centre (vide Haraway, 1989) and the Serengeti Research Institute in Tanzania, and the Amboseli Elephant Research Project in Kenya. Through these research centres and the international networks of scientists and their institutions scientific legitimisation to the social construction of how to conserve nature is provided.

Social interactions, norms and modes of operating within the international community - donor governments, multilateral institutions, international NGOs, scientists, the world-wide media, and northern publics - draw international ideas, policy frameworks, approaches to planning, and agreements into the Tanzanian conservation field. This can be observed through the emergence of new concepts and associated policy and techniques. 'Sustainable development', 'biodiversity', and 'community-based conservation', for example, were terms practically unheard of twenty years ago but now are a regular feature of conservation discourse. Such concepts are disseminated through international conferences, academic seminars, workshops, publications, inter-governmental agreements, membership of pressure groups, etc., each creating contexts which bring people together as communities of experts. These events confer a dynamic and legitimacy to environmental planning, and serve to standardise and universalise the search for conservation solutions, and they contribute to the renewed and changing impetus given to conservation in Tanzania (c.f. Dalal-Clayton & Dent, 1993).[32]

The standardisation of concepts and regulations also emerges through features such as the listing and categorising of species and protected areas at an international level. This can be illustrated with the case of the IUCN which, after it was established in 1956, was charged by

[32] Vide Adams & McShane (1992: 45) for a discussion of the way events such as international conferences and conventions have served to homogenise conservation concepts since 1900 (c.f. Mackenzie, 1988; Grove, 1994).

the United Nations with keeping an up-to-date list of the world's national parks and equivalent reserves (IUCN, 1991). Its efforts have contributed significantly to the development of uniformity of concepts and management practices and has placed conservation matters on national agendas (McNeely & Miller, 1984; IUCN, 1984). It has also helped extend international conservation designations and agreements into national territories. For example, the Serengeti National Park, Kilimanjaro National Park, Ngorongoro Conservation Area and Selous Game Reserve are internationally categorised as 'World Heritage Sites' by UNESCO, the Ngorongoro Conservation Area has recently been declared a 'Heritage in Danger', and the Serengeti-Ngorongoro area and Lake Manyara National Park are designated as international 'Biosphere Reserves' (WSRT, 1995: 20).

Standardisation is also present in the way species and ecosystems are situated within an ecological framework in relation to continental and global points of reference (Stuart & Adams, 1990; WSRT, 1995; c.f. Kingdon, 1989). A further task of the IUCN, for example, is the production of 'red lists' which assess data on endangered species populations; in effect these lists serve to classify species according to scientific assessments of global risk and act as the basis of powerful arguments and actions in support of intervention to 'save' a specific plant or animal and to prioritise conservation actions. These red lists are linked to the international sanctions put forward by the Convention on International Trade in Endangered Species of Fauna and Flora (CITIES). Tanzania, for instance, is signatory to international agreements that ban trade in ivory and live species considered at risk of extinction according to CITIES.

The way a country conforms to international agreements, tries to establish at least partially-standardised conservation models, attracts and maintains donor support, provides a conducive environment for research, and responds to international conservation actions, together help to determine its status and importance within international perceptions relating to the global environment and to development. Tanzania is critically situated, and thus can constitute a case study for developing understanding of how external conservation interventions play a part in organising a country's conservation approach. It is a good example, also, for attempting to comprehend how the different elements defined as constituting 'nature' are framed into a particular semblance of order, meaning and value.

The State

If the international conservation community is central in determining our view of African conservation issues, the various institutions conceptualised as the State, cannot be ignored in the role they play in formulating and implementing conservation policies. In this section I want to examine the place of the State in the historical development of conservation in Tanzania.

During the early colonial period, conservation measures were closely allied to state authority, institutions and bureaucratic practices. This contrasts markedly with the picture in a country like Britain where conservation measures only recently became a state concern (Adams, 1996: 13). In colonial Africa, it was only gradually that an independent conservation lobby started to emerge and become vocal in relation to wildlife protection measures.[33] Today, the post-Independence State is still the main body with jurisdiction over wildlife resources, but, as I have detailed above, a multitude of foreign governments, organisations and agencies, together with the private sector, are highly influential in the Tanzanian conservation field.

Game preservation measures began in the Territory in the late nineteenth century under German colonial rule (Reichs-Kolonialamt, 1913). After the First World War, German East Africa became the UN mandated territory of Tanganyika under British control. As the British began to build up their bureaucratic apparatus they started also to envelope natural resource management within administrative authorities. Later, in the 1930s, the North American model of the protected area became internationally influential as a prototype for preservationist conservation measures (McNeely & Millar, 1984; Anderson & Grove, 1987; Colchester, 1995).[34] This model finds its epitome in the form of the 'national park', large enough for wildlife to roam and migrate freely in a bordered area, free from human presence and preserved

[33] Two examples of the growing preservationist lobby in Britain come to mind. First, a pressure group formed after 1903; colonial officials, hunter-naturalists, and the British gentry came together to form the Society for the Preservation of the Fauna of the Empire (also referred to as the Penitent Butchers Club by the British public due to its hunting membership; Adams & McShane, 1992: 46). The general line taken by this group was that game should be preserved so that (European) hunting could continue. Second, a controversy that appeared in The British Times in the 1940s regarding the controversial game shooting that took place as part of the Shinyanga Tsetse Control Experiments under the leadership of Dr Jackson and Dr Potts (held in files 'Game Reserves', TNA.Mss.11551, Volume 1). Outbursts of British public opinion provoked by the shooting of wild animals, can be seen as early examples of international groups contesting, and in the process creating, particular relationships to an imagined nature.

[34] In North America settlement and resource use for livelihood purposes are banned in national parks. This contrasts with British conservation law which is based on older traditions of crown hunting reserves and access to the commons, taking into account existing traditions of overlapping land-use rights (Adams, 1996; Colchester, 1995). For example the North York Moors National Park has people residing within its boundaries (Statham, 1994).

for perpetuity. Integral to the model, and of fundamental importance, were two critical ideas, namely that wildlife could be owned as private or public property and that land should be set aside permanently for this wildlife.

Starting with the Serengeti in 1951, the national park model was imposed by the colonial state authorities on environments and people in Tanganyika. Bernard Grzimek, an ardent campaigner for the Serengeti National Park, captures the tenor of this preservationist stance: "a national park... must remain primordial wilderness to be effective. No men, not even native ones, should live inside its borders" (cited in Adams & McShane, 1992: 16). The 'protected area' as a form of land-use and of resource management, safeguarded under statuary wildlife laws, has remained at the heart of the Tanzanian state's conservation project throughout the twentieth century.

At Independence, a key question preoccupying the international community was whether African states would continue to promote the conservation measures established during the colonial era. In 1961 the IUCN organised an East African conference on conservation in Arusha, Tanzania, with the aim of making African leaders conversant with European and North American thinking. In the case of Tanzania this resulted in Nyerere's 'Arusha Declaration' (not to be confused with the more famous declaration of 1967), which has become an opening litany to Tanzanian wildlife policy documents in the intervening years.[35] In his discourse, Nyerere clearly aligned Tanzania with international support for conservation and made it plain that the status quo would be maintained.

By the end of the colonial era, the wildlife sector was dominated by private and foreign agencies engaged in hunting, conservation, research activities, tourist safaris, etc. These agencies operated under the auspices of the strongly centralised colonial-style Game Department, and this was the situation up to the 1970s. This state of affairs was perpetuated by the large number of European personnel who remained in charge of wildlife conservation,

[35] "The survival of our wildlife is a matter of grave concern to all of us in Africa. These wild creatures amid the wild places they inhabit are not only important as a source of wonder and inspiration but are an integral part of our natural resources and of our future livelihood and well being. In accepting the trusteeship of our wildlife we solemnly declare that we will do everything in our power to make sure that our children's grandchildren will be able to enjoy this rich and precious inheritance. The conservation of wildlife and wild places calls for specialist knowledge, trained manpower, and money, and we look to other nations to co-operate with us in this important task - the success or failure of which not only affects the continent of Africa but the rest of the world as well" (Nyerere, Arusha Declaration of 1961).

although these people were eventually displaced by Tanzanian graduates from Mweka, the College of Wildlife Management, established as an outcome of the Arusha Declaration of 1961.

The 1970s heralded a distinct change in the organisation of Tanzania's wildlife estate. As part of the Government's development policy, a regional decentralisation programme was implemented under the Local Governments Act (1972). This was followed by an enforced 'villagisation' programme in 1974 and, in the same year, the implementation of new principal wildlife legislation, the Wildlife Conservation Act (WCA). The regional decentralisation programme of 1972 advocated a devolution of administrative control over the management of forest and wildlife resources. Placed together with measures set out in the WCA, this programme heralded radical change in the management of wildlife resources. Game reserves, game controlled areas, wildlife in open areas, and the hunting industry were decentralised and placed under the control of the Regional Development Directorate of each region.[36]

After 1973/4 state agencies were formed; specifically, parastatals like Tanzania National Parks (TANAPA), the Ngorongoro Conservation Area Authority (NCAA), and the Tanzanian Tourist Corporation (TTC) (WSRT: 55). The manner in which control over Tanzania's wildlife estate was fragmented between different government sectors and parastatals bears witness to the establishment of a tendency towards state incrementalism which prevails to this day.

Actions designed to draw wildlife conservation and utilisation into state control were coupled with an almost total exclusion of private sector participation in the wildlife industry. This was apparent, in 1973, in the way that the hunting industry, which had been private sector and foreign dominated, was made part of wider political moves to rout out government corruption (vide Shivji, 1973; Naipaul, 1978 for perspectives on the strong anti-colonial, anti-foreign stance that was taken at the time).[37] Consequently, between the years of 1973 and 1978 a complete national sports ban was enforced, and when the hunting industry was reopened it was under the - grossly inefficient - parastatal, the Tanzanian Wildlife Corporation (TAWICO).

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[36] Principal legislation is the Wildlife Conservation Act No. 12 of 1974 (for the Wildlife Division), the National Parks Ordinance Cap.253 (1948) and Cap. 412 (1959) (for TANAPA), and the Ngorongoro Conservation Area Ordinance Cap.412 of 1959 (for the NCAA).

[37] 75 Game Officers were transferred out of the Wildlife Division, in effect they constituted the Wildlife Division's entire senior staff (Lamprey, 1995: 11). These Game Officers would have been amongst the first trainees of Mweka Wildlife College, so this action also had the extremely detrimental consequence of removing all those Tanzanians with expertise in wildlife management.

The enforced villagization programme of 1974 (*Ujamaa*) had implications for wildlife conservation. By the end of 1976, 13 million people were reported to be living in *Ujamaa* villages (Coulson, 1982). Aggregating people into village units had the unintended consequence of removing from remote areas many people who were likely to come into daily contact with wild animals, or use natural resources in protected areas. In effect, villagisation served to perpetuate a pattern established in colonial times, of the state being instrumental in reorganising the relationships between people and nature.

During the 1980s the Wildlife Division declared that decentralised control of its wildlife estate had been extremely detrimental for the protection of wildlife. In many areas little or no active management of wildlife had taken place through much of the 1970s, the attention of regional government being focused elsewhere. In a move which reversed past policy, the administration of game reserves and the hunting industry were drawn back under centralised control.

Although the colonial-style Game Department was restructured after Independence many of the wildlife management institutions that grew up in the post-Independence era, together with the legislation[38], and the way that state representatives operate, their bureaucratic routines and behaviour, reverberate with the style of the colonial game officers, their practices, and the organisation of conservation in the colonial era. However, despite continuity with the past, one question that has to be addressed is the extent to which the meanings attached to the similarities have altered?

Chapter 1 of this thesis described how control over the Tanzanian wildlife estate is fragmented between the Department of Wildlife, two main parastatals, TANAPA and the NCAA, and three additional minor parastatals, TAWICO, CAWM, and SWRI. In keeping with typical features of state incrementalism, there is a complexity of overlapping and contradictory legislation and policies, and no clear authority or ability to generate integrated management planning for wildlife conservation. A Wildlife Sector Review Task Force (WSRT, 1995) conducted under the auspices of PAWM, the planning unit in the Department of Wildlife, concluded that parastatals in the wildlife sector are prone to structural parallelism, have limited capacity to

[38] The principal legislation through which this can be traced is: Jagd und Wildschutz in den Deutschen Kolonien, 1913 (dates back to the first Game Ordinance of 1896); The Game Preservation Ordinance of 1921; The Game Preservation Ordinance of 1940; The Tanganyika Fauna Conservation Ordinance of 1951 (CAP 302); The Wildlife Conservation Act of 1974; The National Parks Ordinance; The Forests Conservancy and Management Ordinance of 1921; The Forests Ordinance of 1957 (CAP 389) and revisions of 1959.

carry out supervisory and monitoring roles, and that they split responsibility between overseeing authorities, among other critical features (Ibid.: 57). Within the Wildlife Department, a state institution, it was found that, according to the same report, there were conflicting roles and functions, multiple and conflicting reporting and authority systems at regional and district level, a duplication of roles at all levels, and a bias in practice towards tourism and wildlife exploitation in preference to conservation measures (Ibid.: 62). All of these features contribute to the inescapable conclusion that wildlife management in Tanzania is complex, chaotic and often ineffectual. Key questions this raises are: how does the state manifest itself at the local level in relation to conservation-related activities? What implications do these features have in state interventions into conservation? And lastly, how do people experience state-led conservation initiatives at the local level?

To summarise, in the colonial era policy and planning to protect wildlife was the undertaken by the colonial state, a situation perpetuated after Independence, although today influences on conservation planning, ideas and practices are far more heterogeneous and urgent. Even so, one commonality shared with the past is that state control and management of wildlife is 'top-down'; its priorities taking little account of many local interests. This leads to the next institution in the interrelated influences on conservation in contemporary Tanzania, that of the market.

The Market

In the last twenty years the organisational power and development capacity of the market has become very apparent as an agent of increasing importance to change in sub-Saharan Africa (World Bank, 1989, 1990, 1991). The traditional view in African conservation debates has been that wildlife management is the job of government, and, to put it starkly, economic development is antithetical to the preservation of species. However, the capacity of the state to manage protected areas and preserve species has increasingly been brought into question, with many conservation failures being all too apparent. This has led to a search for alternatives, with market-oriented approaches and economic rationales gaining ground and importance in determining how wildlife and protected areas should be valued and how they should be managed (vide ODA, 1996, USAID, 1993). Taken to the extreme, this is an advocacy of a free market approach to conservation although, generally, a middle-ground is sought between state regulation and the private exploitation of wildlife resources (Wells, 1996 and Pearce, 1996).

Two examples of the way market-oriented rationales have entered into conservation debates are, first, private sector alternatives to state management of wildlife are being sought and, second, problems are being framed and solutions sought in conservation initiatives at the local level. A third area, which will not be expanded on, is the specialist study entered into by economists with a view to giving market value to different species and to previously non-commoditised aspects of the environment.[39] Beyond the specificity of each of these approaches, there has been a general embracing of market-oriented discourses by many working in the conservation-field. The case of Tanzania is no exception, with social actors and institutions being repositioned in relation to the market as well as to the international community and the state.

In relation to the first of the rationales, economic restructuring is seen as an important solution to problems encountered at the local level in the Tanzanian conservation field (WSRT, 1995; PAWM, 1995a; Price Waterhouse, 1995). In this regard a key role is conferred on the private sector. Indeed, at present there are indications that the private sector reaps more income from wildlife than does the state, even in regard to the legitimate exploitation of wildlife resources, not considering the massive illegal exploitation of these resources which also takes place. This sector includes: tour operators, hunting outfitters, businesses involved in the ranching, culling, and live bird and animal trade, and the service sector associated with the tourist industry.

At the level of policy, the Government identifies the private sector as a central plank of its initiative on 'community-based conservation' set out in the 'Wildlife Conservation and Utilisation Policy' (PAWM, 1995b). This policy states that control over wildlife resources will be devolved to local communities within or next to units of land known as 'wildlife management areas'. These communities would be able to utilise some of these resources for consumptive purposes, but for the planners 'economic sense' dictates that the major percentage of this wildlife will be sold by local people to tourist sports-hunting outfitters (c.f. Price Waterhouse, 1995; Murphree, 1995; McIvor, 1994).

Discussion of the Policy on Wildlife Conservation and Utilisation (PAWM, 1995c) leads us to the second way by which market rationales have entered into the Tanzanian conservation debate. This is in relation to the way that conservation problems and proposed solutions are

[39] For work which attempts to construe mammals, biodiversity, wildlands, etc., in commoditised terms see Barbier et al., 1990; Dixon & Sherman, 1990; Brown, et al., 1994; Shah, 1995; see also Jacobs, 1991.

framed in economic, in addition to biological, terms and again, this emerges in Tanzania in relation to proposed decentralised approaches to wildlife conservation (Leader-Williams, et al., 1995a). Emphasis is placed on the role of local economic incentives for conservation. A central tenet of this approach is that people must be given benefits for not being able to engage in alternative forms of land use, and in order to encourage them to see the value of conserving wildlife resources.

In keeping with the wider literature, the Tanzanian Policy on Wildlife Conservation and Utilisation clearly equates 'local people' with 'economic actors':

> "Government affirms that an important function of the wildlife sector is to promote its *re-organisation in a manner that permits sufficient revenue* from wildlife to be retained for the *cost-effective* and inter-linked management of protected areas, and for rural communities to receive *benefits* from community-based conservation schemes"..."rural communities bordering (or, in the case of NCA, resident within) protected areas have received *few tangible benefits* from wildlife conservation, further exacerbating the problem of illegal or unsustainable use" (PAWM, 1995c:14; italics added; also PAWM, 1995a).

The view of people as 'economic actors' pervades the proposed incentive structures that are considered necessary to dissuade people from poaching and other illegal resources use. In the methodological individualism that emerges from the economic bias in these documents lies a contradiction however, because at one and the same time conservationists focus on communities, emphasising the collective aspects of African life at the grassroots level. This is apparent in the reluctance of the Tanzanian Government in the Wildlife Conservation and Utilisation Policy, to target income from conservation to individual people or, indeed, individual households; instead, 'the village' and 'the Authorised Association' become the units that can reap benefits from wildlife. Such reluctance is widespread in community-based conservation projects that aim to make people beneficiaries from wildlife (Krishke et al. 1995; Bergin, 1995; IIED, 1994). It would appear that, although there is a desire on the part of many conservationists to teach people to act upon extremely pragmatic rationales in their relationships to nature there is a distrust, at the same time, of the rural 'African individual' (the gist being, perhaps, that this individual will pocket project 'incentives' while continuing to poach).

Redistribution of revenue and cost effectiveness within the Tanzanian wildlife sector coupled with talk of tangible benefits to local communities, has become the language in which key solutions to difficulties facing conservation are framed. In defining the problems that confront conservation and possible solutions in economic terms it can be argued that program designers

misunderstand and mystify both the way that different natural resources are rooted in rural people's lives and the incentives that motivate people's actions. In particular, resources are poured into community projects, but collective benefits may do nothing to prevent individuals from illegally exploiting resources (Gibson & Marks, 1995: 942).

In summary, this discussion has highlighted how economic considerations and market rationales have entered into the terms of the debate on wildlife conservation. In Tanzania these rationales have become important in framing the solutions that are sought to existing conservation problems, particularly in terms of people-related conservation issues. In this respect, linking an economic, market-oriented emphasis to biological rationales has led to a tendency to frame people solely as economic agents. (Mirroring, it could be said, the same heightened tendency operative in modern western society.). This has the danger of missing the social and cultural dimensions of their lives which, although economic elements are inextricably bound to them, are at least of equal relevance in shaping their interactions with natural resources.

Science

A dimension absent from the picture so far, concerns the 'nature' contained within protected areas. Here it will be argued that the totality of natural elements that are perceived to constitute 'nature' within protected areas have emerged as a reflection, at least in part, of outside interests. Two ways this has arisen is through the application of scientific ideas and, as we shall see in the following section, through the superimposition of western aesthetic notions and emotive desires on African environments. In Southern Africa, scientific modes of enquiry, ideas and endeavours played an integral part in colonial attempts to conquer the nature which impeded advance into Africa. The protection of wildlife within nature reserves was an integral part of this complex process.

Tanzania, like the rest of the continent, has been host to scientific exploration. In the mid-Nineteenth century, some of the great Western explorers crossed the country making detailed observations and evaluations of their natural surroundings, mapping and measuring the land they travelled through, creating taxonomies of the animals they hunted, and collecting plant species to be identified and propagated in Europe (examples from the region of Ugalla are given in Chapter 3, c.f. Beinart, 1987; Mackenzie, 1988; Grove, 1989). These records were taken back to European metropolitan centres and contributed to the impetus and legitimacy that

was given to conservation at the international level (Curtin, 1964: 15-17). The apparently 'factual' records of untouched African wilderness left by these explorers also established precedents for later administrators and experts who wished to preserve this wilderness for posterity.

From the late Nineteenth Century, the role of science in, by then, German East Africa, was not simply based on exploration, but was driven by the needs of different colonial administrations. Indeed, many conservation measures came into being as an attempt to counter the excesses of German, and later British, colonial resource use practices, such as hunting and deforestation (Kjekshus, 1977).

The regional manifestations of these scientific initiatives was part of a lively exchange of scientific and technological ideas, information and expertise which took place between colonial outposts and metropolitan centres, with knowledge becoming concentrated in those centres of power.[40] Moreover, scientific ideas and environmental legislation - notably those to do with game preservation - made in one part of the colonial world (India, South and West African territories) were influential in other parts through the entrenchment of the bureaucratic practices of the Colonial Office, the movement of colonial officers and scientific experts, and an interchange of ideas, practices and technology (Grove, 1989). Through this interchange of environmental ideas between different areas of the colonial empire, and the role scientists played in early trading companies and later state administrations, scientific ideas about the dynamics of environmental change in Southern Africa emerged.

For example, the relationships that were postulated between deforestation and rainfall patterns, the notion of 'climax vegetation community' and ideas concerning land 'carrying capacity', each underpinned by the concept of environmental equilibrium (Grove, 1989). In effect, environmental change was perceived as a departure from an ideal, giving scientific grounding to the widespread assumption that there is an inverse relationship between human action and the well-being of the environment; an assumption that has underpinned the creation of protected areas in Africa (Pimbert & Pretty, 1995: 2).

[40] For example this can be seen in relation to the botanical centres of Kew and Upsaala. Thus Karl Linnaeus initiated botanical missions from Uppsala in the 1740s. For Kew, Sir Joseph Banks established the 'Association for Promoting the Discovery of the Interior Parts of Africa' in 1788 in order to systematically collect scientific information to be added to the constantly growing body of botanical knowledge and classification of plant and animal species (Curtin, 1964: 15-17).

In postulating linkages between environmental change and human action, scientific ideas played a critical role in rationalising state interference into people's lives and African environments, one outcome of which was wildlife preservation measures leading to the creation of protected areas. It should be stressed, however, that historically conservation measures were not always necessarily driven by conservation-based policies, but sometimes emerged out of apparently unconnected processes such as public health measures (c.f. Comaroff & Comaroff, 1992; Latour, 1988).[41]

This can be seen clearly in connections with human and cattle sleeping sickness (Trypanosomiasis) measures and tsetse control in colonial Tanganyika, as shall be argued in Chapter Three when we look at the case of Ugalla Game Reserve. Because, throughout the British colonial era, wildlife management was closely bound to tsetse fly and sleeping sickness control measures and experiments to eliminate the tsetse fly in Tanganyika, it is worth elaborating.[42]

In the case of tsetse control measures and sleeping sickness interventions in colonial Tanganyika, the scientific method and subsequent interventions derived from it effectively isolated certain elements - game, trypanosomes, tsetse flies, in particular - in ways that led to administrative actions intended to transform the relationships between human populations, wild animals and the bush in a manner that was conducive to the foundation of wildlife sanctuaries and game protection areas (cf. Kjekshus, 1977).

The history of the relationship between tsetse control and wildlife conservation in colonial Tanganyika is explored in detail by Ofcansky (1981; cf. Mackenzie, 1988). Unfortunately he does not analyse how the presence of sleeping sickness in humans or cattle was constructed into crises whose solutions were consonant with European conceptions of illness and notions of order, which furthermore, favoured particular colonial administrative designs, including the preservation of natural resources free from human interference. Due to the massive population resettlement schemes that arose as a response to epidemics of human sleeping sickness, vast tracts of land became virtually uninhabited and were subsequently gazetted as wildlife sanctuaries.

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[41] See also Fisher & Arce, forthcoming 1998, for an in-depth discussion of this case in the context of Western Tanzania.

One consequence of population resettlement over vast areas of present-day Tanzania is that the historical associations that local people make with wildlife and protected areas are related to the history of forced resettlement, as we shall see later in this thesis. Biological science has played a role in this; science supported and encouraged imperatives for a reordering of the relationships between people and nature to take place. Its findings led also to the introduction of new power relations between the State and local people which were subsequently to play a part in the implementation of wildlife protection measures.

Emphasis has been placed on the historical aspect of scientific research and its applications in African environments. This should not be taken to imply that scientific research and understandings have no present-day relevance to the conservation of species and the organisation of people in Tanzania. On the contrary, today there is a great number of scientific disciplines within the biological and ecological sciences whose understandings act as a crucial linchpin t wildlife management in East Africa. Moreover, scientifically-based practices and knowledge confer on wildlife management a particular authority. This authority appears to stem from the legitimacy that is placed generally on the value the of scientific method and resulting knowledge in modern society (Pimbert & Pretty, 1995). When scientific knowledge is brought into question, criticism tends to arise by way of competing theories (c.f. Brocklington & Homewood, 1996). Questions over the limitations of scientific knowledge for the conservation of local environments are not brought into the terms of the debate.

This is an important point, because, scientific knowledge, as a mode of enquiry and body of understanding, is not something so-called local people are likely to be conversant with. One implication this holds is that, unless there is a radical challenge to the status of scientific knowledge in biodiversity conservation, the management of wildlife in protected areas necessarily entails external intervention, despite rhetoric to the contrary. It also often leads to the local knowledge of people conversant (in a non-scientific way) with these species and environments being treated dismissively.

The case of evaluations concerning the sustainability of local resource utilisation in protected areas is a good example of the authority given to scientific knowledge over and above, in this case, different forms of local knowledge. In these debates the emphasis tends to be placed on

[42] Indeed, between 1919 and 1927, the job of Director of the Department of Game Preservation had a remit including game preservation, tsetse research, and land reclamation.

the capacity of the scientist to determine what degree of resource use is viable and sustainable according to scientific (objective) criteria. These criteria situate people in a particular relationship to the natural world, placing differential values on elements of nature - 'natural resources'- and locating the act of using nature in terms of its value, dissociated from people's actual livelihood practices, their knowledge of fauna and flora, and understandings of environmental processes.

In this approach, science is treated as neutral and autonomous, with the capacity to determine the line between sustainable and unsustainable resource use in accordance with biological criteria, and while reduction and stasis in resource use can be contemplated, qualitatively different lines of analysis, forms of resource use practice, and institutional frameworks that would be required for sustainability cannot be encompassed (Benton, 1994: 370). In this perspective, nature sets limits to human actions and a critical emphasis is placed on the need for a third party to intervene in order to control the unenlightened resource use that does take place. It follows that, use of the concept of sustainable development can easily encourage a managerialist approach; one does not question the capacity of science to overcoming environmental problems (Ibid).

To summarise, science infuses conservation practices and ideas with a particular authority and confers on scientists, policy-makers and planners a powerful legitimacy in their attempts to control the environments under their jurisdiction. Through this process of control, boundaries have been created and the internal nature of protected areas subsequently mapped, ordered and valued. Throughout the twentieth century, development interventions which have been part of conservation have been linked closely to the application of science. However, many of these interventions can after all be seen to have contributed to wildlife conservation, albeit in a circuitous manner, for they have played a central role in reorganising the relationships between people and their environment.

At this point we need also to mention the functional relationship that appears to exist between science and modernity; many of the interventions based on scientifically rational processes and discourse have been driven by the attempt to create a modern society. Conservation plays a part in this; in the process of modernisation, nature itself has been reordered and inscribed by the application of science. In this sense science undoubtedly has been one of the main driving forces behind the social construction of the notions and practices of conservation in Tanzania.

Western Romanticism and the Creation of Landscapes

We turn now to a final and related constituent element affecting conservation in African states, that which derives from the realm of the 'western imagination'. Western romanticism, in different guises, has played an important role in attracting outsiders to 'natural' African environments and wildlife since the Nineteenth Century, a role perpetuated in this era of mass tourism and globally-extended media. This in itself has been part of the impetus behind the perceived need to separate people from the environment of national parks, and to a lesser extent of game reserves and game controlled areas in Tanzania.

African nature has long held a potent niche in the western imagination, whether in the vista of African wilderness that prevails in western literary constructions of nature in the early twentieth century (Blixen (Dinesen), 1937; Hemingway, 1936, 1938; Huxley, 1931; van der Post, 1952; Huxley, 1951; Markham, 1942), or in the more recent global panorama of modern Africa envisaged as a font of diminishing biological diversity (Kingdon, 1989; Wilson, 1992). It holds a powerful appeal to people unconnected with actual everyday life in Africa. The form of this attraction is not fixed but alters as new meanings are given to it, and, as Haraway has pointed out, complex constructions of love, power and science are forged into depiction's of nature in the late twentieth century (Haraway, 1989: 1). This points to a peculiar way in which the perception of nature as plentiful, disordered and exotic can generate personal feelings, challenges, and careers for individual and collective ventures in the attempt to domesticate (civilise) nature to conform to western cultural representations.

Over the past four centuries, 'the dark continent' has held a strong position in the western imagination (Curtin, 1964). This has been created and recreated through contact with Africa, but has reflected not so much the 'reality', as the ideas and intentions of European societies. It may appear that this 'dark continent' has been but a place for the imagination to roam, however, its images and enticements have shaped the interests and activities of colonists, administrators, scientists and policy-makers alike (Ibid., 1964: v); and it could be suggested that this is as apparent in regard to wildlife and its conservation, as to other aspects of colonial and post-colonial activities, perhaps more so. In this vein, concepts like landscape which convey notions of aesthetics and imagination are important to analyse.

A modern result of the western attraction to Africa emerges in the tourist industry, whereby Africa becomes an object of consumption for thousands of people across the globe. For some a

safari in Kenya or Tanzania is the holiday of a lifetime; others watch wildlife programmes on television or campaign to save the rhino, for example. For the wealthy, African nature may be shot and stuffed to be displayed as a showpiece in the hunter's home. The words of a representative of Safari Club International capture well the emotive and imaginative elements that enter into hunting: "Tanzania has four of the Big Five...exotic and beautiful species like gerenuk, sable and zebra attract the collector and home decorator...All animals of true trophy quality are symbols of success, ethics, skill and taste...Tanzania has a reputation for having the best-maned lion, the largest cape buffalo and the distinction of having more buffalo, lion and leopard than other countries" (Jackson, 1995: 7).[43]

In this respect it is helpful to view an attraction to landscapes as a part of the western cultural process in which protected areas as landscape can be seen as an artifice, not truly wild but a human product. "Evidence of agreements painstakingly evolved between man and the landscape" (Lévi-Strauss, 1973 (1955): 116-7). Except that Lévi-Strauss's notion of 'agreements', in the African context can be likened to the actions of the British eighteenth century landscape designer Capability Brown, who first erased an environment's topography in order to create a 'natural landscape' (c.f. Wallman, 1995). The brutality entailed in the creation of African landscapes emerges only too clearly in examples such as the Maasai, who were excluded from using the Serengeti as part of their transhumant pattern of land use (Århem, 1985). Or of the Ik left to die of starvation after being expelled from hunting grounds in north east Uganda to make way for the Kidepo National Park (Turnbull, 1972). Such events are a very modern materialisation of an aesthetic associated with our sense of order.

Let us be clear that this discussion follows Lévi-Strauss's notion of landscape as a feature arising from the framing of nature in specifically western cultural terms, not the more recent usage in anthropological writing which connotes "symbolic environments created by human acts of conferring meaning onto nature" (Greider & Gorkovish, 1994: 1; c.f. Widlock, 1994). The reason for keeping close to the former position is because the development of the concept of landscape, and the practice of landscaping in art, architecture, gardening and conservation has a long tradition which seems to epitomise a specifically western way of bringing nature into the cultural domain. It also captures the role of the observer as agent in actively transforming the landscape - through mapping, delineating boundaries, creating roads, burning the bush in

[43] Safari Club International is the largest trophy hunters organisation in the world, based in Virginia, USA.

Tanzanian protected areas - rather than the emphasis being placed on landscape residing solely and passively in perception, as a 'given'.

The protected area as landscape appears innocuous and a place of beauty for some. However, it has been argued that this conception (and the associated, complex, set of emotions and imagery it evokes) has been superimposed on the African environment according to western conceptions of Africa, of pleasure and of nature (Glacken, 1967; Curtin, 1964: Haraway, 1989). In this respect, it has become typical to associate wildlife conservation with a particular historical and cultural context, by which it is linked to the imposition of the western imagination and will on African environments at the expense of the lives and cultural conceptions of African people themselves (Anderson & Grove, 1987; Adams & McShane, 1992). But what is also needed is a questioning of how these conceptions of landscape relate, or do not relate, to Tanzanian conceptions of aesthetics, taste, and the arranging of nature in the modern era. What relationships or ideas are maintained, created and recreated in Tanzania in relation to these landscapes? What meanings do these landscapes hold today, and for whom; are they purely a market-place to generate 'much needed foreign exchange'? Ultimately such questions are to do with conservation, not only aesthetics and economics.

To summarise, it has been argued that western conceptions of African landscapes have played a part in imbuing conservation interventions with a particular way of ordering, valuing and inserting cultural elements into African environments. Also that conceptions of landscape are closely bound to the thinking and actions of the international community, to the market orientation that drives wildlife tourism, and to scientific research and its applications.

CONCLUSION

In this chapter, we have examined how recent approaches to wildlife management in protected areas have tried to incorporate ways of managing people and the consequences of their actions upon local environments. This led us to suggest that in order to assess fruitfully the merits of such concepts as 'community-based conservation' it is necessary to deconstruct the different elements which enter into the makeup of wildlife conservation, in relation to Tanzania in this instance. To this end it has been suggested that the dynamics of conservation in the country results from the influence of a number of different institutions: the international community, the state, the market, science, and also a form of western romanticism. Each of these influences

has a long history in Tanzania stretching back through the colonial era, although the relative importance conferred on each, and the centrality it has been given in relation to conservation ideologies, planning and actions, has varied. Nonetheless, the issue of how to situate and control human resource-use has remained prominent in the national environmental agenda and in current international conservation-related debates. Here it has been argued that the above-mentioned elements come together to generate particular forms of wildlife management and, consequently, ways of handling the interaction between people and wildlife or people and the natural environment more broadly considered. The fact that tensions arise between certain of these elements shows that the sphere of wildlife conservation is a highly contested one in Tanzania. This is clearly evident in debates concerning the role that local people should play in wildlife conservation.

It has been said that the international community plays an important role in establishing conservation agendas and priorities in Tanzania. One may ask why Tanzanians accept these agendas, and probably the answer lies in the fact that external support for the conservation of biodiversity is part of wider relations with foreign donors and the international community. During the early colonial era the state played a central role in establishing protected areas for the preservation of wildlife. However, in the post-Independence era the state's ability to regulate the use of natural resources has proved to be severely limited. When one connects this limitation to the powerful interests acting to exploit these resources, and the fact that local Tanzanians may not hold (or have the capacity to hold) the aesthetic, global or scientific value of wildlife in high esteem, one has to ask why the conservation of wildlife is still high on the national agenda. This question led us to look at the next element affecting conservation, the market, for evidently wildlife and 'natural' areas have economic value and importance. Throughout the 1980s and 1990s, a shift in development thinking from the centrality given to the role of the state to the potential accorded the market has been reflected in Tanzanian conservation planning. New importance given to the role of the market has flamed a long-standing tension regarding East African wildlife conservation, for not only have economic rationales and models permeated recent conservation thinking, the exploitation of wildlife resources has also become an increasingly attractive prospect for enterprise.

Two elements, science and western romanticism, have both been a means of re-organising, ordering and valuing nature, and in this respect one can find a common linkage in their associations with the scheme of modernising Africa. In the case of science, or, strictly

speaking, the application of techniques and practices based on scientific method, the relationships between people and nature have been changed through a rearrangement of the 'natural spaces' gazetted as protected areas. It has been suggested that in western representations of Africa we have been able to witness how particular imaginative vision of African nature has played a historical role in the impetus to create protected areas, and continues to play a part in their perpetuation.

If we return to the theme of people and community-based conservation, it has been argued that apparent limitations in the state's capacity to regulate natural resources, combined with the changing roles of state and market in conservation planning, have led to a search for new ways of conserving biodiversity. One alternative proposed by those working in the conservation field is that of participatory conservation initiatives, and consequently the concept of 'community-based conservation' has become well established in Tanzanian Wildlife Sectors. A general impression is that despite people and their participation being positively embraced within wildlife management at a conceptual and policy level, all that constitutes the full society of which those people are part - and the way that their social life articulates with those institutions considered above - has not been seriously incorporated into actual conservation practice.

Conservation schemes have been initiated which have tried to incorporate the needs and ideas of rural Africans into wildlife management, and to generate 'collaborative management' so that local people may play a role in the management of, ownership of, and benefits from wildlife resources. In addition, attempts have been made to stress the potential importance of indigenous people's positive relations to the environment and the value of their 'traditional' or 'indigenous' knowledge. However, it has been argued that this positive trend has all too readily led to an unreflective incorporation of what can be termed 'the social dimension' into environmental understanding and planning action. As a consequence, underlying ideologies and the framework and knowledge base of such action often contradicts, undervalues or ignores, what is inherent in 'the social', in terms of human social action and society. Instead 'human resource use' tends to be equated solely with material needs and instrumental rationality. In short, the way in which conservation planning incorporates the 'human dimension' can be both naïve and simplistic. These considerations lead us on to the case of Ugalla Game Reserve, in order to explore the relationships people may hold to a protected area and to wildlife management.

3

Representation, Order & the Purification of 'Nature'

Introduction

The following discussion focuses on the historical dimensions of protected area conservation in the region where Ugalla Game Reserve is situated. The main intention is to elucidate the many disparate elements that have been drawn together into constructing the 'nature' that is today enclosed within the boundaries of the protected area.

The chapter is divided into two main sections: the first considers how the region and people were represented through European exploration, settlement and colonisation in the nineteenth and early twentieth centuries. The second is devoted to an examination of a sleeping sickness epidemic that entered the Ugalla Region in the 1920s, which the British administration responded to by resettling the human population. The sleeping sickness epidemic acted as a critical event through which a reorganisation of the relationships between people, settlements, and forest could take place. This later enabled the area to be gazetted as a wildlife sanctuary, it also created conditions for local people to re-enter the area on different terms.

It will be argued in the following chapter that the manner in which people re-entered the area enabled them to develop new approaches to making their livelihoods. Here we will start to see how the different influences on conservation at the national-level appeared locally, for changing ways of making a living inevitably meant that people started to 'reposition' themselves in new relationships with institutions manifest in the area, such as the state, the market, and, more peripherally, the international community. This has relevance for issues pertaining to the management of a protected area such as Ugalla because the nature of people's presence in the locality was transformed leading to new forms of resource use and a changing dynamic in the resource exploitation which did occur. If one is to understand the importance of productive activities in the present-day, as well as people's responses to wildlife management, one needs to appreciate fully people's historical relationships to the locality.

The historical character of this chapter raises the question of how one should present the 'creation of a locality'. A natural space generates particular problems for historical analysis, for one is looking in the absence of the raw material of human history, the 'landscape of the everyday' - goods and practices, icons and images - to understand the success of the colonial vision of wildlife conservation (Comaroff & Comaroff, 1992: 35). Not that a plurality of meanings, of both colonisers and colonised, cannot be found, for colonial attempts to protect 'nature' from people were, at best, only partially successful. In the absence of material artefacts, one way scholars might analyse the history of the area, is to explore how people's historical consciousness, emerging through their discourses, has produced the texture of locality (Comaroff, 1985); following Marks "what keeps a place alive is not the preservation of its past per se, but the continual weaving of that past into the present" (Marks, 1991: 1). However, if discourses of a shared past can be found at all, this has the danger in this context of over-emphasising people's stories at the expense of situated practices which may retell in their own way a different story to the one that is vocalised (c.f. Nuijten, 1996; Moore, 1993; Malkki, 1995). Therefore here the analysis rests on a mixture of the descriptions of Nineteenth Century European explorers, documentation from the colonial archives, and a limited amount of oral historical material. In relation to oral histories collected during fieldwork, I have tried to keep this minimal in order to present the area and people as it has been represented by external 'others', although in places I could not resist drawing on these accounts.

THE CREATION OF A LOCALITY

The history of Ugalla is explored through narratives, cartography and folkloric interpretations which have contributed to the emergence of a particular idea of 'space' in the region. The actions and accounts of early explorers served to establish a precedent in terms of how the people and nature present in the were represented by successive explorers, missionaries, settlers and state administrators. Early accounts of the region, served in effect to generate information which later gave European colonisers the knowledge, and consequently power, to act in the area in accord with the world views that underpinned their representations.

A Grand & Noble Expanse of Park Land

The descriptions of European explorers present us with the first accounts of Ugalla. In their narratives we can see the way that connections started to be made between the locality, an

international community, scientific exploration, western images of landscapes, and regional trade. These accounts were presented to the British Royal Geographical Society and later published as tales of epic journeys to capture the Victorian imagination, or sent home in personal accounts to family and friends. One can see 'Ugalla' emerging as a romanticised location, a place of 'the other' defined from the vantage point of the cities, country estates, society circles and scientific communities from whence the culture of exploration was emanating (Boon, 1982: 27-49; Haraway, 1989). In this respect the area was mapped in accord with western and scientific knowledge, values and actions.

The Royal Geographical Society first brought Ugalla to the attention of a British audience through two accounts published in 1845 (Macqueen, 1845; Cooley, 1845; cf. Broyon Mirambo, 1878). These accounts were relayed to the authors by Swahili traders, they told of a trade route that passed from Zanzibar through a settlement called 'Ogara' or 'Ogaree' to Lake Tanganyika. Included with Cooley's account was a map tracing the trade route, as in Figure 3.1. The route is positioned within the lines of latitude and longitude, but it is imprecise and based on guesswork. Through narratives and cartography, Ugalla is recalled as a folkloric description portrayed as 'fact' for a European audience of Geographers.

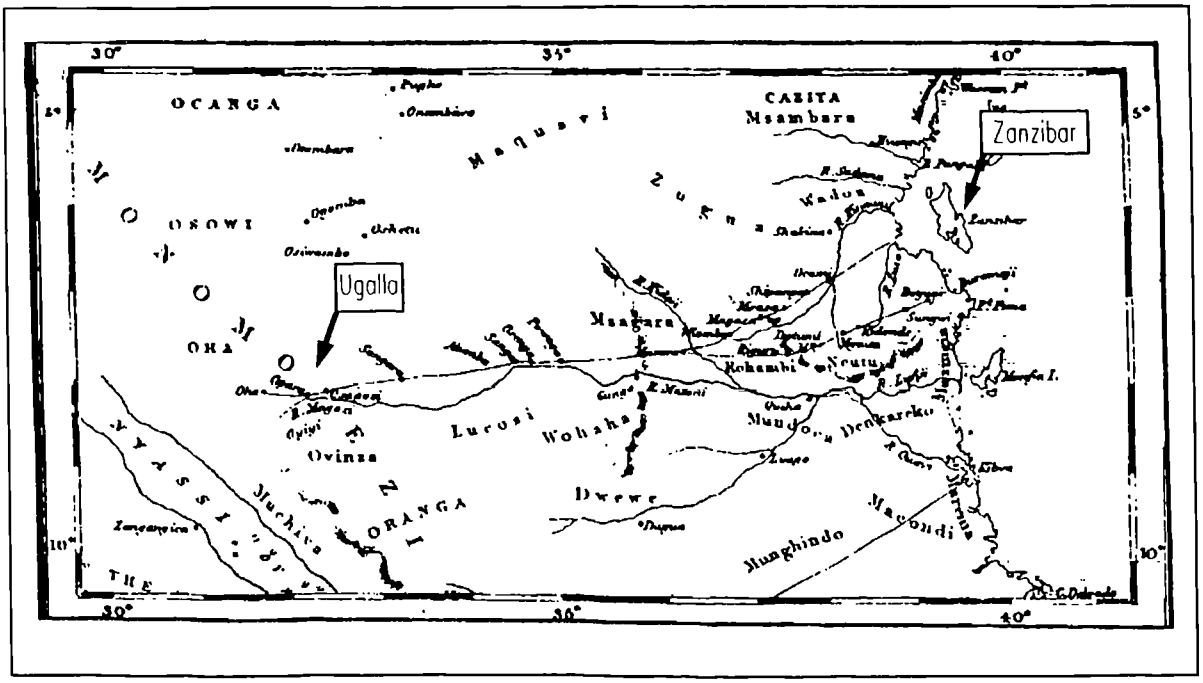

Figure 3. 1 Cooley's map of 'Ogara', 1845[44]

Twenty five years later (1857-8) when long-distance trade between the coast and Unyamwezi had expanded massively, Richard Burton and John Hanning Speke were the first Europeans to visit Tabora town, then a point of departure for caravans going into Central Africa (Burton, 1859: 180).[45] Burton changed the name of 'Ogaree' and populated it with a tribe of people: "Ugalla the lands of the Wagala" which he located in 'Utakama' - literally 'the south' (Ibid.: 195; 1860, II: 2). After leaving Unyanyembe, the explorers passed through the settlement of Masenga: "it belongs to some stray Wagara or Wagala, an extensive tribe limiting Unyamwezi on the south and south-east" (Ibid.: 192; probably the village named by Cooley and Macqueen, 'Ogara' and 'Ogaree' respectively (c.f. Stanley, 1872: 323). The nature of "the Galla" character was portrayed as "hostile to wealth"; a people deemed not to "require notice" they were the "serviles" captured and sold in the Unyanyembe slave market. (Burton, 1859: 190, 195; 1860, II: 33). Burton's second-hand descriptions contribute to further construction of Ugalla as a locality positioned in relation to the values, folklore and knowledge of European observers.

Speke returned to Unyamwezi in 1860 together with James August Grant to explore Lake Victoria. Being avid hunters, while staying in Tabora they spent time hunting on the Walah River, which runs

[44] Source: Cooley, 1845

[45] The town consisted of several Arab settlements built in the chiefdom of Unyanyembe. The name Tabora came to be used after the 1860s.

into the Ugalla through the north-eastern corner of present day Ugalla Game Reserve. In the descriptions published for a British popular audience, new elements entered the attributes conferred on Ugalla as a place: sport hunting, game, species, and specimens (Speke, 1978 [1863]: 96; also, Grant, 1978 [1864]: 47). This natural history of Ugalla drew on images of a newly discovered 'pure nature' that reflected far more about the culture of the explorers than the place itself (Mackenzie, 1988).

The natural history first recorded by Speke and Grant was reaffirmed by Henry Morton Stanley, the next explorer who contributed to the construction of Ugalla according to the European bid to know, represent and control the space (Bennett, 1970 [republished version of Stanley, 1895]). Stanley was commissioned by the New York Herald to 'find' the missionary explorer Dr David Livingstone who had not been heard of for five years. On 20th of September 1871, Stanley passed slightly to the west of present day Ugalla Game Reserve, and wrote for public consumption:

> "[T]wo hours afterwards we had entered a grand and noble expanse of park land, whose glorious magnificence and vastness of prospect...was certainly one of the finest scenes to be seen in Africa...I surmounted one of the numerous small knolls, I saw herds after herds of buffalo and zebra, giraffe and antelope, which sent the blood coursing through my veins in the excitement of the moment...Here at last was the hunter's Paradise!...where is the nobleman's park which can match this scene?...No hunter could aspire to a nobler field to display his prowess" (Stanley, [1895]: 260). "...I came upon a scene which delighted the recesses of my soul; five, six, seven, eight, ten zebras switching their beautiful striped bodies, and biting one another... The scene was so pretty, so romantic, never did I so thoroughly realise that I was in Central Africa. I felt momentarily so proud that I owned such a vast domain, inhabited with such noble beasts. Here I possessed, within reach of a leaden ball, any one I chose...crack! and a royal one was on his back battling the air with his legs" (Ibid.: 262).

Here we have a precursor to Haraway's (1989) primate history, a 'nature' constituted by Stanley through an entangled mixture of love, power and possession. Through hunting, Ugalla is represented as fictional paradise and compared to the park of a nobleman, a landscape that binds Christian images and indicators of European social stratification to the African environment (cf. Grove, 1994; Mackenzie, 1988; Comaroff & Comaroff, 1992).

A portion of Stanley's map is reproduced in Figure 3.2, rivers, hills, and a settlement, 'Mtimi Liowa's' appear in this representation.[46] This map, when compared to those of Cooley and Macqueen, presents us with a clear image of the way physical elements can be assembled together to turn an area from a folkloric description into a scientifically credible location.

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[46] *Mtemi/Mtimi* = chief in Kinyamwezi.

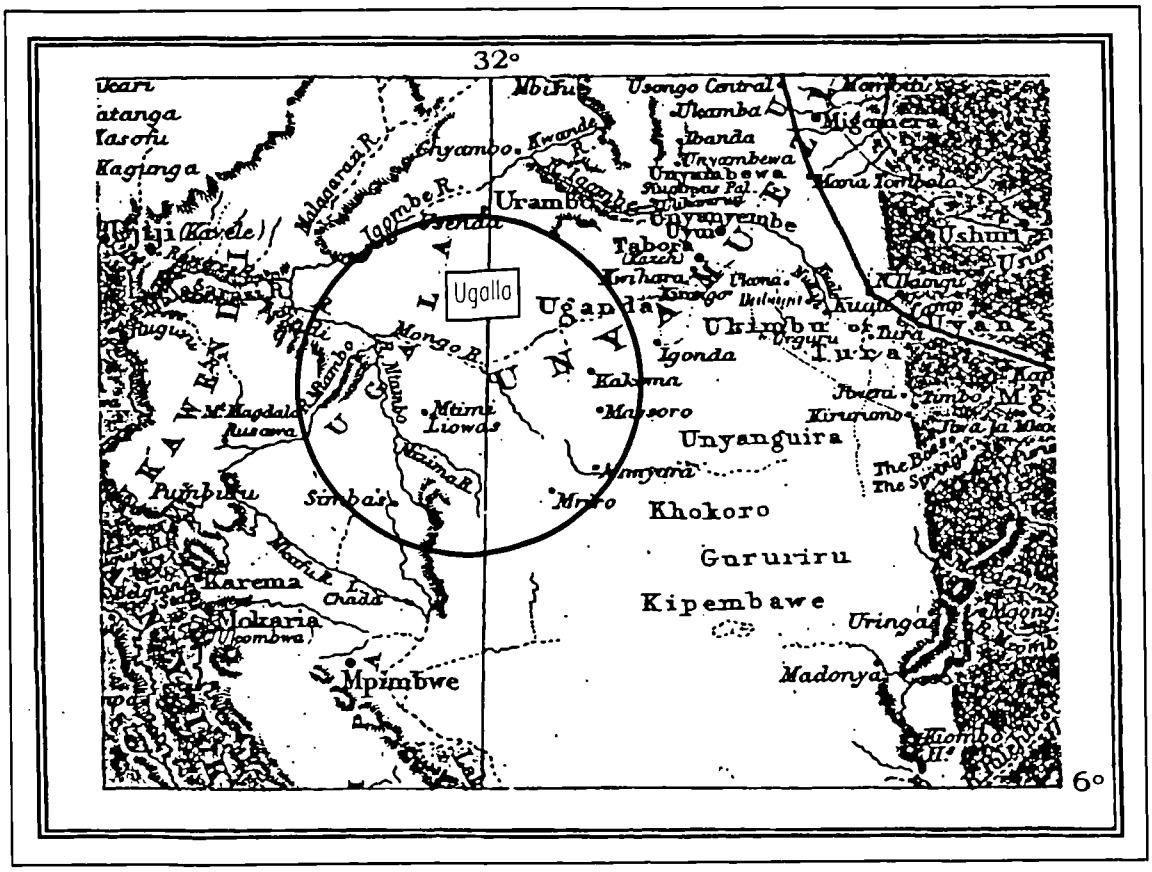

Figure 3. 2 Stanley's map of 'Ugala', 1872[47]

The next step in this process of turning fiction into fact in the genealogy of a location occurred when Livingstone had been 'found' and passed back with Stanley. His terse diary testifies to the institutionalised nature of hunting in European exploration [*8th February* 1872]:

> "Removed from the large pool of the nullah, about an hour to the north, to where game abounds. Saw giraffes and Zebras on our way. The nullah is covered with lotus-plants, and swarms with crocodile. [9th February] Remained for game, but were unsuccessful..." (Livingstone, 1970 [1874]: 167).

For hunters such as Speke, Grant, Stanley and Livingstone 'the hunt' was an imperative part of their practices as they passed through Ugalla. These people held themselves to be natural historians, trying to possess 'nature' through collecting, examining and measuring species, which formed the basis of natural taxonomies and in the process transformed African nature into scientific categories (Ellen & Fukui, 1996: 13). Mackenzie (1988) argues that the natural history generated by explorers, such as the men who passed through Ugalla, also served to legitimise evolutionary ideas on human behaviour and race that were popular in an age beguiled by social Darwinism (Ibid.). This social history was reflected in the way that people in the region were described. Again we can see the

[47] Source: Stanley, 1872.

layers of knowledge that have entered the process of constructing the area as a locality: the geomorphology of the environment, cartography, natural history, and the social evolutionism implicit in ethnographic accounts from the region.

This process of building up a body of knowledge of the locality was taken one step further by Lieutenant Verney Lovett Cameron, as he travelled westwards to map Lake Tanganyika. Cameron passed south of the river in early 1874 with the aim of exploring: "a previously unknown tract, and to make discoveries connected with the drainage-system of the southern part of the basin of the River Malagarazi" (Markham, 1875: 184). This he did through astronomical, hypsometrical and hydrographical observations, the creation of route maps and the keeping of a journal. Cameron's map, Figure 3.3, locates Ugalla in relation to an elevation profile of the region, showing height above sea level.

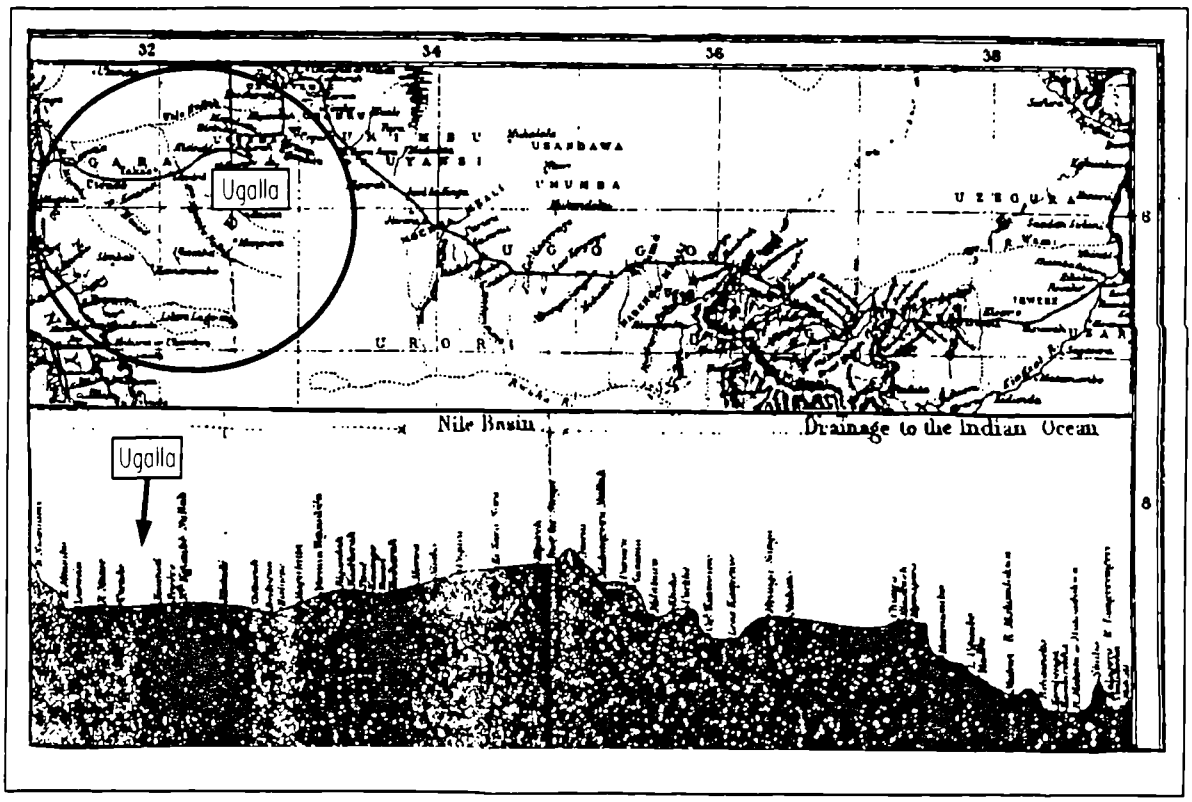

Figure 3.3 Cameron's map of 'Ugalla', 1877[48]

Gone is the vacant space on a trade route from Zanzibar to the west, and now anecdotal descriptions of rivers, hills and villages have become outmoded. His findings were subsequently presented in

[48] Cameron, 1877.

absentia to the Royal Geographical Society, who held that his latitudes agreed to 'within a second' of those found by Speke in 1858, "this is very satisfactory, as establishing the correctness of both observers" (Ibid.: 185).

The use of instrumentation contributed substantially to the portrait of the area begun by earlier travellers. Here the values, attitudes and perceptions of the observer are embedded in 'fact' established through the scientific method. This is clearly apparent in the way Cameron mixes scientific-type observations with romantic descriptions of the landscape:

> "It would have required no stretch of imagination to fancy oneself in the wooded part of a well-kept English park, except that gazelles bounding away in the distance and the skulls of a lion and an elephant kept prominently in mind the fact that one was still in African jungle" (Cameron, 1877: 184). "[Swamp]...followed by the most beautiful piece of plain that it is possible to imagine. Clumps of magnificent trees were grouped with an effect which could not have been surpassed had they been arranged by the art of the landscape gardener: while wooded knolls and stretches of green grass, and a background of heavy timber along the banks of the nullah completed the scene" (Ibid.: 202-3).

In spite of Cameron's capacity to use technical instruments, Ugalla is depicted as perfect, contained nature, an aesthetic landscape This was the first time a European explorer had actually passed through Ugalla detailing its geography, hunting, entering into contact with local chiefs, and writing detailed descriptions of 'the customs of the people'. These people were described as "a fine, manly, warlike race, well armed with guns and spears, the blades of the latter being sometimes two feet in length and more than four inches wide in their broadest part" (Cameron, 1877: 211). Interestingly, although this was the first time an explorer encountered the people of Ugalla, the extreme nature of his descriptions again served to emphasise the existence of a folkloric 'other'.[49] This tradition of ethnographic description continued in the accounts of later explorers (Moloney, 1893: 94-5, 101; Kandt, 1919).

From the 1870s, the epic journeys of explorers gave way to more diverse European interests, and subsequently representations of Ugalla were to change, as we shall see below. In the accounts of the early explorers, we can see Ugalla evolving as a place based on observations, measurements, and textual descriptions. These accounts were transported to London through records, maps, reports, letters, and ethnographic diaries that were to form the basis for a body of scientific knowledge of the area. In this respect, knowledge of Ugalla was formulated by an international community of scientists who, sitting in the grand lecture theatre of the Royal Society of Geographers, had a vantage

[49] In the second half of the nineteenth century, outbreaks of warfare were occurring throughout the region, this was fuelled by the actions of two local war-lords, commonly known as 'Nyungu ya Mawe' and Mirambo. The armies of both these men fought and plundered in the area of Ugalla (Shorter, 1968b; Bennett, 1971).

point from which to transform folkloric rumours (Cooley, Macqueen) into factual 'reality' (Stanley, Cameron) over a period of thirty years.

Closely entwined with the representation of the area as an English landscape, was the activity of sports-hunting, so aptly portrayed by Sir Henry Morton Stanley. Through hunting one can see that 'nature' was being categorised, valued and ordered in ways which located 'species' in terms of the taxonomies of natural history. Moreover, descriptions of physical nature were linked to cultural judgements concerning the nature of the people, 'the Galla' being seen as a warfaring race. Behind these descriptions were the encoutrements of science, the instruments needed to quantify reality through measurement, mapping and observation - the telescope, hyposometer, thermometer, astrolabe, compass, altimeter, hydrometer. In effect, these instruments established both the form of the space, and the practices which brought it into being.

The accounts of European explorers reveal to us how knowledge of the locality was linked to power on the part of outsiders. Representations of the area as a beautiful landscape appear innocuous, however they were based on the world view and culture of an international community and enabled others to attribute their own values and perceptions to the reality of the area. In his analysis of the accounts of the medical officer, Parke, Youngs (1992: 26) brings out well the way that the chronological record of a traveller's account, "shares its pattern with biography, whilst the centredness of the self in the foreign land imposed upon a succession of environments and their inhabitants, reinforces cultural and physical imperialism". Explorers' accounts of Ugalla also reflect cultural judgements of both people and nature. One must add that these accounts were highly gendered, written by men, often although not always, taking local men to be the 'people' (c.f. Mackenzie, F., 1995). These judgements were used to build up a profile of the locality that was later drawn on by British colonial administrators to justify their actions. For example, as we shall see in the last section of this chapter, a certain Dr Maclean drew on the accounts of Stanley and Speke in order to justify resettling the population of Ugalla into concentrated areas (Maclean, 1929a). From the 1880s, Christian and humanitarian motives came to the fore, enabling new missions that reached Ugalla to be framed in terms of the 'civilising' and 'saving' of natives, together with commerce, European settlement, and colonial administration. It is this period to which we will now turn.

A COLONISED TERRITORY

The last section sketched a profile of Ugalla based on accounts of European explorers made between 1845 and 1874. Through the actions of these explorers, representation of the area was associated with particular flows of movement: outward journeys to demarcate land from metropolis to periphery and return journeys with the baggage of descriptions, measurements and maps for an audience of expert geographers and the Victorian public. We now come to a period from the mid-1870s, when the dominant flow of movement is not outward expansion, but 'in-filling' of the locality whose surfaces (nature, topography and people) had already been represented. This flow is driven by the attempt to colonise African minds, bodies and nature: Christianity, empire-building, and environmental change - portrayed as 'ecological calamity' - become the new actions and world views in relation to which the locality of Ugalla was constructed.

Settlement & German Expansion

Between 1881 and 1885, three Germans settled in Ugunda (east of the river) and established an outpost of the African International Association.[50] They were Dr E. Kaiser, a geographer, P. Reichard, and Dr R. Böhm a naturalist. Initially the men occupied a small settlement in a place called Kakoma, but they later moved to a village where the chief of Ugunda was based. They also had a hunting camp called *Waidmannsheil* (good luck with hunting!) at Nsangu on the confluence of the Ugalla and Wala Rivers (a tourist sports-hunting camp exists there today). The Royal Geographical Society was no longer the audience to whom descriptions of Ugalla were relayed, instead regular reports were written for the German colonial newspaper, Deutsche Kolonialzeitung, describing in detail the people, location and scientific endeavours.[51]

These reports convey an impression of confused involvement with local people and politics: Reichard variously describes each European becoming 'blood-brother' to Lioba a Galla chief, assisting others to

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[50] The African International Association was initiated by Leopold II of Belgium in 1876 to encourage scientific and humanitarian ventures. The main - Belgian run - base in the region was located at Karema on the south eastern shore of Lake Tanganyika (Bennett, 1971; Becker, 1887; Moffett, 1958). One of the AIA' s more practical experiments took the form of two Indian elephants which travelled through Ugalla with Frederick Carter, on an experimental mission to investigate the possibility of using elephants as a new mode of transport in East Africa (Bennett, 1971: 113-4).

[51] Böhm, 1883-5, 1888: Böhm & Reichard, 1883-5; Danckelman, 1886; Kaiser, 1883; Reichard, 1889, 1890, 1892, 1881, 1881-3, 1886; Zoppritz, 1883-5; Becker, 1887.

pay tribute to the warlord Mirambo, and 'by a quirk of fate' each man was made into a 'chief' of Ugunda: "eloquent expression of our supremacy was shown when we caused Ndischa [the chief] to make a public apology for her insubordination. She had to go down on her knees before us, and hand over a hoe, a goat, and a slave as a symbolic gesture of her subjugation" (Reichard, 29th March 1890). Böhm and Kaiser died in the region, whilst Reichard tried to convince ReichKommisar Major Witzman and a German public that he owned - by right - the land of Ugunda, to which the response was inconclusive. While this may represent a warped desire for power and property by one individual, it reflected much wider European designs on African land and people and drew the region of Ugalla into the process of colonisation.

The African International Association was a non-religious organisation, but from the 1870s missionary organisations started to base themselves in the region. This can be seen as establishing the institutional bases, territorial parameters and local knowledge on the part of missionaries from which later Christian conversions could take place. These conversions occurred mainly after people were evacuated from Ugalla due to an epidemic of human sleeping sickness in the mid-1920s. Before this period; missions had little success in local conversion (Bennett, 1971; Shorter, 1972). The influence of Islam is less clear because it is not associated with missionary activity in the same way that Christianity is. People from Ugalla had long held contacts with the Islamic Swahili living on the coast due to long distance trade. However in oral histories collected during this fieldwork, and in the life histories of informants, it appears that before the move only certain chiefs converted to Islam, and after it the process was far less 'wholesale' than the inroads made by Christian missions in British colonial sleeping sickness resettlements, as we shall see below.

The Catholic Society for the Missionaries for Africa, popularly known as the White Fathers (because of their white robes), and the German Protestant Moravian Church were the main Christian organisations that became established around Ugalla. The Moravian church entered German East Africa in 1888, initially operating around Lake Nyassa in the south, and oral histories collected during the fieldwork suggest that missionaries entered Ugalla on foot from present day Sumbawanga. In 1897 the Moravians took over a mission station that had been built at Urambo in 1878 by the London Missionary Society (Wright, 1971; Bennett, 1971; Shorter, 1972), which subsequently became a Moravian provincial synod with Ugalla under its auspices. Moravian missions were established to the west of Ugalla at Ipole in 1902 and Sikonge in 1903 and to the north at Usoke (date not known) (Shorter, 1972).

The White Fathers entered western Tanzania in 1878 and became established in Tabora at Kipalapala near Itetemia the village of the chief of Unyanyembe, north-east of Ugalla (Rathe, 1966 [1884]). In the south they had a base at Karema (date unknown) on the south eastern shore of Lake Tanganyika, and Ndala, Ulugwa and Ushirombo missions were built before 1913 in the north of Tabora District. The territory of Ugalla was divided between the Diocese of Karema and the Archdiocese of Tabora.[52] The region had become divided between three ecclesiastical territories: the Province of the Moravian church in Urambo, the Catholic Archdiocese of Tabora and Catholic Diocese of Karema.

Territorial division of the region of Ugalla took another form in relation to the German administration.[53] Iliffe (1979: 116-123) distinguishes two broad phases of district administrative endeavour: in the first, security and the pacification of tribes in the territory was uppermost (1890-1898), and in the second, institutional administrative issues came to the fore (1898-1914). By 1912, German East Africa had been divided into 22 districts (*Bezirke*), each under the control of a district administrators, nineteen of the twenty-two districts had become 'civil districts', two remained 'military districts' (Mahenge and Iringa), and three were residencies (Bukoba, Ruanda and Urundi). Each district had a police force, a District Commissioner who superintended the relationships between employers and employees, and a District Administrator with the functions of security, justice and ensuring the well-being of the population.

According to Iliffe (1979: 116), extension of German control was essentially a series of local processes taking place at district level - in preference to large scale policy decisions - extensive autonomy being conferred upon district administrators. The uneven and particular nature of German control in different regions of German East Africa, was apparent in the region surrounding the Ugalla River. Tabora town, to the north east of Ugalla, was a centre for German administrative and military operations, facilitated by the railway which reached the town in 1907 (Iliffe, 1969; c.f. Langheld, 1909; Sigl, 1892; Fonck, 1910).

The region around the Ugalla river was split between the Civil Districts of Bismarckburg and Tabora, as depicted in Figure 3.4 with the river acting as a division between them. The region was also within

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[52] Tabora Archdiocese Archives, file on history of Kipalapala.

[53] The protectorate of German East Africa came into being following the ratification of the Anglo-German treaty in 1890 (vide Iliffe, 1969, 1979).

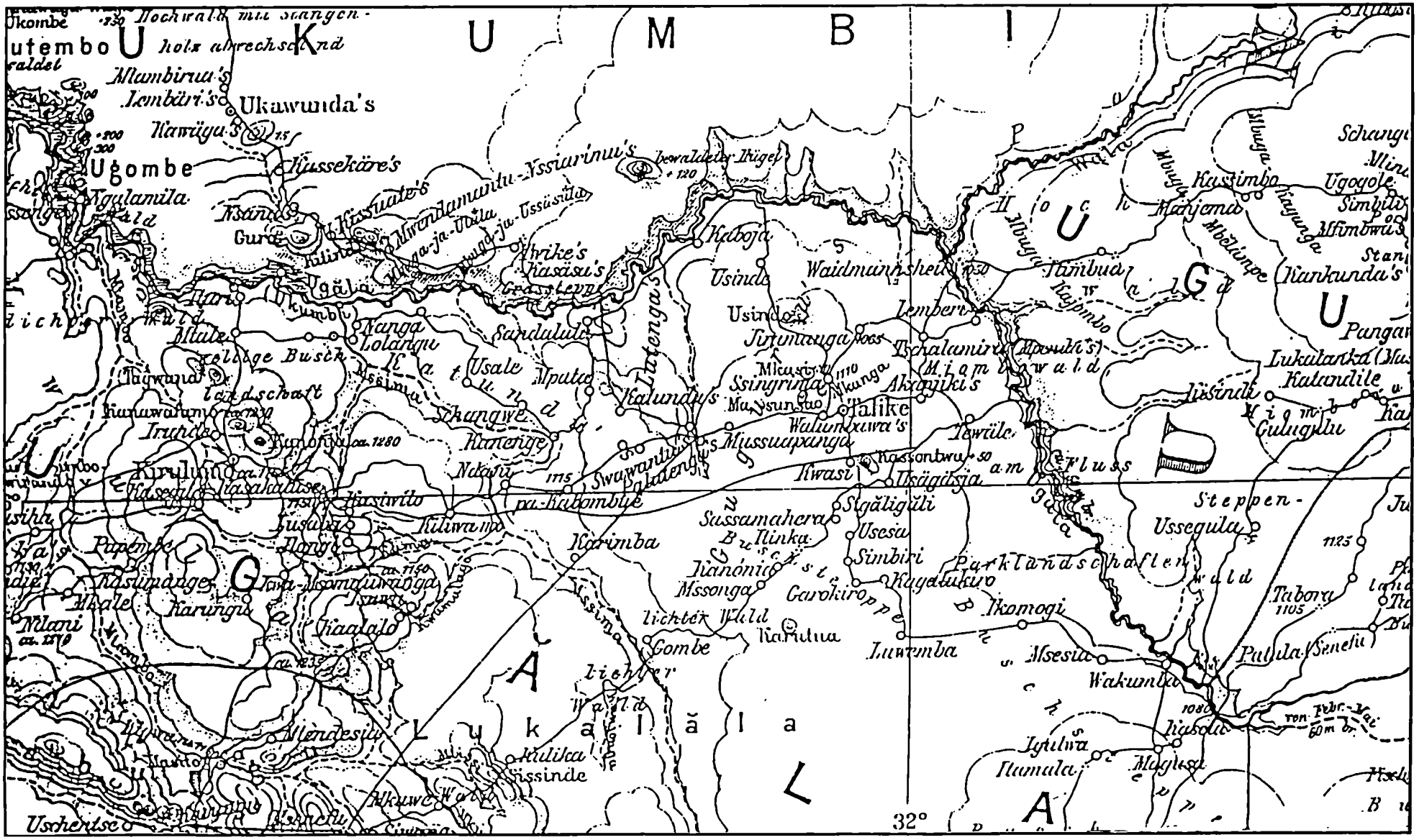

Figure 3.4 German administrative map depicting 'Ugala', 'Ukumbi' and 'Ugunda' (1906)

the boundaries of the judicial district of Tabora where justice would be meted out in the form of extensive corporal punishment, death, imprisonment and fines.[54] Each district had a regiment of protectorate troops (*Schutztruppe*) stationed near the headquarters (consisting of Congolese and Sudanese soldiers together with local *ruga-ruga* (AWSID, 1916).[55] These troops periodically moved past or through Ugalla, particularly when Sikonge town to the west became a German sub-district headquarters where troops were based. The German military attaché stationed in Tabora also went to the river to hunt (Fonck, 1910; Langheld, 1909; Sigl, 1892).

In order to consider how people and nature in Ugalla were being transformed by the German administration, it is helpful to turn to Moore's (1996: 11-2) discussion of Foucault's analysis 'on governmentality' (1991). According to her, Foucault examines the use of specific techniques, forms of knowledge and expertise which are needed in order to manage a population, and which, according to his thesis, were expressions of a certain rational mentality (1991). Focusing on Europe between the sixteenth and eighteenth centuries, Foucault argues that the family disappeared as the model of government and was replaced by the notion of population. A conceptualisation of people - citizens - as a population generated the need to acknowledge and manage new problems: birth rates, death rates, epidemics, the circulation of labour and wealth, etc. In this view government becomes inseparable from the knowledge of all processes related to the population, in effect forming the political economy of the state (Foucault, 1991: 100).

Closely related to the notion of population was the appearance of statistical analysis, the science of the state (Foucault, 1991: 99); and here German East Africa is a particularly apt example because it was German thinkers and statesmen who made fully conscious the idea that the nation-state is essentially characterised by its statistics, because with statistics one could quantify the nature of the population, and hence measure the power of a state (Hacking, 1990: 18). As Moore puts forward, this analytical perspective can be used to study the state; in the context of this analysis it is helpful to search for the mechanisms - techniques of knowledge, power and subjugation - which were being established by political authorities for them to start to administer people's lives through forms of intervention, which came to the fore during the British colonial period after the First World War.

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[54] Map reference, Sprigade & Mosel, 1906.

[55] *Ruga-ruga* was a term for young professional soldiers who held allegiance to a war-leader (said to have been runaway slaves, war captives, deserters from caravans, and others without family ties). They were colourfully dressed and the story is that parts of their victims bodies are said to have been draped across their clothing (Burdo, 1886: 420).

In the case of Ugalla, people living in the area were drawn into the process of German colonial state building: through the enumeration of the population, monetization, taxation, the administration of justice, and the enforced use of labour. Although it is beyond the scope of this thesis to analyse these processes, attempts were also made to inculcate in people the norms necessary for the running of the state; as the Comaroffs remind us (1992: 42), the creation of modern subjects was as much through reshaping the habits of daily life, transforming social institutions, relationships and identity, as through macro-level change. Hence the emphasis placed on the district administrator's role of ensuring the 'well-being' of the population, for the requirement of well-being could be interpreted as the need for interference into the minutiæof daily life - as become apparent below in relation to British colonial control exerted as sleeping sickness measures.

Unlike other areas of German East Africa, Unyamwezi, including Ugalla, was ruled by indirect means through the local system of chiefship although chiefdoms were both created and ignored (Abrahams, 1967a: 45-6; Shorter, 1972). Within each chiefdom a three tiered system of authority was instituted in which the sultan (chief) was responsible for tax collection and some forms of justice, beneath them were *jumbe* or headmen, and beneath this settlement heads who collected tax directly from subjects. Adopting a pre-existing local term, the *gunguli* became the basic territorial unit over which a headman had jurisdiction and through which tax was extracted. The area roughly corresponding to Ugalla GR today was divided into thirty such gunguli.[54]

The 'population' in Ugalla was estimated to be 4,000 people, for which 1000 were men fit for bearing arms (AWSID, 1916: 70).[55] For adults in this population there were obligations to the German colonial state, namely tax and labour; hut tax was instituted in the territory in 1896 and poll tax in 1908. Unyamwezi was classified as a labour exporting region, with men being transported to the plantations in the north and north east of the country. Labour recruitment was not carried out by the German administration directly, but rather became a niche of opportunity for entrepreneurial European men, so that, before 1913, there were said to be over 1000 recruiters in Tabora alone (Iliffe, 1979: 160).

[54] Langland, 1927, Tabora District Book, microfilm held at Rhodes House, Oxford.

[55] The area the 4000 people covered was "to the E. of Ukawende, on the middle course of the Ugalla. To the S. of Ugalla is the densest settlement" (AWSID, 1916).

The process of labour migration affected people in Ugalla directly:

> "[t]he many abandoned and decaying villages in northern Ukonongo and Ugalla are most conspicuous. In others one meets 75 per cent women...to my question I received the reply: the men have gone to work on the coast and have not returned...The village elders and the women complain bitterly that the men have already been away for years" (BNS Bismarckburg to Government, 30 September 1910, TNA XII/C/21/1, cited in Iliffe, 1969: 134).

Aside from obligations such as tax and labour, people also became 'ethnographic subjects'. In order for missionaries and bureaucrats to successfully 'civilise' people in Ugalla and the surrounding region, it was necessary to gain intimate acquaintance with their lives, and this knowledge became a powerful means of re-drawing the boundaries around and through people. Knowledge acquisition was based on rather different methods from that which relied on geographers' instruments: ethnographic descriptions of custom, culture[56] and linguistic details[57] learned from 'living among' people for long periods of time.[58]

In this fashion, people could be clearly distinguished into 'tribes' with particular characteristics. Attention to ethnography also appears in German administrative archives and official reports. In one account (AWSID, 1916),[59] the 'ethnography' of Ugalla is briefly listed under the highly revealing headings of: 'name', 'population (= men fit to bear arms)', 'muzzle-loaders', 'past wars', 'attitude towards German government; its influence', 'tribal organisation', 'language use (Swahili)', 'dwelling places', 'how far defensible', 'manner of life' with the conclusion: "sparsely populated uplands, covered with high foliaeous woods or Miombo bush...very poor country" (Ibid.: 70-1). The ethnography of people as a population is clearly being used for the purposes of the administration.

If we concern ourselves with knowledge and representation, maps of this period can act as a window to give insights into the way that European administrators related to the locality of Ugalla. In the map of this period reproduced in Figure 3.4, above, the German colonial view conveys a 'space' filled in

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[56] For a study containing information from near the Ugalla River in southern Unyamwezi see Blohm, 1931, 1933a/b (material collected between 1896 and 1916); see also Bösch, 1930. For a list of references on early ethnographic studies carried out in this region, vide Abrahams, 1967a.

[57] For examples of research on the Nyamwezi and Konongo languages see Blohm, 1933b and references listed in Abrahams, 1967a.

[58] For example Arnot, 1899; Decle, 1898; Hore, 1892; Hore, 1886; Burdo, 1885, 1886.

[59] This account is contained in a publication of the British Admiralty War Staff Intelligence Division (AWSID< 1916) which was itself reproduced in translation from a German colonial report written just before the First World War.

by details of hills, rivers, administrative boundaries, settlements, the railway, and the relevant latitude and longitude, all features essential to the administration and successful pacification of tribes in the region. This does not mean to say that these features were 'accurate' according to modern mapping, Ukumbi is shown on the map as an empty space even though people lived there and the spatial co-ordinates are skewed.

Before concluding this section, the last topic that will be raised is the counter-tendencies of processes such as long-distance trade and the European presence in the region. The late nineteenth and early twentieth centuries were characterised later as a period of 'ecological catastrophe' by different experts and administrators working in the region. This theme of ecological crisis in East Africa has been examined by certain scholars (Kjekshus, 1977; Ford, 1971; also Iliffe, 1979; c.f. Vail, 1977), who have challenged established orthodoxies by suggesting that, before the late nineteenth century, African communities were able to sustain viable ecological control systems with a considerable degree of success. Kjekshus and Ford disagree over how ecological control was maintained, but they agree that colonial administrative policies prevented the re-emergence of rational settlement patterns (after the warfare of the late nineteenth century) and deprived African people of the means to defend themselves against animals, turning the ecological setbacks of the nineteenth century into the disasters of the twentieth.[60]

Many 'new' diseases appeared and were represented as 'breaking out', 'erupting' or 'sweeping across' East Africa, including the region of Ugalla, Ukonongo and Unyamwezi: rinderpest (Fonck, 1910), jiggers (Baumann, 1894: 72; Fromm, 1912, 81), sleeping sickness, the spread of tsetse flies, smallpox (Stanley, 1895; Becker, 1899: 761), plague's of locusts, famine (Iliffe, 1979; Malcolm, 1953a; Shorter, 1972) syphilis and hookworm (oral historical accounts collected by myself in 1993 from people who were born in Ugalla). Analyses of these processes by modern scholars will not be examined here; the point being made is that popular conceptions of ever-increasing ecological breakdown entered into the representations and understandings of colonial administrators and experts with the result that western Tanzania, including Ugalla, became characterised around this axis of ecological catastrophe. Significant time and energy on the part of the colonial administration

[60] Focusing on a discussion about Trypanosomiasis, Ford put forward the thesis that pre-colonial societies lived with the presence of a disease such as sleeping sickness, over which people maintained control through complex socio-cultural and physiological mechanisms. After Europeans entered East Africa this 'balance' was upset. Kjekshus on the other hand argued that people managed to coexist with diseases by interacting with the environment in such a way as to avoid them. Iliffe (1979), in his history of Tanganyika, documents these processes, and argues that the 'natural disasters' that appeared in the 1890s were transformed into crises through features such as depopulation, itself an outcome of German administrative policies (c.f. Kuczynski, 1949).

was put into trying to rectify this situation, intervening into African 'nature', in the process. This can be seen, for example, in the case of the 'tsetse belts' that were portrayed as spreading outwards across the territory, as reproduced in Figure 3.5, Ugalla being placed at the centre of one such belt.

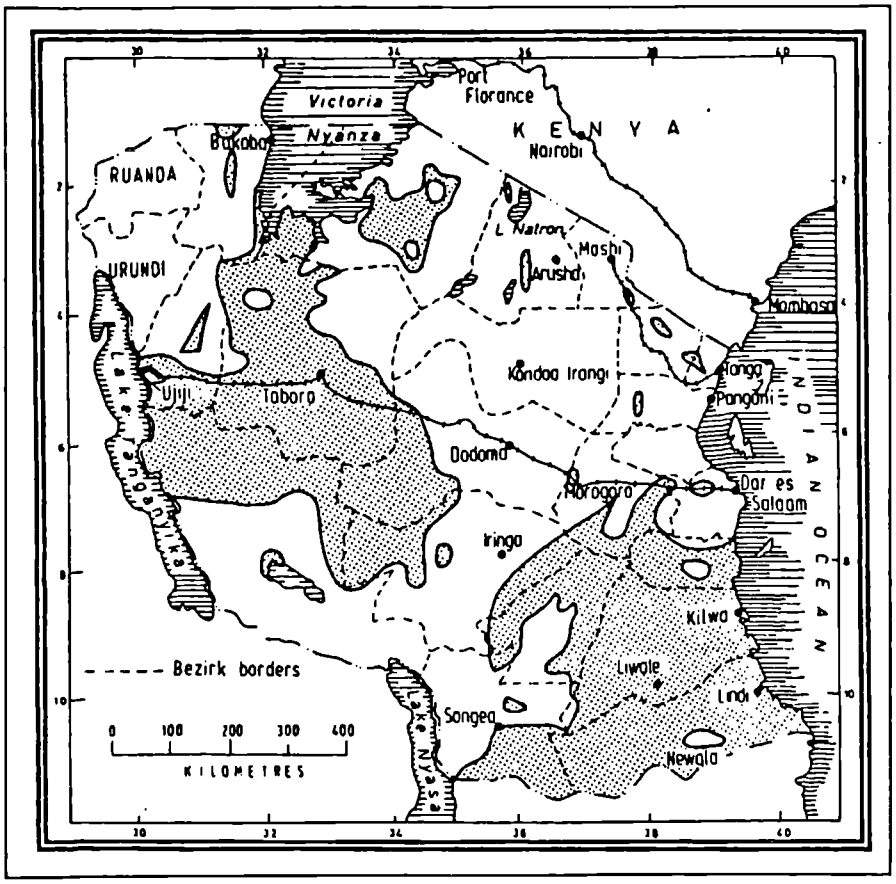

Figure 3.5 Representation of a 'tsetse belt' covering Ugalla in 1913[61]

Through these events of German administrative history we can see Ugalla being delineated in new ways and according to different forms of knowledge. Previously, the exterior surfaces of the place, people and nature were measured, mapped and described by European explorers and settlers; missionaries had established their vantage points from which processes of African conversion could begin, with the contest for souls splitting Ugalla between the ecclesiastical territories of the Moravian church and the White Fathers. With the establishment of German rule, the way inwards was paved, into the interiors of African people and nature in keeping with colonial designs, attempting to control and change minds, bodies and environments in the process.

[61] Source: DDS, 1912/3.

To conclude, this section has traced different descriptions and cartographic representations of the people, place and natural environment of the Ugalla region. In the first section, the passage of people, around which representations of Ugalla were generated, was associated with science, markets and an international community (the trade routes, the Royal Society of Geographers and popular audiences, the Greenwich meridian) which established Ugalla in relation to particular co-ordinates of knowledge, power and action. These co-ordinates were oriented to locating the place (people, topography and the natural environment) in terms of its exterior surfaces. In the second section, the discussion turned to a changing set of axes, with change being associated with missionary activity, the German administration, and ecological crisis. Now the space of Ugalla was located and represented in terms of its interior - the attempt to colonise African souls, minds, bodies and nature. Through the process of exterior and interior mapping, different boundaries for social control and intervention - administrative, judicial, religious, ethnographic - were drawn across the area. This leads us logically into the next section which concentrates on the way in which major interventions took place in peoples' lives in the name of public health and hygiene.

SLEEPING SICKNESS AND POPULATION RESETTLEMENT

We now continue the story of Ugalla in the early 1920s, after German East Africa had become the UN mandated Territory of Tanganyika under British colonial control. Between 1925 and 1927 the people who lived along the Ugalla River were forcibly resettled due to the eruption of human sleeping sickness (*Trypanosomiasis*) in epidemic proportions. So far the discussion has focused on how Ugalla has been represented and the space assembled to make visible different dimensions of its people and nature in accordance with the intentions of explorers, missionaries, and administrators. During the 1920s, an important new representation of Ugalla appeared in the form of an epidemiological profile of the region necessitated by the presence of sleeping sickness, and making it, once visible, in that way, the target of intervention of another kind.

We can suggest that the British colonial policy of evacuating the human population of Ugalla and resettling people within concentrated settlements acted as a 'critical event'.[62] This prompted those people involved to reposition themselves, leading them, over a period of time,

[62] A 'critical event' is taken to be circumstances where existing social institutions, knowledge, and practices cannot encompass the nature of a dramatic situation which people have to cope with and which may directly confronts them with the limitations of their own actions and capacities. It may arise through

to recreate their relations vis-à-vis state and markets and, by implication, their relationship to the environment of Ugalla. This is not to suggest that their lives had not previously been affected by other events - the entry of the Germans and later the British, for example - but that population resettlement was a collective, dramatic situation that had a critical impact on individual lives and the way local people re-entered the area later to become known as Ugalla Game Reserve. (c.f. Zimmerer, 1996).

The idea that people can 'reposition' themselves in a locality, draws on the work of a number of scholars who have carried out research in Southern Africa. As examples: Mitchell (1956) describes the *kalela* dance performed in mining towns on the Copperbelt of Northern Rhodesia (Zambia). According to his description, in the Luanshya Management Board Location dancers were neatly dressed in the European style, some of whom held titles of office - king, doctor, nursing sister - and would sing and dance accompanied by drumming. In effect they copied the most obvious and visible symbols of European prestige, and the songs themselves offered a witty, incisive comment on the way of life of the Copperbelt Africans, being about Copperbelt characters set in the Locations and confronted by familiar situations (c.f. Ranger's analysis of the *Beni Ngoma* danced in Dar es Salaam and other areas of Tanzania).

Another study is that of Comaroff & Comaroff (1987) who explore the historical consciousness of work and labour shown by the Tshidi of Southern Africa. Through the figures of a 'madman' and a 'migrant' they trace how the Tshidi create a sense of themselves by imaginative play with the categories of their culture. According to the authors, the migrant tried to cut himself off from the signs and memories of mine work, while the 'madman', a local prophet, "made visible through idiosyncratic concoction in his apparel something implicit in the experience of many Tshidi" (Ibid., 204). The garb of the madman - mineworkers boots, knitted 'military style' leggings, a cloak and bishop's mitre, and sash emblazoned with the initials of the South African Railway - revealed the contradictory world the Tshidi have had to reposition themselves in, between the urban and the rural, wage-labour and farm-work, modernity and tradition (c.f. Comaroff & Comaroff, 1993). In a study of the Kimbu from the south-east of Ugalla, Shorter also makes reference to repositioning in relation to colonial labour demands. He lists the names a generation of labour migrants gave to themselves and their sons: *Fundi Kwinama* (expert at bending down), *Kamchappe* (flog him), *Msonga Reli* (he pushes the

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conflict, a natural disaster, institutional breakdown or, in this case, actions on the part of the British colonial government (c.f. Long, 1997: 8).

railway on), *Mageta* (gaiters), *Saa Nane* (8.00, i.e. 2 pm), *Namba Sita* (number six) (Shorter, 1972: 340-1).

Two recent accounts which give more consideration than Shorter does to how people view the processes which affect their lives, are provided by White (1993a/b) who describes the associations people in Central and East Africa make to roles such as those of 'fireman' and 'game scout', which, she argues, express the interests, concerns and anxieties of Central and East African people confronted by rapid change in a modern world. However, we have to bear in mind that as Comaroff & Comaroff argue, collective consciousness may not be found in explicit statements of a common predicament, but in everyday acts of resistance to labour discipline and in the implicit language of a symbolic activity. Following this line of analysis, it can also be suggested that repositioning does not always involve 'acts of resistance', for instead events may be preserved in the implicit bodily and verbal language people adopt, essentially giving meaning to their life experiences.

'Repositioning', therefore, is the process through which people re-define their own experiences by way of making use of elements both of previous 'traditions' and of the artefacts, icons and garb of modern life, revealing in this action the contradictions of the world surrounding them. This repositioning has different manifestations, emerging from expressions that indicate the cognitive and practical connections people make in a particular situation. It locates the people concerned at the centre of a world, re-organised through shared perceptions, as they search for a sense of order and security. It may be represented in a style of dressing, in the combination and use of symbols of authority, in the names which children are given, in dance styles, in the stories they tell, and in the significance of a language which mixes traditional, local and modern expressions. The process of repositioning tends to surface at times of critical events or rapid change when the experiences people are confronted by need to be incorporated into their everyday lives. It enables people to absorb and critically reflect upon change in ways that have the result of situating people more comfortably in relation to resources, identity, and knowledge in a potentially or actually disturbing transitional period of their lives.

For people evacuated from Ugalla, the sleeping sickness settlements acted as a focus for colonial attempts to transform the conditions of people's lives into productive, normalising social environments: Christianity, formal education, modern medicine, new forms of agricultural production and cattle-keeping, and new housing designs all being introduced.

People returned to Ugalla from the sleeping sickness settlements to carry out activities that had taken place before - hunting, fishing, honey-hunting, beekeeping - but they were increasingly separated from other aspects of life, by spatial distance, gender, age, seasonality, for example, and in the process appeared to become more specialised. This was especially so given the time, labour, resources and organisation that now entered into going and staying in the forest. Because of the role of representatives of the colonial administration in influencing and intervening in different courses of action and practices, people had to re-orient themselves in relation to the state, and also to markets for produce if they were to be successful at making a livelihood.

At the heart of this process of repositioning is the role played by tradition and modernity in people's lives. One could argue that repositioning concerns a process of detraditionalization whereby people acquire the ability to stand back from, critically reflect upon - and thereby probably lose their faith in - the tradition they have lived by (Heelas et al., 1996). They look instead, to continue in this view, to the modern - which suggests an awareness and positioning in relation to both past and future in ways that embody a faith in progress and in social and moral betterment (Habermas, 1985, cited in Arce & Long, forthcoming 1998).

A radical thesis would propose that the past is equal to tradition, people's traditional culture being dominated by fate or the embedded practices and ideas which largely exclude choice, and that in the present people are moved by the attractions of modernity, eschewing tradition. More appropriate to this context, one may envisage the 'traditional' and the 'modern' as interpenetrating processes, having to do with tradition-maintenance, rejuvenation and 'tradition' construction intermixed with grasping modernity. If one accepts this view there follows the question as to what extent people in the locality of Ugalla continue to use their local knowledge, and what role tradition plays for them? This is something that will emerge in the discussion below, for the idiom of tradition became an important device to try to gain political leverage in the attempt to return to the area, once they had been excluded, and gave rise to a language that re-appears repeatedly in subsequent claims over the right to be in Ugalla and to use its resources, right up to the present day.

The following discussion is divided into three sub-sections which explore, firstly, how the Tabora Ufipa sleeping sickness epidemic erupted and, secondly, colonial designs for

intervention, how people were evacuated from Ugalla and where they were evacuated to, and, lastly, the role of the sleeping sickness camp as a focal point for modernisation.

The Tabora-Ufipa Epidemic

Between 1920-25 three major sleeping sickness epidemics erupted in Tanganyika: in Mwanza, in Liwale, and in the Ufipa-Tabora area of western Tanzania.[63] We are concerned with the Ufipa-Tabora epidemic because it encompassed the area of Ugalla. In response to the epidemic, a policy of enforced population resettlement was adopted, taking effect in 1925 (corresponding to the first year that people were evacuated from Ugalla 1925-7), and by 1929, when it was estimated that 20,000 people had been resettled, the outbreak was considered to have diminished.[64]

The presence of the sleeping sickness in Ufipa was identified in November 1924, following the appointment of a certain Dr Maclean to the position of Medical Officer. The disease started in the south and is held to have "radiated" northwards to Ugalla.[65] The seriousness accorded it is reflected in the Administrative Office Annual Report for Tabora sub-District, including Ugalla: "the most serious matter affecting the public health of the district is sleeping sickness in the south".[66] The epidemic had been present for at least four years prior to this date, as the District Administrative Officer for Ufipa, Mr Hatchell, commented: "the damage was to a great extent done before concentration commenced".[67]

The identification of the presence of sleeping sickness in Ufipa led Maclean to institute a survey to quantify the incidence of the disease, which concluded that there was an epidemic present.[68]

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[63] Fairbairn, 1948; Maclean, 1926, 1927a/b, 1929a/b, 1930a/b/c; Swynnerton, 1923-4 (b).

[64] Hatchell, 1949; Letter from Hatchell to the Provincial Commissioner in Mwanza, 27.8.29, TNA.Mss.11515, Vol.1.

[65] For representations of how the movement of individuals led to the spread of a sleeping sickness epidemic, vide Swynnerton, 1924-5: 142-50; Maclean, 1933; Fairbairn, 1948.

[66] TNA.Mss.1733/20 (105), Administrative Office Annual report for Tabora sub-District, 1926: 15-16.

[67] Maclean, 1926: 330; Hatchell, letter to the Provincial Commissioner of Mwanza, TNA.Mss.11515.Vol.1.

[68] Maclean, Appendix D, Tabora District Annual Report, 1926, TNA.Mss.1733/9 (69). 52 cases were diagnosed microscopically between November 1924 and December 1925. Case histories proceeded to be kept on these people and those who survived were kept under observation until 1928.

The statistical data generated by this survey is highly revealing, not only in terms of the information that it purported to convey, but also in that it was based on the aggregation of people into 'the population'. For a disease to be present in the form of 'an epidemic'[69] a population must exist which can be enumerated and its qualities subsumed within statistical data by officials (whose role confers a legitimacy to carry this out). Once this occurred it was a short step to institute radical changes in the way people lived, in the name of disease prevention, 'hygiene',[70] in the form of public health measures.

Perhaps at this point we should return to Moore's (1996: 10-12) discussion, that through the development of specific techniques, knowledge and expertise, science and public health have been powerful means of managing populations. This process of population management was initiated in the region during the German colonial era, although it remained only partially completed, and was continued by the British. In the case of human sleeping sickness in Ugalla, knowledge, practices and techniques generated in relation to the 'welfare of the population' became a means to establish layers of a bureaucracy that served to tie people into processes beyond their control which they were forced to participate in, directly or indirectly (Ibid.: 10), willingly or unwillingly.

Through the extraction of people's blood, medical officers were able to detach the epidemic from people and, in effect, transform the locally situated expressions of the disease into an idiom of 'clinical cases' that became the basis for disease control. This control was subsequently to have a profound influence on the relationships between people, habitations and 'fly-infested' forest, which created the ideal conditions for wildlife conservation in Ugalla.

British Colonial Designs for Public Health Measures

The actions of administrators and experts working in Tabora and Ufipa during the 1920s were directed towards three spheres of influence: tsetse fly control, population resettlement, and disease treatment. In order to understand how these spheres related to one another it will be helpful to explain something of the ecology of sleeping sickness. Trypanosomiasis is caused by

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[69] "'Epidemic' - affecting at once a large number... a disease attacking many persons at the same time", The Concise Oxford English Dictionary, 1992.

[70] "'Hygiene' - the art of health... the science of the prevention of disease... sanitary science", ibid.

a parasite of the blood (trypanosome) of which there are many different species.[71] The trypanosome for sleeping sickness has a complex lifecycle. It is transmitted from one vertebrate host (natural host), usually the larger species of wild animal, to another by means of an invertebrate host (the vector), namely different species of tsetse fly. Sometimes an infected fly will bite man or cattle (adventitious hosts), leading them to harbour the trypanosome and become sick. Intricate relationships exist between the parasite, the host, the vector, and the adventitious hosts. These relationships become enacted within the habitats of the forest, home of the natural hosts and the vector, and the settlement, home of the adventitious hosts (man and domestic animals).

The different living contexts and physical habitats which support the lifecycle of the sleeping sickness trypanosome became the focus for colonial control measures. These measures sought to break up the lifecycle of the parasite and, in doing so, prevent the infection of people or cattle. In the case of sleeping sickness, controls were biased towards the "man-fly" relationship, seeking to prevent people from having contact with the tsetse fly. These measures were in keeping with the findings of the Desart Committee of 1914 which had concluded that in order to eliminate tsetse-borne diseases it was necessary to wipe out the tsetse fly.[72] From this arose a policy of tsetse eradication in Tanganyika, whose wisdom was not fundamentally challenged until the 1940s.[73]

Against this background, "the fly" became isolated by colonial officers as the administrative "problem", described as "our most formidable opponent" (a view shared by the German

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[71] In the 1920's it was understood that only two species of trypanosome - *T. gambiense* and *T. rhodesiense* - led to the spread of sleeping sickness in Tanganyika. More recent research has demonstrated that this was not in fact the case (Ford, 1971; Giblin, 1990). In the Tabora and Ufipa sleeping sickness epidemics, the trypanosome, *T. rhodesiense* was said to be prevalent, spread primarily by a species of tsetse fly known as *Glossina morsitans*.

[72] The Desart Committee was set up by the British Government in 1911 to advise on issues related to Trypanosomiasis and Tsetse control. The committee made its recommendations in 1914, in which it advocated a policy of total tsetse eradication. It also advised on the importance of policies for permanent population concentrations and bush clearing in order to remove people and domestic animals from contact with the fly. Following the First World War, a policy of human population concentrations as a means to combat sleeping sickness was adopted in Tanganyika territory.

[73] The sentiments that underpinned this view are captured well in a narrative account by Huxley (1931) in the context of a visit to Kikori Tsetse Research station in northern Tabora Region: "'The tsetse-fly' remarked the Provincial Commissioner, 'is one of the two chief curses of East Africa; and the other' - but to say what he considered the other to be would be indiscreet. However he was certainly right about the tsetse. Tanganyika Territory is three times the size of the United Kingdom. Two-thirds of the huge area is tsetse-ridden, and the fly is making advances every year... As Major Church forcibly put it in the House of Commons, 'Are we going to surrender these huge tracts of country to the domination of an insect?'" (Ibid.: 75).

administration, vide Iliffe, 1979).[74] In 1911 Unyamwezi was held to have only four appreciably fly-free areas (Ibid.: 163); by 1925, Tabora District was portrayed as "a sea of fly country with isolated islands of fly-free cattle country".[75] The 'sea of fly country' included the area along the Ugalla River. Bagshawe, the Provincial Commissioner wrote in 1932: "[I]t is certain that tsetse and sleeping sickness are the main problems and the governing factors in every problem of native administration in the Western Province".[76] This is not meant to imply that the opinions of administrators and experts were unanimous, far from it, or that opinions did not change over time, however each in different ways did focus on 'the fly problem'.

The idea that 'the fly' could be identified in a particular locality, within bounded units known as 'tsetse belts', hinted that tsetse flies were a vanguard of the return of nature against civilisation. If the fly could not be contained then the forest would take over, as the Provincial Commissioner for the Western Province pessimistically anticipated in 1932: "in a few years time the bulk of the province entrusted to my care will be uninhabited wilderness".[77] The vast region of 'tsetse-belt' extending over Ugalla was also an area where British colonial control, in the early 1920s, was only partially extended and local knowledge on the part of administrators limited. In this respect, maps performed the role of making visible the invisible threat, the danger pressing on the boundaries of limited administrative control (Douglas, 1966: 146). Such visibility became the first step towards a record for policy formulation and administrative influence that was to lead into the creation of a protected area in the 1950s, namely Ugalla River Game Controlled Area.

In contemporary reports from the 1920s and 1930s, we can see the associations made by colonial experts between the presence of the fly and how people lived. It was not fully understood why sleeping sickness erupted so extensively in Tanganyika after the First World War, or why the disease was endemic, although 'migratory' theses struck a chord in colonial ideas of the period.[78] However, underpinning the concerns of many administrators was a

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[74] TNA. Mss.42398/2. Annual Veterinary Report for Tanganyika Territory, 1920.

[75] Annual Report for Tabora sub-District, 1925, TNA.Mss.1733/20 (105).

[76] Bagshawe, Provincial Commissioner for the Western Province, Annual Provincial Report for 1932, RH.Mss.Afr.s.279-306.

[77] Bagshawe, Provincial Commissioner for the Western Province, 1932, administrative comment at back of file, TNA.Mss.21575.

conception of the spread of tsetse flies - hence human and cattle trypanosomiasis - as ultimately the consequence of bad native land use practices.[79] In these discourses it is apparent that the presence of tsetse fly was seen as part of a much wider problem, namely that of bringing about a more effective and evenly distributed occupation and utilisation of the territory's lands, which was in turn linked to population issues. It readily followed that in order to get rid of the fly, modernisation was essential, and here a link between processes of modernisation and conservation implications becomes clearer.

Observations on Ugalla and western Tanganyika made by earlier explorers, missionaries, settlers and administrators, were used by experts such as Maclean and became defined as 'fact'. For example, Maclean cites the descriptions of Stanley and Livingstone as they travelled through the forest between Tabora and Ujiji, passing across the Ugalla River (1872-3). This led him to argue that in the region surrounding the Ugalla River and into Ufipa, nineteenth century tribal warfare compelled people to live in large settlements centred within cleared areas of land used for agriculture and pastoral activities. In effect, he argued, tsetse flies were kept well away from all but occasional contact with inhabitants because the bush - where the tsetse fly and wild animal hosts lived - was 'pushed back'.[80] Suppression of tribal warfare by the Germans together with troop movements, depopulation through famine, epidemics, and labour migration led to a change in settlement patterns; people started to live in 'forest villages' - family settlements dispersed throughout the woodland: "[T]he protection afforded by cleared and cultivated or grazed land is lost and at certain times of the year tsetse is found almost everywhere, occasionally even inside the houses".[81] Scattered communities in close and prolonged contact with tsetse flies were held to provide the ideal environment for sleeping sickness to spread in epidemic form. Maclean's representation of how once 'open country' reverted to 'tsetse bush' is depicted in Figure 3.6.

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[78] Kjekshus, 1977: 164-8.

[79] For example TNA.Mss.31351; Maclean, 1929, 1930. Unpublished comments by Maclean divulge an awareness of how the extensive use of labour for plantations and other work was contributing to the spread of the fly, although this feature is underplayed in the more moralistic or forthright official interpretations of native land use practices (Maclean, TNA.Mss.1733/9 (69), 1926, Tabora District Annual Report, Appendix A). A dispute that emerges repeatedly in documents from this period was whether tsetse "drives out" man or merely occupies deserted land. Gillman Diary, describing a trip with Maclean to view the water tank experiment at Shinyanga "another of the 'easy' solutions by which the administrators veil their responsibilities", 20.2.34, 1.3..34, 1.4.34. Also 24-25.5.34, and Gillman's notes and views on a Tabora Reclamation (Tsetse) Conference, 1937, RH.Mss.Afr.s.1175, Vols. VII, X, XI, XII, XIV.

[80] Maclean, 1929a.

[81] Maclean, 1929a: 43.

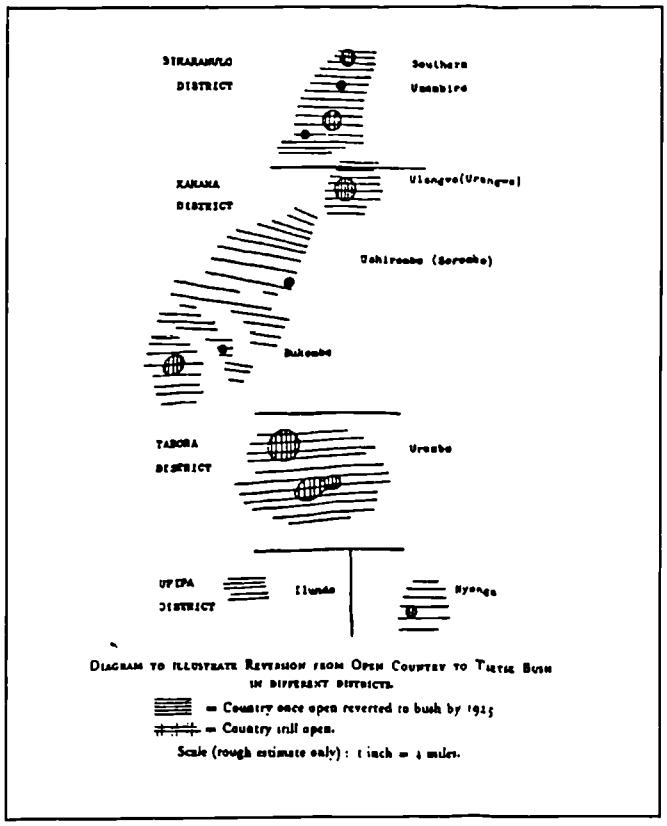

Figure 3. 6 Representation of how 'open country' reverted to 'tsetse bush'[82]

According to Maclean and Swynnerton, both of whom were instrumental in instigating the sleeping sickness resettlements, human settlement patterns and the productive activities that transformed woodland to open country were considered the key to pre-colonial tsetse control, and were therefore something which sleeping sickness control policies should emulate.[83] Implicit in this argument rests the idea that by creating settlement concentrations the colonial regime could reproduce African 'tradition' and therefore such interventions would be acceptable to the people concerned. In this sense, colonial administrators polarised 'tradition' against 'modernity', by doing this the domain of tradition became imprinted upon people in the colonising process, to be later used as a tool by these people to create new modern identities (Comaroff & Comaroff, 1992: 43; Iliffe, 1979; Ranger, 1983).

The model sleeping sickness concentration put forward by Maclean and Swynnerton was considered to need a human population of one thousand or more people per settlement to make

[82] Source: Maclean, 1929a: 38.

[83] Fairbairn, 1948; Maclean, 1929, 1930, 1933.

it viable.[84] If the population density was lower, the infection would be self-limiting, whereas a higher density was likely to mean that extensive areas of bush would be reduced, diminishing the presence of tsetse flies. According to the model, a settlement site would be chosen in the tribal homelands which had a water supply and good arable land. The establishment of schools (state and missionary), clinics capable of treating sleeping sickness, churches, and agricultural and veterinary extension work were incorporated into settlement plans. Through these models for modern living the problems associated with "decadent and disease stricken primitives" could be eliminated (Swynnerton, 1924-5; Maclean, 1929a, 30) and people 'cleansed' of the entrapments of primitive life. For people evacuated from the Ugalla River, Maclean effected a policy of clearing new areas of forest land. A fishing settlement was made along the Rungwe River but it was thought that the Ugalla and Wala Rivers did not "promise much scope for development on these lines".[85]

In the ideas of experts like Maclean, Swynnerton, Gillman and later Fairbairn we can clearly see the way in which public health measures and disease control were used as the basis for development. Initially these measures were a response to a medical emergency, but rapidly became institutionalised, explicitly in order to modernise and administer people's lives. Taken together with information contained in Chapter Four, the links between public health measures and wildlife conservation start to become clear.

In the models that were put forward for sleeping sickness resettlements, in the experiments for tsetse control, and in the treatment of human trypanosomiasis we can see that the scientific foundation and administrative legitimacy was laid for a massive reorganisation of the relationships between people, habitations, and the natural environment. This reorganisation can be viewed as a process of ordering different elements, in an attempt to generate modernity at the local level (Comaroff & Comaroff, 1993). In the following section we will trace how these ideas and models were put into practice in Ugalla, and touch on how the experience was understood by certain local people.

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[84] This figure was based on the calculation that the most suitable conditions for a sleeping sickness epidemic arose when human population densities were between 16.5 people and 82.5 people per square mile (Fairbairn, 1944: 1; Maclean, 1933; c.f. Swynnerton 1924-5: 320-322 for an account of an experimental settlement in Shinyanga.

[85] Maclean, 1929a: 122; Appendix D, Report on Sleeping Sickness, Tabora District Annual Report, 1926, TNA.Mss.1733/9 (69).

The Move to a 'Counterfeit' Country

The people living in Ugalla, Ukumbi and Ugunda along the Ugalla River were evacuated in three consecutive stages corresponding to the dry seasons of 1925, 1926 and 1927. They were moved to seven main settlement concentrations: Kalula, Morogoro, Kakola, Nyonga, Ilunde, Uruwira, Kaliuwa as shown in Figure 3.7 and described in Appendix 4. According to the figures given in Appendix 4, an approximate total of 9,191 people were resettled in these concentrations; although whether all came from the Ugalla River area, and how accurate the process of enumeration was, is not known.[86] A comment in the Annual Report for Tabora sub-District (1926) implies that the authorities did not themselves know: "decided to evacuate the whole of effected area...[Ugalla River]...3,000-5,000 removed - estimate at probably half" (TNA 1733/9 (69)); once the resettlement camps were established a locality for statistical enumeration had been created.

[86] Hatchell gives a population figure of 20,000 people moved from an unspecified area of Ufipa-Tabora at this time (Hatchell, 1949, 60). Elsewhere he is quoted as saying that during 1925-1926 (-1927?) they concentrated 18,000 people from Ufipa and the south of Tabora (Clyde, 1962: 123). Fairbairn (1948) estimated that, including later settlements in Tabora District (Usagari, Ukumbi, Urambo, Uyowa), 28,500 people were moved in Ufipa and Tabora areas between 1925 to 1937, however his unpublished archival data reveals that he did not include the settlements of Kalula, Morogoro, or Kakola in this estimate which would increase the population total to an approximately 30,530 (TNA.Mss.11771.Vol.II).

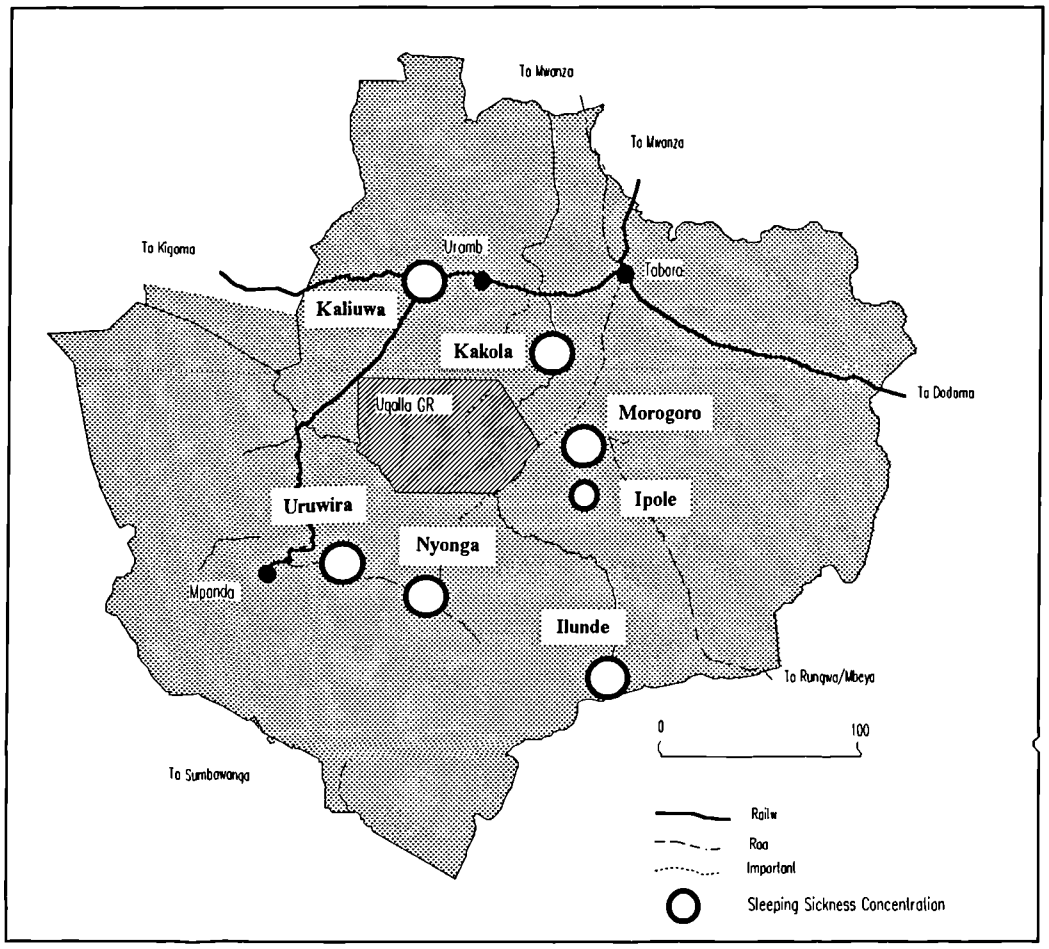

Figure 3.6 Major sleeping-sickness concentrations in the region surrounding the Ugalla River between 1925 - 1927[90]

The models, techniques, plans and practices of administrators and experts described above can be compared with oral historical accounts by informants evacuated from the region surrounding the Ugalla River.[91] These descriptions reveal how different the experiences, knowledge and desires of people exposed to the disease were from their portrayal by colonial experts. Having said this there is no doubt that there was a disease present which people were dying of, but it has to be stressed that the colonial response to the disease was not the only possible response.

[90] Source: base map Lamprey (1994), unpublished digital computer map data.

[91] This information is based on research carried out with people who go to the Ugalla River to fish and keep bees in the dry season, which I collected between 1992 and 1994. A large number of discussions stimulated by my searching for history referred to the sleeping sickness evacuation, deemed as an important collective event and historical reference point. Detailed interviews with five male informants are drawn on here, these people are Chief Nsokoro Mvulla, Mzee George Ntiyama, Mzee Theophilo Mapolo Sizya, Mzee Martin Mpenta Chalamila, and Mzee Lucas Songo, each of whom was born before the First World War and can remember the move. Despite my concerted efforts I could not find any women who could remember the move living in the areas where I carried out village based research.

Furthermore, just because it drew on the instruments, knowledge and expertise of medical science we should not be beguiled into supposing that this was the most 'effective' response from the point of view of people living along the river, although it was undoubtedly highly effective from the point of view of the British colonial government.

The evacuation took place systematically according to the minor territorial units, *gunguli*, each under a headman and chief.[89] According to the people's accounts, a new disease came to the area with which people were unfamiliar.[90] It was reasoned that their misfortunes were a punishment inflicted by the spirits (of the land?) and would continue until they were placated. Chiefs and ritual experts slaughtered cows to the spirits of the land and ancestors[91].

After many people had died Dr Maclean - *Bwana Makeleni* - and C.W. Hatchell arrived in Ugalla. Apparently those officials demanded to know whether anyone was ill. Although people had been experiencing an illness, the first reaction of the locals was to deny and hide it from the sight of the Europeans. Sick people were hidden or made to walk back and forth in front of their houses, pretending to be well. One can assume that this reaction must have

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[89] The colonial administrators were working through the structure of the 'Native Authorities', African chiefs drawn into the colonial bureaucratic structure (see Abrahams, 1967a/b). This led to tensions in the allegiances of the respective chiefs who had to try to balance their relationships with the colonial administrators with their relationship to people who did not want to be moved. Mtemi Nsokoro Mvulla, a Galla chief who took over power following his father's death shortly after being resettled, said that the chiefs were consulted about the move and where they and their people wished to move to, but at the same time their houses were burnt and they did not have a choice about whether they wanted to move or not (Interview notes, July 1994).

[90] The previous lack of knowledge of sleeping sickness which might indicate that it was a new disease to the area can be contrasted with the extensive details that informants gave about other diseases and how they were treated. For example, if a person contracted small-pox they were sent to live or die in the forest and food would be left for them at a distance from their camp. If a person had hook-worm, after they had sat to eat the last piece of millet meal would be thrown at the place where the person had sat and the hook-worm told to stay away. Venereal disease is noted as having became bad in the area from the time when people went to work on the railway (early twentieth century). If a stranger visited they would be offered food, but afterwards the stool they sat on would be turned upside down until it was known whether they were in good health.

[91] C.W. Hatchell was the Ufipa District Political Officer who assisted Dr Maclean to evacuate people from the area. He notes that the greatest objection to being moved was that they would be separated from the spirits of the country and ancestral spirits, since they believed that lacking the protection of these spirits who were held to have inflicted the illness, would inevitably bestow worse disaster. Similarly, in his diary, Maclean records an elaborate ritual that took place in order to move the ancestral spirit of a particular chiefly family to a new location. Consideration was given by the administrative officers to making settlement concentrations on their territory for this reason (Hatchell, 1949: 62). In an interview with the Galla Chief, Mtemi Nsokoro Mvula, he described in detail where, when and how they went to slaughter cattle. He continues to do this on an annual basis today together going to a site near the hills of Kanonya and Kaliwamfumo near Silongwe with certain local ritual experts who he introduced me to. Wagner notes that in the Mwadaye area of Uha (west of Ugalla) the Baha resisted the 1932 resettlement because they reasoned that the misfortune was caused by the earth spirits. *Bateko*, or ritual experts in the domain of nature spirits were left behind when people were evacuated, in order for them to continue to tend the nature spirits (Wagner, 1996: 194, citing Gwassa, 'Tunze papers', 1967: 47).

been connected to previous experiences and imaginary associations with Europeans. Such stories told today express historical fears in graphic detail, telling of how soldiers raped women and tried to drag men away to fight, which caused people to run and hide in the forests. This imagery is connected to a representation of white people as beings not to be engaged with. Specific fears concerning the European desire for blood may also have been present.[92]

Dr Maclean stayed in Ugalla and tried to convince people that their illness was inflicted by tsetse flies. He told them they should not repair their houses as was usual in the dry season, but instead they should make bark sacks for carrying their possessions in when they were evacuated. People did not believe this, as Mzee George Ntiyama has stated: "there were tsetse flies before the illness came, and people thought that the sickness was inflicted by the spirits".[93] When he told them they had to move, inevitably: "people did not want to move because they were being asked to move away from all that their lives were built from [which was inconceivable]".[94] In this encounter, although the illness resonated as a chord between the local people and the experts, the blame created a cacophony of meaning in which the local people could not understand the significance of the vector in transmitting the disease, and the experts could not understand the significance of the ancestral and nature spirits, or the concept of disease as punishment. The encounter reinforced many of the original prejudices of the parties, perceptions whose discontinuities persist today. For example, informants who keep bees near the Ugalla River reason that there are still tsetse fly but no disease:

> "There were many people who were sick and they were moved to live elsewhere. But after we were moved there were still very strong tsetse fly here and we have come every year [to keep bees and fish, therefore] how could Bwana Makeleni [Maclean] have been correct".[95]

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[92] See White, 1993a; 1993b; cf. Moore, 1996. Stories and fears concerning the existence of blood sucking beings, 'vampires', were a widespread phenomena that emerged during the colonial era in East and Central Africa. For example, according to E.E. Hutchins, district officer in Morogoro "[T]he old story that certain Europeans wandered about the country seeking human blood for the purpose of making medicine was revived..." (TNA.Mss.Morogoro District, vol.1, part A, sheets 25-26, August 1931, film no.MF15; cited in White, 1993b: 46).

[93] George Ntiyama, May 10 1993.

[94] Lioba Chalamila (fieldwork diary, 6.6.93) whose father was evacuated from an area of Ugalla. The Kiswahili term that Lioba Chalamila used was *kitende* which comes from the verb *tenda* - to do, act, practice - and was used to connote a person's house, home, surroundings, environment, namely all that has been accomplished or prepared in life.

[95] Juma Lugovi & Katanga Mboga, Senga 2 camp, 10 July 1994. This was a comment made to me on several occasions when I was carrying out research near the river and discussing historical matters.

In Tabora and Ufipa in the mid-1920's, the colonial officers tried to survey and map the extent, density, and movement of the disease.

In the case of sleeping sickness, the desire of medical administrators to extract blood, and people's incomprehension of microscopal analysis, exposed a foreign kind of relationship between the illness, the tsetse fly and blood. According to local informants, the breakthrough came for the medical authorities when some people learned that if they gave blood they could obtain a source of income, because payments were given for blood samples. For example one local informant, a retired Moravian preacher who was born in Ugalla before the First World War, described the sampling of blood, and how evacuation led to him finding God:

> "The medical doctors they took blood and went to test it and brought back the reply to people. One day I can remember my father, may he rest in peace, he was brutally assaulted...they came and they took blood and they went to test it. Afterwards they came to speak with him himself and they said 'aah do you see this blood it is a source of gain (profit, employment)'. They came here, they took blood and then they gave 50 shillings to him. He said to the person 'and you, would you give 100 shillings for my body?' this I would not like! But people they took money for blood. They came and they said 'we want sick people', and you would reply 'what sick people?'. Many people were being hidden and towards the end many were dying. And when they came those medical doctors they walked inside this houses and around the back and inside another house and around the back and inside another house in order to see whether there were sick people, or what? But really the officials they really tried their level best until the whole of our country had been stirred up.
>
> Myself, many times I think that it really was the assistance of God to give [?me] religion. You see that it was really a hard life in our country to get the word of God. It was really difficult because you could leave, for example here, and go as far as Ndono and there you would encounter missionaries, and then you would leave Ndono and it was not until you reached Igange that you could find more missionaries. There were so few in our country, they would walk all around to spread the word of God, but in our country I remember that there were so few Christians...God assisted to bring things here...I am retired but I still love God.
>
> When we were moved we went by the government vehicles. In 1925, 1926, and 1927. It was cars that could move people with such strength. Other people came by foot, they refused completely to climb on the lorry...[because]...you understand that custom is something very strong. Other people died on the road. My father for his own stubbornness he walked and he died on the road and was eaten by hyenas. Four old people remained who did not want to move, three of them died and when people went in the dry season, I don't know whether it was hyenas or what, but the people found the old people were already dead, they just encountered clothes and bones!
>
> He came to stay, the mzungu (white person), he stayed for almost two months to hasten people to move. He arrived many times and he would go to see the chief and tell him or her that they had to tell the people not to build houses in order to move, and to tell people to make bark sacks. People said 'that one is a madman'". Makeleni, Doctari Makeleni aah I remember him very well because I saw him with my own eyes" (recorded interview with Teophilo Mapolo, 18.5.93).

Nowhere in the colonial administrative archives is it mentioned that payments were made for blood, the emphasis being placed on the notion of 'voluntary' testing (for discussions on fear of the theft of the body see White, 1993a/b).[96] Once blood samples started to be 'volunteered', native dressers were stationed with a microscope, samples were taken by these dressers (colonial government employees and private mission personnel) and the blood was diagnosed by European doctors (most of whom were attached to the missions - Catholic and Moravian).

Stories abound of the burning of huts, fear of the lorries that came to take them away, old people who refused to leave and who were eaten by hyenas and the difficulties of life after the move, and in these stories it is the move that is emphasised, not the presence of sleeping sickness:

> "My uncle he left [was resettled from Ugalla] and he came to Uyumbu. He was a sick man you realise this [he had sleeping sickness], but you couldn't live with all those injections, injections and injections and injections. After we had been evacuated and arrived here all the people who were sick they got better, but he remained sick having injection after injection until he was tired and then took up a gun and shot himself".[97]

After the move, people experienced extensive material hardship. Resettlement also generated political conflicts. For instance the settlement of Kakola[98] (also known as 'Ugalla') was in the powerful Unyanyembe chiefdom.[99] The move effectively subordinated the people of Ugalla to Unyanyembe, a situation which generated intense disputes over a period of twenty years when the Ugalla chiefs gained administrative permission to resettle elsewhere. In the case of Kakola, older people continue to refer to the new location as a 'counterfeit' country (the settlement being named 'Ugalla' which was the same name as the place people came

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[96] TNA.Mss.1733/9 (69). Maclean, Appendix 'D', Report on Sleeping Sickness in Tabora District, Tabora District Annual Report for 1926.

[97] Mzee Katanga Mboga (field diary, July 1994).

[98] Kakola settlement was an area on the border of open country which was cleared for the purpose of sleeping sickness removals. 3000 local inhabitants were used as labour for nearly a month to clear land for the settlement. They were supervised by Mr Stiebel, the District Administrative Officer. Mr Swynnerton, the Director of Game Preservation visited the settlement to evaluate progress. In 1925, 1,350 people were resettled in an area of eight square miles, which was extended to nine square miles in 1926, when a further 50-100 people were moved into the area, totalling approximately 1,400 inhabitants.

[99] This is not something I encountered, but Clyde, 1962 makes reference to a proliferation of settlements growing up during this period named *Makeleni* after Dr Maclean.

from), "a place without a soul".[100] Certainly some people's souls were reorganised in the process, as the account of Teophila Sizya Mapolo above tells, it is by this means that he came to God.

However this process of trying to reorganise the soul of the people was only partially successful: according to oral accounts, people returned seasonally to hold their *ngoma* (drumming and dancing), drink beer, hunt, fish, and gather honey, whilst the chiefs returned annually to worship their ancestors. This may have helped them to recover their sense of belonging and identity. The process of local people giving renewed meaning and expression to their lives also appeared through the popularity of the witch finding movement known as 'Muchape' which entered the sleeping sickness field in western Tanganyika, and specifically Uruwira Camp in the 1930's.

Modernity & Galla Claims to History

By the 1930's a community of British administrators, experts employed by the Colonial Office, and independent mission organisations had become experienced at dealing with tsetse reclamation and sleeping sickness issues and had themselves become well established in the region. The hopes of many administrators are echoed in the sentiments expressed by the Provincial Commissioner for Western Province: "[i]n their ignorance bush natives must realise that the advantages of safe community life properly administered, must eventually out-weigh the joys of being left alone...".[101] Dimensions of modernity expressed through Christian missions, education (state and mission), healthcare (state and mission), agricultural and veterinary extension work (state), all gravitated towards the spaces delimited by the resettlement schemes[102]. For colonial administrators, these settlements were to become

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[100] Teophilo Sizya Mapolo & George Ntiyama, 10.5.93 (both men are Christians). Reference to the soul is also explicit in the accounts of administrators. For example: "[A]n Administrative Officer in a Province such as this where each one on the average has the affairs of at least one hundred thousand souls to deal with, cannot be confined to office hours, he is never off duty" (Senior Commissioner to the Chief Secretary to the Government, Annual Report for Tabora District, 1925, TNA.Mss.1733/4 (52)).

[101] Bagshawe, Provincial Commissioner, Western Province Annual Report, 1932, RH.Mss.Afr.s.3059; Mss.Afr.s.279-306, Private Diary. TNA files, sleeping sickness education, health, missions.

[102] The importance of the sleeping sickness settlement as a focus for modernising concerns is conveyed in the case of sleeping sickness settlements in Buha to the west of the area with which we are concerned. In the 1930's an intensive wrangle occurred between the Neuk i rchen Mission, the Christian Missionary Society, and the Society of Missionaries for Africa (White Fathers) over which mission could gain the rights to establish their schools within

centres where people's identity could be repositioned in relation to new ideas of time, to markets, and to the state.

Some resistance was put up to the new centralised trajectories of colonial administrators. Once moved, one tendency was an outright rejection of the resettlement schemes: some people simply ran away from intervention measures and attempted to render themselves invisible in the forest.[103] Another expression of people's reflection on their own circumstances, and possibly a way of trying to bring change within a local sphere of control, was the growth of the Muchappe witch-finding movement that entered into the sleeping sickness field in the 1930s, particularly in Uruwira settlement in Mpanda District.

In the oral historical accounts I collected from informants who were moved to or were brought up in Kakoma sleeping sickness settlement, the language of tradition is forcefully used to argue for the right to return to Ugalla, 'the traditional homeland of the Galla'. One such case is that of Mtemi Nsokoro Mvulla, who holds claim to be a chief of Ugalla. In the 1940s, the possibility of returning to Ugalla was made into a political issue by a group of people at Kakola sleeping sickness settlement. It was argued that it was important to go and worship (tambiko) at the ancestral burial ground, Mvulla's father had died in 1942, which Mvulla argued now made this imperative, in addition to the fact that they no longer wanted to be subordinated to the local chief. In 1948 the District Commissioner let Mvulla and his followers return to Silongwe on the Mpanda Railway line.[104] Three years later another chief from Ugalla, Mtemi David Yongolo, was relocated to Kilometa 34 also on the line of rail.[105]

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each settlement. The White Fathers started to build schools very rapidly in an active attempt to exclude the other missions (TNA.21711, n.d. see correspondence).

[103] Fairbairn, 1944: 4, it was in fact 'discovered' that the schemes for intensive agriculture and livestock keeping were fundamentally ill-conceived: "the Agricultural Department do not yet know how to maintain the fertility of miombo soils, much less how to restore fertility" (1940, TNA.Mss.11771, Vol. II); also Hatchell, 1956 and Welch, 1956 who describe the disastrous outcome of the resettlement experiment initiated in 1923 by Swynnerton. Bagshawe, Western Province Annual Report, 1932, RH.Mss.Afr.s.3059

[104] At Silongwe, the chiefly burial ground is at Isuba, by the hills of Kanyonya and Kanawafumo, between the Mtambo and Msima rivers. There were once other chiefly burial grounds near the hills of Uguluwe, Mbamba and Kapemba in the Italike-Kasontwa area. Each area is cleared and has Muninga (Pterocarpus angolensis), Mkola (Afzelia quanzensis), Mnongo (?), Mng'ongo (Sclerocarya birrea), and Mgungu (Lannea schimperi) around it.

[105] The Mpanda Railway line was built in the 1940s. The need for labour for the railway line and mines in Mpanda generated a perceived need for new settlement concentrations. Possibly these events are the reason people were allowed to move from Kakola settlement.

The language of tradition was an important device to gain leverage in the attempt to return, a language that reappears repeatedly in subsequent claims over rights to Ugalla. This language can be seen in the example of a 'mythical charter' which I have chosen to call a 'modern epic'. In his bid to claim the right to live in Ugalla, Mtemi Nsokoro Mvulla had a version of this charter typed for him. In this action, if the social mechanisms for preserving such charters were impeded by people's evacuation from the area in the mid-1920s (Cunnison, 1951), new mediums of preservation had been found and new meanings encompassed (cf. Abrahams, 1967a: 106). Similar charters of people moving into an area as elephant hunters and settling on the site of a slaughtered elephant are common in western Tanzania, apparently reflecting a historical process of human movement across the region (Abrahams, 1967a; Roberts).[106]

The mythical charter typed for the Chief, which is translated and included in Appendix 5, describes how the Galla moved into the region from the north east as elephant hunters, the processes of conquest, journeys to the coast, the influence of long distance trade, territorial occupation, encounters with the Wangoni, and chiefdom proliferation. The account also contains an explanation of why the people were called the Galla, and consequently the area called 'Ugalla' being a reference to the *ngara* or head-dress made of bird feathers worn like a circular fan around the heads of male warriors, intended to denote the fierce nature of the people. Through this historical form, a certain group of people could claim the right to live in Ugalla in the twentieth century, this language of tradition reappeared when another bid was made to return to Ugalla in 1961 as described below, and today when Nyamwezi fishermen - beekeepers voice opposition to immigrants fishing on the Ugalla River, as described in Chapter Six. Ugalla is positioned as part of their tradition, a locality they have a right to be in as an inheritance. In this respect, one can argue that the language of tradition is an expression of how modernity has taken root in the area, something that emerges as an object of self-conscious attention (Pigg, 1996).

Resettlement schemes can be seen as purifying attempts to establish modernity in the area. The resettlement sites were legitimised as places where local people's bodies could receive protection from sleeping sickness and contact with the fly. Their minds could become

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[106] For example Maclean describes the movement of a group of Galla for purposes of elephant hunting which led to subsequent settlement in Masumbwe in Kahama District (RH.Mss.Afr.s.622). Similarly the Nyanyembe chiefdom of Itetemia is held to have been established at the site of a killed elephant (Tabora District Report, 1919, TNA.Mss.2551).

receptive to proper training in order to remove the contamination inherent in being 'primitive' and instilled with the pursuit of progress. Here we can see the continued relevance of the Comaroffs' (1992: 42-3) argument concerning the morality of properly inhabited space in nineteenth century Bechuanaland: "bodies, houses, and everyday routines bore the capillaries of a full-blooded imperialism, capillaries that ran from the palace gates to the 'mud huts' on the colonial frontier". In Ugalla in the 1920s we can discern massive interventions into people's bodies, habitations and productive environments which, despite everyday forms of resistance, had the effect of profoundly redrawing the boundaries of their way of being. Through the insertion of new elements - medical knowledge, technologies such as that attached to the microscope, and efficient bureaucratic practices - old elements - tsetse flies, people, animals, forest - could be effectively rearranged.

CONCLUSION

We have traced how a locality started to emerge through descriptions and cartographic representations of the people, place and natural environment of the Ugalla region. It has been argued that flows of action generated by explorers, missionaries and settlers shaped how the people and nature of Ugalla were portrayed, and also generated a source of knowledge that contributed to outsiders' capacity to act in the area.

Ugalla first appeared as a folkloric description presented as fact, a chronicle based on the second-hand descriptions of traders. As explorers started to enter the area new associations began to arise, like the idea that they had found a 'pure nature' in a remote part of Africa. In these accounts we can see a process of constructing the locality, through natural history, the geomorphology of the environment, the use of instruments, the creation of maps, and ethnographic descriptions, for example. Each activity was part of transforming the region into a cultural expanse of landscape represented through maps, reports, diaries and ethnographic descriptions, and drawing into the region an international community, the market, and science. Geographical exploration and Swahili trade established foundations that were used in the extension of Christianity, the process of state building, and in the environmental change that has been portrayed as ecological catastrophe.

The importance of understanding these processes for an analysis of wildlife conservation in the region a century later, is that they served to build up layers of practices, knowledge and

techniques of external interference which underpin more recent actions. In this respect, particular emphasis has been placed on cartography and diagrammatic representation because they serve to make visible certain elements of the environment - representations of reality based on European material needs and desires for expansion, fears, morality, techniques of knowledge collection, quest for truth, power, etc., - which were the first step towards policies of intervention.

Moving to the second half of the chapter, has been argued that resettlement schemes were seized as an opportunity to establish modernity in the region. In Ugalla in the 1920s we are witness to massive interventions into people's bodies, habitations and productive environments, which, despite everyday forms of resistance, had the effect of profoundly redrawing the boundaries of their way of being.

Evacuation of people from Ugalla had two crucial implications: the first being that once it was no longer inhabited by a human population, the area could be protected as a wildlife sanctuary. Through the insertion of new elements (medical knowledge, technologies such as the microscope, and efficient bureaucratic practices) old elements (tsetse flies, people, animals, forest) could be rearranged in ways that opened the field for the gazettement of the area for wildlife. The second implication was that once people had been moved they re-entered Ugalla to make their livelihoods on new terms. These implications take us into the next chapter, to see how Ugalla was conserved as an area for wildlife protection and how people again became present in the area.

4

Emerging Forms of Resource Use and the Gazettement of Ugalla Game Reserve

Introduction

After the human population of Ugalla was resettled, the area became viewed - by colonial administrators, scientists, and sports hunters among others - as a 'natural environment'. Subsequently, it became the focus for research in a fashion that reveals the role the natural sciences played in enabling administrators to discern Ugalla as being worthy of conservation status. Here it starts to become apparent how apparently disparate elements - tsetse control, public health measures, scientific research, local administration - contributed towards wildlife management in the region.

As this chapter will elaborate, once Ugalla was deemed a 'natural environment', local people started to re-enter it on new terms. The administrative conditions prevailing in the area - it was a quarantine zone on public health grounds and therefore no one could settle there - meant that when local people did visit the Ugalla River, colonial administrators saw fit to define them according to their productive activities. This implied that those who were permitted to enter could only allowed to do so as part of an accepted seasonal labour migration, carried out by able-bodied, adult men.

In the fact that people became classified as 'resource users', we have an important change. Where once they were visible to colonial administrators as statistical elements, 'the population', 'tax payers' or 'sleeping sickness cases'; their visibility now emerged in relation to economic categories based on forms of production, 'honey hunters', 'fishermen', 'hunters'. Two of the categories conferred on local people subsequently became accepted as legitimate forms of resource use, namely fishing and beekeeping.

The success of colonial administrative practices in representing Ugalla as a 'natural environment' emerges in the Ethnographic Survey of Africa, written in the 1960s (Abrahams,

1967b). In the Survey, Abrahams, an authority on the Nyamwezi, represents the area as uninhabited in preference to associating it with a specific tribal group. In a personal communication, Abrahams stated that he is unaware of a group of people named the 'Galla', that the area was unsettled; he deems this part of the region to be under-researched and historical 'tribal' affiliations to be fluid and of limited significance.[107] This suggests that administrative representations of the area, as uninhabited and natural, have, in certain quarters, been highly successful. However, as this thesis amply demonstrates, people have remained attached to the area up to the present day. While it may be the case that tribal affiliations are fluid, one might argue that these affiliations are of importance if only because people couch their claims to the territory of Ugalla in terms of a tribal tradition, whether this is the recreation of a 'fictitious' tribal identity or otherwise. This apparent absence of people from Ugalla raises the need to portray their situation analytically, to which end the notion of 'visibility - invisibility' is drawn on

The concept of 'visibility - invisibility' is used in this study to represent how different categories of 'resource user' became manifest in the apparently dehumanised 'space' of Ugalla Game Reserve, making them the focus of attention by administrators and experts. Scholars working in the fields of anthropology and of development studies have used various notions of 'invisibility' or 'visibility'. In a discussion on ritual metaphor, Turner (1967: 95-6) argued that a person undergoing a ritual passage enters a liminal period in which he or she is structurally 'invisible' to those whose cultural definitions and classifications have conditioned them not to 'see' the individual. In this respect, invisibility is a property of transition, something conferred upon an individual once classified as one thing, but yet to be classed as something else.

In the context under study the principle of systematic invisibility appears misleading because the people who make their livelihoods in Ugalla Game Reserve are not in a process of transition, nor are they from the same cultural background and therefore liable to hold a shared understanding (c.f. Malkki, 1995 for an example of the way Turner's concept of liminality has been used to characterise the situation of Burundian refugees in western Tanzania).

In contrast to Turner's analysis of making what is visible invisible through ritual, the concept of invisibility has been used in relation to power. Feminist studies of the development process,

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[107] R.G. Abrahams, personal communication, December 1994.

such as that of Boserup (1970), have highlighted the way that development planners have paid no attention to gender issues. This, they argue has had the affect of systematically excluding women from developments, rendering them 'invisible' to planners due to gender inequality (c.f. Moser, 1993, Momsen, 1991, Ostergaard, 1992). Whereas Turner argues that through ritual an individual may temporarily become invisible, these feminists put forward the case that development can reinforce inequalities inherent in the relations between the sexes and therefore women remain 'invisible'.

The idea of invisibility has now become widespread in referring to categories of people or areas of concern that have or have not been brought to centre stage in development policy and planning. Escobar (1995), for example, focuses on how different 'client categories' ('women', 'peasants', 'the new farmer', 'the environment') have entered development discourse. Drawing on Foucault and Haraway, he argues that client categories are brought into a particular 'field of vision' based on power relations. Consequently those holding power can define certain co-ordinates for control over these subjects, a control that is generated according to an "economy of visibilities articulated through the dualism of tradition and modernity" (Ibid., 157). Here we have a process of making visible what is invisible.

In the work of Turner, of these feminist writers, and of Escobar, reference is made to three ways the notion of invisibility or visibility can be used. In some senses, Escobar's concept of a 'field of vision', is more appropriate than Turner's association of invisibility with the ritual process. The former introduces notions of power and control - i.e. which social actors have the capacity to define what is visible? However, considering the material presented in this chapter, Escobar's argument is also problematic; his work is too generalised, focusing on discourse at the expense of other forms of practice, and also he doesn't pay enough attention to how the 'visible' or 'invisible' subjects of development may themselves manipulate the categories through which others see them. Bearing in mind the material presented in this thesis, it is possible that these subjects themselves may create opposing or counter fields of vision through which to organise their claims to power and authority.

In this respect, Haraway's (1988) discussion on situated knowledge provides the most satisfying way of conceiving visibility or invisibility. She places emphasis on the element of vision, arguing that it is always a question of the capacity to see, and in this sense vision is

something which is embodied in practices and power relations, namely within a social context. Her perspective on embodied vision appears to have more depth than Escobar's use of Foucault's image of the 'panoptic gaze'; this gaze presents a passive observer/subject relation, whereas Haraway emphasises the idea of positioning - the observer being positioned in relation to the subject of knowledge, the observed. Here attention has shifted towards invisibility and visibility being a question of the interrelationships between two parties. Also, importantly, the subject is an agent in his or her own right who is capable of influencing what the observer can visualise and control.

Here the concept of visibility and invisibility will be used to portray a relation between knowledge, power and vision. Haraway's emphasis on positioning is drawn on because it can reveal how different colonial officers and experts were situated in relation to the subjects of their knowledge, also, importantly, these subjects are not passively moved into and out of the expert field of vision, but have the ability to manipulate their identity and create counter-narratives to official discourses. Attention is also given to the role of technology in enabling experts and administrators to 'see' a certain reality and respond to it (Haraway, ibid.). For example, in the 1930s the presence of fishermen along the Ugalla River was revealed through microscopic analysis of their blood, while, as shall be mentioned in Chapter 6, sixty years later the aeroplane was instrumental in assisting planners to identify patterns of resource use in Ugalla Game Reserve and a computer database became a means to try to enumerate and control the number of people entering the area. We now turn to trace a history of Ugalla from the 1930s, when people had been evacuated until after Tanzanian Independence in the 1960s.

The Kakoma Tsetse Experiments

In the 1930s, the depopulated region of Ugalla started to attract outsiders for various purposes: it was known as "the best shooting grounds" in the District,[108] infrastructure was developed,[109] timber extracted, and scientists carried out botanical, geological, entomological and zoological

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[108] Tabora sub-District Annual Report, 1926, TNA.Mss.1733/20 (105); Bagshawe Papers, 1932-5, RH.Mss.Afr.s.279.

[109] During the 1930s increasing numbers of motorcars appeared in the region. In 1933 a new, though badly constructed, road was built through Ugalla as an access route to the Lupa Gold-fields in the south (Gillman, 1933, RH.Mss.Afr.s.1175, Vol. XX). Three years later a bridge was constructed over the Ugalla River at Isimbila "a large, new expensive bridge...is closed and whilst the river is dry the vehicles cross, as they have always

research. These studies are of special interest since, through them we can see local history being re-framed according to current ideas of the dynamics of ecological change. Furthermore, a project known as the 'Kakoma Tsetse Experiment', was the first step to gazetting Ugalla under the Game Preservation Act, in effect transforming it into a protected area

In the 1930s a research station was established at Kakoma in Ugunda, east of the Ugalla River under the auspices of the Tanganyika Tsetse Research Department.[110] From this base, three phases of tsetse experiments were initiated: in 1934 the 'Kakoma Tsetse Reclamation Camp' was started but soon abandoned (Jackson, 1936).[111] In 1938, a detailed population study was carried out on the Tsetse fly, *Glossina morsitans*.[112] Lastly, in 1954/5 scientists from the now renamed East African Tsetse and Trypanosomiasis Research and Reclamation Organisation, extracted blood from mammals infected with trypanosomes and used it as a base for an inoculation which they tested on human 'volunteers'.[113] Other smaller research projects undertaken by individuals who stayed at the Kakoma Research Station.

As stated above, the research on tsetse fly populations was highly significant from out point of view for it led to a portion of Ugalla being enclosed under existing game legislation. The experiment's objectives were to examine the relationships between tsetse fly and species of wildlife in their 'natural habitat', and the effects of the non-burning of vegetation on the presence of tsetse. Exclusion of people and all resource-use activities was a pre-requisite of experimental success and therefore land was alienated from Native Authority control (the Chief of Ugunda).[114] Figure 4.1 shows a sketch map representing the boundaries of the 'Kakoma

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crossed... and if it rains no vehicle can go as far as the bridge... it looks very nice" (Bagshawe, 1936, RH.Mss. .Afr.s.3059).

[110] Kakoma is a site Kaiser, Bohm and Reichard of the AIA were based in the 1880s, unwittingly establishing a locus for future twists of local history (see Chapter 3).

[111] A certain Dr Jackson and a Mr Lloyd ran this experiment, the aim was to clear a large area of land for human resettlement. The plan paralleled the 'Shinyanga Experiment' instigated by C.F.M. Swynnerton in the north of the region, as referred to in Chapter Two (Bagshawe, Provincial Commissioner for Western Province, Annual Report for 1936, RH.Mss.Afr.s.279-306).

[112] Potts, Tsetse Research In Tanganyika Territory, 1925-1952, RH.Mss.6234; also TNA.Mss.19931.Vol.1.

[113] TNA.Mss.19931, Volume One, Game Reserves in Connection with Tsetse Research & Anti-Sleeping Sickness Measures.

[114] Tabora District Book for the year 1938, microfilm housed at Rhodes House, Oxford. TNA.Mss.19931, cutting from the Tanganyika Gazette dated 2nd of December, 1938, to show Government Notice 213 notifying that

Experiment' which covered an area from the southern bank of the Wala River, along the eastern bank of the Ugalla River to Isimbira, and up to the Kakoma road in the east. Under the Game Preservation Ordinance, the land was gazetted (Government Notice 213) and formally incorporated within the Game Preservation Ordinance of 1940 as 'Kakoma Controlled Area (Tabora District)' (Colonial Office, map of protected areas in Tanganyika, 1942).

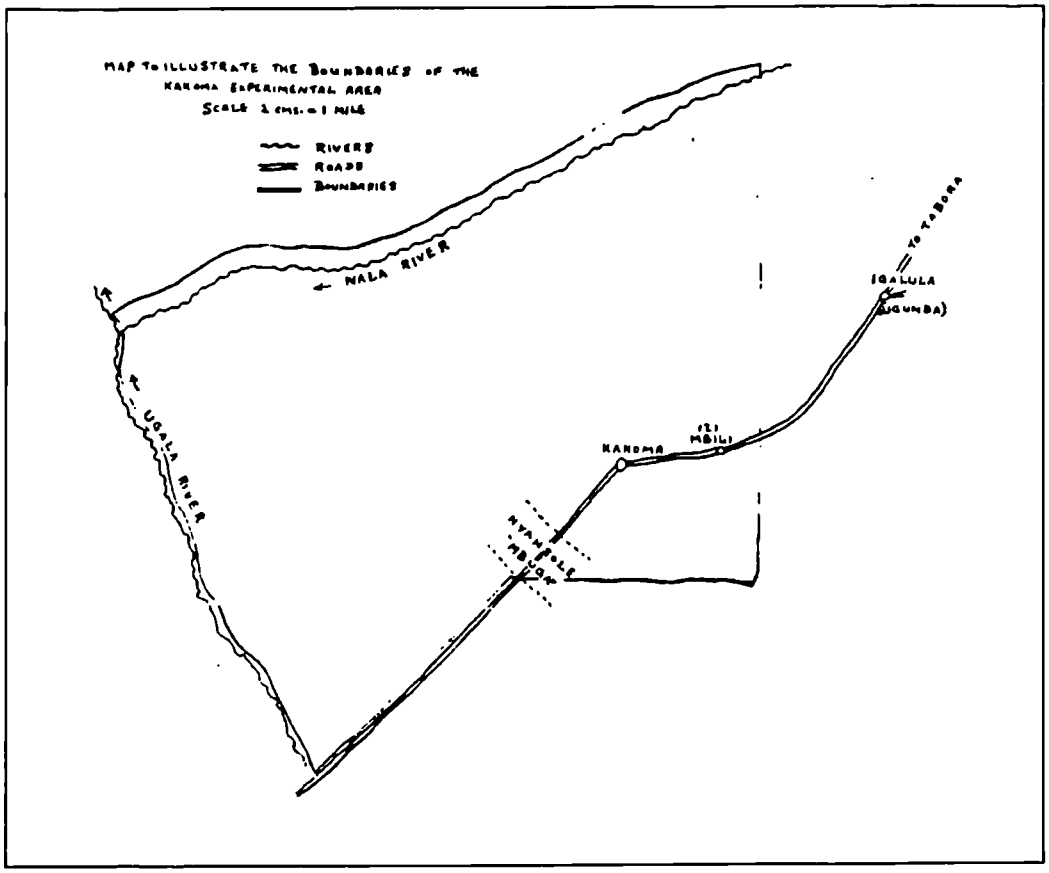

Figure 4. 1 Boundaries of the 'Kakoma Tsetse Experiment' of 1938[115]

The series of experiments carried out in Ugalla were part of a process motivated by the search for scientific and technical solutions to administrative problems faced by the colonial government. In this locality, the conditions to carry out such experiments were ideal by virtue of the fact that the human population had previously been resettled.

Kakoma had been gazetted under the Colonial Government Game Preservation Ordinance (28.11.1938). This is updated in the Wildlife Ordinance of 1940.

[115] Source: TNA.Mss.19931, Volume 1, Game Reserves in Connection with Tsetse Research & Anti-Sleeping Sickness Measures.

If we consider each experiment in turn: the scheme to resettle people back into the area (1934) was motivated by the idea that nature could be reordered and controlled through removing the forest, making the vacant space appropriate for habitation. When this did not work, attention focused on tsetse flies (1938) in experiments predicated on the idea that flies were existing in their 'natural' habitat, free from human interference. Subsequently, through a convoluted history, medical researchers, once anxious to remove people from the locality and purify their blood, now removed the trypanosome and reinserted it into people's bodies in the attempt to devise an inoculation against sleeping sickness.

The individual research projects carried out in Ugalla focused on a taxonomy of the 'floral cover' (Phillips, 1931), the soil composition of termite mounds (Milne, 1936), and the comparative ages of trees in relation to their habitat (Glover, 1939). The topic of each study reveals these scientists to have been concerned, unsurprisingly, not simply with tsetse control but also with contemporary environmental issues. At the time, in the 1930s, colonial concern over ecological degradation in Africa (e.g. soil erosion, game destruction, deforestation) was heightened, and implicit in each of the studies is the premise that human resource use was inherently degrading the natural environment (Burtt, RH.Mss.Afr.s.1263 (12); Potts, 1937; Jackson, 1936; Milne, 1936; Glover, 1939; Phillips, 1931). To take but one example, Glover used a scale of vegetation succession to identify the 'relic' tree communities that represented the 'true climax vegetation' that had not been interfered with by man.

Such studies contributed to a body of work that gave foundation to the thesis that human activity in an environment is a departure from a natural ideal (Pimbert & Pretty, 1995; Leach & Mearns, 1996). They underpinned calls for protectionist strategies of environmental conservation implemented by the state such as the preservation of animals within game sanctuaries (Beinart, 1987). Thus, it can be said that research carried out in Ugalla fed into a much larger body of work on human action in African environments, which shaped and gave a scientific basis to administrative policies. The gazettement of Ugalla as a game sanctuary was one outcome of these policies.

To summarise, because the human population had been resettled away from the Ugalla River, the region's history could now be re-framed according to its natural elements. Biological, zoological, geological and botanical research enabled ideas on the relationship between people

and the environment to be reformulated. In practical terms, attempts were made to 'rearrange' elements of the natural environment - vegetation, animals, tsetse flies, trypanosomes - in relation to one another and also to people, through the application of science. One, unintended, outcome was of this process was that the practices, techniques, knowledge and social interactions generated in the course of administrative and scientific endeavours, together with associated bureaucratic routines and legislation, helped to shape the course of action administrators took in gazetting Ugalla as a game sanctuary.

The Partial Visibility of People as Categories of Resource User

After people were moved to other parts of the region, the presence of rural Africans near the Ugalla River was linked to their productive activities. In colonial administrative documents the economic categories of 'fisherman', 'native hunter', 'fishmonger', 'honey collector' appeared for the first time. Later, in the 1950s and 1960s due to a new emphasis placed on honey production, people became referred to as 'beekeepers' but prior to this the activity was subsumed within 'fishing'. In effect, the whole reality of a person's life was reduced to a single trait based on a particular economic activity. One can argue that the use of these classifications reflected a process that fed into the way the administration constructed the problems they were faced with in Ugalla (Escobar, 1995: 110). This is important, for, using the words of Croll and Parkin, the issue of who maps out the spaces and decides the order, intervention and productive pursuits that occur, and in whose interests the environment is separated out and dominated, tapped, exploited and otherwise acted upon (Croll & Parkin, 1992: 31), is critical when we consider local people's responses to wildlife management and protected area conservation in the modern era. How people are defined as a problem is just one part of this process.

In order to characterise people according to specialised forms of resource use, Ugalla also became perceived and classified in terms of its 'natural resources', from the perspective, that is, of state administrators and entrepreneurs. As in the changing representations of people in the area, here we also witness a transformation; previous images of Western Tanganyika as a 'tsetse belt' with land unfit for productive use, were giving way to utilitarian conceptions and economic appraisal - on the part of planners and administrators - of 'natural resources' with market value. Scientific research and environmental concern fed into this process, for, through classification, it underlined the value of wildlife as a natural resource in need of state protection.

To identify the presence of people along the Ugalla River in the late 1920s and 1930s, administrators did not obtain their information by direct observation or dialogue as one might expect, but, instead, by means of the microscope. By extracting and examining people's blood for trypanosomes, it was possible for medical officers to identify where they had been (because the carriers of trypanosomes, tsetse flies, only live in the forest) and alert government officers accordingly.[116] It is apparent that the legitimacy public health measures conferred on earlier interventions was still present; a fresh increase in sleeping sickness cases gave the authorities power to take action on 'medical grounds'.[117] In this respect we can see the power of an optical instrument to reveal reality by disembodying its elements - blood, trypanosomes, people - enabling the latter to be relocated according to scientific understandings, administrative practices and, increasingly, economic rationales (c.f. Haraway, 1988: 581).

One response to continued sleeping sickness cases from the Ugalla River, was a Native Authority Ordinance that covered Unyanyembe, Ukimbu, and Ukonongo (1935).[118] It stated that fishermen proceeding to the Ugalla River were to go in large parties under a leader; any sick were to be sent at once to hospital; and the whole party was to proceed for medical examination at the end of the season. The fishermen elected to take on the leadership role was Lupelo Kaliyanyaga a leader of a local Nyamwezi fishing 'secret society'. The existence of this ordinance is stressed not because of the role it may have played in controlling sleeping sickness cases, if it did (and this is open to question), but because it - unintentionally - established the basis of a permit system to control local resource use after Ugalla became gazetted as a game controlled area. Furthermore, Kaliyanyaga is a historical figure endowed with significance by Nyamwezi fishermen - beekeepers in present-day claims they make over the 'true' right to work on the river vis-à-vis immigrant groups (as will be elaborated in Chapter 7).

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[116] The Medical Officers were Dr Keevil from the Moravian Mission hospital in Sikonge, Father Van Mugen and Father Osther at Uruwira Mission. Annual Report for Western Province, 1934, Bagshawe Papers, RH.Mss.Afr.s.279-306; Bagshawe diary Vols. XVII and XVIII, 4.9.33; 20.9.33; 16.11.35; 9.1.36; 5.11.36; 27.6.36. Vide Fisher & Arce, forthcoming 1998.

[117] For example, in 1933 it was proposed that three medical dressers and a microscope should be situated at the river and estimated that there were 400 'professional fishermen' who could be taxed at three shillings per annum to cover the costs. (Had the Provincial Commissioner reflected on the power of taking the laboratory into contexts where people and the disease were both present - as Latour argues contributed to the success of Pasteurians in France - he might not have acted as he did to overturn the move, Latour, 1988). Another means of control contemplated by the colonial authorities was unwittingly proposed by the Native Authorities who wished to instigate a fishing tax based on their former rights to tribute (Bagshawe Papers, ibid. 9.10.34). Neither scheme came to fruition.

[118] Tabora District Book, 1935.

In 1936 a fresh rise in sleeping sickness cases was identified microscopically by a 'dresser' at Uruwira Resettlement camp, and subsequently linked to fishing activities at Sika (the confluence of the Mtambo and Ugalla Rivers in west Ugalla). These cases persisted until 1939: "The rise in the number of sleeping sickness cases noticeable in 1938 continued in 1939...[due to the] dispersal of large numbers of people through fly infested bush in search of honey and beeswax, and to fishing pools...together with a tendency to shift back into individual communities".[119] Some 48 'families' and 'fishmongers' were reported to be residing at the river or in nearby bush at Sika (west), and all were subsequently re-evacuated because, in the view of the Provincial Commissioner, "there would have been 480 by this time next year" (Bagshawe, ibid.).

Aside from fishermen and settlers, 'native hunters' were also defined as 'a problem' by the local administration for they were held to be responsible for game being 'shot out' near the Ugalla River in the late 1920s and 1930s. In this case, microscopes were not needed for identification, for many Europeans were keen sports-men who took a first-hand interest in their subject (personal diaries from this period for example contain detailed notes on hunting, for example those of Bagshawe the Provincial Commissioner). According to statuary law, unlicensed 'native hunting' was not permitted, although at the local-level law enforcement appears to have been limited, reflecting a disparity between national game laws and local administrative actions (c.f. McCracken (1987) who refers to similar disparities in Nyasaland).[120] Limits to practical action were not simply due to lack of capacity. They were also related to the fact that at this time game officers were preoccupied with pest and tsetse control - the need to shoot crop-raiding, man-eating and trypanosome-laden creatures - over and above a perceived need to preserve wildlife.

In the classification of 'fishermen', 'settlers', and 'native hunters', we begin to discern how certain classes of people became identified, made visible, and re-positioned as 'problems', both

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[119] Bagshawe Diary 9.1.36, RH.Mss.Afr.s.279-306Vol. XVII; See Carnochan & Adamson, 1935, 1937, for romantic accounts of the movements of fishermen to and from the river during this period.

[120] Some attempts were made to control local hunting, for example under promise of ammunition supplies, 3,404 "English tower muskets of Crimea days or older" were produced for registration in the sub-District. Also local hunters were taken to court for "offences against the game laws" TNA.Mss.1733/20 (105), 1926. For an impression of the activities of game officers in Tabora sub-District see TNA.Mss.1733/20 (105), TNA.Mss.1733/9(69), 1926: 33-36; 1733/20(105), 1926: 1-2,8-10,18; 1733/(5), 1921: 11,13; 1733/4(52), 1925: 11-12, 22-23.

environmental and administrative. Actions then taken by officials reflected a different response to each type of resource use and resource user, according to how they featured in the construction of problems confronting the administration in Ugalla. For example, control measures were adopted for fishermen through the use of local leaders, settlers were evacuated and their houses burnt, and hunters had their weapons registered or legal action taken against them. In response to these problems, a repertoire of management techniques were emerging and gradually becoming entrenched within local administrative practices.

In the same process whole categories of people were rendered completely invisible through absence, women, children, the old and infirm, for example. In the case of women who previously lived near the Ugalla River, this period marked a process of 'divorce' from the environment. Colonial administrators tried to prohibit from going to the river because they saw this as an effective way to prevented seasonal settlements becoming permanent (c.f. Mbilinyi, 1989 on Tanganyikan colonial policies restricting female migration). Dissociation of women from the environment was not simply an administrative imposition, it also emerged locally, as new meanings became given to the sexual division of labour due to the process of resettlement. Certain types of forest resource use were clearly the domain of men, as they had been previously (hunting, fishing, honey hunting), but this exclusivity was now reinforced by large spatial distances, and in effect forest resource use by women in Ugalla became restricted.

To turn to another dimension of the issue, one feature that becomes apparent in administrative classifications of people, is that the movement of people across the neat boundaries defined by tsetse experts, medical officers and cartographers as 'tsetse belts', 'quarantine zones', and 'barriers' free of 'native rights', caused responses that demonstrated how intensively charged administrative actions were with the occupational fears of colonial officers. The facade of concern over people's health easily slipped when confronted with local boundary-crossing actions - 'dispersal'...'through fly infested bush' - that jeopardised the notions of order colonial policies tried to generate. As the Territory's Chief Secretary highlighted: "the weakness of the whole thing is of course that a native forced to migrate has only to run away and upset the whole business".[121] Through one action 'a native' could completely undermine the "economic and social value of properly organised [sleeping sickness] concentrations",

[121] Minute by the Chief Secretary of a meeting on the 4.2.28, TNA.Mss.11771.

particularly when this action was associated with actively throwing off the modern trappings of the sleeping sickness settlement.[122]

In interview, two old men who had been resettled from Ugalla gave a good impression of the role the area had played:

> "You know when someone leaves the place, he has lived he has his memories...every year it was an obligation to return..." (GN, 18.5.93).

> "When we came the life was bad and we were not blessed. At this time there was sleeping sickness [in Ugalla] but even so there was a lot of food...Even before we moved, when we came to sell wax people here would say no don't come and we would reply, no we eat our ugali of cassava and finger millet...[i.e. prefer our own customs]...they returned to hunt animals, drink beer and live, and to hold *ngoma* [celebrations]...People went by foot and in two or three days you would arrive with nothing and then make *kangara* [beer made with sorghum, millet and honey] and drink lots, eeh. Here people said 'you should not make *kangara*'..." (TSM, 18.5.93).

In this respect the movement of people classified as 'fishermen', 'honey collectors' and 'hunters' into the forests along the Ugalla River each dry season - some of whom would inevitably return with sleeping sickness (Maclean, 1929a: 43) - touched at the heart of a weakness, and in local administrative endeavours, threatening to undermine the basis of control over the population.[123] It is against this background that we have to understand efforts to restrain people's actions along the Ugalla River. The attempt to control 'refugees' from the sleeping sickness concentrations and restrict the 'tendency to drift back into individual settlements' became a key administrative priority through the 1930s and 1940s.

Compounding this weakness, in keeping with the tendency to define people according to a classification of economic activities, were value judgements linked to native occupations and the constitution of 'proper work'. Development in Tabora District was heavily biased towards the promotion of agriculture "[it] is, and I hope always will be, the *main occupation* of the natives,..[but]...it is a fact that it does not occupy anything like all their time...[for the]...*slack season*...[lasts for]...half the year...during which time, in this province probably 10,000 men

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122 Bagshawe, Report on Native Affairs for the Western Province, 1935, held with Bagshawe Papers in Rhodes House, Oxford.

123 RH.Mss.23892, Vol. II.

spend their *spare time* every year in collecting wax and fishing" (italics added).[124] These value judgements reveal how classifications and characterisations were part of a process of disciplining local human time and action by the authorities.

To summarise, we have traced how people were classified according to specific economic activities and the way these occupational categories entered into constructing 'the problems' confronting the local administration. A related, and accompanying, process was how the environment was classified and evaluated according to both scientific and economic criteria based on the types of species and the range of natural resources it contained. This process of evaluation involved the expertise and authority of people, European administrators and scientists from outside the area, for this process was certainly not participated in by those rural Africans working in the locality.

Having highlighted the research activities of different scientists based at Kakoma Research Station and traced how the environment and people of Ugalla were framed within the land-use plans, administrative rationales and scientific imperatives of experts from outside the area, the stage is set to focus on how Ugalla became gazetted as a wildlife sanctuary.

The Gazettement Of The Ugalla River Game Controlled Area

The way Ugalla was gazetted as the 'Ugalla River Game Controlled Area' in 1954 gives insight into how certain categories of local resource-use were rendered visible by representatives of the Game Department, two forms of activity being accepted: beekeeping and fishing. This legitimisation of their productive activities took place alongside the institutionalisation of the planning, rationales, techniques and bureaucratic routines essential to the management of wildlife within a protected area. One implication being that a framework of control was established for those groups able to work in the reserve, the beekeepers and fishermen. In effect, they could carry out productive activities but on terms they could not determine, and by accepting the wildlife management within a protected area as a form of land use in the region. Having said this, however, the capacity of officials to manage the area on a daily basis appears to have been partial, to say the very least. Indeed, later chapter's of this

[124] Bagshawe in the Annual Report for Western Province, 1936, RH.Mss.Afr.s.279-306.

thesis will seek to demonstrate how the management's limited capacity at this time, as well as later, enabled local people to retain some autonomy in their activities in the area.

The enclosure of Ugalla as a game controlled area (GCA) reflected wider change occurring in Tanganyika Territory. Following the Second World War, a new emphasis was placed on the need for rational forms of natural resource management and development planning. The 1950s, in particular, have been characterised as a decade of "development planning and secondary industry, cash-crop expansion and agricultural improvement schemes, educational advance, constitutional progress, and local government reform" (Iliffe, 1979: 436).[125] More stringent forms of natural resource management emerged in interaction with an increasingly international dimension to conservation planning, with the appearance of agencies such as the IUCN. In Tanganyika, two major pieces of legislation pertinent to this area were the Forests Ordinance (CAP 389) which was adopted in 1957 and remains the primary legislation today (1994), and the Fauna Conservation Ordinance of 1951 (CAP 302) which, with subsequent amendments, remained the principal wildlife legislation until superseded by the Wildlife Conservation Act in 1974.

In western Tanganyika between 1951 and 1959 extensive areas of land were enclosed within forest reserves and game controlled areas under the Forestry and Fauna Conservation Ordinances. Ugalla River GCA, Inyonga GCA, Ugunda GCA, Msima GCA and Luganzo GCA were each *gazetted in the 1950s.*[126] *Furthermore, around and indeed* continuous with, Ugalla River GCA[127] were and are: Ugalla River Forest Reserve (FR), Wala River FR, Ugunda

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[125] Some of the last grand colonial development schemes took place during this period (Iliffe, 1979), a local example includes the infamous 'groundnut scheme', which is held to have been one of the white elephants of development planning in Tanganyika. Part of this scheme took place at Kaliua, Urambo and Uyumbu, a fact pertinent to this case because they were each resettlement sites for people from Ugalla. Later, the cleared land was used for tobacco schemes, and today fishing in Ugalla is carried out in tandem with tobacco farming in these area by many fishermen (c.f. Boesen, 1979 on tobacco farming in the region). Documentation of the connections between agricultural, rail and mining developments in Tabora Region in the 1950s and the ex-sleeping sickness concentrations for the population evacuated from Ugalla can be found in TNA.Mss.23892 (volumes 1 & 2).

[126] Ugalla River GCA (4,200km^2), Inyonga GCA (9,000 km^2), Ugunda GCA (3,950 km^2), Msima GCA (4,200 km^2), and Luganzo GCA (5,200km^2). Further to the south in Rukwa Region (Ufipa): Mlele GCA (7,050 km^2), Rungwa River GCA (3,600 km^2), Lake Rukwa GCA (size unknown) and Lukwati GCA (size unknown) and Katavi Game Reserve (size unknown). Today the Katavi National Park has been extended in Mlele GCA and a game reserve replaces Rukwa and Lukwati GCAs (PAWM, 1994b).

[127] The fact that Ugalla River GCA was, and is, continuous with forest reserves is not atypical. The reasons for this double protection were two-fold: firstly, to control the extraction of timber resources, and secondly, to restrict people from entering, living in, or using resources in a forest reserve, whereas a game controlled area only places restrictions on hunting, in effect the forestry laws increased the protected status of resources.

FR[128], Mpanda North East FR, Mpanda Line FR, and North Ugalla FR.[129] Within these areas, people's rights to use resources were severely restricted and, in the case of forest reserves, the right to settle was denied.

Land gazetted under game and forestry laws largely coincided with the area covered by the Tabora-Ufipa sleeping sickness epidemic of the 1920s, from whence the majority of the population had subsequently been settled. Kjekshus (1977) finds a close correlation between measures to control sleeping sickness or eradicate the tsetse fly and the subsequent enclosure of land for wildlife. The information presented in Chapter 3 of this thesis has revealed how complex this process was, therefore one has to be wary of creating the impression of causal connections between policies for sleeping sickness resettlement and those for wildlife conservation. However, it does appear that the re-ordering of people and environment that took place in the name of disease control in the 1920s and 1930s did facilitate the subsequent rationalisation of natural resources within protected areas in Western Tanganyika. Furthermore, the enclosure of land in the 1950s bears witness to the extension of a new phase of development planning, when the older paradigm for social change based on medical and sanitary 'necessity' was transformed into an economic paradigm of development (Comaroff & Comaroff, 1992; Moore, 1996; Latour, 1988). The conservation of wildlife within protected areas was part of this process of modernisation.

To turn to the case of Ugalla specifically,[130] 'rumours' concerning a proposal to declare the Wala-Ugalla River area a GCA entered into administrative circulation in the late 1940s

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[128] Ugunda FR (and Nyonga FR to the south) is a 'protective' reserve where no extraction of major forest products is permitted, but all others are 'productive', meaning that timber may be extracted under license. Today, where a forest reserve overlaps with Ugalla River GCA the Wildlife laws take precedence, it is unclear whether this was the case in the 1950s.

[129] Ugalla River FR was gazetted in 1950 (4,274 km^2), Wala River FR was gazetted in 1956 (1,606 km^2), Ugunda FR was gazetted in 1954 (1,295 km^2), Mpanda North East FR, date of gazettement unknown (5,025 km^2), Mpanda Line FR, date of gazettement unknown (4,274 km^2), Nyonga FR, date of gazettement unknown, (7,100 km^2) and lastly, North Ugalla FR (2,784 km^2), this reserve was never properly gazetted although the boundaries were prepared and the Forestry Department treat it as being a formal forest reserve. Further south are Swangala Forest Reserve, Mulele Hills Forest Reserve, Msaginia Forest Reserve and Rungwa River Forest Reserve, the area of each is not known.

[130] Unless otherwise stated all the subsequent archival references in this chapter are held at the Wildlife Division in Ardhi House, Dar Es Salaam, in an archival file for Ugalla Game Reserve.

(Thomas, 1961).[131] In 1952, D.K. Thomas, Game Ranger for the 'Western Range', promoted the need for a GCA in order to control the hunting and lumbering that was taking place, and to provide a breeding sanctuary for the types of animals which inhabit Brachystegia woodland (Ibid.: 227). Interestingly, Thomas did not point to local hunters as the main culprits of game destruction; instead, extensive "illegal and unsporting hunting" by Europeans based in Urambo, by Arab and Greek personnel of timber camps, and foreign tourists were held to blame.[132]

In 1925, sports-hunting had been banned from Ugalla due to the threat of sleeping sickness; however, in the 1930s and 1940s, Ugalla became part of a fashionable 'western hunting circuit' for colonial administrators and wealthy tourists who sought to shoot lion, greater kudu, black sable, roan and water fowl.[133] In their desire to hunt, Sir Henry Morton Stanley's attraction to Ugalla resurfaces, now unencumbered by the presence of local villages. This apparent invisibility of Africans meant that Ugalla of the 1950s could be endowed with a vision of landscape befitting a nostalgic wild Africa. Indeed, the facade of 'nature' had been constructed well in the intervening years since Stanley's visit in 1872. The Provincial Commissioner, for one, was convinced that, "the Ugala River is one of the last few remaining places in Tanganyika which is uncontrolled, and where game can be seen in its natural habitat".[134]

In the course of negotiations over the proposed gazettement of the GCA, the narratives of colonial civil servants reveal that different 'classes of Africans' were rendered visible and positioned to support the claims of these administrators. The Director of Veterinary Services & Animal Husbandry, afraid of the implications a game sanctuary might have for the spread of Rinderpest, argued that 'native hunters' were needed to volunteer information on dead or sick

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[131] Letter from the Director of Veterinary Services to the Honourable Member for Agriculture and Natural Resources, 19.7.1949, WD.Mss.Ugalla Game Reserve.

[132] The expansion of commercial timber ventures was another dimension of the rationalisation of resource management taking place in the region. Near the Ugalla River, timber camps apparently run by people of Greek origin opened up at Misakela in the north, Kamekala on the Wala River (the remnants of which can be seen today), Kasontwa to the south-east, and Siri Mawe on the River itself.

[133] Sayers, 1930; Moffett, 1958; Rodger, 1954. For example, the Persian Royal party hunted there supported by 'a high up personage' in Britain, and Syd Downey, a well known East African Professional Game Hunter of Ker & Downey Safaris Ltd. (Nairobi), regularly took clients to the Ugalla River (Letters 21.9.54; 7.10.54; 25.7.55; 11.10.55. Vide Hemingway (1936, 1961 [1938]) for narrative accounts which epitomise the world of 'the hunt' for rich Americans, Europeans and Arabs in Tanganyika.

[134] Letter from the Provincial Commissioner, Western Province to the Game Warden, Arusha, 16.9.52.

animals.[135] This was countered by representatives of the Game Department,[136] for example Swynnerton, the Game Warden, brought to visibility four 'classes of Africans', by first dismissing 'native hunters' as 'poachers', "people of doubtful character who would be liable to arrest" he promoted, "bona fide fishermen, timber cutters and accredited beekeepers...[who]...would be operating in the area" and from whom the Veterinary Department could obtain information.[137]

Despite the apparent visibility of these 'classes of Africans' in the narratives of the civil servants, constructive dialogue with rural African people appears to have been absent. Even so, their interests were not completely obscured, for in the decade preceding Independence 'native customary rights' could no longer be ignored (Iliffe, 1979; Ranger, 1983). Indeed against the context of the enclosure of vast areas of forest, native rights to forest produce had become a hot political issue in the 1950s (Rodger, 1954: 46-47). This contrasts sharply with the sleeping sickness evacuations of 1925-7 when, according to the archival data, the legal grounds for resettlement or the opinions of members of 'the population' were not even considered. We should however bear in mind that archival documents reveal the capacity of administrators to carry out actions which, by positioning, classifying and manipulated 'classes of Africans', could support state policy, practices and interests and not necessarily those of rural Africans themselves.

Despite the capacity of certain administrators to manipulate Africans in narratives intended to further their own aims, the way the interests of African people were taken into account by civil servants responsible for gazetting Ugalla River GCA, reveals that the conservation process was nothing as simple as a clear-cut exclusion of local interests. Initially, the Provincial Commissioner argued that "[the GCA would not]...affect the interests of Africans, as it is all

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[135] Letter from the Director of Veterinary Services to the Honourable Member for Agriculture and Natural Resources, 7.19.49, TNA.Mss.11234.

[136] Letter from the Director of Veterinary Services to the Game Warden, Tenguru, 31.10.52; letter from the Acting Director of Veterinary Services to the Game Warden, Tenguru, 5.1.53, Letter from D.K.. Thomas, the Game Ranger for Tabora Range to the Game Warden Arusha, 30.1.53; Letter from the Provincial Commissioner, Western Province to the Game Warden, Arusha, 19.3.53, Letter from G.H. Swynnerton, Game Warden, Arusha to the Provincial Commissioner, Tabora 2.4.53, Letter from the Honourable Member for Agriculture and Natural Resources to the Game Warden, Arusha, 4.5.53.

[137] Letter from G.H. Swynnerton, Game Warden, Arusha to the Honourable Member for Agriculture and Natural Resources, DSM, 2.4.53.

fly country, and the only inhabitants are fishermen".[138] But Thomas, the Game Ranger was strong in his advocacy of the interests of these fishermen "it is however essential that Africans be allowed to continue their fishing activities in the proposed controlled area".[139] One gains the impression that this reflects a local knowledge and awareness on the part of Thomas concerning how entrenched these 'fishermen' were and, furthermore, from his point of view they could act as a source of information concerning what was taking place in the area.

Support for 'native rights' also came from the District Commissioner of Mpanda, who argued that beeswax exports were the mainstay of the African economy and it was Government policy to build up this industry:

> "I have had doubts about this proposal from the start, because this area is much used by honey hunters and fishermen from this district"..."The ultimate aim is to make it into a Game Reserve or National Park. The ultimate aim, in this district is to set up co-operative societies for the production of beeswax and honey, and the two will not go hand in hand...It is submitted that a much smaller area should be controlled...this would be capable of supervision and would fulfil the purposes of game preservation without creating large numbers of offenders, and inconvenience to native rights".[140]

Here for the first time 'honey hunters' are becoming visible, and a conflict of interest between different branches of the colonial political economy is revealed.[141] Prior to this communiqué, Smith, the Colonial Beeswax Officer, was consulted over how the interests of beekeepers would be affected by the conservation area: "as entry is permitted into controlled areas, the declaration of this region as a Controlled Area will not interfere with the activities of beekeepers about their lawful occupation". Once Smith's support for the move was made clear to the District Commissioner he retracted his objections.[142]

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[138] Letter from D.K. Thomas to the Game Warden in Arusha 16.8.52 (also 9.11.53/ 16.8.52/ 16.9.52/ 17.9.52/ 26.9.52.) Letter from the Provincial Commissioner, Western Province to the Game Warden, Arusha, 19.3.53.

[139] Letter from D.K. Thomas, the Game Ranger of Tabora Range to the Game Warden, Arusha, 2.10.52.

[140] Letter from the District Commissioner, Mpanda to the Provincial Commissioner, Western Province, 3.12.53.

[141] In the late 1940s, F.G. Smith was appointed to upgrade the quality of beeswax exported from the region, this work led into the promotion and development of the beekeeping industry. 'Honey hunters' along the Ugalla River were rapidly transformed into the more progressive category of 'beekeepers', as the new Beekeeping Division Headquarters and Beekeeping Research Station in Tabora town focused its attention on the Ugalla River and Ukonongo as key loci for its extension work.

[142] Letter with minutes of a District Commissioners Conference at which the Game Ranger, Tabora was invited to attend, Provincial Commissioner of Western Province to the Game Warden, Arusha, 28.1.54.

Access to the area for fishermen and beekeepers created a legal problem which is of significance today, namely, the Fauna Conservation Ordinance stated that animals, including fish, could only be hunted or trapped in a GCA under written permission by the Wildlife authorities. Accordingly a clause was inserted in the game legislation to the effect that "nothing in this schedule shall be deemed to prohibit fishing in Ugalla Controlled Area by persons in exercise of native customary rights" (FCO 1958 Seventh Schedule, no.48). Beekeeping was recognised as a legitimate activity in a GCA and therefore no special mention was made of it. Later, as we shall see below, lack of reference to beekeeping was taken to mean that no provision was made for beekeepers to use the area at this time. Problems have also arisen in relation to fishing, for no clause was entered permitting fishing in Ugalla in the Wildlife Conservation Act of 1974. These anomalies mean that although fishing and beekeeping were permitted in the newly gazetted GCA, and although today they continue to be carried out and are accepted by the Wildlife Department, they are in fact illegal.

A second legal anomaly also arose at this time, a large percentage of the area covered by Ugalla River Game Controlled Area was coterminous with forest reserves. According to the game laws related to game controlled areas, entry and settlement in the area was and is not restricted though it was and is not considered desirable. However in a forest reserve, entry and settlement was and is restricted under the forestry laws. Periodically since the 1950s disputes have erupted over who has the main jurisdiction over the area - the Wildlife Department or the Forestry Department.

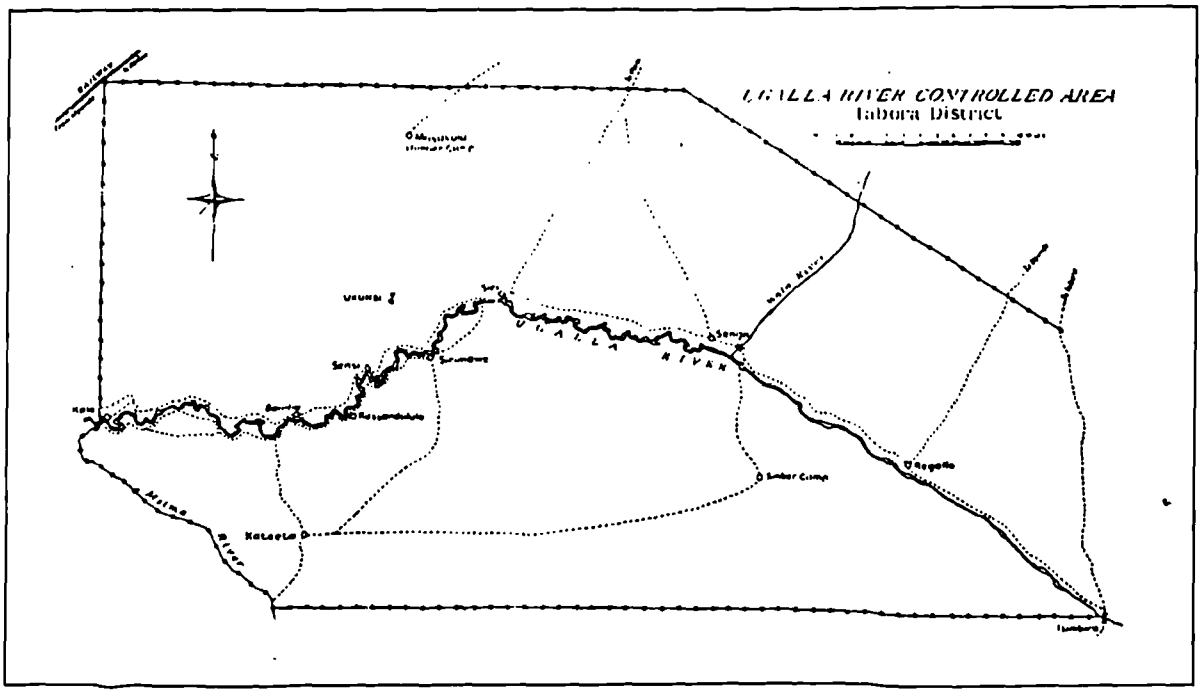

Figure 4.2 The Ugalla River Game Controlled Area (1954)[143]

In the event, once its boundaries had been agreed, the Ugalla River Game Controlled Area was gazetted in 1954, as shown in Figure 4.2.[144] Three classes of resource-user were visible and permitted to use the area on licence: 'beekeepers', 'fishermen' and 'sports-hunters'.[145] Sports-hunting in particular was felt to provide "justification for the formation of these areas".[146]

To sum up this discussion, we can convey something of the mood of the time through the words and personal aspirations of the Provincial Commissioner:

> "My own personal idea for what it is worth is that I would like to see the Ugalla River area turned eventually into a National Park, as I think it is worth preserving in view of the great variety of species obtaining there and the relative ease of access to the area from the North. At the same time I see no reason why the traditional seasonal activities (i.e. fishing, honey hunting and beekeeping), cannot be maintained as long as no permanent settlements and cultivation are allowed to spring up and that they do not interfere with the wild life there. This has been discussed with the Tabora Native Authorities and on this basis they say they have no objection whatsoever to the

[143] Source: Thomas, 1961.

[144] Government Notice no. 83, formalised in the 1958 Fauna Conservation Ordinance, 7th Schedule, No.48. Letters 14.7.53 and 22.7.53.

[145] Letter with minutes of a District Commissioners Conference at which the Game Ranger, Tabora was invited to attend, Provincial Commissioner of Western Province to the Game Warden, Arusha, 28.1.54

[146] Letter from D.K. Thomas, Tabora Game Ranger to the Game Warden, 31.6.54.

> establishment of a controlled area there. If we keep our word to them on this, I am sure they would equally have no objection eventually to the creation of a small National Park over one of the finest game areas in Tanganyika".[147]

A Bid To Reclaim The Land - Independence And After

From the year Tanganyika received its Independence from Britain[148], in 1961, new social actors started to emerge associated with Ugalla: African bureaucrats in the Game and Local Government Departments, refugee fishermen and women from Burundi, Zaire, and Malawi, Burundian refugee ivory traders, sports-hunting Tanzanian citizens (African, and people of Arab and Asian origin).[149] The appearance of these different actors reflected the fact that the existence of the protected area had been drawn into the regional political process.

In 1961 the return of people from past sleeping sickness concentrations to their original homelands became a political issue in western Tanganyika. One way Ugalla was endowed with political significance was by local leaders who, anxious to return to live in the area, articulated their claims through a language of 'tradition' and African rights. In the language of these leaders, Ugalla was transformed into the repository of a true 'Galla' identity, and portrayed as a place the colonial Government had taken from the people. This was a strong counter-narrative to the representation of Ugalla as a 'natural' environment; for now it was situated at the heart of local culture (and politics).

The bid to reclaim the land obviously emerged as part of wider territorial claims made at Independence. Along the Ugalla River specifically, it became linked to the claims of local 'Galla' people vis-à-vis resource use by immigrant groups, and furthermore, it was a means to challenge state control over the area. In this respect, one could argue that the changing national and local political landscape gave rise to new means for people to become 'visible' or 'invisible' to the Game authorities and local administrative officials. The claims local leaders

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147 Letter from the Provincial Commissioner of Western Province to the District Commissioner of Mpanda, 14.7.53.

148 Tanganyika gained Independence in 1961, and in 1964 joined with the Republic of Zanzibar to become Tanzania.

149 There are communities of Tanzanian citizens of Asian or Arab descent living in the towns of the region, and dominating the haulage, construction, and retail industries. Categorising these people together as 'Arabs' or 'Asians' is common in Tanzania, although in fact they come from diverse places of origin and there are many social divisions between them.

made were taken up by representatives of the Tabora and Mpanda District Councils, causing immediate concern within the Game Department. As the Game Department officials realised "it appears that the Tabora District Council has the power to let these people in, and this can only be altered Ministerially"[150]:

> "there seems to be a certain faction...who are most keen to re-settle the area comprising the Ugalla River Controlled Area...As we are all aware, this is one of the show pieces of this part of the world, and any settlement would in fact be disastrous...I wonder if we could possibly make this into a Native Authority National Park? I think this sort of thing would be accepted in a big way...I feel we should do something pretty quickly about this before these chaps get their feet in...".[151]

The language of these administrative documents suggests a tension between the public designs and personal outlooks of British colonial officers in senior positions in the Game Department, and the now African District Council members representing people from the area.

A subsequent communiqué from the Executive Officer for Tabora District Council - for the first time in Kiswahili not English - to his counterpart in Mpanda reveals local people's use of the idiom of 'tradition' in contesting their claim: 'the Wagalla to return to their traditional homeland'.[152] The leaders of the people, David Yongolo and Abdurahaman Kaponta, claimed rights as 'chiefs' to move to Ugalla with their people, arguing that it used to be their country, they would be near traditional fishing and honey-hunting grounds, and their present agricultural land was infertile.

Two groups attempted to return to Ugalla: one of 547 people from Mpanda (Uruwira resettlement) under the leadership of Kaponta, and the other of 500 people from Tabora under the leadership of Yongolo (Kakola settlement). After a visit to Ugalla accompanied by a game officer, tsetse officer, agricultural officer, and officer for local government, Kaponta chose the site of Kasekela outside the southern boundary of the GCA, and Yongolo a site called Igombe outside the northern boundary (the only portion of Ugalla which is not a forest reserve and

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[150] Telegram from the Regional Game Warden, Tabora to the Chief Game Warden, DSM, 2.8.62, and reply for the 3.8.62.

[151] Letter from the Game Ranger, Tabora to the Game Warden, Dar Es Salaam, 26.9.61. Also letters14.7.61, 31.7.62.

[152] Letter from the Executive Officer, Tabora District Council to the Executive Officer, Mpanda District Council, 20.11.62, letter from the Executive Officer, Mpanda District Council to the Executive Officer, Tabora District Council, 28.2.63.

therefore settlement was not restricted). In both areas the administrative officers demarcated a line beyond which settlement and agriculture could not take place.

Local versions of events recorded during my fieldwork give different representations of what took place and why the move subsequently failed. For example people's desire to return to 'the river' is held to have degenerated into factionalism when Chief Ngugula Yongolo tried to force everyone to settle at Igombe, his 'hereditary chiefdom', by tying a rope across the road to prevent people from going further (the line of the administrative officers referred to above). When Chief Yongolo and a small group were settled at Igombe, they found they had become accustomed to welfare provisions, and animals ate their crops and were dangerous.

A story is told to explain why they realised they could no longer live in Ugalla: the wife of Yongolo died, and because she was a Muslim they went to seek the assistance of a ritual leader for the funeral. When they returned they found that the hyenas had taken her body and pulled it to pieces. After this critical event they realised that the place was only good for animals; note the similarity to accounts told of hyenas tearing people's bodies apart when they were evacuated in the 1920s. This bid to resettle the land therefore failed when people gained direct experience of the area, rather than romanticising its traditional history through their claims.

The instigation for moves to return to Ugalla and the support this generated in the district government provoked a rapid response from the Wildlife Division. The Chief Game Warden challenged the moves and placed the matter urgently before the Minister of Agriculture, Forests and Wildlife. Ministerial support was given to raising the status of the area to a game reserve, under Government Notices 281 and 282 in June 1965, to be administered directly under the Game Division in Dar Es Salaam. This change in the area's status was made explicitly because the Fauna Conservation Ordinance legally prevented human settlement in a game reserve.[153] Subsequently, the boundaries of Ugalla Game Reserve were demarcated on the ground through vegetation clearing (1964).[154]

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[153] Acting Chief Game Warden to the Permanent Secretary, Ministry of Agriculture, Forests and Wildlife, 1.6.64.

[154] The north eastern border was not cut accurately; this provides an example of how local people can affected the administrative process. At the time it was thought that beekeepers would be excluded from the reserve and, as local men who kept bees in the area were part of the border clearing team, they made a deliberate deviation to exclude certain beekeeping camps along the Ugalla River. Mr Kiyungi, personal communication August 1993; Mr Ntenga, personal communication August 1993.

The attempt to resettle the area coupled with subsequent administrative actions had the unintended consequence of making 'beekeepers' and 'fishermen' (who were not all the same individuals as those trying to resettle the area) highly visible. The issue of local rights to fish and keep bees was re-introduced because, according to the Fauna Conservation Ordinance, entry into a game reserve was prohibited and neither activity could legitimately be carried out. In the event, fishermen were given legal rights to use the reserve because a prior exception had been made under the GCA regulations: "provided that nothing in this item shall be deemed to prohibit fishing in the Ugalla Controlled Area by persons in exercise of customary rights".[155] In contrast, the Game Division was reluctant to allow beekeeping to continue, because it was held to disturb wildlife and to led to tree cutting and vegetation burning. Consequently, the lack of precedent for 'beekeepers' in the legislation pertaining to Ugalla River GCA was used to militate against their entry and they were banned, but the issue soon erupted.

In a letter from Juyawatu, the Government Game Warden, to Mr Ntenga, the Senior Field Officer of the Beekeeping Section, Tabora, we see an misrepresentation of local history being revisited on the beekeepers: "their claim that they have got permanent camps along the river is not justified. The area, to a distance of 30-40 miles on each side of the river was cleared of permanent habitation in 1950 as an anti-sleeping sickness measure...anyone found in the reserve will be prosecuted".[156] Mr Ntenga responded with a detailed report that refers to Ugalla based on first hand knowledge and discussions with the leaders of some 43 beekeeping camps in the reserve.[157] Interestingly, his account is the only one in the whole of the colonial archives of Ugalla which refers to people by name not as a collective category of resource-users, and whose information on beekeeping camps and camp members is still of value today. Mr Ntenga's capacity to put another perspective on the situation may have been, as he himself claims, influenced by the fact that he originates from a beekeeping family in neighbouring Ukonongo. Following Ntenga's representation beekeepers were allowed to re-enter in 1966 subject to certain controls over their activities,[158] as was the case with fishermen.[159] This was

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155 Fauna Conservation Ordinance, Government Notice, 281, 1965.

156 A.G. Juyawatu, the Game Warden to Mr. Ntenga, the Senior Field Officer, Tabora, 29.12.65.

157 Report from Mr. Ntenga the Senior Field Officer, Beekeeping Section, Tabora to the Principal Secretary for the Ministry of Agriculture, Forest and Wildlife; Ntenga, personal communications during 1993 and 1994.

158 Letter from J.N. Kundaeli, the Principal Game Warden to the Regional Game Warden, 19.4.66. Beekeeping: (I) the Reserve will be divided into two parts: Isimbira to Siri (b) and Siri to Kalo (a); (ii) the camp sites will be left in their present locations and except where it becomes necessary two or more camps will be combined into

the second attempt to implement a licensing system for the entry of beekeepers and fishermen to Ugalla (the first being in 1954).

There were other changes in Ugalla during the 1960s and 1970s, which ushered new categories of people into visibility: refugee fishermen and women, Burundian Hutu refugee ivory merchants, Burundian Hutu refugee timber cutters, and citizen sports-hunters from Tabora and other local towns.

In reference to the refugees, Western Tanzania is home to large numbers of people who have fled surrounding African countries over the last 35 years, some of the refugee camps being located in the region surrounding the Ugalla River. In 1968, the Tanzanian Minister for Home Affairs permitted a group of Malawian and Zairean refugees to work as self-employed fishermen in the game reserve. They were later joined by people from Rwanda, Burundi and Mozambique. The entry of refugees into the area met with intense opposition from local fishermen, and this is a category of people who have remained highly visible to the game authorities over the last thirty years.

Burundian Hutu refugees first entered Tabora Region after 1972, and subsequently four massive refugee camps were established north, east and south of Ugalla (see Appendix 2).[160] According to the discourses of Tanzanian Government officials, and of Hutu refugees in Mishamo settlement and Kigoma town, as portrayed by an anthropologist named Malkki, a few

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one; (iii) fire hazard - each camp shall have its own headman to make sure that the occupants of the camp do not cause fire; wildlife - the beekeepers shall strictly observe the regulations regarding the use of a Game Reserve and the whole F.C.O. where applicable, the same shall apply to fishermen; with regard to section 6 of the F.C.O. the headman of each camp shall obtain an inclusive permit listing all persons under his supervision. This reduces paper work. And this permit shall operate for one permitted season only (19.4.66).

[159] Fishermen: (i) no person shall enter the reserve for the purpose of fishing unless he obtains a written permit from the Game Warden, Tabora; (ii) fishermen will start operating in the reserve from the 1st of May to end of October in that part from Siri to Kola and from 1st of May to end of December in that part from Isimbira to Siri. After that period no person shall be allowed in the reserve; (iii) the Chairman will list the names of all fishermen who are to get a permit and he will be a supervisor to all fishermen; (iv) no fire shall be set up for any other purpose other than for drying fish and cooking. The headman of each camp will control this; (v) camps should be constructed in one place and no moving of camps will be allowed. Fishermen will collect fish with their canoe along the river; (vi) no more camps should be constructed from Siri down to Kola; (vii) the Chairman of the Ugalla Fishing Association will bring the number of the truck which will be operating in the Reserve and this truck will only be allowed to pass through two tracks:- from Isimbira to Senga and from Uyumbu to Siri. Vegetation - cutting of any vegetation within the Reserve will not be allowed except dead wood. This is a privilege and not a right... (Statement of the 18.8.66 by the Game Warden, Tabora).

of these people became wealthy ivory merchants in Tabora, Mpanda and Kigoma towns (Malkki, 1995). The extent of the role they played in the high levels of ivory poaching taking place in Ugalla and its surroundings is unclear (Rodgers, 1980), although two of my local Nyamwezi informants were ex-ivory hunters both whom claimed to have sold ivory from the region of Ugalla to Burundian traders. This trade declined after the CITIES ban on international trade in ivory in the late 1980s.

Another category of resource user entering the scene in the 1960s, comprised wealthy local sports-hunters. In 1956 sports-hunting had been banned from game controlled areas, but after Independence tourist hunting began in selected game reserves in order to increase earnings from wildlife. The first overseas hunting party was allowed to enter Ugalla in 1969 and the area again became popular until 1973 when a national hunting ban was imposed. The early 1960s also coincided with a period when sports-hunting became open to Tanzanian citizens, and subsequently 'the safari' along the Ugalla River grew to be an important part of the culture of local Arabs, Indians and African civil servants.

In 1974 the Tanzanian government replaced the Fauna Conservation Ordinance by the Wildlife Conservation Act (WCA) as the principal legislation of the Wildlife Division. This had important implications for both beekeeping and fishing. The 1974 schedule for Ugalla Game Reserve in the WCA made no special allowance for fishermen or beekeepers.[161] Since then people carrying out either of the two activities have technically been breaking the law although, in practice, it is recognised that both activities are so institutionalised in the area that as long as they are controlled they represent a legitimate form of resource use.

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160 These refugee camps were Ulyankulu, Pangale, Mishamo, and Katumba.

161 Fishing is considered to be a form of hunting or trapping in Tanzanian law (Wildlife Conservation Act, 1974) and is banned in GRs unless exemptions are made by the Director of Wildlife. Beekeeping necessitates the destruction of vegetation for beehive construction, also banned within GRs. In 1954, when Ugalla River Game Controlled Area was initially gazetted under Government Notice 83 (according to the Fauna Conservation Ordinance (FCO) of 1951 and as amended in 1957), the Schedule made special provision for fishermen exercising their "native customary rights" (Seventh Schedule, No.48). No mention was made of beekeepers because at this time the activities were less specialised than they are today and the fishermen referred to tended to be beekeepers or honey hunters as well. In 1965 when Ugalla River GCA was upgraded in status to a GR a renewed provision was made for fishermen (Government Notice 281) but not beekeepers due to the fact that no provisions had been made for them in the earlier regulations. In 1974, when the Wildlife Conservation Act (WCA), the principle legislation of the Wildlife Division, superseded the FCO (of 1957) no provision was made for fishermen or beekeepers in the new legislation.

CONCLUSION

The material presented above has helped to elucidate how apparently disparate elements, raised in both this and the last chapter contributed towards the gazettement of Ugalla Game Reserve as protected area and the institution of land-use policy and planning focused on wildlife conservation. Recent conservation approaches which seek to enrol so-called local people and communities into wildlife management in Tanzania, all too readily make statements to the effect that rural Africans have been excluded from the conservation process. While this may, possibly, have been the case in relation to national park conservation, the archival record from Ugalla reveals a complex and multi-faceted process at work. The position of, and relationships between, people trying to make a livelihood and state authorities trying to manage wildlife resources have never been clear cut. Such local complexity suggests we should be wary of being over-simplistic in our characterisation of the exclusion of local people from the conservation process.

It has been shown that the people who re-entered Ugalla became classified according to the main productive activity they were deemed to be carrying out, with varying degrees of 'visibility' or 'invisibility' being conferred upon different categories of 'resource user' by administrators. By rendering some forms of productive activity legitimate and others illegitimate, beekeeping and fishing came to the fore only as 'partially visible' and semi-legitimate, but nonetheless institutionalised, economic activities that could be carried out in the protected area. This is important because it suggests that these two groups of resource users became drawn into the framework established for wildlife management in the region (whether they wished to be or not). This is an opportune point to turn to Chapter 5 which describes the major interest groups associated with Ugalla Game Reserve in the 1990s, themselves part of the contemporary management framework.

5

Interest Groups and their Styles of Operating

Introduction

This chapter moves from the history of Ugalla to consider the interest groups which are associated with the reserve in the contemporary period.[162] It is primarily descriptive, identifying which interest groups are attached to the reserve and for what purpose, elaborating briefly on their style of operating and, where possible, furnishing information on market destinations for produce. In addition, details are given concerning the status in law of each form of resource use, and if legal or condoned by the Wildlife Department, the type of licensing system used for control.

Through this information we seek to build up a profile of resource use in Ugalla Game Reserve. It is intended that the descriptions will bridge the historical analyses of 3 and 4 and the topics covered in the remainder of the thesis; namely, how management planning is implemented, how different groups of fishermen make claims over access to resources, and beekeeping skills, market organisation and social relations. In the case of each topic, it is hoped this chapter will provide a background context to detailed arguments which make no further reference to the many different interests referred to here.

One feature that will emerge in the following discussion concerns the relationship between forms of productive or consumptive activity and the style of operating adopted by each interest group, present within the reserve or connected to it. The way people are able to organise themselves varies enormously, depending on a range of factors, which include the linkages being made between the resources available to individuals (e.g. food, labour,

[162] The term 'interest group' is useful as a means to convey how different people or organisations share an interest in the exploitation of a particular natural resource. In this sense the term cuts a swath across the complexity which is present in the area, painting the broadest picture possible. I do, however, use it with a sense of dissatisfaction for although members of an 'interest group' have a common interest in a particular natural resource and activity, they may hold little else in common, are unlikely to identify themselves as a collectivity, and, indeed, may give very different meanings to the same activity; and so this does have the danger of giving a false impression.

money), forms of association (the fishing co-operatives, the Tabora Beekeepers Co-operative Society, the hunting company), types of transport available and access to it (foot, bicycle, car, lorry, canoe, train, aeroplane), the social networks which link individuals and groups to others outside the area (and the nature of these networks), people's relationships to institutions such as the Tanzanian State (i.e. whether the presence of an interest group within the reserve is legal or illegal and, how individuals interact with members of the Wildlife Department) and the international community (foreign donors, UNHCR, hunting organisations, fair trade organisations), and available markets for produce (local, regional and overseas).

The multiple and diverse connections existing between these factors suggest that there are extensive differences in the background experiences people draw on, their skills, and the meanings they give to their work or leisure and to their presence in the reserve. This results in a considerable degree of social complexity existing in the area, something which has an important bearing on environmental planning initiatives.

A Context to the Activities of Different Interest Groups

Certain important features pertaining to the context of people's activities in Ugalla Game Reserve should be highlighted: First, the area holds a range of natural resource which include fish, bees, trees, land, animals and water; and the very existence of each resources opens up the possibility for different forms of exploitation and different kinds of social actor and organisation.

Second, people who work in Ugalla or use it for pleasure come from socially heterogeneous backgrounds. This heterogeneity emerges from differences in nationality, ethnicity, occupation, education, religion and wealth (but not gender, for they are almost exclusively male). It includes wealthy foreign nationals, refugees from surrounding African countries, people of Nyamwezi descent and Tanzanian urban sports-hunters of Asian, Arab and African origin.

Third, resource use is distributed unevenly through the reserve, both spatially and temporally, through the year. It is affected by factors such as the presence or absence of transport infrastructure and the availability of transport to individuals and groups, sources of drinking water, resource-rich areas, activities on the part of the management, the whereabouts of different forms of resource use in relation to one another (e.g. illegal timber cutting or hunting

will not take place near a tourist hunting camp), etc. Because extensive parts of the reserve are swamp which becoming flooded during the rains, licensed activities are confined to the dry season (beekeeping, fishing, tourist sports-hunting). In addition the Management rarely, if ever, enters the reserve during the rainy season (financial resources being short and the road from Tabora becomes flooded). The absence of licensed resource users and of the Management is used as an opportunity for illegal activities by some individuals, particularly in seasons when rainfall is low (e.g. Tanzanian sports hunters, village hunters, unlicensed fishermen, but not beekeepers because the honey harvest is in the dry season).

Fourth, as already explained in previous chapters, according to Tanzanian law, certain forms of resource-use are legal (sports-hunting by overseas tourists, for example), or illegal (hunting by Tanzanian residents, timber cutting, cattle-keeping, agriculture, settlement, for example), while other activities are illegal but accepted by the Wildlife Department as established practice (beekeeping, fishing). By implication, differential access to resources is accorded each interest group by the state.

Fifth, the markets for produce differ in their nature and their scale. Beeswax, honey, meat, trophies, timber, and fish are each produced or extracted from the reserve. Markets for products may be local, such as those for fish, honey and meat, or may extend to meet the demands of regional and international consumers, such as those for timber, beeswax, honey, and trophies. Different market opportunities are linked to diverse forms of organisation in interest groups operating in the reserve.

It can be argued that the way in which different interest groups situate themselves in relation to the above five factors, and use them to achieve different ends, contributes to the 'style of operation' individuals and groups manage to assume when working or pursuing leisure pursuits in the reserve.

In order to build up a profile of the region, taking these factors into account, the chapter is broken into sections according to productive or consumptive activity being described: beekeeping, fishing, hunting, tourist game viewing, farming, cattle-herding, and timber extraction. Each of these activities is depicted in Figure 5.1, which is followed by four photographs which give an impression of the area. The information indicated in the diagram will be further elaborated on below, but if we are to summarise: the main forms of productive

and consumptive activity taking place in Ugalla Game Reserve are sports hunting by foreign tourists and resident urban Tanzanians (of African, Arab and Asian descent), bush meat and trophy hunting by rural people, beekeeping and fishing by people from surrounding villages and towns, honey hunting by people in the area for other purposes, and lumbering by entrepreneurial urban Tanzanians (of African, Arab and Asian descent).[163] In addition, other activities do occur but on a very minor scale, these include game viewing by expatriates living in Tanzania and by people of Asian origin living in Tabora town, cattle-keeping by Sukuma pastoralists anxious to water their cattle at the Wala River during the dry season, and limited agricultural encroachment on the north-western corner of the reserve due to the presence of a village, Lumbe, located in the vicinity. Because the area is so far from local towns and villages - with the exception of the village of Lumbe - it is not associated with the types of productive activity that are typical in forests more accessible to people from populated areas; for example, charcoal-making, and the collection of firewood, building poles, thatching grass, medicinal plants, wild fruit and mushrooms, etc., except where beekeepers and fishermen collect these items for use in the reserve.

Plates 1-4 are of the reserve. Plate 1 is an aerial view taken in the east of the reserve at the end of the dry season in October 1993, it gives an impression of the characteristic pools formed by the river when the water is low, and of the surrounding terrain. Beside the river clumps of trees growing from anthills can be observed, between which are open areas that become swamp (*mbuga*) during the rains. In the photo plumes of smoke can be seen rising up from late dry-season burning, in this instance due to honey-hunting activities. Plate 2 is of a beekeeping - fishing camp (Igululu Camp, one of the two camps where I lived and conducted research). Grass shelters can be seen, a large one in the top left for beekeepers, smaller shelters for fishermen with fish drying racks outside. The main road (sic.) running through the reserve passes into the camp and paths radiate outwards in different directions. Plates 3 and 4 show the reserve boundary marked by crude vegetation cutting, and signs to tell people they are entering the area. This indistinct border is the only feature which demarcates the forest within the reserve from that outside.

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[163] In some protected areas, such as the Serengeti National Park, live birds are illegally captured and sold to dealers for subsequent export (Bhatia et al., 1992). There is no evidence whatsoever that birds are trapped in Ugalla Game Reserve. The reasons for this are likely to be because the live-bird trade has grown up around Yellow collared and Fischer's love birds, Tabora is out of the home range of these birds, also the high species diversity of birds characteristic of the Acacia - Comiphera woodland is absent from the Miombo woodland of Ugalla. Furthermore, Ugalla Game Reserve is too inaccessible and the transport infrastructure needed to carry live birds is not present, so markets for birds from the region have not been developed, and linked to this, potential trappers are not exposed to situations where they can acquire the skills to trap birds.

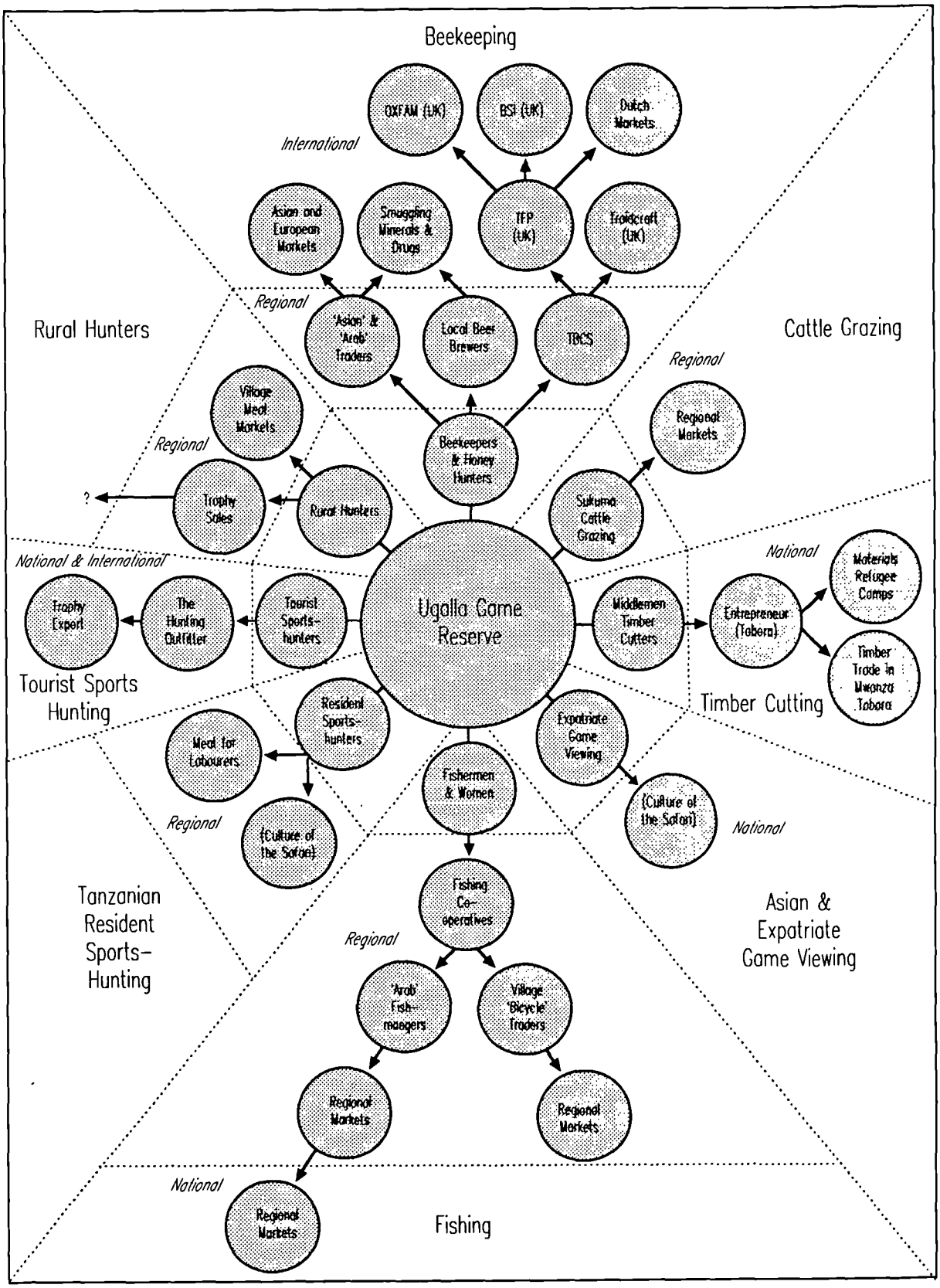

Figure 5.1 Interest groups associated with Ugalla Game Reserve and an indication of market destinations for produce (1993-4)

Plate 1: Aerial view of Ugalla Game Reserve

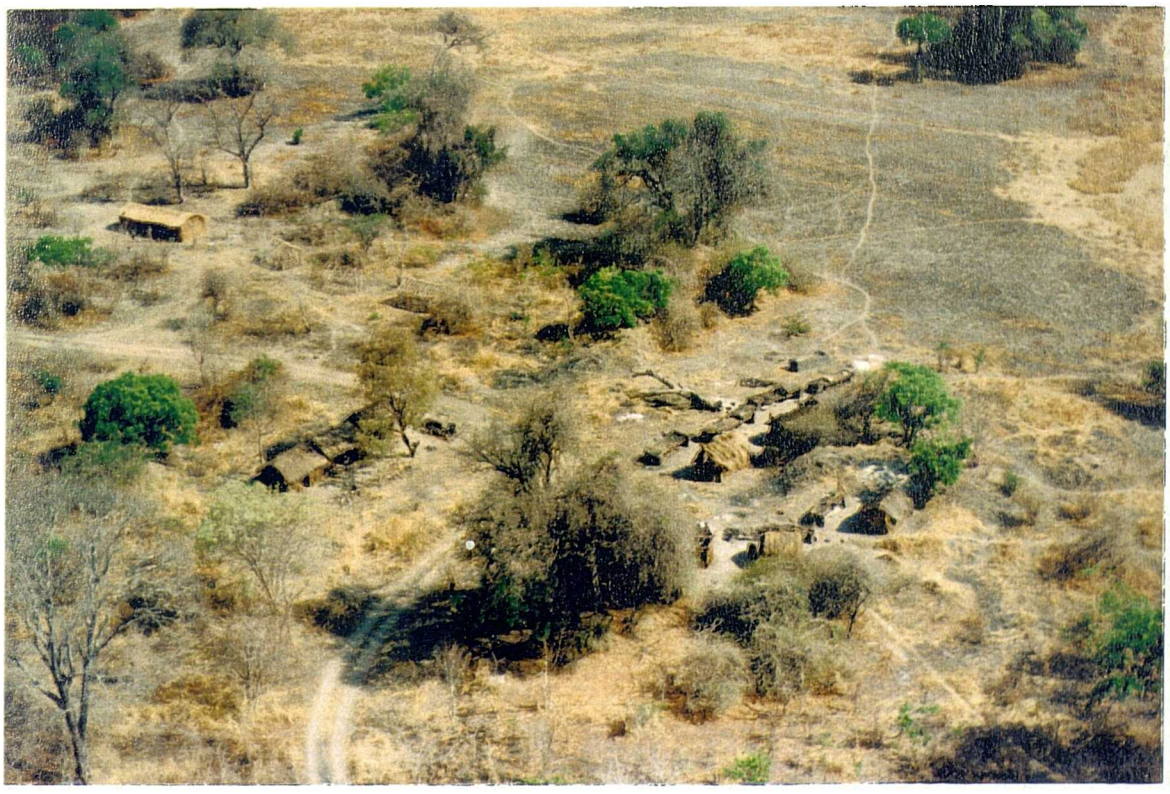

Plate 2: Aerial view of a beekeeping - fishing camp

Plate 3: The boundary of Ugalla Game Reserve

Plate 4: A sign placed at regular intervals along the boundary ('Ugalla Game Reserve - Entry Prohibited')

HONEY & WAX PRODUCTION

Four interest groups are associated with the production and marketing of honey and wax from Ugalla Game Reserve: people who keep bees, people who honey hunt, the Tabora Beekeepers Co-operative Society, and Tanzanian beeswax traders (of Asian or Arab origins) living in towns in the region. To this list one can add unsystematic sales of honey to people who will buy if opportunity arises, especially at railway stations along the Mpanda line, west of the reserve.

General Features of Beekeeping

Beekeeping is an established form of production in Ugalla Game Reserve which people carry out by siting their beehives at dry season camps. Beehives are hollow cylinders made of wood or bark placed in the canopy of a tree. The technology used for making and harvesting hives is simple: an adze, axe, knife, and rope, together with plastic buckets, drums and in some cases protective clothing. Beehives are constructed from materials readily available in the woodland, and implements are made and obtained locally.

For honey and wax to be produced in commercial quantities, beehives must be situated in undisturbed forest where bees, forage and hive making materials are plentiful. Ugalla Game Reserve is ideal because it contains good quality woodland which is inaccessible during heavy rains and is therefore undisturbed. Furthermore, beekeeping in this region is land extensive and the reserve offers beekeepers ample space in which to site their hives. A person may place a few beehives near the village to provide honey for family and guests, or when money is urgently required, but around settlements hive occupation is low and theft of produce common.

In Ugalla Game Reserve, beekeeping is primarily a male occupation. A few women do possess beehives and go to the forest, but this is unusual and does not challenge the common perception that beekeeping is a male domain. People hang their beehives around a dry season settlement known as a camp. Each camp will house between approximately four to fifteen people who may have kept bees together over a period of many years.

The number of beehives a person possesses varies according to the length of time he has been keeping bees, individual knowledge, skill, their idiosyncrasies, and capacity to employ labour, etc., however, for an established beekeeper this may be between 500-1000 hives. A person

with a large number of bee-hives will tend to locate them in two or three different camps. Typically, one of these locations is near the home or farm, and the others further away.

Honey hunting and beekeeping should be clearly distinguished because they are often confused and both occur in Ugalla Game Reserve. In the context of western Tanzania, 'honey hunting' (synonymous with 'honey gathering') is the search for feral bee-colonies in hollow trees found in the forest. Usually this is carried out with the assistance of a small bird known variously as *Kasegu* (*sega* = honey comb) or *Kasolo* (*Indicator indicator*). In contrast, 'beekeeping' involves hanging a hive in a tree in order to attract a swarm of wild bees. The hive is the private property of the beekeeper, who also has long-term use rights over the tree it is placed in. Wild bees colonise the hive and the beekeeper will return in the dry season to harvest it.

Beekeepers and Beekeeping

Figure 5.2 shows beekeeping camps in the area.[164] On the basis of management estimates, it has been calculated that there are 83 beekeeping or beekeeping-fishing camps located in the reserve (PAWM, 1994b), although my own observation and discussions with beekeepers would suggest there are at least 93 camps (the names of which are listed in Appendix 6). Of these camps, there are estimated to be 56 solely for beekeeping purposes, and 37 camps for joint fishing - beekeeping activities.

[164] The names of all camps included in the diagram are real and not pseudonyms.

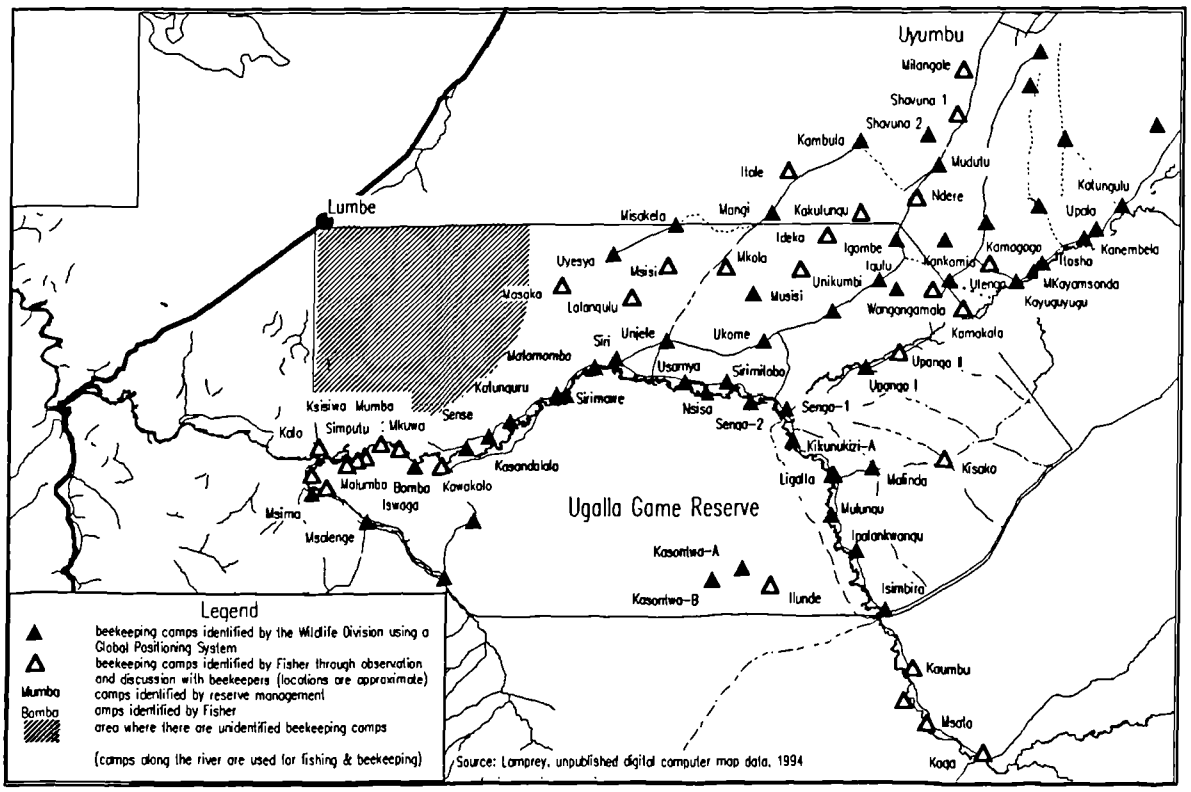

Figure 5.2 Beekeeping camps in Ugalla Game Reserve (1993/4)

Camps are distributed through the reserve at locations where water is found and people can gain access by transport. A high concentration of camps exists north of the river which people can walk or cycle to from villages in Uyumbu Ward, Siganga Ward, Sikonge Ward and Tutuo Ward, etc.

Estimates of the number of beekeepers who work in the reserve are limited. Details are included in the Ugalla Game Reserve Management Plan based on the number of licensed beekeepers working in the reserve. According to the Management, in May - July 1994, 174 beekeepers or beekeeper-fishermen obtained permits to enter the reserve, together with 574 beekeeping assistants.[165] In terms of gender, approximately 18 of the total 848 people were women, and of this number only 2 are beekeepers in their own right (i.e. they own beehives and employ and provision labourers).[166] My own interview data and observations would suggest

[165] The licensing database is far more inaccurate for assistants than beekeepers; when people apply for permits they do not necessarily know who they will employ, the important thing for them is to put enough names down to enable as many assistants as they require to enter the reserve legitimately.

[166] 1994 was a year of extremely poor rainfall in the region and consequently the number of people who applied for a beekeeping permit was low. In years of good rainfall numbers would be higher and in particular more

that in fact a high percentage of the people keeping bees in the reserve do apply for permission and therefore this information may be a good, albeit rough, estimate for the period in question. Chapter Eleven provides comprehensive details of the composition of beekeepers in five camps in Ugalla against which these figures can be set. In relation to the places where men who keep bees in the reserve live, Figure 5.3. indicates the administrative wards they came from in 1994. The diagram is intended to give only a rough indication for the information it is based on is limited.[167] It should be noted that for each beekeeper who is represented, a group of between 2-5 other men accompany him or her to the reserve, acting as labourers or apprentices.[168]

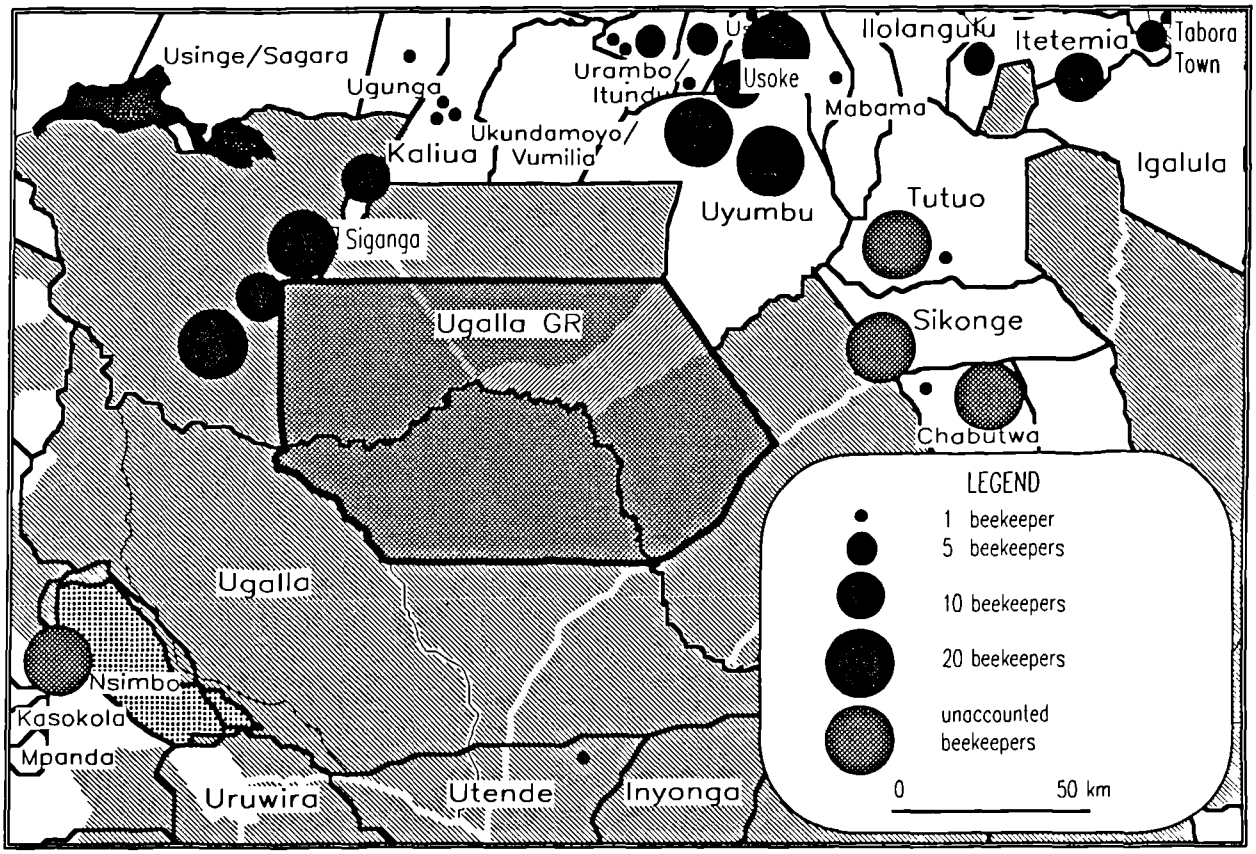

Figure 5.3 Administrative wards where beekeepers live who work in Ugalla Game Reserve[169]

people would be employed as assistants. Fluctuation in numbers of beekeepers entering the reserve is however also a feature of the activity itself.

[167] The information is derived from application forms given to the Management for permits to enter the reserve in 1994. These forms were cross-checked against membership lists of the Tabora Beekeepers Co-operative Society.

[168] The reason why only one man from a group holds a permit is because only those established shareholder members of the TBCS may apply, while others can be listed as 'helpers'.

[169] Source: Base map, Lamprey unpublished digital computer map data, 1994. Information on beekeeping, compiled by Fisher from information held by the reserve Management and by the TBCS.

From the diagram it is apparent that beekeepers live within a 150 km radius of the reserve; people from outside the region do not travel to the area for beekeeping purposes. 150 km may still appear a long distance for beehives to be sited away from a person's village, certainly given the difficulty of obtaining transport; however planned resettlement schemes of the 1920s (due to epidemics of sleeping sickness) and 1970s (due to government development policy) have played a significant role in relocating people away from the immediate vicinity of Ugalla Game Reserve and the high quality woodland it contains for beekeeping purposes.

Beekeepers working in Ugalla who reside in three wards are under-represented on the diagram: Tutuo, Sikonge, Ipole, as the year, 1994, was extremely poor for honey in the south and east of the reserve (where these beekeepers work), consequently many people remained at home. Also under-represented are beekeepers from Rukwa Region in the south, although, due to questions of access, historical association, and alternative livelihood possibilities, far fewer people go to the reserve from the south.

A number of factors appear to come together to affect why people from certain areas choose to work in the reserve and how they are distributed through the region. Chapter 3 gave details of the history of sleeping sickness resettlement from the Ugalla River, many present-day beekeepers trace links between their family history and this collective event (one has to be wary though because this is also part of a claim-making narrative regarding access to the reserve), this suggests historical connections to the area play a part in influencing why some people work in the reserve as opposed to elsewhere, but the picture is far more complex than this. The presence of a large number of men going to the reserve from locations such as Siganga, Usoke, Uyumbu and Itetemia is also linked to how people come together to organise themselves to go to the forest, involving their access to transport and affiliation to strong TBCS branches.

In terms of control of beekeeping by the reserve management, the Project Manager has authority to issue permits to beekeepers. Various permit systems have been instituted since the area was gazetted in 1954; in 1989 the newest system came into operation which has meant that beekeepers have to obtain an annual permit to work at a specific camp in the area. This is free and gives entry permission between: 1st May - 31st July and 1st October and the 30th of November, in keeping with the main and secondary honey crops.

Honey and beeswax produced in the reserve is intended for sale on international markets, although much is also sold locally.[170] The majority of beekeepers using the reserve are shareholders of the Tabora Beekeepers Co-operative Society LTD (TBCS) and as part of their membership agreement, they should sell their honey to the TBCS, although this doesn't always occur. Other outlets include beer brewers in villages and towns, or, in the case of west Ugalla, middlemen who transport the honey to non-honey producing areas in the north and east. A small percentage of wax is sold to the TBCS whilst the rest is taken to the local towns and sold to local Asian and Arab traders for export because a higher price is given.

Honey Hunters and Honey Hunting

Honey hunting from feral bee colonies nesting in hollow trees occurs, but people do not go to the area solely for this purpose. It is an activity that accompanies other forms of resource use. Honey hunting is practised opportunistically by fishermen, beekeepers, bushmeat hunters, staff of the Wildlife Department, and employees of tourist hunting camps. When these individuals have few forest-based skills, this activity might more accurately be called 'honey raiding'; for others, such as Nyamwezi fishermen, hunters and beekeepers, it is a skilled activity. In the case of beekeepers and their assistants, wild honey may be acquired if they are establishing a new camp, or if the year is particularly poor for honey, or if an individual possesses few or no beehives.

The Tabora Beekeepers Co-operative Society Ltd (TBCS)

The TBCS began in the 1950's as a private co-operative, and the reserve was one of the first areas where it became established. The TBCS was, and is, essentially a marketing co-operative, supplying inputs to individual producers and exporting their honey. Thus it operates in a sphere where producers are themselves least able. In the 1960's beekeepers were allowed to operate in the reserve on condition that they were members of the TBCS; this principle still prevails, although of the 174 beekeepers who applied for a license in May 1994 only 57 appear

[170] Based on management estimated figures for 1993 and 1994, it has been estimated that the honey and wax produced annually in Ugalla Game Reserve has a gross annual value of around T.Shs 56 million (US$118,500). Production is subject to large annual fluctuations; in a good year this figure may be considered conservative, while it is well in excess of the quantity produced in a poor year. See Appendix 9 for a qualitative analysis of honey production and sales by one group of beekeepers in Ugalla Game Reserve in 1993.

to be TBCS members.[171] It is estimated that on average produce from Ugalla Game Reserve contributed some 20% of the Co-operative's total honey input.[172] Therefore it can be said this is a significant production area for buyers linked to the Co-operative.

The TBCS is a large co-operative with a main factory and 36 branches throughout western Tanzania.[173] Figure 5.4 depicts the 17 TBCS sub-branches in the vicinity of Ugalla Game Reserve and beekeepers who work in the area are members of these different local branches, especially those to the east, north and west. This is important for not only do the sub-branches act as honey collection points, but they are also a means through which members organise themselves to work in Ugalla. The TBCS factory has a full-time workforce of 33 people (1994), and approximately 1,306 member beekeepers. [174] Until the early 1990s there were 6,156 members, but the membership share was raised from T.Shs.100 to T.Shs.2000 and many people discontinued their payment and relinquished their membership.

[171] Two villages where all the beekeepers (66) who obtained permits to enter the reserve in 1994 were not members of the TBCS were Ukumbi Sikanga and KM 60 (Lumbe). Probably this is due to their Chairman, and in effect each member, being thrown out of the TBCS at the May 1993 AGM for refusing to sell their produce to the Co-operative preferring instead to deal with buyers who pass through on the train. If these 66 people are added to the 57 TBCS members who keep bees in Ugalla Game Reserve this brings the total to 123 people.

[172] Mr Madaha, personal communication January 1993 and July 1994.

[173] The number of branches has varied between 32 and 41 as some become amalgamated and others expand.

[174] The data that is available indicates that there 129 beekeepers in the reserve who are members of the TBCS. However this figure obscures the much larger number of beekeepers who sell their produce and obtain inputs through their relationships to these members. In this respect one can visualise each beekeeping camp holding 2-6 members whom others use to sell their produce through.

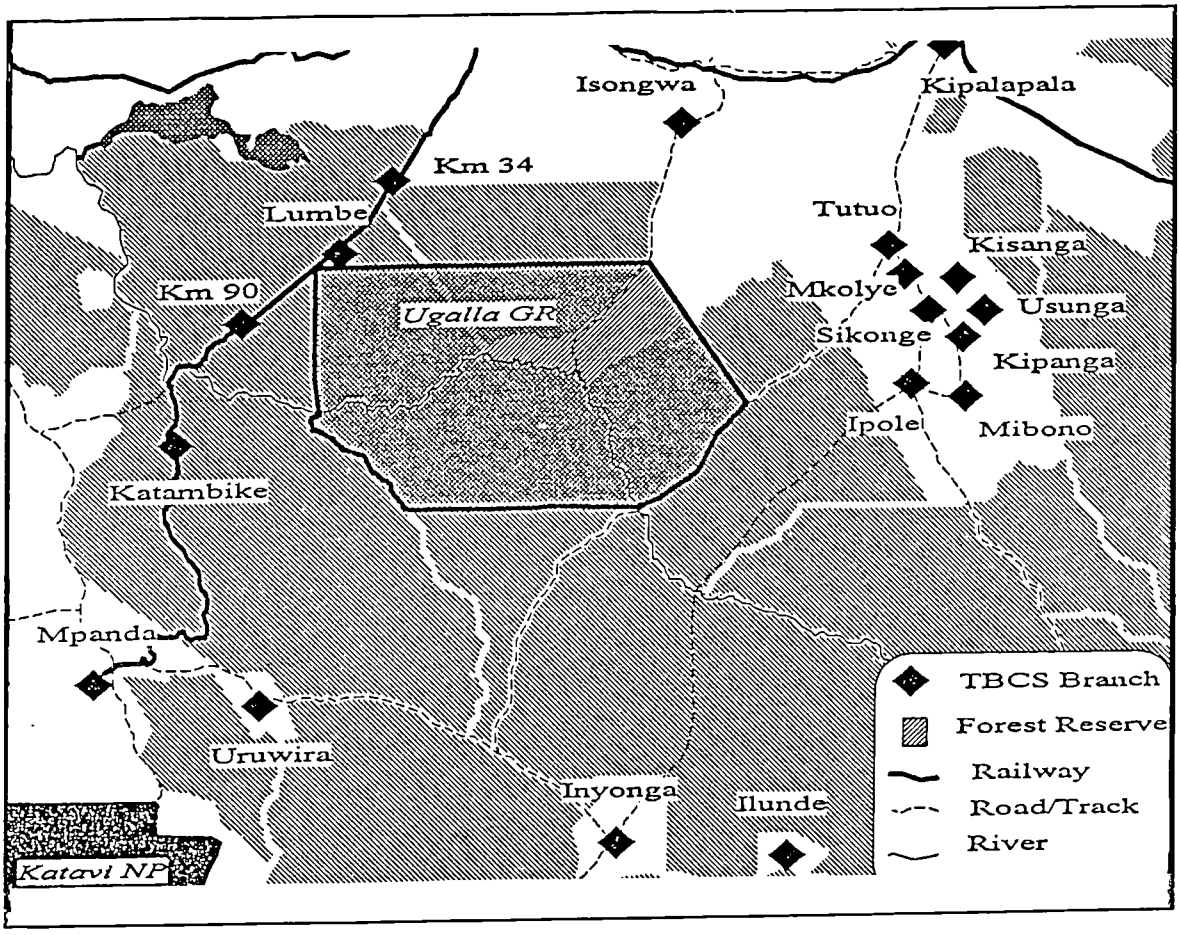

Figure 5.4 TBCS sub-branches relative to Ugalla Game Reserve[175]

A beekeeper with 100 or more hives pays a membership share of T.Shs.2000 and commits himself to sell all his produce - bar 2 buckets of honey - to the TBCS. In return he can obtain transport for himself and his helpers, honey containers, and a guaranteed market for produce. Ugalla Game Reserve is a stronghold for TBCS membership, aside from policy on the part of the reserve Management that dictates beekeepers should be members, this is because many areas of the reserve are particularly inaccessible, being located away from transport routes, and beekeepers really need the service the Co-operative provides in transporting people, possessions and produce, and its guaranteed market for the very large quantities of honey an established beekeeper may produce in the reserve.

Each of the 36 local branches has a group of share-holder members, a chairman, agent, secretary, and committee as is required of Tanzanian co-operatives. Each branch supervises the collection and recording of members produce, the distribution of containers, payments, and

[175] Source: PAWM, 1994b.

negotiates transportation for its members. There is also a beekeeper shareholder leadership of the co-operative overall, this consists of a chairman and ten council members who hold meetings four times a year, advise on topics for the annual AGM on the fifth of May, and are required to authorise the actions of the Manager.

The TBCS exports honey on the 'fair trade' market to outlets in Britain and the Netherlands.[176] In 1987 the British organisation Traidcraft Exchange became involved with the co-operative as part of a program to support four small businesses in Tanzania. To date, Traidcraft has played a pivotal role in assisting the Co-operative to attain short-term financial viability. Indirect assistance is estimated to have been in the region of £85,000 (Traidcraft Exchange, Social Audit, 1993-94; Traidcraft Exchange Report, 1992), including support from the British ODA. In 1994 Traidcraft Plc began to enable the producers to receive 60% of produce payments immediately, and made a commitment to buy 54 tonnes of produce per annum until 1997/8.[177] Tropical Forest Products is the TBCS's other major buyer.[178] Aside from this there have been one-off international sales (for instance, 0.3 tonnes of honey to Dubai in 1991 and relatively minor quantities of honey to ATO's in Sweden and Holland). Very negligible quantities of wax are collected for which there is no regular market at present. The connections between the TBCS and the fair trade market are important for it means that honey production in Ugalla Game Reserve is linked to this market where the forests of the reserve are packaged as 'organic' and 'natural' while beekeeping practices are portrayed as 'traditional'. Away from the export market the TBCS engages in small domestic sales, although the TBCS Manager does not hold the domestic market to be a viable option for he argues that there is no capital to build up the market.

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176 See Fisher 1994, 1997, 1998 a/b forthcoming.

177 Traidcraft Plc moved to become one of the TBCS's major markets: Traidcraft Exchange encouraged Traidcraft Plc to buy 6 tonnes of Tabora Honey in 1989/90, representing 7% of total honey production of the Co-operative. In 1990/91 13 tonnes of honey were bought, equivalent to 4.5% of total produce. The 54 tonnes of produce Traidcraft Plc was committed by buying from 1993/94, encompassed 50% of total honey production, and in 1994, 95%.

178 In 1991 the company bought 56 tonnes of honey, followed by 26 tonnes (1992), and 54 tonnes (1993) (Wainwright, pers. comm. 1995). In 1994 TFP could not obtain honey since the total harvest was only in the region of 55-60 tonnes. The Co-operative was unable to sustain its export commitment to both organisations opting in favour of Traidcraft Plc who offer a higher price.

Beeswax traders

There is no real local demand for beeswax and therefore production is for the export market. Until the mid-1980s, beeswax from Ugalla was sold to the TBCS and handled for export by one Asian trader acting on their behalf, however as Tanzania liberalised its economy and the marketing parastatal responsible for wax exports, GAPEX, was dissolved in 1985/6, private companies entered the beeswax trade. In Tabora town in 1993 at least 8 traders dealt in the product and others are located in small towns along transport routes, some of whom also act as fishmongers along the Ugalla River. It is difficult to find out information about this trade because it is largely covert, but it appears that these traders sell to 4 main dealers in Dar es Salaam (in 1993/4). Beeswax is one of a range of items that plays a role in the 'export-import' trade, and for this reason, and the use of wax in smuggling items such as drugs and minerals from Tanzania, beekeepers who work in Ugalla are given an extremely high price for their produce, over which the TBCS cannot compete.[179]

Beekeepers either deal with these men individually, or, typically, one person transports the wax of several people into town. This person may be acting on behalf of friends and relatives, or may himself have bought the wax within the village. When fishermen and beekeepers leave the reserve, beeswax is a popular form of payment made for transport away from the forest. It is also kept as a form of security by beekeepers for times when money is needed.

FISH PRODUCTION

The interest groups associated with fish production in the reserve, and the social composition of these groups, are more diverse than those associated with beekeeping. These fishermen are members of five different fishing co-operatives, and fish is collected from the area by fishmongers of Arab descent and by African village traders.

General Features of Fishing

The Ugalla River is one of a number of areas suitable for fishing in western Tanzania. Other places include Lake Sigara, the Wembere swamp, Igombe and Igunga dams, the Rungwa and Malagarasi Rivers, and, to the north and west of the region, Lakes Victoria and Tanganyika. Many people who fish in Ugalla Game Reserve have worked at a number of these locations.

Like beekeeping, fishing along the Ugalla River generally takes place during the dry season, when farms are not cultivated and when lorries or bicycles can gain access to riverside camps, although a few people do go to the river to fish during the rains. In the case of Ugalla Game Reserve specifically, the Management tries to restrict the access of fishermen to the river through the use of a permit system which entitles people to enter and leave the reserve on specific dates between June and December.

As regards the type of fishing which takes place in the reserve, two types of net are used, gill nets and beach seine nets. These nets shape the different fishing practices and forms of labour relations which arise. Gill nets are suspended on floats across the river by an individual fisherman working from a canoe. To help him he employs one, or sometimes two, assistants to clean and smoke the fish. Beach seine nets, in contrast, are placed in the water by people working from canoes but then fish are hauled in from the bank of the river, this task requires at least four people, one of whom must be highly skilled. Far greater fish catches can be gained from beach seine nets than from gill nets.

Fish from the Ugalla River are dried and sold to fishmongers who transport them to local towns for sale in the food markets. Produce is also taken on bicycle to villages in the west of the area. In years when catches are good, produce may be are conveyed by rail to Dodoma and Dar es Salaam.

Fishermen/women and Fishing

Fishing camps are distributed all along the Ugalla River and its tributaries; Figure 5.5 depicts the locations of these camps. All are used by both beekeepers and fishermen, although their size can vary considerably; some are small, 'family', camps of 10 - 20 people, while others may house around 60 people. Fishermen are from backgrounds that are ethnically, socially and economically far more diverse than beekeepers. They include refugees, both men and women, from Mozambique, Malawi, Burundi, Rwanda, and Zaire, some of whom are well-educated while others learned to fish as a full-time annual occupation in their home countries. Other groups are Muha from Kigoma Region, together with people of Nyamwezi and different local ethnic origins.

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[179] In the 1980s and early 1990s, primary products were exported from Tanzania to generate foreign exchange used to import luxury items, equipment and vehicles. Some, but not all, of this trade was 'above board'.

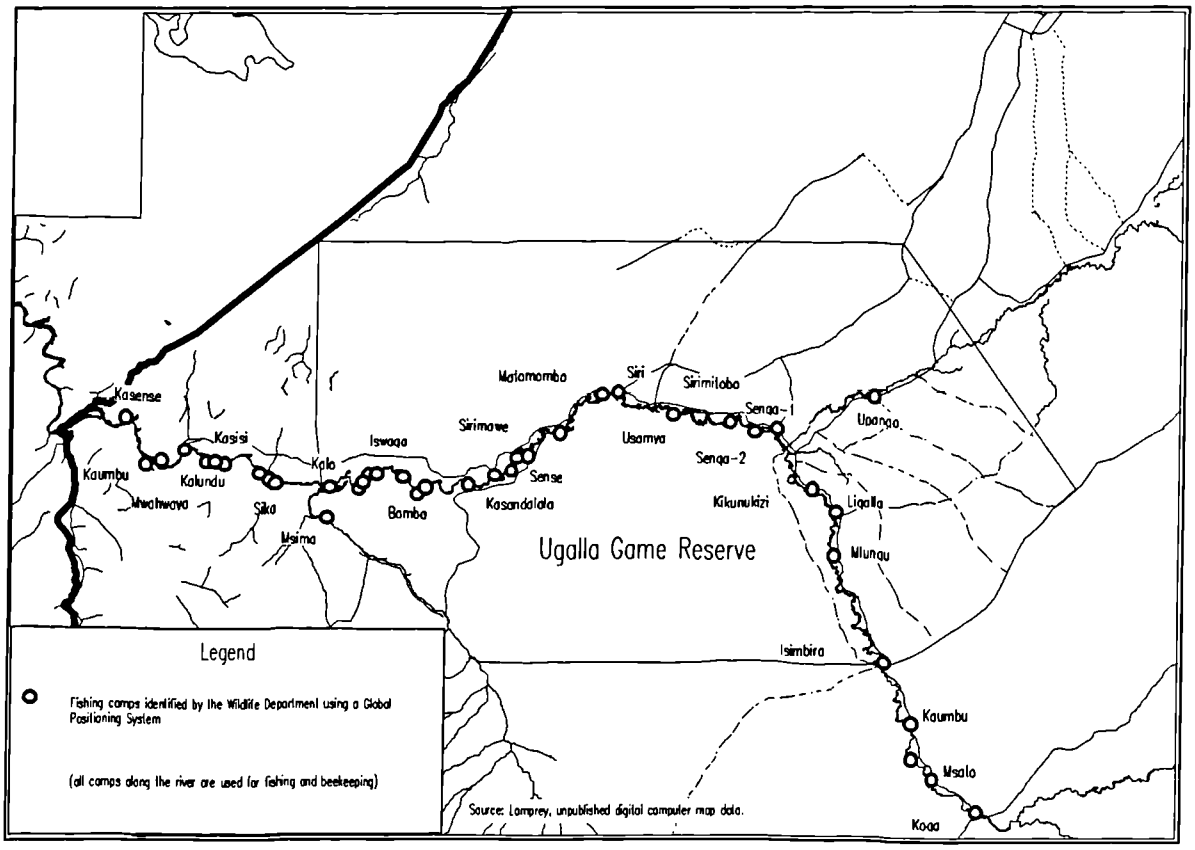

Figure 5.5 Fishing camps in Ugalla Game Reserve (1993/4)[180]

Appreciable socio-economic divisions exist between fishermen, some are self-employed and possess only a few gill nets, while others, including local officials, employ people to fish for them and possess several of the much larger beach seine nets. Some women go to the river particularly refugees from Malawi and Zaire where there are traditions of female fishing, but fishing in the reserve is predominantly a male occupation. Some people carry out both fishing and beekeeping as a joint occupation, but generally speaking it is only those who are Nyamwezi or of closely related tribal affiliation, from beekeeping areas in western Tanzania, who do this.

Many who fish in the reserve are farmers during the rainy season, growing tobacco, in particular, as a cash crop. Usoke, Urambo, Kaliua, Tutuo, Sikonge, and Siganga Wards are areas of high tobacco cultivation; interestingly, although a strikingly large number of fishermen are tobacco farmers, very few beekeepers are.[181] Other fishermen are traders in Tabora market.

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[180] The names of all camps included in the diagram are real and not pseudonyms.

[181] Opinions vary, but the timing of tobacco planting and harvesting, and capacity to employ labour may be factors that deter beekeepers from growing the crop. Tobacco production is most intensive in September - October when seedlings need to be tended, and in May - June when the crop is harvested. This coincides with the honey cropping seasons. Furthermore, at this time tobacco farmers need labourers to assist with the harvesting and drying process and beekeepers also need to employ labour for the honey harvest. A household may not be able

Refugees may be farmers but often in the past they have held different occupations, both manual and white collar.

It is hard to establish the number of fishermen who use the Ugalla River or its tributaries on an annual basis. Management estimates suggest that at the peak of the fishing season (July and August) 400 to 600 fishermen and assistants may be at the river legitimately (PAWM, 1994b: 45).[182] If one considers that some enter illegally, and fishermen come and go through the fishing season, this number may easily be higher in a good year.[183]

Like beekeeping, fishing is under the jurisdiction of the Project Manager of the reserve. Fishermen obtain a free annual permit which enables them to fish between the 1st June and the 31st July, or the 1st August and 30th September, or the 1st October until the 30th November. In practice the period a person stays in the reserve is more flexible than the permit regulations would suggest.

To obtain a permit from the Management in order to fish at a particular camp in the reserve, a fishing license must first be acquired which enables the individual to fish anywhere (for fisherman, all helpers and canoe/s) from the relevant District Fisheries Officer of Tabora, Urambo or Mpanda Districts (in keeping national fisheries law).[184] This costs money and lasts

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to support both activities, particularly because TBCS honey payments and the Tobacco Board payments (money needed to support labour) are only forthcoming in August or September at the earliest.

Shorter reports that in the late 1960's the interests of the then highly successful private Tabora Beekeepers Co-operative Society clashed with those of the Department of Agriculture over the issue of tobacco cultivation. During this period the government introduced new tobacco growing schemes that beekeepers became co-opted into. Two test cases were held in the Tabora Courts which established that beekeepers in possession of 100 + hives (the number needed for a share in the Co-operative) should not be forced to grow tobacco since apparently they would have incurred considerable financial losses (Shorter, 1972: 54). The fact that these men choose to keep bees in preference to tobacco farming may have demonstrated, as Shorter argues, how lucrative beekeeping can be. It may also be a comment on the desire of beekeepers to preserve a sense of autonomy from state initiatives which I was repeatedly told attracted interviewees to beekeeping. (For details of tobacco farming in the region at this time, vide Boeson, 1979).

[182] Information contained in the Management Plan lists 80 fishermen and 284 helpers as having applied for a permit in June 1994. 40 fishermen and 64 assistants applied for joint beekeeping-fishing permits and have already been included in the beekeeping figures above.

[183] On the basis of reserve Management statistics, I have estimated that in 1991 fish from the Ugalla River grossed a total value of T.Shs. 14,147,020 and in 1992 T.Shs. 9,203,488. However, my own qualitative data suggests these figures are a gross underestimate of the value of total annual fish production from the river.

[184] In 1993 a license to fish cost an initial T.Shs. 250, with T.Shs. 500 for the canoe and T.Shs. 400 for canoe registration, each helper cost T.Shs.90. Usually one or two helpers accompany a fisherman/woman if he is using gill nets, whereas four or five if he is using a beach seine, therefore the license for beach seine is effectively more expensive. In 1993 the District Fisheries Officers were instructed that they could not issue licenses for beach

for 5 years but has to be renewed annually. Generally, members apply for their permits to enter the reserve collectively through the fishing co-operatives. Fishermen report being given contradictory advice or orders from the Regional and District Fisheries Officers on the one hand, and the Project Manager on the other, a situation which reflects administrative tension over who has jurisdiction over fishing in Ugalla Game Reserve.

The Fishing Co-operatives

In 1993 there were five fishing co-operatives operating in Ugalla Game Reserve. Two fishing co-operatives were started in the early 1960's: these were *Twikwilagi Chama Cha Uvuvi* (Usoke Fishing Co-operative) and the *Sikonge Chama Cha Uvuvi* (Sikonge Fishing Co-operative), which traditionally fixed the price for fish, and arranged transport to carry the fish from the river with fishmongers from Sikonge, Usoke, and Tabora towns.

During the late 1970s this picture became fragmented, three new co-operatives started following allegations of mismanagement and corruption, generating antagonism between refugees, market traders, and members of Sikonge Fishing Co-operative. These were the Tabora Fishing and Fish Marketing Co-operative, Pangale Fishing Co-operative, and Kigwa Multi-Purpose Unit.[185] Neither Pangale nor Kigwa are officially registered co-operatives because there is a government ruling that only Tanzanian nationals can form co-operatives, although both associations have obtained support as co-operatives from both the United Nations High Commission for Refugees and Oxfam. In the 1980's there was also a group of refugee fishermen at Katumba refugee camp in Mpanda District who were members of Katumba Multi-purpose Co-operative, but the membership was of Burundian fishermen who returned home in 1993. Also fishermen from Ulyankulu Refugee Camp are apparently members of a multipurpose co-operative but further information was not available at the time of research.

In structure, each co-operative consists of a chairman, a secretary, approximately 8 committee members, and a membership of fishermen shareholders. In 1993 total membership of the different co-operatives was: Usoke Fishing Co-operative, 142 fishermen shareholders (all men), Sikonge Co-operative, 158 fishermen shareholders (all men), Pangale Fishing Co-operative, 27

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seine in Ugalla Game Reserve but could do so outside the reserve (Mrs Luyelo, District Fisheries Officer, personal communication, 1993).

shareholders of whom 3 were women, Kigwa Fishing Unit in 1993 was 14 people, 1 of whom was a woman, Tabora Fishing and Fish Marketing Unit, 60 fishermen shareholders (all men).

The fishing co-operatives are marketing organisations, which do not operate in relation to fish production. In return for membership fees, the co-operatives should perform 6 functions on behalf of its membership: 1. The co-operatives fix the price that their members are willing to accept for fish. The price is set at the Annual General Meeting of each co-operative on the 5th of May with the attendance of District and Regional Fisheries officials. 2. Co-operative membership is in principle needed for a fisherman to obtain a five year fishing license and renew it annually. Similarly, to obtain a permit from the Project Manager to work in the reserve, the fisherman must hold a valid license and co-operative membership. A representative of the relevant co-operative should assist its members to acquire their licenses and permits. 3. In assisting members to acquire a permit to enter the reserve the co-operative allocates individual members to specific camps along the river. 4. the co-operatives arrange the transportation of members and the collection of their fish catch, 5. during the 1970's and 1980's fishermen generally sold their fish to the fishmongers on credit and received their payments at a later date from the co-operative, although this function has now declined. 6. co-operatives may buy nets in bulk and sell them at relatively cheap rates to their members. In practice, however, not all these functions may be carried out.

Fishmongers

In Tabora and Rukwa Regions the haulage industry is dominated by Tanzanians of 'Arab' descent, as are the people who act as fishmongers along the Ugalla River. Every couple of weeks, 10 or more lorries enter the reserve at Isimbira and go as far as Nsangu (the Wala River), and a similar number enter from Usoke and go west to Koga to buy fish. Every lorry will be accompanied by a Game Scout from Tabora. These lorries transport people, fishing gear, and possessions as well as food stuffs for sale, like maize, fishing nets, nails, fish hooks, mending thread and other small items. Produce is picked up and packed in reed baskets or metal drums; often but not always collected on credit, or set against the sale of other items. A Game Scout is supposed to check permits and register the quantity of fish being picked up from each camp, although such surveillance appears to be limited. Fish is sold in Sikonge, Tabora,

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185 This information is based on fieldwork data collected between 1992-4. It is probable that Kigwa and Pangale Fishing Co-operatives no longer exist because they were run by Malawian refugees who returned to their country in 1994.

Usoke towns, and in years of abundance it is apparently taken on the train to Dar Es Salaam. All lorries going to the reserve must obtain a license to trade from the District Fisheries Officer, as well as a permit to enter the reserve from the Project Manager.

In the far west of Ugalla Game Reserve village traders are encountered who buy fish and carry it, loaded in reed baskets, on the back of their Phoenix bicycles. The fish is sold at villages on the railway line or transported by train to local towns This trade takes place in the west where people have access to the railway line and can only carry small quantities of fish relative to the overall size of catches which need to be picked up by lorry.

INTERNATIONAL TOURIST SPORTS-HUNTING

There are two types of wildlife-related tourism in Tanzania, sports-hunting and game viewing; in Ugalla Game Reserve itself, sports hunting takes place but game viewing is rare. Although the area is scenically attractive, it is off the normal tourist 'circuit' and does not contain a high density of spectacular game species to draw international tourists to view game. The few game-viewing safari's that take place are limited to wealthy Asians and resident expatriates mainly from Tabora town, although occasionally from further afield (Crees, 1995). In contrast, being part of the 'western hunting circuit', the area is a popular area for exclusive hunting safaris for overseas tourists.

Several interest groups are associated with tourist sports-hunting: overseas tourists, a hunting outfitter who runs the safari s and employs professional hunters to accompany the tourists,[186] Tanzanian urban sports-hunters, local village hunters, government employed game scouts.

Sports Hunting and the Hunting Outfitter

To explain how sports hunting in Ugalla Game Reserve operates it needs to be placed in national context. International tourist sports hunting is under the control of the Wildlife Department from headquarters in Arusha and Dar es Salaam where licenses are issued. This contrasts with the case fishing and beekeeping which are under the jurisdiction of the Project Manager of the reserve. All sports-hunting areas in Tanzania are divided into 'blocks' which

[186] A 'hunting outfitter' is a company which organises sports-hunting safaris.

are allocated to hunting outfitters.[187] Each hunting block has a quota attached to it that specifies which species and what quantity of that species can be hunted annually. Since 1992, the hunting outfitter has been required to shoot 40% of the game on the quota within a season (Price-Waterhouse, 1995). Ugalla Game Reserve is divided into two hunting blocks, Ugalla East and Ugalla West, these are allocated together with another block, Ugalla Open Area, directly to the north, as shown in Figure 5.6

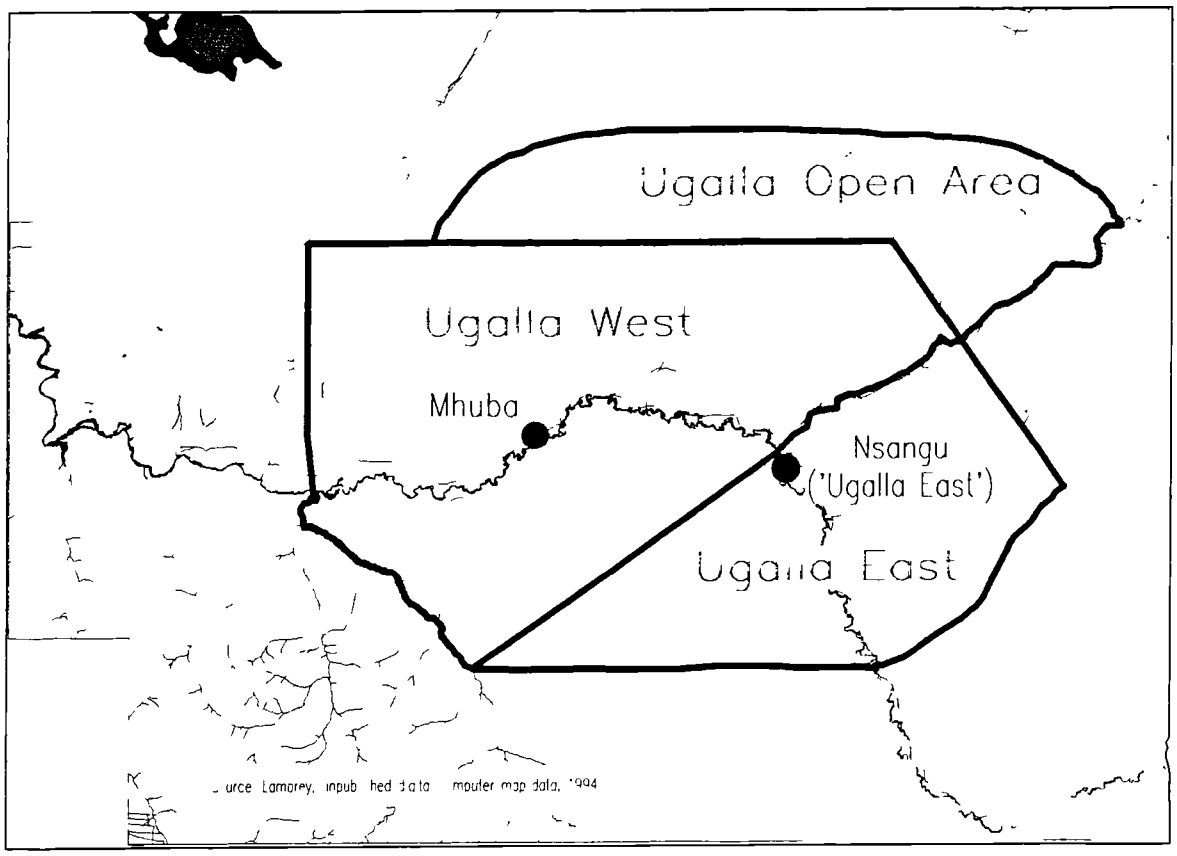

Figure 5.6 Tourist sports hunting blocks in relation to Ugalla Game Reserve (1993/4)

[187] Hunting companies are allocated hunting blocks for a period of three years by the Wildlife Division (Bartlett, 1993, pers. comm.). Despite this, considerable insecurity is attached to these allocations, formal obligations made by the Wildlife Division to a hunting company may be over-ridden by manipulation of interests within the Wildlife Division itself.

A single hunting company, Tanzania Game Tracker Safaris LTD (TGTS), American owned but based in Arusha, has controlled these blocks since 1990. Additional tourist hunting blocks surround Ugalla Game Reserve but are under the control of the Regional Game Officers of Rukwa (Msima GCA, Inyonga GCA) and Tabora (Luganzo GCA, Ugunda GCA). This is because they are in Game Controlled Areas, a situation that further adds to regional administrative complexity.

The hunting company operates a scheme called the Cullman Wildlife Rewards and Benefits Project, named after its principal benefactor, an American hunter, Joseph Cullman 111, and first instituted in Maswa Game Reserve in 1991 (PAWM, 1992a; TGTS, 1992). This is a project that aims to 'benefit local people', although the focus is towards drawing inhabitants into anti-poaching activities and unfortunately the tenor is extremely patronising. The project puts some money into Ugalla Game Reserve, notably to assist the Project Manager to clear the boundary. The company also states that meat is given to local people, although this is on a haphazard basis between individual professional hunters and nearby fishing camps.

Tanzania Game Tracker Safari's LTD held control of the Ugalla hunting blocks between 1990 and at least 1995.[188] Professional hunters are employed on contract by the company; those who worked in Ugalla Game Reserve during 1993 each had extensive experience of hunting in southern Africa. Sports-hunting clients are attracted to the company through events such as the January 'game fairs' that take place in America and Europe, used to market world-wide hunting safari s.

In Ugalla Game Reserve the company employs a core of Tanzanian staff, many from Arusha Region, although local Tabora hunters may be employed as game trackers. At Nsangu camp, for example, one professional hunter told me how he had caught a 'poacher' in the reserve who went on to become one of his best trackers. Within the camp there is a clear division of labour and hierarchy of authority between the staff which includes the camp manager, the cook, kitchen and cleaning staff, trackers, and those who clean the hides and cut up the meat.

[188] Hunting blocks are issued to hunting companies (outfitters) on the basis of a five year lease, with an annual 'performance' review. Despite the lease the hunting company does not necessarily have security of tenure. For example, in June 1993 TGTS (together with other hunting companies) had to enter into negotiations with the Wildlife Division in order to hold onto the blocks it had previously been allocated, including those in Ugalla Game Reserve.

In Tanzania the hunting season begins on the 1st of July and has been unofficially extended by the Wildlife Division from December until the 31st of March. In the case of Ugalla Game Reserve, the hunting company enters in mid-May and clients begin to hunt on the 1st of July. The company then withdraws in mid-October in anticipation of the start of the rainy season. Typically, clients who hunt in Ugalla will be on an exclusive 16 or 21 day safari, staying twelve to fourteen days in the reserve before moving to hunt elsewhere.[189] A sixteen day safari for an unaccompanied person would cost in the region of US$30-32,000. Lion, Leopard, and Sable antelope are species that Ugalla Game Reserve is especially favoured for.[190] The trophies which the hunter gets are cleaned up in the reserve and transported by plane to Arusha, where they enter a bureaucratic process to acquire a trophy export certificate.

Tourist sports-hunting in Ugalla Game Reserve generates significant revenues for the Government of Tanzania. For example, in 1992 total revenue[191] from tourist hunting in the reserve was approximately US$300,000, sub-divided into US$33,411 to the Treasury, US$94,919 to the Tanzanian Wildlife Protection Fund,[192] and US$174,800 to the hunting company. 50% of the daily hunting rate paid to the hunting company is supposed to be remitted as foreign exchange to the Bank of Tanzania, to the effect that it is estimated that in

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[189] Some species of animal can only be hunted on a safari of a certain length, for example elephant, sable, and leopard each warrant a 21 day safari, and lion a 16 day safari.

[190] Between 1988 and 1993, lion, leopard, hippo, and sable antelope were the species that generated most revenue from game fees in Ugalla Game Reserve (PAWM, 1994b: 73), however, other less valued species are shot in greater quantities.

[191] According to the *Management Plan (PAWM, 1994b: 68) a range of fees that are periodically revised* are levied on tourist hunters by the Wildlife Division. These are: 1. License Fee: this is US$450 for a safari duration of 7 days or less, or US$600 for a safari duration of 14 days or more. The license fee is credited to the Tanzanian Wildlife Protection Fund (TWPF). 2. Game Fees: the official WD fee for each species. After an animal is shot, the game fee for that species is divided into a proportion destined for the Treasury, the Treasury Fees. Prior to the 1992 hunting season 75% of the game fees went to the Treasury, and 25% to TWPF. Since the start of the 1992 hunting season, approximately 37.5% of the Game Fees goes to Treasury, and 62.5% to TWPF. 3. Conservation Fee: a fee of US$100/day charged to the tourist hunter, paid to TWPF. 4. Observer Fee: a fee of US$100/day for each non-hunting partner, paid to the TWPF. 5. Trophy Handling Fee: this fee, levied by the WD for the completion of paperwork for the export of trophies, is US$200 for a 7-day safari, or US$300 for a safari of 16 days or longer. The fee is paid to TWPF. 6. Daily Rate: this is the fee to the hunting company, usually paid overseas. Rates vary from US$700-1100/day. The hunting company is obliged by the Tanzanian Government Foreign Investment Code to remit 55% of this to the Bank of Tanzania.

[192] The Tanzanian Wildlife Protection Fund (TWPF) is a Government fund that was established under the 1974 Wildlife Conservation Act to receive funds from levies placed on game fees and through the disposal of confiscated items. It was intended that the money that was generated would be channelled into conservation projects. Prior to the 1992 hunting season, 75% of Game Fees went to the Treasury, and 25% to the TWPF. Since the start of the 1992 hunting season, approximately 37.5% of the Game Fees goes to the Treasury, and 62.5% to TWPF (PAWM, 1994b: 68). Some of the conservation projects supported by the fund are advertised in the magazine of the Wildlife Division, 'Kakakuona' although this does not cover the total funds that are generated (possibly in the region of US$2 million per annum) whose outlets remain obscured from public scrutiny.

1992 Tanzania earned US$224,470 from tourist hunting in Ugalla Game Reserve (PAWM, 1994b: 69; TGTS, 1992). This sum is lower than that earned in 1990 and 1991 although a comprehensive breakdown of income for these years is not available. The game controlled areas adjacent to Ugalla Game Reserve also generate revenue from tourist hunting.[193] The sum of US$224,470 which passed from Ugalla Game Reserve to different sectors of the Tanzanian economy can be set against the $20 million generated annually by the Wildlife Division through tourist hunting as a whole (Lamprey, 1995).

The Hunting Camps

There are two hunting camps in the reserve, Mhuba in the west and Nsangu in the east, both are luxurious four-star tented camps. Taking 1993 as an example, on the 21st of May a professional hunter who works for TGTS drove down from Arusha together with two lorries laden with equipment and staff, the Tanzanian (all-male) staff remaining in the reserve until the hunting company pulls out each October.

In the case of Nsangu, the camp consists of several large sleeping tents set away from each other behind bushes and trees and joined by swept paths. The tent of the professional hunter shelters a radio which serves as a source of daily communication with the hunting company and, if necessary, the Anti-Poaching Unit and Project Manager in Tabora.

Plates 5 and 6 are photographs of Nsangu, the focus of the camp is a dining area with a scenic view. At Nsangu this is on top of an anthill with high steps cut into it, surrounded by trees and over-looking the river, where animals are attracted to strategic salt-licks. Between the anthill and the river is an area where a large fire is built each evening from which the guests, can watch the sunset as drinks are brought by 'boys' who drum and sing 'native' chants in the background. Slightly apart from the dining area is the kitchen and wire-padlocked store room, all disguised behind a high grass fence. Set away from the main camp, and beyond the kitchen area is the two storey room for cleaning and tanning skins and other trophies, the staff sleeping

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[193]Revenue generated by Tanzania from tourist hunting in the GCA's between 1988-92 is: Ugunda US$81,420; Inyonga US$86,745; Msima US$75,575; Luganzo US$58,560. Although these sums are significant they are appreciably less than revenue generated within Ugalla Game Reserve, also the sums are related to the capacities of the respective hunting companies rather than to possibilities inherent in the areas. No percentage of the revenue generated is reinvested in the areas for conservation purposes (PAWM, 1994b: 72).

Plate 5: The dining area of Nsangu Hunting Camp

Plate 6: Nsangu Hunting Camp, view overlooking the river and seating area where guests sit in the evening to drink and listen to 'native music'

quarters, and diesel storage area. Both hunting camps in the reserve are accessed by grass air-strips.

The resources, activities, personnel, expectations, values, etc., associated with tourist sports-hunting in these camps in Ugalla constitutes an entirely different, and contrasting, style of operation to that associated with other activities in the reserve. The hunting outfitter and those associated with it are also in a far more powerful position that local people in terms of determining how they wish to operate within the area and the allowances that have to be made by the Management.

The layout of the hunting camp, and the elite safari culture it typifies, is common throughout sports-hunting areas of southern Africa and in this respect we can see Ugalla Game Reserve drawn into a continent-wide and international way of using, valuing and giving meaning to African nature. For the Government of Tanzania, and for the hunting outfitter among others, this is very much a commoditised form of value, with high economic stakes being placed on the capacity for a tour operator to run a successful safari. For the Wildlife Department the economics of sports hunting also provides important rationales for the conservation of wildlife (biodiversity). In addition to this, it is also clear that in order to maintain sports hunting as a viable industry, a 'myth' of wild Africa and of hunting has to be perpetuated in modern form (through glossy brochures, the hard sell of the game fair, hunters organisations such as Safari Club International, the repertoire of stories told by professional hunter and clients, Wilbur Smith novels, etc.). An important aspect of such myths is that people are not present in the 'nature' that safari's take place in and in this respect, one would expect Ugalla to fall short of expectation.

Tourist Sports-Hunters

Tourists from the United States, Mexico, Europe, and Southern Africa are attracted to hunt in Ugalla, of the people whom I met during 1993 several owned large companies and spent their leisure-time hunting world-wide. All the hunters I encountered were men (this is not always the case), hunting alone, with a son, in groups of three, or on holiday with wives or girlfriends. One elderly German couple who regularly visit Nsangu camp in the reserve explained to me that they did so because it is wild and beautiful, although attitudes to the area and the fact in contains 'villages', range widely and tend to be linked to how successful a safari progresses, whether the hunter has shot the species he is aiming for and the nuances of trophy quality, and,

importantly, the views of the professional hunter. In 1993, some professional hunters disliked working in Ugalla because of the presence of people while others found people an asset because they could impart information on the movement of game - as long as they didn't touch bait strung up in the trees. These attitudes were conveyed to the hunting clients and tended to be reflected in what they themselves said. This suggests that professional hunters play an important role in interpreting the 'nature' tourists have come to encounter and generating opinions about it, with or without people present.

Game Scouts

Because tourist hunting is under the direct control of Wildlife Division headquarters in Dar es Salaam and Arusha, the Project manager of Ugalla Game Reserve has only occasional contact with the incumbent hunting company and none with sports-hunters themselves. However, a game scout from Tabora is stationed at each camp for the season. Individual game scouts are rotated by the Project Manager because of the 'perks' which are attached to this job. These men are supposed to ensure that the hunters are shooting game according to their quota and which are of suitable trophy size and to report details of species shot to the Project Manager. They are also the only members of the Management who are stationed in the reserve and, because they move around with the hunting company, they act, via the radio, as an extremely important source of information for the Project Manager and representatives of the management. For example, when entering a fishing camp, they may stop to demand everyone's permits.

Plates 7 and 8 are pictures of game scouts operating in Ugalla, in both contexts they were attached to the hunting company and out in the reserve by virtue of this, certainly one never witnesses game scouts on patrol which should be standard management practice. In Tanzania more generally the practice of stationing a single, low paid, game scout at the hunting camp is held to be open to abuse by the professional hunter and clients, although I had no particular evidence of this by TGTS in Ugalla.

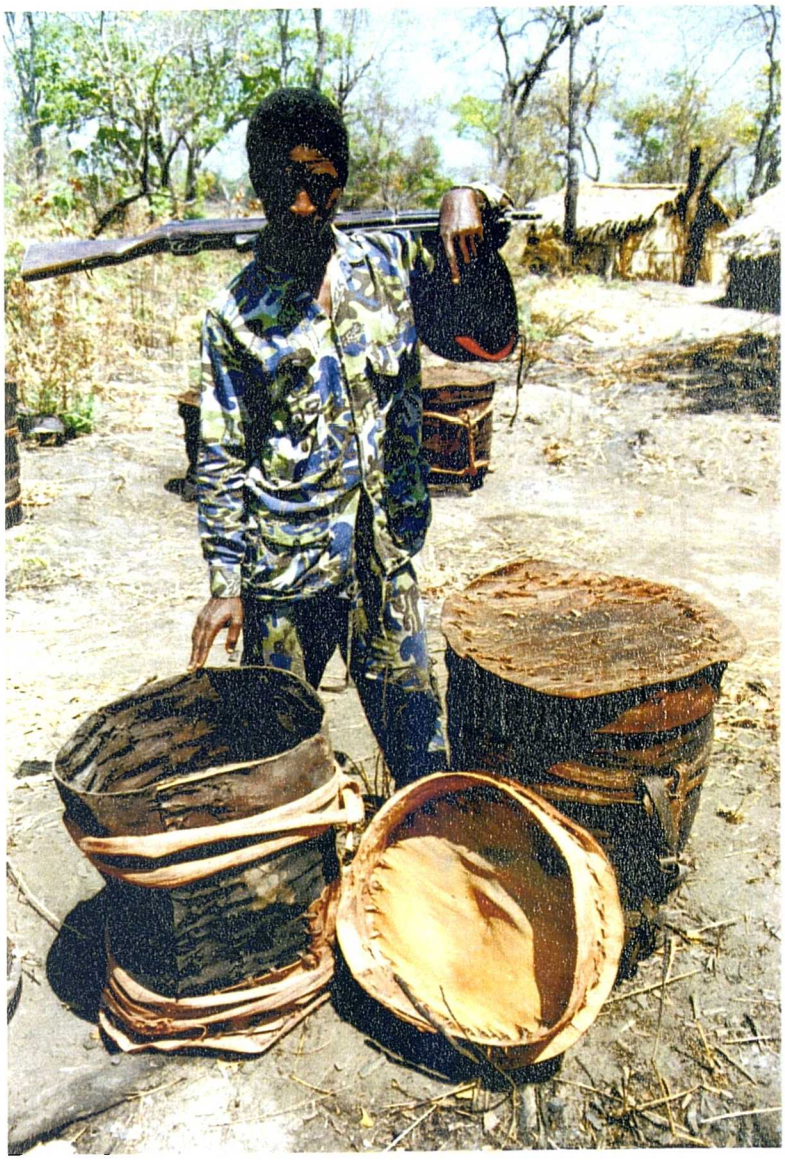

Plate 7: A game scout inspects beehives in west Ugalla

Plate 8: A game scout looking for signs of people in west Ugalla

RESIDENT HUNTING

In Tanzanian law no distinction is made between resident hunters who live in rural areas (in this region, peasant farmers) and the urban elite who hunt using vehicles and high-powered rifles as a luxury sport. In the case of Tabora the elite are the Asian and Arab minority ethnic groups, high ranking civil servants, and resident expatriate communities.

No resident hunter is permitted to hunt in Ugalla Game Reserve or the surrounding game controlled areas, nor can they shoot all the species of animal that may be hunted by tourists in 'open' areas. However, both village hunters and urban sports-hunters do hunt in Ugalla Game Reserve and the surrounding GCAs; in the case of the latter, by all accounts, hunting licenses can be obtained from members of the Wildlife Department in Tabora and are far cheaper than those for tourist hunting.[194]

Urban Sports Hunters

For senior civil servants who have access to vehicles, sports-hunting is a recreational activity associated with access to both meat and prestige. For some of the Tanzanians of Asian descent living in Tabora 'the safari' is considered an important part of their culture, something they have grown up with as a form of recreation.

These safaris sometimes include Ugalla Game Reserve or areas on its boundary and these people are well acquainted with the area. Women, children, food, beer, generators, stereos, tents, camp beds, etc., are transported away for weekends. Among Asian s living in Tabora town, stories abound about Ugalla; one family proudly boasts of the possession of a stuffed rhino foot said to have belonged to the 'last rhino' to be seen alive near the Ugalla River in the 1980's. Whether this story is true or not is another matter, but it does convey a sense of attachment held to the area.

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[194]A large number of 'irregularities' arise in association with the licensing of resident hunting, particularly hunting by the urban elite, and is reflexive of the uncontrolled nature of resident hunting in Tanzania. In Tabora relationships between the Wildlife Division officials and urban hunters are cultivated. In the case of Taboran Asians payments for licenses are said to be systematic. In the case of civil servants one has to consider the complex nature of their relationships to one another often over a period of many years. According to Asian informants another very common practice was obtaining a permit for one - cheap - species and shooting another. Perhaps this explains why in Tabora Region in 1992, 16 licenses were issued for Thompsons gazelles for areas that do not contain them, and only two for buffalo a species favoured for hunting when I was there in 1993 (PAWM, 1994b: 73).

Another dimension to this hunting is that those Asians and Arabs who run timber camps shoot large quantities of game in Tabora and Rukwa Regions in order to provide meat for their labourers. There has been an enormous expansion in timber cutting in the last few years and presumably the need for meat has expanded in a commensurate manner. As illegal timber camps opened up in Ugalla Game Reserve in the 1990s, it is possible that game meat is being shot for this purpose, although there is no evidence for this. Some game meat also finds its way into at least 1 Asian owned restaurant in Tabora on a systematic basis.

The Resident Hunters Association

Some urban resident hunters living in Tabora are members of the Resident Hunters Association of Tanzania (RHA) which has chapters in the regional capitals throughout the country. The Tabora Chapter of the association is dominated by Tanzanian Asians. The national chairman of the RHA is the brother of an chairman of the CCM (Chama Cha Mapinduzi, the ruling party) of Tanzania, and the association has many other powerful connections. Representatives of the Tabora chapter of the RHA were extremely annoyed that they were not invited to the Ugalla Game Reserve planning workshop held in Tabora in November 1992, and sent a written letter of complaint which was read out at the workshop. Months later the RHA member who had instigated the letter explained that they should have hunting rights in Ugalla Game Reserve and the Management had conspired to exclude them from the workshop.

Village Hunters

I have little information on local hunters who work in Ugalla Game Reserve. Hunting is illegal and village hunters caught in Ugalla Game Reserve are penalised to a far greater extent than would be urban resident hunters. In the past hunting was a specialised occupation with high prestige, today it has declined considerably due, at least in part, to hunting laws and a dramatic reduction in animals.[195] Discussions I held with men who hunted in other areas would suggest that it is still a highly specialised occupation carried out by people from hunting families.[196] This may include some of the men who keep bees and fish in the reserve, although because they

[195]Anecdotal descriptions by sports hunters and Tabora residents familiar with Ugalla Game Reserve from the 1960's and earlier, describe meat smoking on wracks as a regular feature of the camps but this is not seen today.

[196]Hunting was/is associated with specialised hunting societies, I do not know to what extent they still remain although hunting is still a skilled activity people learn from 'apprenticeship' (see Abrahams, 1967a; Cory, EA.Mss.105; Blohm, 1931; 1933a/b).

are engaged in making an income through other means this does not appear to be large scale or systematic.

Hunting takes place from temporary camps at locations where there is access to drinking water. Unsurprisingly, the hunting which does take place in Ugalla Game Reserve is extremely covert and most likely to occur during the rainy season. Dried or fresh meat is transported loaded on bicycles and taken to village areas outside the Reserve border. No estimates have been made of the amount of bushmeat hunting that is occurring in Ugalla Game Reserve and figures on the number of people caught poaching reflect varying levels of law enforcement. Professional hunters working in the area suggest that animal trophy sizes are smaller than could be expected and wildlife extremely wary, although resident sports hunters also contribute to this. According to the beekeepers and fishermen I stayed with, hunting increases in years when the rains have been bad and people are hungry. The beekeepers and fishermen, who may themselves hunt illicitly, can be very antagonistic towards these *magangiri* (poachers) because they will harvest beehives, honey hunt, and steal canoes or other items left in the camps.

In the 1970's and 1980's significant levels of ivory poaching were taking place in Ugalla Game Reserve and the surrounding region (Rodgers, 1980: 10), although this declined appreciably after 'Operation Uhai', the anti-poaching drive in 1989/90.[197]

FURTHER INTEREST GROUPS AND FORMS OF RESOURCE EXPLOITATION

Cattle-Herders and Livestock Keeping

Livestock keeping is not extensive in the region surrounding Ugalla, due to the widespread presence of tsetse fly. However, Sukuma men bring cattle seasonally from northern Tabora and Shinyanga Regions southwards either in search of grazing and water during the dry-season or on their way to cattle-markets in Rukwa Region. In the vicinity of Ugalla they are attracted to the Wala River (north-east) where they can obtain a good supply of water. A large semi-permanent cattle-*boma* (stockade) has been established ostensibly outside the reserve, although because the boundary has been demarcated in the wrong place, it is actually located within the

[197]Writing in 1980, Rodgers argued that the elephant carcass ratio in Ugalla Game Reserve showed 100 live to 33 dead animals. When compared with the Selous Game Reserve (100:7) and Ruaha-Rungwa National Park and Game Reserve (100:11) the ratio in Ugalla Game Reserve "indicated the Tabora population has been subject to more than natural mortality" (Rodgers, 1980: 10).

reserve, and cattle are herded along the Wala River. The extreme destruction of vegetation and trees, including those which hold beehives, in the vicinity of this *boma* is marked.

Agriculture

People do not cultivate in the reserve and because human settlements are located far from the northern, eastern and southern borders threat of agricultural encroachment is minimal. Two exceptions exist, however, the first is in the far north-western corner of the reserve which abuts onto the Mpanda Railway line, where the village of Lumbe is situated; from this village cultivation takes place from its location up to the indistinct reserve boundary. The second exception includes small areas of cultivation around semi-permanent villages that have grown up from fishing camps beyond the western boundary of the reserve.

Timber Extraction

Licensed timber extraction is permitted in the productive forest reserves adjacent to Ugalla. However, unlicensed timber exploitation is taking place in southern Tabora on a massive scale, facilitated by the increased availability of vehicles, spare parts and diesel since the 1980's.[198] Although illegal, lumbering activities in the reserve occurred throughout the 1980's and have increased significantly in recent years.[199] One of the main species of tree exploited commercially in Ugalla is *muninga* (*Pterocarpus angolensis*).

Timber operations are based on cutting by means of the use of small-scale saw-pits. The person who is putting up the capital and equipment will be the licensee, if a license has been acquired. An overseer and labourers will be employed and, unlike the owner of the operation, remain in the forest camp. The work is on a temporary basis for the duration of a timber operation, although a core of people may be employed on a permanent basis. They are generally young men from villages in the south of the region and refugee camps such as Katumba, Pangale and Ulyankulu. The licensee must own or have access to a lorry or lorries in

[198]Officially cut timber cannot be exported from Tanzania, although this trade takes place either illegally or by cutting the timber into roughly made furniture. This being the case, the trade has bees stimulated by economic liberalisation.

[199]In 1978 EcoSystems LTD carried out an aerial survey of Ugalla Game Reserve and the findings report very few saw-pits in the area. This contrasts with the enormous number (623) that was reported on the basis of a later survey (TWCM, 1991). The density of saw-pits in Ugalla Game Reserve (0.13 pits/sq.km.) is reported as roughly half that found in adjacent forest reserves (0.24 pits/sq.km.) (PAWM, 1994b: 75).

order to carry the timber. In some cases operations involve the use of several vehicles and a tractor whilst others are on a smaller scale. As one drives on the roads in the region it is rare not to pass timber lorries laden with wood and men coming from the forest areas. Local Arab, Asians, and Africans, some of whom are women, are involved in the timber business. Certainly, for local Asians and Arabs, the timber trade is part of a range of commercial activities - shop keeping, the haulage and construction industries, marketing of crops and beeswax - one which was given a short-term boost in 1994 due to the demand for timber to construct refugee camps in northern Tabora Region for people fleeing conflict in Rwanda.

In the case of Ugalla Game Reserve, an aerial survey conducted in October 1991 indicated that there were 623 saw-pits within the game reserve, giving a density of 0.13 saw-pits/sq. km (TWCM, cited in PAWM, 1994b: 74). It is argued that given that approximately 50% of saw-pits noted in an aerial survey are taken to be 'active' it can be calculated that a minimum of 1200 muninga trees were being cut within the reserve annually in the late 1980's. From this it is estimated that prior to 1990 the revenue from timber in Ugalla was approximately T.Shs.35 million (conversion to US dollars not given). In 1993/94 two timber camps were operating, one north of the river and one to the west (arguably this was on or just outside the reserve boundary), and the number of camps expanded enormously in 1995 and early 1996.

CONCLUSIONS

In this chapter we have built up a profile of resource use in Ugalla Game Reserve and the surrounding region, accompanied by details on legislation, management controls and markets. Through description, a picture is drawn of the many different interest groups connected to Ugalla, both those that are present in the locality and those that are absent but nonetheless influential. It has been argued that the way each interest group situates itself in Ugalla, working within the means it has available and against the constraints confronting it, contributes to the 'style of operation' members of the group manage to assume when working or engaged in leisure pursuits in the reserve. What is emerging are impressions of the organisational processes which play an integral role in each form of resource use. In effect, the presence of different interest groups, their styles of operation, and the organisational processes which are bound to these features, give rise to the particularities of the dynamics of resource exploitation in the reserve.

This resource exploitation is oriented, primarily, towards different produce markets. This will in fact be explored in depth in Chapter 9, but it can be argued that these markets play a crucial role in shaping forms of organisation present in the area. Moreover they contribute toward imbuing different forms of resource utilisation with distinct characteristics, as the nature, scale and market connections vary enormously with different products. To reiterate, beekeepers produce honey as a cash crop with the express intention of selling it on international 'fair trade' markets by means of the TBCS. A significant percentage does, however, enter the regional economy, especially due to its use in the production of 'honey beer'. Wax is produced solely for overseas markets, 'Dar es Salaam Beeswax' being a known international commodity for industrial use. A percentage of wax also appears to be used as a means of smuggling other goods, such as minerals, or heroin from the Far East. In terms of wax exports, it is significant that since 1986 when the wax trade was deregulated, it has become one of a range of products exported by 'Asian' traders in order to support the importation of capital goods. This has given local beekeepers an added, high value, market for their produce which contrasts distinctly with the 'fair trade' market where their honey is sold.

Smoked fish from the reserve is not so versatile as bee-produce, being destined solely for consumption in Tanzania, mostly regionally, although quantities may be transported to Dar es Salaam. Similarly, meat hunted illegally in the reserve is destined for consumption regionally, being sold covertly in local villages or towns. Cattle-grazing in the reserve is so limited it does not warrant being rated as a significant productive activity for the area, even so those cattle that are grazed for brief periods of time in the north-eastern corner of the reserve are, apparently, on their way to cattle-markets in Mbeya Region. In the 1970s and 1980s, Ugalla Game Reserve was a prime hunting area for ivory poachers. According to local accounts, local hunters sold their ivory to Burundian entrepreneurs and the ivory was then used to finance the Burundian regime, but it is impossible to ascertain whether this was in fact the case. Since the international ban on the ivory trade in the late 1980s, ivory poaching has declined and trophy hunting (of skins, teeth, horn) does not appear to exist as a specific purpose for going to the reserve. Trophies are taken legitimately by tourist sports hunters, and illegitimately by Tanzanian sports hunters, but it would appear that they are prestige items not cured with the express intention of being sold. The last product we should mention coming from the reserve is that of timber, primarily *Pterocarpus angolensis* (*Muninga*), which is sold as cut timber in Tabora or, as the scant evidence would suggest, transported to

places like Mwanza. There it may be put to local use or constructed into rough furniture - in order to flout export restrictions - and sold across the East African region.

Features such as those we have been describing - interest groups, styles of operating, organisational processes, markets - contribute to the considerable social complexity manifest in the reserve. If we view this social complexity as a way in which diversity is organised, it can be strongly argued that this complexity cannot be fully appreciated through macro-level explanations or through standardised formulations of people - wildlife interactions. The above descriptions give some impression of the scale and character of different forms of resource use, however they provide us with relatively little understanding of the nature of these activities in terms of the social distribution of meaning, of how individuals and groups gain access to resources, of linkages made with institutions like the market and the state, of relationships to technology, of how communication flows, of the skills and knowledge which are built up around the exploitation of different resources, the externalisation of practices, etc. In the remaining chapters some of these issues will be turned to in order to promote a better understanding of the nature of local resource use.

Two issues can be stressed, for they form the topics of Chapters 6 and 7; the very diversity which exists in the area, the range of natural resources and presence of interest groups, raises the likelihood of conflicts arising over entry to the reserve and access to natural resources. Indeed in Chapter 4 we traced some of the interactions which have occurred historically between state representatives and local people in relation to wildlife conservation and local resource use. This raises two questions, first, how is the protected area and its resources managed by the state and, second, how are claims made to the Management or members of other interest groups regarding legitimacy of access and exploitation of resources.

6

Government Officials, Institutions and the Local Implementation of Conservation Policy

Introduction

Information on interest groups and their styles of operating in Ugalla Game Reserve leads us to consider how the area is managed. This chapter examines how state-led policy for the management of the reserve is put into effect by a local bureaucrat, Mr Fundikira, the Project Manager, and his staff, and focuses on the implementation of a policy devised by technical consultants and government officials attached to the Wildlife Department's planning unit, Planning and Assessment for Wildlife Monitoring (PAWM, 1994b). PAWM was funded as a short-term project by USAID (1991-1995/6) under the auspices of the African Wildlife Foundation (AWF) and implemented through the World-Wide Fund for Nature (WWF), during which time a management plan was written for Ugalla Game Reserve. The process of formulating and bringing this plan into effect coincided with my own period of field research, being the main emphasis for management actions between 1992 and 1994. Of interest here are the management practices and techniques of law enforcement used by the Management during this period and, further, how the actions of the Project Manager and other local officials were viewed and responded to by people subject to his authority, such as those men who keep bees and who fish in Ugalla.

To begin this discussion, I would like to refer to a personal anecdote. When carrying out field research in 1993, I owned a white Toyota four-wheel drive pickup which I used to travel around in inside the reserve. One seldom hears the sound of a vehicle, and when the noise of a lorry or pickup does come into hearing it attracts the attention of men working there and they listen to it intently, speculating on who it belongs to and what they are doing in the reserve. This is pertinent to the anecdote because, on the occasions I drove through the area, I would come out of a patch of woodland or cross a plain, only to glimpse people, who had evidently been standing listening, start to run or cycle into the nearest piece of bush in a panicked fashion. It transpired, according to the accounts of local companions I travelled with, that people

assumed I was the Project Manager; my vehicle was identical to his and, not incorrectly, they associated anyone in a four-wheel drive with the government - bureaucrats, aid workers, researchers. The response people made of running away from my pickup occurred throughout my fieldwork, alerting me to the fact that a car is not simply a research tool, as Gudeman and Rivera (1990) hold, for a vehicle embodies values, associations and representations, not all of them favourable to the researcher in question (c.f. White, 1993a, on associations people make between cars and officials in Central Africa). People's reaction to my pickup also provoked me to reflect on why, if they mistook me for the Project Manager, they responded as they did, which is the question I wish to start this chapter with.

Consideration of how a local bureaucrat acts and carries into practice policies formulated for wildlife management within and around a protected area is highly pertinent to conservation-related planning which tries to incorporate the participation of local people in decision-making and management. It appears all too readily forgotten that African bureaucrats act as the linchpin of wildlife management, certainly in Tanzania. New conservation ideologies and approaches, such as 'community-based conservation', not only have to draw representatives of local communities into the conservation process, but inevitably carry with them the need for staff to be trained or re-trained in appropriate ideas, methodologies, techniques, technology and data management systems. However, bureaucrats attached to the Tanzanian Wildlife Department working in the regions have to carry out their work in cash-strapped offices, against enormous personal financial constraints, and for whom there are few opportunities for on-the-job training, except under the auspices of a donor-led aid project. Certainly skills necessary for community initiatives were little catered for at Mweka, the training college for Wildlife Department personnel, in the early 1990s (Fieldwork Diary, College of African Wildlife Management, October 1992).

Without due consideration as to how government officials involved in managing protected areas operate on a daily basis - whatever this 'management' might mean - formulations such as those included in the Wildlife Sector's Policy on Wildlife Conservation and Utilisation can seem ill-conceived and rhetorical: "wildlife staff involved in community-based conservation will re-orient their role from that of policeman to facilitator, serving and providing technical advice to village wildlife committees, training village scouts, helping villagers to monitor wildlife populations and to set and distribute quotas..." (WSRT, 1995b: 24 (Clause 3.2.4)). This

raises the need to examine the style of operation of those bureaucrats charged with managing protected areas in which encounters necessarily take place with local people.

We should be clear from the outset why so much attention in this chapter is devoted to the Project Manager of Ugalla Game Reserve, Mr Fundikira, specifically, and not, for example, to other employees of the Wildlife Department. As shall be elaborated in due course, the Project Manager is a representative of central government who lives and works in Tabora town. Due to the way the administration of wildlife is structured, he is in a position whereby those to whom he is directly answerable are based in the Wildlife Department in Dar es Salaam, several hundred miles away. Since he first took over the position, in 1990, he has built up for himself a sphere of operation which is very 'personalistic' in style, and in which he is 'the boss' to whom the 21 staff beneath him defer.

The term 'personalistic' is used here to convey a particular mode of operating within the Tanzanian civil service. In this context, the discretion of the bureaucrat is exercised in the interpretation of the protocol of office in order to achieve ends which may be favourable to the private interests of the individual concerned (c.f. Olivier de Sardan, 1997). The reasons this can be done are due to restricted central co-ordination, lack of resources, and difficulties in travel and communication. In this respect the office the civil servant occupies, and the style of management he or she uses, is embodied in a person who represents the state in speech, writing, law enforcement practices, etc., in a manner which does not follow a blueprint of how a bureaucrat should operate when in public office. Moreover, in the case in question, for people working in Ugalla Game Reserve, the institution of the state is personified in the performance of the Project Manager in overseeing the reserve.

Arce's (1989: 24) discussion on the role bureaucrats play in implementing policy is pertinent here. He argues that the individual actions of officials become of key significance when there are few counter-weights to their position, in the form of, for example, local political leaders able to voice the discontent of people over whom the official has jurisdiction, and also where groups from civil society cannot or do not intercede on behalf of the people. In the case of Ugalla Game Reserve, many local people who work in the reserve do not have recourse to officials who hold formally-defined channels of communication with the office of the Project Manager. The one means through which communication is open is through the beekeeping and fishing co-

operatives, as we shall see in Chapters 7 and 9; other than this they have few formal or public opportunities to air their grievances.

According to planning theory, development change is brought into effect through a multi-stage, linear process: a problem is identified, policy is formulated, and subsequently the policy is implemented. An increasing number of studies reveal the 'reality' of the development process to be far more complex than such an approach to planning allows (Apthorpe, 1970; Long & van der Ploeg, 1989; Mongbo, 1995; Arce, 1993; Ferguson, 1990; Escobar, 1995; Hardiman & Midgeley, 1982). Taking the case in hand, that of conservation planning for Ugalla Game Reserve, we are confronted by a situation where laws and policy have grown up over time, becoming multiple and over-lapping, and where wildlife protection occurs alongside the legal, semi-legitimate, and illegal exploitation of natural resources.[200] This context raises the question of how a figure such as the Project Manager of Ugalla Game Reserve, a representative of the Wildlife Department, tries to encompass the dictates of planners and policy-makers, on the one hand, and the 'reality' he is confronted with on the other.

Here I want to argue that a number of features come together to form a 'window of opportunity' for the Project Manager, allowing him to act in the area with a considerable degree of 'discretion'. These features include structural factors related to the bureaucratic organisation of the state, the under-resourcing of the management of the reserve, the difficulties of communication and transportation between the Project Manager in Tabora Town and his superiors in the Wildlife Department, the distance and inaccessibility of Ugalla Game Reserve itself from Tabora Town, and the opportunities for resource exploitation that have impinged on the region during recent years.

By 'discretion' we can follow Arce, Villareal and de Vries (1994) who examine the actions of bureaucrats engaged in policy implementation in Latin America. The authors emphasise the danger of conceiving state activity as a sphere isolated from society, and raise the issue of the need to investigate changing forms of power and authority in policy implementation. In their discussion they point to patterns of 'discretion' that emerge from the interaction of different individual and collective intentions on the part of those engaged in policy implementation (ibid.:

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[200] For details on issues relating to the post-Independence administration, management and monitoring of Ugalla Game Reserve, vide Game Department Report (1968), Nicholson (1969), Rodgers & Nicholson (1973), Nanai

152). This leads the authors to argue that the implementation of policy is something other than a rational exercise in resource allocation with a view to reaching objectives of growth or redistribution. Instead institutional procedures and the social practices of bureaucrats, their backgrounds and lives, are more significant than is generally given room for in the established theoretical models of policy formulation and implementation.

The following sections will provide a general picture of the institutional, political, background of local administrators. This will be followed by a look at how the administration of game reserves is organised within the Tanzanian Wildlife Department. The discussion then proceeds to examine the local implementation of Wildlife Department policy concerning game reserves as 'National Projects'. After which two sections are given on the Project Manager's style of administration and the techniques he uses to manage local people in Ugalla Game Reserve, and the stories which emerge as a result of his actions. To complete the chapter, the analysis concentrates on how people 'reposition' themselves through 'techniques of invisibility' vis-à-vis the local officials.

The Institutional Political Background to Local Administration

A breakdown in state regulation of natural resources, coupled with an expansion in trade in marine, forest, mineral and wildlife resources through the 1980's and 1990's, has been referred to by several authors, and is taken as the starting point of their discussions (Chachage 1988, 1993; 1995; Gibbon, 1993; 1995a/b; 1996; Kiondo, 1995; Maliyamkono & Bagachwa, 1990; see also, Raikes & Gibbon, 1996). This body of work suggests that the Tanzanian state no longer has the capacity to manage, collect revenue from, or monitor the natural resources under its jurisdiction. From this perspective, the market replaces the state, becoming the new mechanism by which natural resource exploitation is governed, added to this is the suggestion that the dynamic of natural resource exploitation is firmly bound to corruption within the political economy, itself associated with a lack of counter-balancing accountability within the state or civil society. Each of the aforementioned authors, in effect, traces the nuances of the connections between environmental (over-) exploitation and the market.

(1974), Hemingway (1975), Massawe (1981), Rodgers (1982), Malima (1989), Ecosystems Ltd. (1978, 1980), TWCM (1991), Lamprey (1992, 1993), PAWM (1994b).

In Tanzania the extent of trade in natural resources is impossible to quantify because official statistics are extremely poor and a large proportion of total trade passes through a multiplicity of informal channels (Maliyamkono & Bagachwa, 1990: 118; Chachage, 1993: 234). In the broadest picture, the economic trends to which these authors refer, are in keeping with the manner that structural adjustment programmes have attempted to gear the national economy towards export-oriented production and expansion in non-traditional products. To this end, in the 1980s and early 1990s, export-incentive schemes were progressively introduced, coupled with monetary devaluation and the deregulation and relaxation of wage control policies (Mbatia, 1992/3: 56-60; Bol, 1992/3). It is possible therefore to support what the literature in general suggests, that there are strong incentives for a massive uncontrolled exploitation of natural resources. (One of the issues is, however, whether or not this is a necessary consequence of neo-liberal policies.).

Two articles by Gibbon (1996; 1997) on economic liberalisation and the environment in Tanzania, are, first, an overview of the Tanzanian situation, and second, a study of the marine-based prawn industry. In the first article, he proposes that trade in non-traditional natural resources has expanded enormously relative to other sectors of the economy and, in addition, that it is based on growth that began in the mid-1970's. Gibbon points to the appearance in post-structural adjustment guises of previous forms of rent-seeking behaviour, linking it to an apparent breakdown in state revenue collection together with the related question of illegal imports (Gibbon, 1996: 23-25; c.f. Booth, 1994; Boesen et al., 1986; Havnevik, 1993). In his second article he argues that economic liberalisation may affect the environment in a number of ways, but among the most significant is that it appears to have promoted shifts in production and trade away from the domestic market toward production for export-oriented trade, such as in the prawn industry.[201] This is held by the author to have highly detrimental implications for biodiversity and the environment.

Chachage (1993) takes up this theme in his consideration of how livelihood strategies established in the 1970s became extended in the 1980s and 1990s. He argues that structural

[201] 'Non-traditional' products based on the exploitation of natural resources are associated primarily with regional and overseas markets. The letter-heading of one Dar es Salaam-based export trader captures a flavour of attempts to encompass new markets in minor products: "agricultural products, spices, vegetables and fruits, exotic birds, reptiles, insects and pet animals, bees, beeswax, honey, and beehives, salt and marine products" (Bhatia et al. 1992: 81).

adjustment programmes have encouraged a boom in speculation associated with natural resources. According to him, the second economy which grew up in the 1960s and 1970s in response to state limitations and people's need to survive has been restructured around deregulated branches of the economy, especially in relation to the import-export trade and to services. Through non-traditional exports, overseas holdings of foreign exchange can be replenished and used to import fresh consumer and capital goods.

This leads Chachage to argue that economic deregulation and trade has resulted in a process that formally sanctions and benefits state representatives through corruption, fraud, and embezzlement. In the author's terms, the 'traditional private bourgeoisie' together with party, government and parastatal officials are the primary beneficiaries of these practices. In another study, Chachage (1995; c.f. Chachage, 1988) explores the relationship between the informal and formal economy in research on the mining sector. Here he questions the way that accumulation is taking place in the informal economy and asks who benefits and what consequences it will bring for the fate of natural resources in Tanzania. His findings concluded: "the bulk of illegal transactions and mineral smuggling is probably...[carried out]...by companies and dealers or people in positions of authority...[within the state]...rather than small-scale miners themselves (Ibid., 104). This quotations suggests that state representatives benefit at the expense of both the poor and the environment.

By referring to the massive accumulation held to be taking place without forms of counter-balancing accountability for civil servants, Gibbon and Chachage distinguish their argument from a popular position voiced by Doriye, namely that the private interest use of public office has become a 'survival strategy' for Tanzanian state employees in the light of dramatically declining salaries (Doriye, 1992: 91). While poor civil service wages (combined with massive in-flows of development aid) may be part of the picture, both authors emphasise that there is an important relationship between formal sector resources and informal sector employment; formal employment - especially that of middle-class civil servants - gives access to resources and contacts which may be crucial to informal employment. This is an important point, as Chachage argues: "successful 'entrepreneurship' in the second economy, as opposed to mere survival, tends to depend on the manipulation of both official connections and private opportunities. It definitely does not depend on the strength of some moral choice between state and non-state alternatives" (Chachage, 1995: 42). An important implication of this view is that

if the state's regulatory capacity breaks down, as appears to be the case in Tanzania, a range of other actors - including state representatives acting in private capacities - will arise to translate conservation policies and to transpose local natural resources into commercial terms. Thus policy implementation becomes a discrete field where the individual interests of the civil servant take considerable priority.

A picture of the situation described above, takes material form if one enters the offices of the Tabora Regional and District Wildlife Sector or the Ugalla Game Reserve Management, it appears patently obvious that managerial tasks are under-funded and low in the personal priorities of state representatives. These offices are unkempt and, to the outside observer, employees - game scouts, members of the anti-poaching unit, managerial staff - seem to congregate for much of their daily working life under a tree in the yard or remain apparently dozing at a desk. Stories abound about how easy it is to acquire a license to hunt, of the timber business carried out by the Project Manager of the reserve, of the need to make payments over and above the official fee to acquire a permit to enter and stay in Ugalla Game Reserve, etc. These stories of locally-known civil servants making money on the back of their positions in the natural resources sector are propagated by people from different backgrounds - villagers, people of Asian and Arab descent, the white expatriate community, middle-class African civil servants, etc., - who have come into contact with wildlife officials. We can view such stories as public discourses stigmatising corruption (Olivier de Sardan, 1997), whether or not what they describe is taking place.

In Departments at the end of a chain receiving foreign donor support, managerial activities appear stepped up, as in the case of the office of the Project Manager of Ugalla Game Reserve between 1992 and 1994 (USAID support) or the Regional Forestry Officer (World Bank support) after 1994 (World Bank, 1992). But even so, information and statistical data on the areas under their jurisdiction is often non-existent or highly inaccurate, and if one goes out to the protected areas that are apparently under the control of these state representatives, the likelihood of encountering a game officer is negligible. On the other hand, artisanal saw pits, laden timber lorries, village hunters, and beekeepers are a familiar sight, while urban sports-hunters appear for weekend safaris throughout the dry-season.

In the Tanzanian national media, apparent mismanagement, corruption and nepotism in the Wildlife Sector are periodically brought to public attention, but only rarely does this lead to legal proceedings or sanctions against the culprits. More specialist publications suggest that these cases are only rare examples of everyday practices in the sphere of wildlife management (e.g. the live bird trade, see Bhatia et al., 1992; Rosser & Milliken, 1995). For example, a case that was brought to the attention of Parliament in 1993, which became dubbed 'Loliondogate' in the Tanzania Daily News and Business Times, features the allocation of Loliondo Game Controlled Area adjacent to the Serengeti National Park to a Brigadier of the United Arab Emirates as a ten-year private hunting concession, an action which is held to have led to the extermination of all large game in the area. Another example is that of Ndolanga, ex-Director of the Wildlife Department, who in September 1995 was given a three month jail term for malpractice and nepotism in the allocation of hunting blocks to different companies (the Business Times of Tanzania, 8.9.95/22.9.95). The allocation of safe-haven wildlife areas as hunting blocks to hunting outfitters owned by relatives of members of the Wildlife Division has also been the subject of a Parliamentary Committee.

But the question we have to ask ourselves, as observers, is how to interpret this situation; what is beyond a facade which can so easily give rise to simplistic interpretations? Are these phenomena simply a result of the 'roll back' of the state in a neo-liberal era, leaving natural resources exposed to exploitation by one and all in accordance with poverty and market forces? Or are they the outcome of practices which have evolved in local government officials because the machinery of administration they work within is convoluted and difficult, if not impossible, to co-ordinate? In answering these questions, it will help us to look at just how a local official implements centralised policies related to wildlife management and the administration of a protected area. against all the constraints confronting him together with a loss of legitimacy to administer and control.

The Administration of Game Reserves in Tanzania

It is important to give further attention to the administrative jurisdiction of game reserves, because it is a good basis for understanding the management of Ugalla Game Reserve and the activities of the Project Manager, as portrayed later in this chapter. In order to elaborate on this administrative framework, it will be most pertinent to use the example of the Ugalla Game Reserve, itself.

In 1972 the Government of Tanzania implemented a regional decentralisation programme which included change in administrative control over the management of forest and wildlife resources. Control over Ugalla, like other game reserves, was transferred from the strongly centralised administration of the colonial-style Game Department to regional administration; the southern portion of the reserve went to the Regional Development Directorate of the newly formed Rukwa Region, while the northern portion, in Tabora Region, was placed under the control of the Tabora Regional Development Directorate. Within these two regional administrations, the management of fishing and beekeeping activities was divided between the fisheries and beekeeping sections of three district authorities - Mpanda (Rukwa Region), Urambo (Tabora Region), and Tabora (Tabora Region) corresponding to the respective administrative boundaries which meet the boundaries of the reserve.

Administrative fragmentation and complexity was, and is, further accentuated by the fact that most of Ugalla Game Reserve is continuous with the Ugalla River Forest Reserve, the North Ugalla Forest Reserve, the Mpanda Line Forest Reserve, and the Wala River Forest Reserve. In principle both the Regional Forestry Officer and the representative of the Wildlife Department with responsibility over Ugalla Game Reserve have jurisdiction over timber resources within the reserve, which has given rise to periodic conflicts between the incumbents of the two offices. Such legal complexity is not uncommon in Tanzania.

In the 1980's the Wildlife Department argued that decentralised control of game reserves had been detrimental for wildlife management, leading to high levels of poaching and lack of management on the ground so that, in the late 1980s, it was decided to take game reserves and the hunting industry back under the centralised administration of the Wildlife Division. All 23 Tanzanian game reserves became 'National Projects' under the control of a 'Project Manager', with 3 exceptions: Ibanda and Biharamulo Game Reserves in the north west of the country, and Uwanda Game Reserve in Rukwa Region. Biharamulo is managed in conjunction with Birigi Game Reserve which is a National Project, while Uwanda Game Reserve is presently submerged under Lake Rukwa. A 'National Project' is simply an administrative designation referring to how the management of these areas are organised within the Wildlife Sector. An important reason why change in the administration of these areas is significant is because it enabled the Wildlife Department in Dar es Salaam and Arusha to gain direct control over tourist sports-hunting within game reserves, a significant income earner for the Department.

Today, the structure of administrative jurisdiction over particular protected areas is complex, and the case of Ugalla Game Reserve and surrounding areas is no exception. At the national level, responsibility for the management of national parks and the Ngorongoro Conservation Area is centralised within the relevant parastatals. The management of the sports-hunting industry, the Tanzania Wildlife Protection Fund,[202] Pasiansi (a training college for game scouts), and game reserves known as 'National Projects' are centralised within the Wildlife Department. In contrast, jurisdiction over other game reserves, game controlled areas and wildlife in open areas is under the control of the Regional and District Game Officers, under the authority of the Regional Natural Resources Officer. These officers are answerable to both the Director of Wildlife in the Ministry of Tourism Natural Resources and Environment (MTNRE), and the Regional Development Director or District Executive Director as representatives of the Ministry of Regional Administration and Local Government (MRALG).

The fact that game officers are positioned in two different chains of command, within both the MTNRE and the MRALG, exposes them to having to act upon different directives, which may well be in conflict, and may raise issues concerning who takes ultimate responsibility for the consequences of actions. Divisions in administrative jurisdiction over natural resources contained in adjoining areas of land can also act to limit the effectiveness of individual civil servants, for wildlife in particular is a fugitive resource, and unauthorised people are equally capable of moving across administrative boundaries.

In 1990 Ugalla Game Reserve itself was designated as a 'National Project' under a 'Project Manager' answerable to the Director of Wildlife in Dar es Salaam. This was put into effect in 1991 following 'Operation Uhai' ('Operation Life'), a massive army-police force crackdown on poaching activities throughout Tanzania (1989/90). The surrounding game controlled areas are under the jurisdiction of the Regional Natural Resources Officers (RNROs) and Regional Game Officers (RGOs) for Mpanda and Tabora Regions. The RGOs are answerable to the RNROs who also have jurisdiction over representatives from the fisheries, forestry and beekeeping and poaching sectors. There are, as well, the relevant District Game Officers for Mpanda, Urambo and Tabora Districts who are answerable to the Regional Game Officers, and who implement district-level policy in and around game controlled areas.

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[202] The Tanzanian Wildlife Protection Fund (TWPF) is a sector level retention fund within the Wildlife Department funded through income generated primarily by tourist sports-hunting.

Administrative positional ambiguity and tension exists between different representatives of the Wildlife Department in Tabora town. (Government in Tanzania is divided between central government and local government, sub-divided into regional, district, division, ward, and village level administrative divisions.). The Project Manager of Ugalla Game Reserve is answerable to the Director of Wildlife, acting as a direct representative of central Government, although he and his staff are based in Tabora town. This gives the Project Manager a seemingly higher positional status than his regional counterpart, the Regional Game Officer who works in an office across the road and has jurisdiction over wildlife outside the boundary of Ugalla Game Reserve.

The Tabora Regional Natural Resources Officer was drawn from the Wildlife Department during the period of this fieldwork (although potentially he may come from another sector), he is the immediate superior to the Tabora Regional Game Officer, with both being based in Tabora town. The Regional Natural Resources Officer is answerable to both the Tabora Regional Development Director and the Director of Wildlife. A potential for tension arises through problems inherent in the poor co-ordination and lack of integration of the administrative system. During the period of fieldwork, tensions between the above administrative positions were expressed in terms of personal animosities on the part of the incumbent post-holders.

An important dimension of the fact that Ugalla Game Reserve is managed by a bureaucrat outside local government is that access to this office-holder by beekeepers and fishermen who use the reserve is limited and largely indirect, through the co-operative organisations. Even where wildlife management is integrated into local government through the regional and district level authorities, these authorities are located above office-holders in administrative positions to whom local resource users would have ready access, namely the village or ward administrations.

To summarise, the administration of game reserves in Tanzania has been briefly elucidated using the example of Ugalla Game Reserve, locating it within a national institutional structure. It has been made clear that this structure is complex, unwieldy and fragmented, leading amongst other features, to uncoordinated natural resource planning and policy initiatives. Two features of the sectoral division and administrative hierarchies described above should be emphasised: the first is that control over the wildlife estate is fragmented between different state

authorities, a situation reflected in the nature of national policy and planning, and in contradictions between administrative offices at the national, regional and local levels. The second is that the administrative hierarchies which govern the management of wildlife are located above the levels of the village and the ward administrations. This is particularly the case in terms of wildlife management and local resource use in a National Project game reserve, where the Project Manager is a direct representative of central government acting at regional level. One implication this holds is that the Project Manager is relatively inaccessible to even legitimised resource users in Ugalla Game Reserve such as beekeepers and fishermen.

These features have implications for local level conservation initiatives; for if one considers that the livelihoods of rural people are dependent upon a wide range of natural resources found in different locations the possibility, indeed probability, is raised that they have to contend with multiple and often conflicting government directives and planning without immediate recourse to relevant state representatives in a location and at an administrative level with whom they can readily interact. Questions concerning what the fragmentation of administrative jurisdiction over natural resources means for the implementation of policy, such as the Policy for Wildlife Conservation and Utilisation (WSRTF, 1995), inevitably arise.

The Management of Ugalla Game Reserve

As stated above, the status of Ugalla Game Reserve was changed in 1990, when its administration was transferred from regional to central government, at which time it became characterised as a National Project. A 'Project Manager' was installed to administer the reserve, directly answerable to the Director of Wildlife in Dar es Salaam, with, beneath the Project Manager a unit of 20 personnel.[203] New project offices were built by the Wildlife Division in Tabora town, and are located alongside those of the Tabora Range Anti-poaching Unit, near the Regional Natural Resources offices and behind the Regional Development Directorate and old Boma.[204] Beside the project offices, in 1993/4 a house was being

[203] An Assistant Project Manager, 2 Assistant Game Officers, 1 Accounts Assistant, 1 Driver, 1 Secretary, 7 Game Scouts, and 7 Field Auxiliaries.

[204] The old Boma is a fort built on top of a hill by the German administration, it now acts as the military barracks. Boma (lit. fort) is used to refer to Government offices in Tanzania, hence the Regional Development Directorate is the new boma.

constructed for the Project Manager, funded by the Wildlife Department (by the TWPF, more specifically).

To enter the office of the Project Manager one waits in an anteroom where a secretary sits beside an office typewriter. Once inside, one is confronted by a long imposing table and the Project Manager ensconced behind a desk, facing people who enter from the far end of the room. Around the walls are maps of the reserve, in a corner sits a computer, and on the desk is a telephone. The point of this description is that this office and its location in Tabora are elements critical to style of management effected for the administration of Ugalla Game Reserve. The context - the positioning of the furniture, modern technology, maps, location of the office - all enter into the sense of authority the Project Manager tries to convey. And from this office, in regular contact with a community of local bureaucrats, the Project Manager administers the reserve and tries to influence what takes place in the area.

Turning to Ugalla Game Reserve itself, there are 4 game posts: Isimbira, Ligalla, Senga 1 and Siri. These were built under Costa Mlay, Regional Game Officer in the 1970's. They are not systematically used and, although refurbished in 1990/1, windows, doors and parts of the roof were stolen between 1993 and 1994. Another game post was in the process of construction in the village (on the far side of the village from the reserve boundary) of Lumbe (Km 60) on the Mpanda Line railway in 1994. Thus, although the infrastructure exists for personnel to live in the reserve this does not happen. The main presence of Wildlife Division staff in the area are in fact the two game scouts who are stationed at each of the sports-hunting camps (Mhuba and Nsenga) for the hunting season, from the middle of May until the end of October. Game scouts also accompany the fishmonger lorries that enter the reserve approximately every 2 weeks throughout the dry-season from the beginning of June. The Project Manager himself, or other senior staff, do not stay in the reserve and rarely visit, nor are systematic patrols made on the part of junior staff.

Situating offices and field-staff of natural resources sectors of Government in towns some distance from the location of the area or resource under management is common practice in Tanzania, and in keeping with Wildlife Department policy and the personal preferences of civil servants (Rodgers, 1980: 3).[205] In terms of the administration of Ugalla Game Reserve,

[205] The office in Tabora town is defined as the 'duty station' for Ugalla Game Reserve. This means that visits by the management, including game scouts, incur a costly 'night out' allowance, a normal practice in the Tanzanian

rationales given in formal documents for siting the office in Tabora include access to administrative and personnel facilities, and the flooding of the reserve during the rains. In addition, chronic under-funding makes it too difficult for staff to stay in the reserve for any length of time (unless supported by the hunting company).

In relation to the issue of under-funding, the management of Ugalla Game Reserve receive in the region of US$5-10,000 per annum from central government.[206] Put in context, this is only some 5 - 7% of the revenue (game fees plus TWPF fees) generated annually by tourist hunting in Ugalla Game Reserve alone (PAWM, 1994b: 104). The Management Plan includes provision for a 50% retention scheme from hunting revenues but as the plan has not so far been formally endorsed. These features amount to enormous institutional constraints within which the Project Manager has to operate.

The formal appearance of an administration for wildlife management in Tanzania provides an impression that a given wildlife officer in control of the protected area under his jurisdiction. However, despite this, discretion can still be as one of the main characteristics of office (as an institution). For example, through features such as the licensing system, a wildlife office can exert controls in order to make himself an indispensable actor in legitimising the local use of resources. In this respect, the paraphernalia that surrounds the Project Manager - computers, maps, a desk, four-wheel drive vehicles, etc., - are objects through which he becomes positioned and is able to relate to local people in what is in effect a strong power position. This may enable him to enforce his own personal presence in the reserve and in other local contexts pertinent to management rather than implement the Ugalla Game Reserve Management Plan, or other policies and law enforcement. This leads us to realise fully that it is in the form of the

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civil service. Given that civil service wages are extremely low, such allowances are an important means for officials to gain a better income.

[206] The Wildlife Division generates funds for the Government through hunting licenses and game fees. A significant proportion of these funds goes to the Treasury. The Wildlife Division receives funds from the treasury in the Annual Budget (1st July - 30th of June). This is in the form of two 'votes': (i) the development vote which dictates the upper spending for development projects - game reserve development, anti-poaching, and less systemmatically infrastructure and vehicles (ii) the recurrent vote which dictates the upper spending limit for 39 different budget lines including salaries, transport, maintenance, etc. In the budget years 1992/3and 1993/4 budget allocation for Ugalla Game Reserve was TShs.3,000,000.00 and TShs.8000,000.00 respectfully from the development vote and TShs.1,700,000.000 and TShs.1,620,000.00 from the recurrent vote. The management also received from the Tanzanian Wildlife Protection Fund TShs.4,800,000 in 1992/3 for boundary demarcation and TShs.12,000,000 in 1993/4 for the construction of 3 units and a game post and the Project Manager's house (PAWM, 1994b).

idiosyncratic style of management that the Project Manager chooses to adopt that the presence of government within the game reserve is felt.

The Project Manager

The style of management of the Project Manager of Ugalla Game Reserve is of an extremely personal, so-called 'hands-on', kind. Being based in Tabora, he operates away from his superiors in Dar es Salaam, and employees working under him have to have authorisation for even minor decisions and actions. He is also the one individual who represents the 'office' of the Wildlife Department to men and women keeping bees and fishing in Ugalla Game Reserve. For these reasons, the Project Manager is the focus for the ethnographic description which follows.

The person occupying the office of Project Manager, Ahmed Fundikira, is a Nyamwezi from the Uyumbu area of Tabora Region.[207] A middle-aged man with a local wife and seven children, he is a Moslem and a CCM supporter. Fundikira's father and uncle were beekeepers with camps in Ugalla, and both were instrumental in initiating the Tabora Beekeepers Co-operative Society in the 1950's. Indeed Fundikira was taught how to keep bees as a young man, but continued in secondary school and later went on to Mweka, the Tanzanian College of African Wildlife Management where senior Wildlife Division staff are trained; according to Fundikira's uncle, the income from beekeeping helped to pay for his education at the college. After attending Mweka, Fundikira held various government positions within the Wildlife Department in different parts of the country before being relocated to Tabora town.

As Project Manager of Ugalla Game Reserve, Fundikira's local upbringing endows him with an ability to mobilise social resources which he uses to good effect in both his role as a civil servant and as a private entrepreneur. This ability is derived from his position as a middle-ranking civil servant, a person who owns property in Tabora town (apparently inherited from his father), has a detailed knowledge of the local environs, and is connected to a wide range of people. These people include middle class civil servants, members of the Asian and Arab communities, and a large number of relatives, some of whom hold regional-level civil service positions, while others are farmers residing elsewhere in the region. As mentioned above, he

[207] This is the one of the areas people were resettled from the Ugalla River, and where the TBCS originates from (see Chapter 9).

has first hand experience of beekeeping and also some knowledge of fishing, unusual for a civil servant and skills not shared by other natural resources officials in Tabora. This knowledge is deployed in his decision-making as Project Manager for Ugalla Game Reserve, as will be discussed below.

During the period of this fieldwork (1992-4), Fundikira's power base related not exclusively to the formal structure of government, but, to recapitulate, related to his association with a planning unit attached to the Wildlife Department in Dar es Salaam, Planning and Assessment for Wildlife Management (PAWM), and his relationship to its representatives. Activities in relation to the formulation of the management plan in fact, at the local level, became woven into those activities prompted by Ugalla being a National Project. Added to this we have to take into account the presence of a foreign-run (American) hunting outfitter, Tanzania Game Tracker Safaris Ltd. (TGTS), which, as described in Chapter Five, held the concession over 3 hunting blocks in and north of the reserve. Obviously the hunting company were anxious that management activities were effectual - poaching of trophy animals seriously affects their business - and to this end they contributed a small financial sum to assistance in boundary cutting, as well as providing the Project Manager with a four-wheel drive vehicle.

Part of PAWM's remit was to write management plans for selected game reserves in Tanzania, one of which was Ugalla Game Reserve (between 1992-1994).[208] Through PAWM's planning involvement in Ugalla Game Reserve, coupled with the change in status of the reserve to a National Project, resources were channelled through the Project Manager's office which would not otherwise be available. Actual financing by PAWM was extremely limited, but the process of writing a management plan for Ugalla included generous per diems (night-out allowances), a computer, assistance with development for the game reserve (e.g. boundary marking), and the planning process lent the office and its staff an air of importance. This international aid, although insignificant in wider financial terms, became incorporated into the way Fundikira used his position in office to further various personal ends.

[208] After an initial assessment of five game reserves (Mkomazi, Maswa, Rungwa-Kizigo, Ugalla, and Uwanda) by the PAWM project the Director of Wildlife decided that the unit should write a plan for Ugalla Game Reserve (PAWM, 1992a). This plan is intended to cover the management of Ugalla from 1994-1999 (PAWM, 1994b: 119).

Since returning to Tabora, the Project Manager has reputedly developed a number of 'sideline' enterprises which relied on his official position. From the realm of local rumour and suspicion accounts emerge (from people who fish, keep bees and hunt in the reserve, middle-class professionals, white expatriates, and members of the Asian community) of Fundikira's possession of a beach seine fishing net and the employment of men to fish in the reserve, receipt of payments in return for the authorisation of sports-hunting permits and fishing permits, and, most persistently, of a business exploiting timber within Ugalla Game Reserve latterly extended to Moyowosi-Kigosi Reserve. According to this local gossip, when the Project Manager took over the office in 1990/1 involvement in the timber business was haphazard and related to the confiscation of timber cut by others, but later became systematic.

From our point of view, the presence of these rumours and their propagation by a cross-section of the local community is what is of interest, whether or not they are true; for the activities which the Project Manager and other regional-level officials may or may not have been engaged in have been widely condemned and, in the case of people who worked in Ugalla, used as recriminations against management claims that they themselves were 'poachers', or broke the law in other ways. This moral condemnation of corruption was common in the discourses of many different people in the area. What was more unusual, however, is the fact that Fundikira's involvement in the timber business led to sanctions against him. In 1995, the Wildlife Division made an attempt to reshuffle him to another position on the coast apparently under pressure from the hunting company who worked in the reserve, the Regional Development Director, and the World Bank who initiated a regional forestry project in Tabora Region in the early 1990s. At that time Fundikira, in fact, held on to his position, but by 1996 his timber enterprise had expanded, as rumour had it, and in June of 1996, under pressure from the above agencies, he was sacked from his official position as Project Manager. The fact that he was not prosecuted is hardly surprising in the Tanzanian context, but the manner in which pressure was brought to bear on the situation by representatives of the private sector, foreign donors and the state is interesting, and on a man who increasingly became characterised - by the self-same local rumour-mongers - as having become too greedy.

Given the base in Tabora town away from Ugalla Game Reserve, under-funding, and the lack of an effective presence of game scouts in the reserve, the question must be raised as to how the Project Manager can act effectively in the area, especially given the fact that his physical

presence in the game reserve - or that of other senior members of the management - is a rare event. The beekeepers I stayed with in 1993, for example, did not have any direct contact with a member of the management in the reserve for the duration of the beekeeping season.[209]

An important element in the formulation of the new management plan was the process of data collection, as summarised in Box 1 (PAWM, 1994b: 117-118). This gives us an insight into how representatives of different interest groups were, or were not, enrolled in the planning process, and into the techniques of mapping and the technological paraphernalia they made use of. This process of collecting information is emphasised because it was central to the context in which the Project Manager - and other state representatives as well as expatriate advisors - had contact with local interest groups after Ugalla Game Reserve became a National Project (and, coincidentally, during the period of my own fieldwork). As the process of formulating the plan took place - involving a workshop, planning meetings, research, aerial reconnaissance, discussion with various local power-holders - the Project Manager was able to make himself indispensable as a central 'gate-keeper' in relation to the activities of a technical advisor and civil servants assigned to the task.[210]

Plates 9 and 10 are of a planning meeting (described in Box 1 No. 5), and plates 11 and 12 are of members of a PAWM team carrying out research in Ugalla Game Reserve (described in Box 1 No.7), both give an impression of the scale of the process, the planning environment and the personnel involved. Plates 13 and 14, in contrast, give examples of the uncontrolled 'human resource exploitation' the planners are trying to counter.

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209 It might be assumed that this was because of my presence in the locality, and perhaps this was a factor, however as far as I could ascertain this was the general picture throughout the reserve during both 1993 and 1994.

210 For example, the Ugalla Game Reserve management workshop held in November 1992, drew together many distant actors, particularly those associated with the government and state - MPs and senior-level civil servants. Most under-represented were those interest groups who gain their livelihoods from resource use in Ugalla Game Reserve - legally or illegally. Some absences were of particular note, because they appear to have been based on the Project Manager deliberately being economical with the information he gave to the outside experts. This feature was again replicated in the smaller planning meeting. No representatives of the refugees, or beekeepers and fishermen from Rukwa Region were present. All local representatives were also those people at the top of local-level administrative structures - the primary co-operatives and village government - even though there is a process of fragmentation and individualism taking place in relation to formal co-operation in the reserve, particularly in terms of the fishing co-operatives (although it is unfair to expect the planners to have been aware of this).

Box 1: Formulation of a management plan for Ugalla Game Reserve (1992-1994): research and consultation

1. June -September 1992: border alignment - a strip of cleared vegetation marks the border of the reserve. An aerial assessment was carried out using a Global Positioning System (GPS) in order to determine the border's accuracy.[211] A large portion of the northern boundary was found to be incorrect, which subsequently led to the management being trained in the use of a GPS and sections of the boundary being re-cut. Signs to demarcate the boundary were place around the area at 6 km intervals: stating *Pori la Ugalla Marafuku Kuingia* (no entry without permission).
2. October - November 1992/April - December 1993: mapping - a map of the reserve was commissioned from the cartographer of the Forestry Division giving details of accurate borders, fishing camps, water-holes and flood-plains. During 1993 a series of maps were made locating Ugalla GR in the context of the surrounding regions, districts, forest reserves, game controlled areas, transport routes and local relief.
3. 8-12 October 1992: assessment of fishing activities - this consisted of a survey flight to locate each fishing camp with a global positioning system (GPS) and a second flight to determine the number and distribution of canoes in the reserve.
4. 22-28 October, 2-4, 12-14 November: organisation of the Ugalla Game Reserve planning workshop - which was held in Tabora on the 25-27 of November. The aim of the workshop was to involve all (apparently) relevant parties in the planning process of the Ugalla GR management plan. This workshop was hosted by PAWM in conjunction with AWF and attended by 60 people. They included: Hon. A.Y. Mgumia the Minister of Tourism, Natural Resources and Environment, four Members of Parliament, the Regional Commissioners of Tabora and Rukwa Regions, the Director of Wildlife and other representatives of the Wildlife Division, regional level planning and natural resources officials, representatives of TGTS the hunting outfitter, representatives of the Tabora Beekeepers Co-operative, Chairmen of the Sikonge, Usoke and Tabora Fishing Co-operatives, Village Chairmen from villages abutting the reserve, representatives of TANAPA (Tanzania National Parks), British ODA, TWCP (Tanzania Wildlife Conservation Monitoring Project), WWF. The Project Manager of Ugalla GR was highly influential in deciding who should be present from the regional and local levels, notably in relation to which representatives of local villages, beekeepers and fishermen should be invited. For example, representatives of the refugee fishermen were 'inadvertently' excluded from attendance at the meeting (field notes from the meeting).
5. March 1993: Planning meeting - this was held to decide the finer details of recommendations as regards utilisation activities in Ugalla GR with key people (PAWM, 1993). The key people were deemed to be: representatives of PAWM, the Project Manager, the Regional Game, Beekeeping and Fisheries Officers, a senior instructor from Tabora Beekeeping Institute, the Chairman of Usoke Fishing Co-operative, the Chairman of Kwihara Branch of the TBCS (Lioba Chalamila whose beekeeping camp is the focus of the study in Chapter Five), and the Village Chairmen of KM90 and KM60 on the Mpanda railway line. A second planning meeting was held a year later involving roughly the same people. The Project Manager was central in determining who was invited to the meeting.
6. June, 9-11 July: assessment of the implementation of fishing and beekeeping control mechanisms which were recommended as a result of the planning meeting in March. This found that "representatives of the co-operatives present at the planning meetings had some difficulty in communicating the recommendations to their members" (PAWM, 1994b: 118).
7. September, 9 October - 6 November 1993: field research on the impact of fishing and beekeeping on Ugalla GR. Vegetation transects were carried out in the vicinity of Ligalla, Senga-1, Unjele, and Kasontwa B camps to analyse the impact of fishing and beekeeping on the vegetation, to record the type and density of tree species, and estimate the density of beehives around each camp.
8. January 1994 onwards : implementation of the draft Ugalla GR Management Plan.

[211] Details concerning the border are contained in the Wildlife Department's archives on Ugalla Game Reserve.

Plate 9: A planning meeting for Ugalla Game Reserve held in Tabora Town (1993)

Plate 10: The Project Manager demonstrates an issue against a map of the reserve

Plate 11: Field research carried out by a team from the Planning and Assessment for Wildlife Management Unit of the Wildlife Department in Dar Es Salaam (1993)

Plate 12: The research team measure the cut stump of a borassus palm while undertaking vegetation monitoring

Plate 13: Trees are cut and debarked illegally for a wide range of purposes. This palm (Borassus aethiopum) was used to make a canoe

Plate 14: A forest fire started deliberately by one of the many users of the reserve

The outcome of this formulation process was surrounded by bureaucratic in-fighting within and between the group of expatriate advisors and Tanzanian civil servants in the Wildlife Department. One result was that the Director of Wildlife did not endorse the financial aspects of the plan - a 50% retention scheme - (certainly this had not taken place by the mid-1990s). However, because the Project Manager started to implement features of the draft management plan from April/May 1993, as proposed by members of PAWM, it can be suggested that the fact that it was not formally endorsed, and no money was forthcoming, placed him in a greater position to implement it at his own discretion.

One may presume that the fact the plan was not endorsed (and therefore finances were not forthcoming) meant his superiors were less interested in what was taking place, with reference to the management of the area, than might have been expected, and by implication would have meant he was less accountable to senior civil servants in the Wildlife Department in Dar es Salaam. By senior civil servants not calling him to account for his actions, in ways they otherwise might have if the plan had been endorsed, the existence of the management plan increased the personal capability of the Project Manager to impose his presence in the area, by enforcing those sections which he chose to.

The techniques and information used and generated by the planners - boundary demarcation, cartography, aerial reconnaissance, local consultation meetings, vegetation and fisheries assessment, a computer database for the beekeeping and fishing permits, etc., - generated at least two related elements the Project Manager was able to incorporate into his 'personalistic' style of management. The first was that through the process of demarcating the reserve boundary and of taking management actions such as closing camps and creating a new permit system (following Operation Uhai, Operation Life the anti-poaching drive in 1989/90), the presence of the state in the area was reasserted for those local people using the reserve. The second was that the planning process provided the Project Manager with new knowledge and an up-to-date conservation language in which, as we shall see below, such terms as 'sustainable development', 'communities' and 'participation' often appear.

These elements amounted to a situation in which, through the vehicle of the management plan and associated law and policy, he had a means by which intervention and law enforcement became a reality felt by local people through the way he asserted control over their activities.

This enforcement was combined with the practice of making local people feel that the Project Manager's discretion was the central element they had to engage with in order to have access to resources. In this way, he used a technocratic knowledge sometimes to harass and threaten and sometimes to allow individuals to carry out their interests and activities. In effect this amounted, not to a better management of natural resources, but to an attempt to reduce the autonomy of people with interests in the area, and to decrease the extent of the reserve converted by people into viable social environments in order to make their livelihoods.

The points of communication between state representatives and local people that arose through turning the reserve into a National Project and in the process of formulating the management plan and implementing the new regulations were, in a very immediate and pragmatic sense, a substantial element of what represented 'the management', 'the state', and 'wildlife conservation' to these local people, as well as being what constituted the 'personalistic' style of management enacted by a local official, during the period of my own data collection. Although in the end this generated counter-tendencies that were expressed through local stories that traversed the organisation of the reserve. Thus the performance of the Project Manager repositioned the local people and brought the awareness that they had been located within a changing policy context.

Establishing a Personal Style of Management

The Project Manager arrived at his post in 1990/1 following 'Operation Uhai', the national campaign against ivory poaching. At the time, personnel of the Wildlife Department were drafted into Ugalla Game Reserve in a clamp-down on uncontrolled local resource exploitation. In order to distinguish between who was and who was not a 'poacher' the Regional Game Officer, then responsible for the reserve, devised a new permit system to enable authorised beekeepers and fishermen to work without harassment (Malima, 1989). This permit system remained in place when the reserve became a National Project. In effect, the Project Manager entered his post on the back of forceful restrictions on local resource use.

In the dry season of 1991, after the Project Manager first took over, approximately 130 arrests were made of people apparently carrying out hunting, lumbering, and unlicensed fishing and beekeeping activities. An estimated 10 of these people were imprisoned, 40 fined, 16 acquitted and 64 are still 'awaiting trial'. By 1992, the numbers of people arrested had dropped to 50,

this time all 'awaiting trial' without the cases being pursued. In 1993, the numbers of arrests had dropped still further to only 15 people, again all 'awaiting trial' (PAWM, 1994b: 102). Finally by 1994, 3 arrests were made of village hunters who were apprehended by the hunting company. 'Awaiting trial' is a limbo for the individuals concerned, it may mean that no action will be taken, or perhaps they have paid the authorities off, or that they will come to trial eventually. This is one of the techniques of control through which local people have to accept the authority of the Project Manager.

In interview, Mr Fundikira, the Project Manager, characterised this as a period when he "took control of the poachers". In contrast, men keeping bees and fishing in the reserve widely viewed this as a time when the Management imposed its authority on them through the use of physical harassment, and this was bitterly resented. The arrest figures themselves can be read in two ways, either the reader can surmise that they reflect an effective clamp-down by the Management, deterring people from carrying out further illegal actions, or they can be read as reflecting decreasing levels of law enforcement. My own observations would suggest that after an initial intensive phase of law enforcement, the Management's strong and heavy-handed actions decreased. If this was the case, the forceful tactics used initially, when the Project Manager took up his office and when funds were available, were a demonstration, through the number of arrests (the statistics syndrome) to show to superiors in Dar Es Salaam a good standard of management performance. Also, this demonstrated to people working in the reserve that the new Management was in office, an authority to be reckoned with. During this period, precedents were set and managerial routines established, thereafter it was no longer necessary for the above tactics to be used.

By 1994 (the time my own fieldwork ended) a repertoire of techniques were in place which the Project Manager found appropriate to use in the area. Many of these techniques can be identified in the Ugalla Game Reserve Management Plan (PAWM, 1994b). For beekeeping and fishing the package of control's listed in the plan include, an ID card, annual licensing, patrol/checking, and revenue recording; however, it would appear that only some elements of this package were implemented. In this respect one can argue that this local official separated the expert system of knowledge (consisting of information, techniques and timing of each phase) into different components, manipulating certain components in order to establish his presence as a state official in the reserve while disregarding others, as in Box 2. The way the

expert system was taken apart emerged partly because of the Project Manager's awareness of local conditions (from the difficulties of preventing people from debarking trees or of making people apply for a permit on time, to the lack of availability of office paper and the secretary's inability to use a computer). Also, one can recognise practices long-established in the Game/Wildlife Department coming to the fore (such as controls over vegetation burning, policing activities against poachers, restrictions on people's movement, the use of licenses, the burning camps where necessary, etc.) as against more modern techniques such as the use of a computer or participatory methods.[212] In addition, implementation of this form of management was also to do with the personal benefits the Project Manager could obtain from implementing, or failing to implement, a regulation in a certain way.

Box 2: Techniques the Management Used to Control Beekeepers and Fishermen in 1993 and 1994 included:

1. Control of beekeepers and fishermen through a permit system. In order to apply for a permit both beekeepers and fishermen had to be members of co-operatives whose leadership were accepted by the Project Manager, and each member had to supply him with a photograph annually and submit it together with an application form. Although no fee was charged. These permits stated which camp the person could stay at. When in the reserve the permit could be checked in a given season or it might not be. If Wildlife Department staff paid a visit this was the first thing they looked at, if someone did not have one it was likely he would have to walk out of the reserve, or else pay a fee to have an invalid one endorsed.
2. Requiring beekeepers and fishermen to stay at the camp stated on their permit. One technique the Project Manager used, particularly with fishermen, was to split groups of people up, allocating them different camps in order, he argued, to stop them 'organising'.
3. Preventing beekeepers and fishermen from walking between camps in the reserve. It was argued that if people walked they would disturb the animals, or get hit by a hunter's bullet, and that the only reason they moved around was in order to poach and this was unnecessary.
4. Using the hunting company and game scout stationed with the hunters to observe and apprehend poachers and, to put it bluntly, condoning the physical harassment of these men if caught.
5. Where possible, using individuals working as beekeepers or fishermen as informants, in the Project Manager's words, as 'spies'.
6. Closing camps by burning them down.
7. Using game scouts stationed with the hunting company to obtain information, and keeping informed about what was happening in the area through the use of daily radio calls to the office of the Anti-poaching Unit in Tabora (next to the Project Manager's office).
8. Ensuring that each fishmonger who enters the reserve is accompanied by a game scout, who not only checks upon the fishmonger's actions, but checks the permits and licences of men fishing and keeping bees in all riverside camps where fish is bought.

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The techniques of this style of management - making people apply for permits, listing names on a database, requiring a photograph, enumerating beehives, canoes, fishing nets and assistants, etc., - held the potential to make beekeepers and fishermen who use the reserve highly visible as objects for control. But despite this, the potential for control was not fully exercised, instead people were confronted with an administrative facade, in which rules and regulations may or may not have been enforced. Despite the facade, this process is not fully standardised and allows an official such as the Project Manager to exercise his own discretion and presence. And when encounters between the Management and local people do in fact take place, they are used as a display of the differential power relation between the authorities and different resource users. In this respect the processes people must enter into to obtain a permit or permission to carry out some action, became more critical from the Management's point of view than any actual attempt to promote the conservation objectives the rules and regulations are designed to achieve.

To take another aspect of this situation, the language in which the Project Manager justified his actions was imbued with concepts, intentions and objectives of the recent expert-led planning initiative. For example, in the Project Manager's discourse, camp closures were linked to the sense that administration was efficient when controlling resource users and, according to his view, the need to dictate control and restraint to them, these people being, for him, potential 'hooligans' in need of discipline. As a manager he liked to portray himself as having 'spies' at camps beside the river through which he could obtain his information, and techniques at his fingertips whereby he could enforce the closure of camps in order to enable him to control resource exploitation. What is interesting in the quotations presented below is his utilisation of a language where policy criteria, techniques of control and ecological rationales came together to provide us with a glimpse of his personal style of management.

The context of the conversations presented was that, between 1991 and 1994, the Management of the Game Reserve closed twelve fishing-beekeeping camps along the Ugalla River. In January 1993 the Project Manager explained to me:

> "We intend to rotate the camps which are open every few years. In 1991 Ugalla East camps were closed, in 1992 Ugalla West camps were closed. The management aims are...you see sustainability is judged not only according to ecological criterion but also Management criterion. Whether the Management is able to control resource use will

> dictate the levels of resource use which will be allowed. Also this minimises risks and conflicts between people".[213]

In a later conversation the issue of dictating control was further emphasised:

> "We encourage people to join the fishing co-operatives this helps in the security of the area. We must take care of hooligans and it is easier for the co-operatives to control. We must be able to control so that poaching does not occur. You see I have my spies in each camp. We don't encourage people wandering in the reserve they may be hit by a stray bullet [from a tourist hunter]. These people organise for poaching".

To this end he drew on the idea of placing beekeepers in allocated zones:

> "[For beekeepers] zonation is important. After the beekeepers have been zoned, after 1994, they could have more than one camp as long as it is within zoned limits. Zonation will be important. If beekeepers are zoned they can be controlled so that poaching will not occur".

In these conversations it clearly transpired that camp closures were linked by the Project Manager to the need to restrict people's movements in the reserve. In conversation, the importance of control was linked to 'poachers' (*majangiri*) and people 'organising', the beekeepers being a key target for his accusations. He would support the need to restrict movement with the argument that there was a danger someone would be hit by a tourist hunter's bullet, as if there were stray bullets flying across the reserve. Spies, like bullets, are a pervasive means of controlling people in stories generated in the Project Manager's office.

In our conversations the Project Manager would clearly re-state the language of policy documents and planning meetings on Ugalla Game Reserve making his own associations between the techniques of control at his disposal and the environmental policy objectives (PAWM, 1992, 1993, 1994; Fundikira, 1992). However, his main task was to acquire experience to manage the reserve, and in this respect the central issue for the management became control over people and localities where they work.

Another dimension of the nature of Fundikira's actions in Ugalla was discretionary power to implement ideas of control in a context where he was surrounded by people who were in a

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[213] According to the Ugalla GR Management Plan: "The number of fishing camps within the reserve has been reduced from 26 in 1989 to 16 camps, with 14 camps along the Ugalla River, and two camps on the Wala River (PAWM, 1994b: 80). The reserve Management have introduced a minimum distance of 9 Km between camps". Furthermore: "The number of fishing camps along the Ugalla River will be [further] reduced from the current 14 to 10...The reserve Management may at its discretion close any camp for an unspecified period to allow vegetation to recover" (Ibid.:81). "No new beekeeping camps will be allowed in Ugalla Game Reserve. The reserve Management may at its discretion close any camp for an unspecified period to allow the vegetation to recover" (Ibid.: 80).

personal relationship to him, like some beekeepers and fishermen, particularly those from the Uyumbu area. These people have close connections to him through family ties, to whom he showed some consideration. On the other hand, he appears to exhibit a prejudice against beekeepers stating that they are all 'poachers' and 'hooligans'. The beekeepers I stayed with characterised him as having become 'the boss', someone they were jealous of in that he has become successful, a jealousy tinged with fear because of his power to harass them.

In the Manager's discourse the suggestion that beekeepers are 'poachers', coming together and 'organising', identifies walking in the reserve as a dubious activity which must be controlled to uphold conservation policy objectives. In doing this he introduced the notion of illegality, and by implication the need to dictate control, into a context where people are carrying out livelihood activities co-operating together, 'organising' themselves in order to get by in the tough conditions of the forest. Whether or not this includes bushmeat hunting (poaching), the effort is concentrated in the production of honey, beeswax, and the catching of fish to which ends walking is an essential aspect of their daily existence.

To depict some of local people's reactions to this style of management, two illustrative quotes can be recalled:

> Haji Hamisi: "Fundikira...when we go to Ugalla we are told to walk in the forest [not on the road] then when we meet the tourists [hunters] they tell us to walk on the road, and then we are told not to walk".

> Peter Steven: "If you go between camps...us people we encounter problems. People don't move because they want to walk, they have an intention like food or medicine. Us camp leaders have had a meeting and written a document but we don't know if it will be implemented. Then they harass you, three years ago the game people they put people in a group and harassed, they said sit down, stand up, sit down, stand up, sit down, stand up. It annoyed us, they don't see...[give respect to]...age at all".

In these examples it is clear that people feel disoriented over how the protected area is being managed and that this is clearly against their own interest. From Haji Hamisi's point of view, the Project Manager is only one of the authorities telling him how to behave in the forest; the other is people associated with tourist hunting. In Peter Steven's account, walking is represented as an essential part of the working lives of people in the forest, and any intention to control walking collides directly with the necessary everyday activity of people in the forest. By identifying walking as an activity antagonistic to conservation aims, the Management is clearly pointing to the fact that management of the protected area would be more efficient without

people wandering around and organising their livelihoods in the forest. In practical terms, the activity of dictating control to local people is what, in the end is seen as essential to bring ecological sustainability into reality. This managerial view of reality clashes with the everyday life of people who work in beekeeping and fishing camps.

Against the perspective of the Project Manager, we can counterpoise an example of people's daily existence in the forest. In the camp where I stayed, practically everyone smoked or took snuff. The morning regularly started with people lying in bed by the warmth of the fire rolling cigarettes, teasing each other about the quality of their health. Getting hold of tobacco and the paper to roll it in was a constant preoccupation, although it rarely reached the limits described in the story which the young men humorously told me one morning. A relative of their father, who also stayed at the camp, a certain Mzee Ali - by then in his seventies, extremely poor, almost blind, and rather senile - 3 years previously, they recounted, walked 25 miles to a fishing camp in order to borrow some tobacco. The performance of this heroic journey involving his stumbling, blind walk and relief at finding tobacco at the other camp, far farther than any of them would normally walk, was re-enacted with enthusiasm and hilarity by all the young men for my amusement. The story of Mzee Ali drew to my attention the significance for local people of walking within the reserve in a purposeful manner, for something that is important to the quality of their life, while carrying out a tough job that is limited by their physical selves and their capacity to acquire critical things such as tobacco, food and transport. Their purposes of walking were far removed from the descriptions I was given by various officials, of local people and their capacity to come together wily nily as a shadow group of conspirators whose only aim was to poach all the animals from the region.

One feature highlighted in these examples of Management control and local counter-control, is the extent to which beekeepers and fishermen are themselves domesticated into Management practices; whether they obeyed the regulations or not, they knew of them and took them into consideration. Techniques of control, such as having a valid permit for a camp, were disliked, but generally considered necessary and therefore accepted by people who legitimately interacted within the framework of management (beekeepers, fishermen, game scouts, Project Manager, anti-poaching personnel, etc.). Such acceptance enabled the Management to establish basic, albeit rather inaccurate, data on persons using the reserve for beekeeping and fishing. By the same token it is necessary to point out the inability of the local official to use

this information in a manner capable of influencing the existing practices of licensed resource users or even probably those of 'poachers'. But just the unquestioned availability of a technique to dictate control shows us in a nutshell the gap which exists between recent policy formulation and objectives to protect species, and policy implementation within Ugalla Game Reserve.

People's Stories of the Lives and Actions of Local Officials

One of the ways in which people's ideas about the management manifested themselves was through a number of stories told about the actions of the Project Manager and other local officials. One cannot approach these anecdotes from the perspective of whether they are true or false, although they are stated as 'fact', but they do disclose something of the interests, concerns and anxieties of people working in the reserve (c.f. White, 1993a/b). The stories express people's relationships to the management and give explanations by which actions are justified. Thus, they also constitute counter-narratives against the administrative process. One must remember that these accounts were recounted to myself, a white researcher asking questions, who was variously represented as an aid-worker, official or student, and therefore I became part of the way they were positioning themselves vis-à-vis the Management.

When carrying out ethnographic research in Ugalla, people told me many anecdotes about Management actions since Ugalla became a National Project. One story I heard on several occasions from beekeepers and fishermen, both local and refugee, working throughout the reserve, was that the Project Manager and his management team would enter a camp and line people up; if a person's permit was invalid he would make him eat raw fish, in the case of a fisherman, or cover him in honey, in the case of a beekeeper. This invariably led to a much recounted scenario of the Project Manager beating up his uncle, a man in his eighties and a renowned and highly respected local beekeeper; 'he even beat his own uncle, what can you expect from him'.

Very typically men would put forward a case to me against the Management by drawing on their historical experiences. For example one man whose fish catches were particularly low, equated this not with a poor season but with state control, stated that, "soon after Independence one person from the *Game* put his signature to an agreement [about turning Ugalla into a game reserve]... if we had been consulted we would have refused". He proceeded to state that:

> "After this area was taken for game we began to be further restricted...mind you, at first we assisted them because we were still the leaders here...we chased people away. If a strange car came in the night then we would tell the children 'go and light a cigarette...[for light]...and go over there, when the car stops go down low and write the number'. In the morning if the game people came we would show them the paper, but we didn't get anything. We were told not to burn...[the grass]...then one day I captured the Game Officer burning (he laughed). Nowadays game restrictions have increased, first they said 'don't bring chickens because you will say you have killed a chicken when you have killed a duck or guinea fowl or kwale'. Of the children they said 'they should be left in the village to go to school'. Everything that was done. Women they said they could not come, we don't understand this. "after *Operation Vijijini* [Villagisation, 1974] we were given small bits of paper...a permit to cut firewood, trees, rope...even to enter here [the reserve]...permits, permits, permits" (Mzee Musa Athumani, July 1994).[214]

This anecdote was raised in the context of the informant, an old 'Galla' Nyamwezi fisherman (see Chapter 7), trying to put a case against over-fishing at his camp by people employed by, he claimed, by the Project Manager and Regional Fisheries Officer.

Referring to various local officials, people would also give detailed descriptions of the way in which the different bureaucrats had been apprehended organising timber operations, or hunting illegally. Often I would hear comments like "that...[naming an official]...he has his nets...[in my camp]...once it was all fish but now they are gone, what can one do...there is nothing", or "that *Mininga*...[*Pterocarpus angolensus* - a timber tree]...it is the wealth of Fundikira, he sends it to Mwanza...even two years ago he was at this very camp cutting with the refugees". These descriptions were often explicitly linked to a questioning of why local people should stick to the regulations when the officials who told them to do so were so clearly not obeying them themselves.

These accounts extended into a fascination with the lives of officials living in Tabora town. Men in the camps where I stayed would grill me over what I knew of the Project Manager and his colleagues, latching on to any gossip I myself told them and subsequently recounting it among themselves. For example, a lot of the work carried out by planners when writing the management plan for the reserve involved aerial reconaissance (see Box 1). Local people

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[214] The attempt to control fire-burning is interesting: fire appears to have been used to give ritual safety to men hunting and honey gathering in the forest (Blohm, 1931, 1933a/b). The use of fire to create a 'safe' environment marked out a highly contested field of action between colonial bureaucrats and local people within Ugalla Game Reserve as in other game reserves in Tanzania (cf. Moore & Vaughan, 1994, Chapter Two, for a discussion of local burning and the colonial construction of ecological and agricultural knowledge during this period in Northern Rhodesia). Contestations over the space through fire burning still erupt in Ugalla Game Reserve today (see the Ugalla Game Reserve Management Plan, 'Fire Management', PAWM, 1994b: 106).

working in the reserve widely believed that the Cessna belonging to the Wildlife Department held the Project Manager who could come down and stop them doing something illegal like burning the grass. Endless speculation went into the details of this plane and its capacity to land.

It should be repeated that the truth or falseness of these stories or rumours is not the issue here (indeed one would be naïve to take them at face value), but their existence at all. Through anecdotes such as those presented it becomes apparent that men keeping bees and fishing in the reserve are concerned not with the objectives of wildlife (biodiversity) protection, but with the people implementing these objectives. In this sense we gain an insight into how the process of policy implementation becomes personal, embodied by particular local characters. It also suggests that an individual such as the Project Manager, and others who represent the state to people are very close to their lives; far from absent, distant or external as some recent scholars have portrayed. The Management may not have been efficient, or have been acting toward the goal of preserving wildlife, but such stories give testimony to their continuous presence as significant beings in people's working lives. This is suggested by the content of stories, such as being covered in honey or made to eat raw fish - 'fictitious' perhaps -, in which punishment bears a direct relationship to the very productive activities which provide people with an income and are part of their identity.

As a reaction to the 'personalistic' style of management adopted by the Project Manager, through their stories local people create a modality specific to the way they organise their livelihoods in the natural environment of Ugalla, to their history in the area, and also to the position they feel they are placed in by local officials. In this respect, these stories are "passages" that link their livelihood, their history and their location in the natural environment. As de Certeau might say (1984: 115), stories traverse and organise places - such as Ugalla Game Reserve - and through selecting and linking localities together they help organise walks and make journeys before or during the time the feet perform them. The other element they display in their stories is their local knowledge; through an intimate acquaintance with the terrain, and of entering and moving around in the area as well as of how to cope with wild animals and other dangers, including local officials.

Local Techniques of Invisibility

In Chapter 4, the concept of invisibility / visibility was used to describe the way that historically people were selectively located as economic categories by planners - 'fisherman', 'hunter', etc. Here, a local concept of 'invisibility', used by people to express their position vis-à-vis the Project Manager, is highlighted in order to emphasise that in spite of the presence of the local official, they have not been transformed into passive agents. The concept of invisibility draws on hunting traditions within secret societies.[215] In this respect people link invisibility to specialised and exclusive knowledge used in the forest, which includes detailed observations of how the Project Manager and other officials act, and extends to encompass the way they link their skills to claims over the right to be in the area. In effect this is a process of 'positioning' to locate themselves in relation to the area and to state representatives.

We can illustrate how people use the idea of invisibility through the example of a group of beekeepers with whom I stayed in Ugalla in 1993 (see Chapters 10 and 11). In November 1991, after they had left the reserve, the Project Manager and his assistants poured petrol on their camp and set it on fire. After this the camp was 'closed' to comply with conservation planning, it being argued that animals need to drink from the river undisturbed by people, helping to protect species and to better integrate tourist sports-hunting with local resource use (PAWM, 1992). When the men returned the following season and discovered their camp had been burned they moved down-river to the next camp in order that they could return to harvest their beehives on a daily basis.

In 1993, when I was staying with these men, they regularly talked about the camp which had been burnt, being extremely upset at what had happened. They claimed that all their cooking and beekeeping utensils had been burnt in the fire. Also, each day they had to walk 6 kilometres up river to work and then return with heavy (28kg) honey buckets on their heads which significantly added to their workload. After they arrived in 1993 they built a strong new

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[215] Blohm (1931: 97-107) gives a description of hunting and hunting societies from research carried out in the first quarter of the twentieth century. He describes how the use of specialist medicine is central to a hunters skill, without it a person would not attempt to hunt. A hunter is initiated by a teacher who introduces medicines into his body via tattoos on his heals, underarms, wrists, joints, temples, and forehead (similar to those borne by the older Nyamwezi fishermen along the Ugalla River) such that the hunters body enters a state known as 'lusu'. Blohm locates the importance of such medicines in terms of 'Lumidini' the wild hunter. Medicine is used to anaesthetise Lumidini and for the hunter to become invisible to him. Medicine can also lead to good hunting grounds and charms were also worn (see also Cory, n.d., Mss.EAF 105). This information is historical but the protective medicine and idea of invisibility used here strikes chords with this description.

shelter at the camp down-river, as one man said, "it is necessary to build a strong camp, we are not animals, its a hard life but we cannot sleep outside like those fishermen". This man alluded in a derogatory manner to a common stereotype of fishermen who will sleep next to their fish-drying wracks to prevent hyenas stealing their catch.[216] Sitting around the fire that night, Lioba Chalamila burst out "the camp of Kwalungu it was like home, it is my camp, here will only suffice for now". His wife's brother turned to me and elaborated, "Kwalungu was like Johannesburg [in South Africa]". The young men regularly referred to a good place in the forest as 'Johannesburg' or '*Ulaya ndogo*' (little Europe), indeed one of them had carved 'Johanes barg' in large letters on the trunk of a tree at Kwalungu. A week before this conversation, the Project Manager had been involved in a car crash as he travelled together with other natural resources officials. The beekeepers had heard of this and the camp leader's son proceeded to comment, "Perhaps his accident is God saying to him" [i.e. that he had not behaved properly toward them], they all fell about laughing and continued to joke about it in the days to follow.

Despite building the new shelter, throughout 1993, the leader of the group repeatedly voiced the hope that the Project Manager would eventually permit them to return to Kwalungu. To support his argument he claimed that it would be in the Project Manager's interests to let them go back because, he said, when a camp is empty the poachers move in. By making this claim, the head of the camp was clearly positioning himself, a licensed beekeeper, as acting in the interests of the Project Manager. The argument he made was one I regularly heard repeated by fishermen and beekeepers working along the river, locating themselves as guardians of the reserve through adeptly transforming the discourse the Project Manager used in order to advocate the need to control beekeepers and fishermen because "they are all poachers" (*majangiri*). It was also in the camp leader's interests to keep poachers away because men who come into the reserve to hunt will readily steal honey from a beehive.

In October 1993 the beekeepers returned to the reserve for the second honey harvest of the season. On visiting their hives, tracks of bicycle tires were noticed at Kwalungu Camp. Fresh ones kept appearing as, it was presumed, the people concerned cycled to the river from a camp in the woods to renew their supplies of water. "Perhaps they're hunting elephant" commented the camp leader as we found some fresh tracks. "Elephant?" I replied, surprised because I

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[216] Fishermen liken hyenas to witches because they are said to be able to steal every single fish even though the drying wrack is covered in large pieces of bark and there are people sleeping all around them.

didn't think ivory poaching was still taking place in the area. "Last week I saw a Chagga...[man from Kilimanjaro]...at the market...[Tabora]...with elephant tusks in a gunny sack in his Landrover. You can put poison in the fruits of *Mhama* (Borassus palm) and the elephant will die". In his comments, he exaggerated the possibilities of the situation through referring to the biggest animal possible, whose ivory was at the heart of official fears about poaching. In doing so he was building up a strong case in order to negotiate the possibility of re-opening his camp.

At the end of the day when they had finished harvesting, the camp leader made his sons accompany me back to Kwalungu and went to look for the hunters by himself. They had been staying in an empty beekeeping camp but the people had fled probably because a PAWM vehicle was in the reserve (vehicle sounds can be heard for many miles) scaring the people concerned who had left parts of a giraffe and some chewed honey comb. "Did you find them?" I asked when he got back to camp. "No"...eeh he exclaimed angrily..."every *fundi* (skilled person, specialist) has his skill. They have got honey, I think they have harvested one of my hives, if so I will find a way to catch them personally". I obviously looked puzzled at his explanation; "they can't be caught because we cannot see them, every *fundi* has his own protective medicine (*dawa, kinga*)[217], they put it on their feet and eyes" explained his sons, accustomed to elucidating apparently obvious things to me.

The next morning it was proposed to me that I should drive the beekeepers to a camp where some people from PAWM were staying on a field trip. Because they were from the Wildlife Department the beekeepers held them to be the correct people to inform. We encountered some of the officials, themselves out hunting to get meat to return to town with, and the beekeepers furiously informed them that there were poachers at Kwalungu who had killed a giraffe (a national animal which cannot be shot legally), were looking for ivory, and had harvested their beehives. They proceeded to argue that they should be allowed to have their camp back, so they could the poachers from operating and, they added, there were people in the reserve who were burning vegetation and they could stop this too. The senior official from the Wildlife Department listened to them but replied dismissively that they should "file a report". That night they discussed the day's events, feeling the morning's encounter with the officials to

[217]I have translated the word *dawa*, a general term for medicine, as protective medicine (in the sense of *kinga*, to screen against, ward off, block) used as part of specialist hunting knowledge.

have been inconclusive and again emphasising the need to return to their old camp. Their discussion was broken up by great hilarity as a beekeeper who had accompanied the hunting trip re-enacted the incapacity of a game scout to hold his gun steady or shoot straight. For a few days after these events, poaching was a topic of conversation, but it became peripheral, the hunters having fled and the beekeepers exhausted from honey harvesting.

In this illustration we can see that by portraying 'poachers' as invisible with specialist knowledge, the beekeepers choose not to pursue them directly, but instead incorporated their presence into a case to re-gain control over their beekeeping camp. In making their claims, both to myself and to representatives from PAWM, they located themselves on the side of the Project Manager. Arguments the Project Manager used against beekeepers to support the need for tighter controls, were transformed into a claim that only through their presence could poaching be prevented. Through the language and actions of officials, and the counter-narratives of beekeepers, we gain an insight into the way that, far from accepting the way regulations were enforced and the implications this held for them, they tried to locate themselves in a satisfactory position to carry out their work. This included living near their beehives and being on good terms with state representatives.

CONCLUSION

In this chapter we have explored certain issues which have to be taken into account when considering how protected areas are managed by the Wildlife Department in Tanzania. As an introduction to fieldwork data from Ugalla Game Reserve, aspects related to national economic liberalisation were highlighted, as were those pertinent to the institutional framework of administration in the natural resources sectors of government. As a general, and for those familiar with the context, self-evident, point, it is extremely difficult for government officials to operate at the local level in Tanzania, especially for those state representatives charged with managing large areas of land protected under the game laws, and set away from the urban areas where the officials themselves reside and work.

Situations of extreme under-resourcing, and the sheer logistics involved in managing protected areas, combined with the fact that, as a number of scholars make plain, many civil servants use their positions to further their own private interests, may lead one to conclude that the

Tanzanian state is extremely weak in regulating the exploitation of wildlife resources. This has even led some to suggest that the state has 'withdrawn' from the regulation of natural resource exploitation. However, even though the state may be extremely weak as an institution there are officials present who represent it at the local level, therefore the question still remains, how does administration take place and to what ends?

In the case of Ugalla Game Reserve, it has been suggested that the authority of the Project Manager is exercised through a very 'personalistic' style of operating. In this context, the presence of the state is manifest to local people through the way a particular bureaucrat acts - making personal contacts, linking together different groups of people, etc., - and this generates a semblance of governance.

It has been shown that the Wildlife Department is a complicated ensemble of colonial tradition, recent transformations within the Tanzanian state, and the influence of the international community. This ensemble forms a machinery which carries contradictions and at times lacks co-ordination, such that comprehensive policy and planning is made difficult, a situation exacerbated by the lack of resources. Nonetheless, there is in existence a planning framework, although how it is manifest 'on the ground' will depend on the contexts in which policy is implemented and how it is actually put into effect.

At the centre of this discussion has been the issue of how programmes using support from the international community, and planning approaches upheld by the Wildlife Department, are mediated by way of a local official's interpretation. In this case it is striking how the Project Manager used his discretion in order to exercise control in the reserve, for his presence was felt among members of the different interest groups. Of note was his ability to take apart an expert package introduced by planners, and to use components in order to implement a form of management in the reserve which was, in fact, a measure of control. In this respect, in spite of a clear-cut framework of management techniques, the Project Manager and his management team were able to implement policy and regulations using a specific administrative style. On one level the style was extremely authoritarian; so that we witness a familiar situation in East African wildlife departments where the scientific evaluation, rationales and monitoring basic to wildlife management in protected areas are combined with long-accepted, police-style,

techniques of law enforcement. Here the emphasis is on 'control' and certainly not 'participation', despite the use of a modern conservation idiom.

As we have argued, a system generated as part of an expert planning package is not internalised automatically; only certain elements are carried into practice, and used to create a particular style of operating by the management. We have characterised this manner in which an official balances his presence in the reserve and his interactions with representatives of different interest groups with part of a knowledge system and a language coming from a new management plan as a 'personalistic' style of management.

This leads us to suggest that although the Tanzanian state might be weak it is embodied within the actions of local bureaucrats, holding a meaning for people such as those making their living in Ugalla Game Reserve. In the case of Ugalla, the personalistic style of management adopted by the Project Manager generates many situations in which local people react in different ways to his presence. One feature that emerges is that they do this by first accepting they are part of the management framework. Even though they may break the regulations and generate counter-tendencies to this style of management, they acknowledge the presence of certain laws, regulations and procedures long-established in the management of the area - the process of obtaining permits or not openly cutting trees for example. Indeed beekeepers and fishermen will accept this management framework even though, strictly speaking, they should not legally be present in the reserve, and in this way they are still part of the process of management. Despite this, it should be clear that acceptance of the procedures of management does not mean people are transformed into passive agents - 'objects' of management - for people working in Ugalla Game Reserve generate counter-narratives to management. Such counter-narratives are recalled in the stories we have presented in this chapter such as claims over the capacity of skilled individuals to become 'invisible' and the way this is used to make claims over the right to certain resources in localities where people wish to be based.

In conclusion, contrary to the idea that conservation planning, laws and regulations are absent or completely ignored by local people, we would argue that both local people and local officials align themselves in particular ways in order to perpetuate a framework of governance over natural resources. This is far removed from any abstract planning design or conservation goal, but in tune with the history of the protected area, established Game / Wildlife Department

practices, the everyday life of local people, and different styles of operating present among the interest groups in Ugalla Game Reserve.

The personalistic style of management adopted by the Project Manager and the counter-narratives local people make through their actions and stories leads us into the issue of claim-making which will be explored in the next chapter. Here we have argued that certain groups of local people are located within the management framework, this raises the question of how they position themselves vis-à-vis the management and their capacity to work in the reserve. It is through this process of positioning and alignment that claims are made, for once the history of a locality is rewritten, people become positioned as desirable or undesirable, effecting their capacity to work in the area with one another and with the management.

7

Claims To The Right To Fish In The Ugalla River

Introduction

In exploring how conservation planning is implemented in Ugalla Game Reserve, interest groups have been identified who are located within the framework of management; namely, international tourist sports hunters, beekeepers and fishermen. As previously explained, beekeeping and fishing are accepted as institutionalised forms of production by the Wildlife Department but nonetheless they are only semi-legitimate, being in fact illegal, therefore located as part of the problems which confront management in the area. Given that the history of Ugalla has been recreated according to the intentions of conservationists and local people alike - as a natural wilderness or the cultural repository of tradition - this raises the question of how claims are made over people's capacity to work in the area, for once the history of the locality was rewritten people became positioned as good or as bad, situated within a broader framework of conservation issues and planning judgements. This state of affairs raises the question of how beekeepers and fishermen position themselves vis-à-vis the Management of Ugalla Game Reserve.

This discussion continues themes raised in the last chapter concerning how management planning was implemented between 1992 and 1994. However here we will focus on a single issue that emerged concerning one interest group; namely, fishermen and how, in 1993, they contested a ban on the use of beach seine fishing nets, as prohibited in the new Ugalla Game Reserve Management Plan (which was not endorsed at the time but whose regulations were nominally put into effect from the dry season of 1993). Prohibition of this type of drag-net was in keeping with a national ban being, at the time, taken through Parliament with the backing of the Fisheries Department of the Ministry of Natural Resources, Environment and Tourism. Because the ban was seen as a very real threat to the livelihoods of some fishermen, although not all, it emerged as a local issue given importance by the people concerned. This is relevant

to the analysis because it suggests that we are not simply following a case defined as priority by external planners.

In order to examine how the ban was contested, the idea of 'claim-making' will be used. In this case claims were dressed as complaints about a regulation which members of an interest group found untenable, and as such these claims were necessary factors in the construction of a local environmental and social issue. In order to see how a problem emerges as a local issue, we can distinguish three different elements involved in the claim-making process (Hannigan, 1995: 34). First, claims are put forward by claim-makers who seek legitimacy and institutional support from various sources. In the case of Ugalla, there are different groups of fishermen who make claims in relation to the actions of one another and of local officials. Each group of claim-makers tries to affiliate themselves to specific organisations or institutions which they may turn to for support, such as the fishing co-operatives, the United Nations High Commission for Refugees (UNHCR), Oxfam, and state departments. People also draw on support from social institutions such as kinship relations. Institutional sponsors are important for they have the capacity to ensure both legitimacy and continuity to a claim that is being made.

Second, an environmental claim must be assembled into a problem. In order to do this, fishermen need to define an issue in their own terms, situating a notion in relation to their backgrounds and experiences. In so doing they attempt to link their desire to work in Ugalla Game Reserve and use its resources, to their legitimacy as a claim-making group in order to gain access to these resources. In this context, the statement of the problem emerges from the diversity of fishermen's backgrounds, their differing claims to legitimacy, and the manner in which they construct their messages through the vehicle of the fishing co-operative societies.

Third, a claim has to be framed or dramatised in order to persuade an audience that the people concerned have a legitimate grievance. In the illustration used in this chapter, the process of framing arises through the way fishermen express their views concerning different methods of fishing: the gill net versus the beach seine net. In assembling a claim, different linguistic styles and kinds of knowledge are drawn into people's narratives; local knowledge, expert knowledge, the language of the market, law, science, tradition or modernity, for instance. Here we have to bear in mind the audience to whom a claim is put forward (remembering also that many examples given in this chapter were made to a foreign researcher - directly or at meetings where she was present). In these presentations, claim-makers will put forward information to

support the basic facts of the ensuing discourse, leading to justifications for action, and conclusions indicating the course of action that is needed.

These three elements - claim-makers, assembling a claim, and the dramatisation of a claim - will emerge in the following discussion about the prohibition on the use of a type of fishing net. Fishermen were chosen as an illustrative case because there is considerable diversity between the groups of people who work at the river, providing an insight into the complexity of situations confronting the Wildlife Department in managing the area and revealing many different local positions on a single issue. The case in hand reveals a different facet of the issue of planned intervention in environmental issues, moving from, in Chapter 6, consideration of how an official such as the Project Manager of Ugalla Game Reserve acts in different circumstances, to how members of a particular interest group act in relation to one another and to state representatives.

We should be aware that in linking the claim-making process to access to natural resources there is a danger of framing people's relationships to the environment of Ugalla Game Reserve in very instrumental terms. However, although the process of claim-making may centre around access to a specific resource - the right to fish with a certain type of net - it draws in other less tangible aspects of people's relationship to the locality. These aspects may equally be related to people's desire for autonomy and need to make a livelihood on their own terms, and express aspects of their identity and the meaning they give to their environment. Also people respond to present-day issues with reference to past experiences of state intervention, not simply on the basis of a rational consideration of present circumstances or of the issues outside experts give most credence to.

The concept of claim-making starts from the notion that human agency confers on people the knowledge and capability to comprehend their social experiences and to solve the multitude of difficulties which confront them on a daily basis (Giddens, 1984). It is a crucial practice, which needs to be taken into account when considering how people use resources within a protected area. It is in the way that meaning is attributed to conservation and to the reality which confronts people living and working in a protected area, that interaction is generated between the knowledge held (the capacity to understand a situation) and the power (the ability to relate this knowledge to others and to use it as a basis of negotiation) to carry something out. This interaction between knowledge and power accords validity to people's ideas concerning their

access to resources and the justice this entails. In the case of Ugalla, claim-making can be related to two areas, first, conflict over specific natural resources and, second, people's occupation of the space and the sense of belonging conferred by their presence in the reserve.

There are in fact differences in the relationship between knowledge and power in western industrialised countries, where the process of claim-making has been most extensively analysed (c.f. Hannigan, 1995), as compared to a context such as Ugalla Game Reserve. The relationship between what is generally known by people and their ability to make claims only emerges at certain times or according to certain situations, often triggered by an event or change of circumstance. In the case of local resource use in Ugalla Game Reserve, vigorous processes of claim-making have always arisen when changes in regulations have touched people's lives, even existence. For example historically, as documented in Chapters 3 and 4, after people were resettled from Ugalla (1925-7), at Independence when local political moves were made to re-colonise the area (1960-5), and when it's status was subsequently up-graded to that of game reserve and beekeepers banned from entering (1965).

If we compare issues raised by claim-making in Ugalla Game Reserve to those pertinent in the western industrialised context in western Tanzania, the form it takes may vary in crucial ways. To stereotype, in the West a number of different elements come together in the process of claim-making: mass media, state and non-state institutions (agencies), fora where people, scientists and planners meet (public enquiries, appeals); and a centrality given to different forms of scientific evidence (i.e. scientific information being contested by scientific information), with scientific knowledge distributed between different interest groups. On the other hand, in Tanzania, while some or all of these elements may be present, their scale and centrality differs, and, in this context, the use of development discourses, local knowledge, the idiom of tradition, kinship relations and tribal affiliation are far more prominent as legitimate properties of the claim-making process than one finds in many, although not all, cases emerging from the western, industrialised context.

Having introduced the notion of claim-making, we can proceed to analyse the case of how fishermen presented their claims over the prohibition of beach seine fishing nets which was a part of a larger process of planned intervention, as documented in Chapter 6. In order to do this, the discussion will first elaborate on the fishing co-operatives that operate in Ugalla Game

Reserve, second, it will explore the identity of claim-makers and, third, it will analyse the social construction of a ban on beach seine fishing nets.

THE FISHING CO-OPERATIVES

In attempting to control fishing along the Ugalla River, the Management of the reserve act through the fishing co-operatives, requiring fishermen to be members of a co-operative in order to obtain a permit to work in the reserve and implementing regulations pertinent to fishing through the co-operatives. In short, the co-operative associations draw groups of fishermen together under a leadership recognised by the Wildlife Department to whom assertions about putative conditions may be made by co-operative representatives. Because of the role the co-operatives play in organising fishermen to work at the river and in mediating between them and the Management, this section will provide a brief introduction to the co-operatives that operate within the reserve.

In the late 1940s and 1950s, the colonial government tried to organise a fish marketing scheme along the Ugalla River (Rodger, 1954). To this effect it was proposed that primary markets should be established at key points along the river.[218] This promotion of fish marketing was one element in a much larger 'Unyamwezi Development Scheme' put forward in the 1950s by the Government and Native Authorities. It was argued that fish markets should be 'energetically pushed' as a line of development with the possibility of later resettlement near the Ugalla River (Ibid., 23).[219] In the event these plans were not a success, however a fishermen's co-operative was established at this time; the Usoke Fishing Association whose leader was based at Senga, one of the camps the authorities wished to draw into the fish marketing scheme.

[218] These markets were proposed for Silongwe near the Mpanda Line Railway, and later at Senga and Bomba. To this end it was suggested that representatives of the fishermen from Senga and Bomba visit Ifakara in Ulanga where a successful fish market was held to have been established in 1948.

[219] Apparently an earlier fish marketing scheme on the Ugalla River was opposed by fishermen because they were afraid of a fall in the price of fish, the proposal for a fish market at Silongwe in the early 1950s also failed for reasons that are unclear, although in both cases it is not unreasonable to assume that the fishermen were reacting against interference by the colonial state.

The Usoke Fishing Association was started under the leadership of a man named Mwana Kasika from Senga Camp, a role later taken over by his son, Mzee Masanja, who still works at the camp. The Usoke co-operative became established as a fish marketing association, and in 1963 after Independence, became registered as a co-operative with the government, and was known as the *Twikwilagi Chama Cha Uvuvi* ('Lets Pull Together' Fishing Co-operative). Interestingly, the leader, Mwana Kasika, was himself the son of a fishing leader given responsibility by the medical authorities and district administration for ensuring the welfare of men fishing on the Ugalla River in the 1930s.[220] Members of Usoke Co-operative worked at camps along the Ugalla River from Nsenga to Kalo in the west (see Chapter 5, Figure 5.5).

Upriver from Senga Camp, fishermen who lived in the Ugunda/Sikonge area, east of the river, started a fishing association in 1963. According to the account of the first Chairman, Mzee Ali, who remains in office today, the association was initiated under pressure from the government.[221] Only in 1982 did this became a registered co-operative, the *Sikonge Chama Cha Uvuvi* (Sikonge Fishing Co-operative), although, anomalously, it was treated as a formal co-operative by fisheries officials throughout the 1970's. In a case which parallels that of the leader of Usoke Fishing Co-operative, Mzee Ali, is reputed to be the nephew of a fishing leader who lived at Isimbira village before people were resettled in the 1920s. Members of Sikonge co-operative worked at camps between the Wala River, Kikunukizi, and the Ugalla River up to Koga and Iswangala (see Chapter 5, Figure 5.5).

In interview, Mzee Ali and the son of Mwana Kasika, Mzee Masanja, maintained that these state instigated co-operatives were formed on the basis of older forms of fishing organisation which existed along the Ugalla River, something they also linked to the start of the Tabora Beekeepers Co-operative Society, as shall be elaborated in Chapter Nine. Although evidence is scant, descriptions by these and other established fishermen suggest that fishing was once organised into associations similar in form to the many secret societies for which the Nyamwezi are famous. Hence these men described how fishermen once had to acknowledge different

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[220] See Chapter Four.

[221] Following Independence in 1961, agricultural co-operative societies, and the unions to which they belonged, became a focus for national rural development. Large numbers of co-operatives were initiated under pressure from the state. Many of these co-operatives failed because they were established in areas with low levels of cash crop production, poor infrastructure, and were not based on grassroots demand (Co-operative College/Afro-Aid, 1991).

taboos when at the river, that they had to be tattooed with protective medicine (*kinga*) (these tattoos can still be seen marking the arms of many old men), of tests such as swimming to the bottom of the river to try the skill of apprentices, and the leadership that existed in each camp (c.f. Cory, EA.Mss.105; Cory, 1946; Blohm, 1931, 1933; Unomah, 1976; Abrahams, 1967a; Ranger, 1969; Roberts, 1968a, 1970).[222] Whether or not fishermen were once organised into fishing associations, the important point for our purposes is that the leaders of Usoke and Sikonge Fishing Co-operatives situate their associations within the domain of tradition and use this both as a point of comparison with what exists today and as a means to put forward their own fishing claims.

In contrast to the background of Usoke and Sikonge Co-operatives we have the case of the refugee fishing co-operatives. In 1968 refugees from Pangale Refugee Camp started to fish in the reserve, at the time they were placed under the control of the Tabora District Fisheries Officer, and became members of Sikonge Fishing Co-operative. Today these fishermen allege that they encountered problems in obtaining payments for their fish from Sikonge co-operative and because of the subsequent conflicts that arose, fisheries officials permitted them to form their own association, supported by UNHCR who funded them to buy fishing nets. The Pangale Fishing Co-operative was started in 1975 under the leadership of a Malawian, Mr Jackson, who was still in office in 1993; until the present-day it has remained unregistered with the Government because refugees are not formally permitted to form co-operatives in Tanzania.

In 1979 the Camp Commandant of Pangale Refugee Camp and many of the inhabitants were transferred to Kigwa Refugee Camp near Tabora. Fishermen who were moved subsequently initiated a second fishing association, the Kigwa Fishing Unit, which became established as one part of a larger multipurpose co-operative. Due to the support of foreign aid donors, the Government permitted it to be a formal co-operative. Consequently it was established under the leadership of Mr George, a Malawian and cousin of the Chairman of Pangale Fishing Co-operative. To support refugees who were members of this co-operative, the Christian Council

[222] There do not appear to be any scholarly studies available on fishing societies along the Ugalla River, but as little research has been carried out in this region this is not surprising. The 1935 Report on Native Affairs for the Western Province makes reference to the Ugalla River and fishing leaders: "the river fishermen come from all parts, but each gang is under a recognised headman-expert, whose duty is to protect them from crocodiles by the power of his medicine, which is probably a family secret...". The same report goes on to describe how men would catch fish by swimming in a long line to chase them into nets. Bagshawe, RH.Mss.Afr.s.279-306 (c.f. the romantic account of Carnochan and Adamson (1935, 1937) who describe in detail night fishing on the Ugalla and Wala Rivers in the early 1930s).

of Tanzania and Oxfam donated five beach seine nets worth T.Shs.160,000 in 1984, and in 1990 and 1992 a further T.Shs.150,000 were received in each of these years.

Moving away from the refugee co-operatives, corruption allegations against Sikonge Fishing Co-operative have been widespread and are not confined to people from the refugee camps. In 1984 a group of fishermen who work marketers in Tabora market themselves broke away from Sikonge Fishing Co-operative. Many of these men originate from Kigoma on Lake Tanganyika and moved to Tabora through the fish trade. Having experience of both fishing and marketing this places them in a good position to run a co-operative and they decided to formed their own association, the Tabora Fishing and Fish Marketing Unit, which was registered with the Government in 1987.

Each of the five co-operatives appears very similar if viewed in terms of structure and formal functions (as set out in Chapter Five); however, their internal make-up actually varies enormously, differences which emerge in respect to the internal dynamics between fishing groups and the relations fishermen hold with the local wildlife, fisheries and co-operative authorities.

The Usoke and Sikonge Co-operatives, whose roots are in the late colonial period and early years of Independence, are the two associations most entrenched in the area and most favoured by officials. For example, in planning meetings held between 1992 and 1994 (see Chapter 6, Box 1), only representatives from these co-operatives were prevailed on to participate, a situation which the Project Manager of the reserve was instrumental in instigating and maintaining. Also, the Regional Fisheries Officer accepts the role of Usoke and Sikonge in determining the price of fish that all fishermen, whether they are members or not, will sell their produce for in a given season (although there are indications that control in this area is loosening).

The membership of Pangale and Kigwa Fishing Co-operatives is, as has been noted, made up of refugees. In contrast to the position of members from Usoke and Sikonge Co-operatives, the actions and views of state representatives suggest a strong bias against the refugees. Although they will give them permits to fish, they not only exclude them from the planning process, but also discriminate against people at an individual level. The refugees are not without their own power base however, for the international community confers on them both material support

and legitimacy. Furthermore, they also find support the 'Camp Commandant' of Kigwa Refugee Camp, a senior-level government official working for the Home Office who, on a number of occasions, has been known to exert pressure on the Project Manager of the reserve and other officials, a state of affairs which is not appreciated by regional-level bureaucrats.

In the 1980s when the Tabora Fishing and Fish Marketing Unit was formed in the 1980s, entrepreneurial activity was being promoted in Tanzania. This timing is not coincidental, its membership has burgeoned through attracting a group of fishermen who were disillusioned with corruption and alliances made between fishing leaders and state representatives in the case of Usoke and Sikonge Fishing Co-operatives. In this respect this co-operative is far more oriented towards the market, and less concerned with the regulative functions of the two older co-operatives or with the particular and often highly politicised orientation of the refugees. Indeed, fittingly, this co-operative operates from an office in the centre of Tabora market. An important aspect of this market orientation is the fact that because many of its fishermen members are also market traders they are trying to make new linkages between the sale of fish and its marketing in ways which may benefit the producers more, something which the entrenched leadership of Usoke and Sikonge Co-operatives do not appear to have attempted.

The very different internal composition and spheres of operation and influence which each co-operative holds is reflected in the way that different fishermen's groups construct claims over problems pertaining to their capacity to fish in the reserve. In the following section we explore the internal makeup of these co-operatives in greater detail by considering the identity of different claim-makers working as fishermen along the Ugalla River.

FISHING CONTROVERSIES AND THE IDENTITY OF CLAIM-MAKERS

The circumstances of different fishermen and the way they frame their claims can be examined using examples drawn from discussions with representatives of people from three broadly different types of background. The first are 'Galla' Nyamwezi fishermen who claim to be descended from families who lived in the area before the human population was resettled. They are members of Usoke Fishing Co-operative and also, in many cases, beekeeper-members of the Tabora Beekeepers Co-operative Society Ltd. The second are fishermen and women from Pangale and Kigwa refugee camps in Tabora Region. The third are fishermen who

originate from other areas of Tanzania, particularly from near Lake Tanganyika and who are members of the Tabora Fishing and Fish Marketing Unit.

'Galla' Nyamwezi Fishermen

Fishermen from villages in Uyumbu ward, north of Ugalla, allege that they are a group who have the 'true' right to fish in Ugalla and to control the fishing activities of outsiders. They assert that this right is based on their historical ties to the locality and to their past relations with the British colonial administration. Many of these men are also beekeepers, so their claims parallel and are entwined with the histories of members of the Tabora Beekeepers Co-operative. This group of fishermen maintain that they or their families were moved to Kakola sleeping sickness camp in present-day Uyumbu Ward. Therefore, they are people one might distinguish at the heart of a process of 'repositioning' themselves in the locality, as described in Chapter 3, following the critical event of sleeping sickness resettlement.

The dispute over fishing tackle highlights how people use their past resettlement history to locate themselves within the genesis of Ugalla. These fishermen identify themselves as being 'Galla', a status which they perceive to endow them with a 'true' claim to control resource use in the reserve vis-à-vis immigrant Tanzanian fishermen, refugees, and representatives of the state.[223] Such claims are in keeping with a wider phenomenon witnessed in East Africa in which people long rooted in an area manipulate 'tradition' in order to contest the right of immigrants to reside in a locality and use its resources (Ranger, 1983: 260).

The gist of the 'Galla' Nyamwezi fishermen's assertions were presented to us by two men, Mzee George and Mzee Masanja. Mzee George, now in his eighties, was evacuated at the age of fifteen from a village south of the river to Kakola sleeping sickness camp. He later became a highly respected beekeeper-hunter and was the first Chairman of the Tabora Beekeepers Co-operative Society, from the late 1950s. Here we have a point where the history of this particular group of fishermen coincides with the history of the origin of the Tabora Beekeepers Co-operative Society. The second informant, Mzee Mfaulme, is in his sixties and works as a fisherman-beekeeper at Nsenga Camp. He was the first Chairman of the Usoke Fishing Co-operative and is the grandson of a fishing leader who was based at Nsenga Camp Nsenga in the

1930s. If one asks fishermen with historical roots in the locality there is a consensus that Mzee George and the grandfather of Masanja, Lupelo Kaliyanyaga, were their two leaders, one in the domain of beekeeping and the other fishing. These people were enrolled into their leadership positions by the British colonial administration and, in the case of Mzee George, also by the Catholic Church.

In making his case, Mzee George listed 18 riverside camps - together with other camps in the woodland - which he claimed to be "the camps of the Galla", started from 1927: Kikunukizi, Senga 1, Senga 2, Silimitowe, Unikumbi, Usamya, Siri, Matomombo, Katungulu 1, Katungulu 2, Siri Mawe, Kanaikombe, Sense, Kasandalala, Mkuva, Bomba, Iswaga and Kalo.[224] In conveying the names of these camps, Mzee George, a man long acquainted with a European way of making connections, was very exact about the order, moving from one end of the river to the other, and linking each name to a brief description of the genealogical relations of camp members. To take one example from his list:

> "X camp was a village before people were forcibly moved from the river. Mohammed Juma started the camp in 1927 when he returned [to Ugalla]. His grandson, Rhamadhani Hassani keeps bees there now, together with Saidi Saidi his brother in law and Juma Hassani his brother".

Through these histories, Mzee George is clearly assembling a claim to the area, for he makes connections between people's 'tribal identity' as 'Galla', their rights to be leaders of each camp (and therefore control the fishing activities that take place, and mediate between fishermen and state representatives) and the transmission of these rights through kinship, in effect excluding unrelated immigrants to the area. The image he creates is of traditional fishing camps inhabited by small family groups - like beekeeping camps in the woodland - however, this narrative disguises the fact that large numbers of fishermen of diverse origins work at these camps, each forming their own separate groups and making very different claims to work in the area.

Mzee George linked the identity of being 'Galla' to how people made their livelihoods at the river:

> "A 'fisherman' meant all, like one person. Because a fisherman he was a Galla, and a beekeeper he was a Galla, and a honey-hunter he was a Galla...and a hunter likewise...Now a beekeeper fished and for bees he looked for honey in the forest, in the trees...these occupations were split...hunting as well. These three things they went

[223] As identified in Chapter Four, similar claims were manifested in Mtemi Nsokoro Mvulla's attempt to move to the Silongwe area of Ugalla in the 1940s, and in the bid by a group of people to move back to the *Nchi ya Wagalla* ('Land of the Galla') at Independence.

[224] These are the real camp names, not pseudonyms.

> together. Now one day...at the time we moved, we chose one person as a leader and he was a fisherman".

Instead of identifying people as they were categorised by officials, namely according to types of resource use - fisherman, honey hunter, hunter - the narrative of Mzee George identifies being 'Galla' as holding particular associations with the locality, and with a lifestyle based on seasonal forest occupations. Indeed, the less specialised and more diverse skills these 'Galla' men are held to have known is used to provide another point of contrast with the skills of present-day fishermen from outside the region whose fishing knowledge, derived from experience of commercial fishing on the Great Lakes, is highly specialised and perceived to be inappropriate to the local context.

The link made between being 'Galla' and the right to work at camps along the river is not simply based on people's professed claim of origin. In addition, an association is made to the role played by the colonial administrative authorities after the human population was resettled. In Chapter Four, we examined how the authorities tried to control the activities of fishermen in the 1930s by stipulating that they elect a leader to ensure that sick people were taken to hospital. Present-day fishing leaders, such as Mzee Masanja, refer back to these actions, however the emphasis is shifted from the colonial administration's holding this as a means to control people's presence in the locality, to the same event conferring upon people of Galla origin the right to fish in the river.

In the 1930s, the person given the responsibility for ensuring that sick fishermen were taken to hospital, was called Lupelo Kaliyanyaga, and later his son, Mwana Kasika, took over this task.

In an interview, Mzee Masanja, described the role of his father, Mwana Kasika:

> "It was yourself and your own nets you said that you were going to build a camp...but to have a camp first you had to come and see the chief...each leader of every camp gave permission...it was essential that you came to see the leader to build in a certain place. Mfaulme was the leader of all the river from Koga to Silongwe, he was the Mtemi (chief) of the area...It was camps, his camps and relatives, this is the reason it was groups of fishermen. Here Mfaulme was he not the Chief? He and his subordinates, two people, even they would listen to cases...the heads of other camps they would be called to come and listen. If a person had done something really wrong he was brought here and then chased from the riverside".

The impression that Masanja creates is of a unified group of fishermen, related to each other through ties of kinship, each working on the river under a single leader. Here there is a

similarity to Mzee George's portrait of camps bound together through kinship ties. As a descendent, it is unsurprising that he emphasises the role of his grandfather and father; however, fishermen working in the east of the reserve, in camps from Isimbira to Kikunukizi and along the Wala River, support the historical claim that Kaliyanyaga was given certain responsibilities by the administrative authorities. However, they also had a leader of their own, Mwana Kaswika, now deceased, whose nephew, Mzee Ali, is Chairman of Sikonge Fishing Co-operative. Such conflicting accounts suggest that even those people who claim to be part of the legacy of 'Ugalla' are fragmented, a situation which is manipulated as part of the claim-making process.

In the many occupational histories that I collected from people fishing at the river, a picture emerged of the important role that non-Nyamwezi fishermen, particularly from present-day Zambia or Zaire, have played in teaching local men how to fish. Indeed Nyamwezi fishermen would often claim that 'the Galla, not even one, knew how to fish'. Lupelo Kaliyanyaga is one such example because he is said to have been of Congolese descent. In these examples it becomes apparent that it is not immigrant fishermen who are being objected to per se, but the challenge to the control of local fishing leaders that recent immigrants or state representatives may represent. In people's accounts, it is clear that loss of so-called 'traditional' control over fishermen's actions on the river is not based on territorial and resource-use disputes alone; it is also strongly linked to 'Galla' fishermen's perceptions of how they have lost their autonomy to the Tanzanian state.

To summarise, in portraying themselves as a particular group of fishermen, these claim-makers draw different referents that appear to be exclusive into their identity: tribe, collective resettlement history, kinship relations, and knowledge of 'traditional' forest-based livelihoods. In assembling their claim to the right to fish and control resource use on the Ugalla River they portray themselves in the historical role of being leaders (a role embodying secret and ritual knowledge) of small family camps, and as having the right to use Ugalla endorsed by the British colonial administration. These claims are narrated through accounts that emphasise tradition and local knowledge, while simultaneously dramatising the hypocrisy of the local authorities and intrusiveness of incoming fishermen.

Fishermen and Women from Pangale Refugee Camp

The second group of fishermen/women who assert their right to fish in Ugalla Game Reserve are refugees living in Tabora Region. In the example below their case is put forward by Mr Jackson who arrived in Tanzania from Malawi in 1964, and who, during the period of fieldwork, was the leader of the Pangale Fishing Co-operative.[225] These fishermen argue that the Tanzanian Home Office gave people of refugee status permission to fish in Ugalla Game Reserve in 1968 and therefore they have every right to work in the area on an annual basis.

This group of refugee fishermen have been in Tanzania since the 1960s and early 1970s, or were born in the country. Over this time period they have built up lives for themselves far removed from stereotypes of socially dislocated people living in extreme poverty. Of these people, some of the men have experience of commercial fishing in Lakes Malawi, Tanganyika or Victoria. Some refugee women also fish, having come from backgrounds where there are female fishing traditions. This means that their fishing practices have been shaped by experiences different to those of the 'Galla' Nyamwezi fishermen who work along the Ugalla River.

Mr Jackson described the initial contact between refugees and local fishermen in a narrative that dramatised 'traditional' local elements:

> "When we first went to the river there was trouble. Foreigners like Mr Barume were more experienced fishermen and could get higher levels of fish production. Originally people had many taboos and in order to qualify a fisherman had to undergo tattoo cutting. This is a form of magic and the newcomers did not agree. Also you had to be tested to swim, going down underwater and picking stones up from the bottom. If the leader of the camp went for a meeting with other camp leaders you had to wait until they came back before you could start fishing again. This created many problems and the CCM [Chama Cha Mapinduzi, the ruling party] and the District and Regional Fisheries Officers had to intervene".

The Regional Fisheries Officer was familiar with the problems of refugee fishermen and women, as he and his predecessors had been called in to arbitrate:

> "A change in practices came with the refugees. Farmers used small nets from which productivity was relatively low, however the refugees had been far more successful fishermen and the farmers didn't like mixing with the refugees. Farmers with limited funds have not been able to take their production very far even though they started competing to a greater extent with the refugees. The main complaints are that the new comers are changing the whole thing into a commercial business and they feel that the

[225] Mr Jackson and other Malawian refugees living in Pangale and Kigwa Refugee Camps were repatriated in 1994.

> area is being over-fished. Also the farmers have traditional rights passed on through generations over certain water holes, they did not like the refugees coming in and taking over these water holes, but there was nothing to stop the refugees going to particular water holes. Protests were made at the time to government officials".

With the entry of refugee fishermen and women to Ugalla Game Reserve the practices of local fishermen were questioned in encounters that challenged local control over resources through a language of modernisation and progress. This contrasts strongly with the language of tradition through which 'Galla' Nyamwezi fishermen voice their claims. In the narratives of refugees, local fishing practices and rationales are held to be unproductive, and the entry of refugee women into the fishing field challenged pre-existing gender relations.

In describing local fishermen as 'farmers', the Regional Fisheries Officer is making an important point, for the refugees are people with experience of commercially-oriented fishing methods, often gained through employment as labourers on trawlers. In particular, refugees introduced the beach seine net to the reserve, which was based on different methods and rationales. This will arise later in the illustration, for although Tanzanian fishermen use these nets and some refugee fishermen prefer gill nets, there is a widespread and often negative equation of refugees with beach seine net fishing.

Economically many of the refugee fishermen/women appear wealthier than local fishermen. This creates antagonism, and is drawn into the claims of refugees, who characterise local appearances of poverty as due to 'laziness', 'fear of hard work', 'lack of incentive', and being 'backward'. Part of the relative economic success of some of the refugees is the fact that they are living in camps which serve as good organisational units for productive activities and draw in aid donors eager to initiate 'self-help' projects (c.f. Malkki, 1995). One example is the financial support members of Kigwa Fishing Unit received to buy beach seine fishing nets, and their access to resources such as a lorry owned by UNHCR and medical kits.

People's status as refugees and the presence of aid donors in the refugee camps means in Tanzania, individuals have a catalogue of experiences of different forms of donor assistance and institutional support - UNHCR, the Tanzanian government, foreign donor governments and NGOs. This implies that refugees not only try to draw in Tanzanian officials to support their cases, but also seek sponsorship from the international community to ensure the legitimacy and continuity of their claims. When the refugee fishermen and women first encountered problems

with local people they tried to enrol Tanzanian officials to deal with those problems, a course of action local fishermen would have avoided. In this sense we can see the emergence of mediators, namely state representatives, and also members of the international donor community, who are sought to give legitimacy to refugee claims.

In summary, as claim-makers refugees draw on a far more mixed background, socially and experientially, than 'Galla' Nyamwezi fishermen. Although their status in Tanzania means that local people label them collectively as refugees, histories of political activism and formal education mean that many are extremely articulate and capable of mobilising people and resources. This can be observed in the way they assembled their claims to the right to fish in the river, for example, in the way Mr Jackson uses a language of modernity and progress, dramatising their situation against observations of the Nyamwezi fishermen as traditional, engaging in magic, and lacking adequate expert knowledge to be successful fishermen. At the same time this has to be set against the extreme precariousness of their status as refugees in Tanzania and against discrimination by local bureaucrats. Here there is a notable difference between the courses of action taken by refugees in response to a problem arising at the river and action on the part of local fishermen; whereas the latter try to deal with disputes internally and prefer to avoid local officials, the refugees have a tendency to draw in the support of as many different organisations and individuals as possible - the Camp Commandant, representatives of the Fisheries Department, and foreign aid donors, for example.

Fishermen working at Igululu camp in 1993

The last claim-makers contrast with the previous two examples insofar as explanations of the presence of some fishermen in Ugalla Game Reserve do not emerge through reference to a collective identity, or to key historical events such as those used to explain grievances against another group of fishermen, as is the case with both 'Galla' Nyamwezi fishermen and people from the refugee camps. These are Tanzanian fishermen who started to work in the reserve at different times, coming from different backgrounds, motivated by different ends. In terms of information, one is presented with a series of disparate life-stories and personal descriptions that coalesce with the lives of other fishermen through social networks that stretch from the town or village contexts and coming together at the river or within the co-operatives.

Two such life-stories are briefly presented below, based on interviews held at Igululu Camp in 1993. 30 to 40 fishermen worked at Igululu at the height of the fishing season, divided into a number of smaller groups within which Nyamwezi fishermen (from the Sikonge area), refugees (from Pangale Refugee Camp) and market traders were each represented. The case of the 2 men that follow are of people who work in Tabora market and are members of the Tabora Fishing and Fish Marketing Unit, having recently moved their allegiances from the Sikonge Fishing Co-operative, for reasons, they claim, that were linked to corruption. They are also both members of the Tabora Beekeepers Co-operative Society, although they view themselves as fishermen.

Mwana Fongonyo was born in Kipanga village in 1935, this is to the south of Ugalla in present-day Rukwa Region and he describes himself as being Fipa by tribe. When he was a child, he moved with his father to live in Mwanza, on the edge of Lake Victoria, where his father was in the police force. Later Mzee Fongonyo went to live in Kigoma where he worked as a clerk in the fish trade, travelling regularly along the length of the central railway line between Ujiji-Kigoma and Morogoro-Dar es Salaam. A 'long time ago', Mzee Fongonyo's father and grandfather were fishermen on Lake Tanganyika in the south and while in Kigoma he decided to follow this family tradition and take up fishing himself. In 1968, when he moved to Tabora as a market trader, he began to fish in the Ugalla River. Today he lives in Tabora town, he has a small-holding to grow food crops on, fishes, and keeps some beehives in Ugalla Game Reserve. His wife has severe epilepsy and cannot leave the house, a situation that often prevents him from working at the river. Mzee Fongonyo always fishes with gill nets, and he explained that he prefers to fish alone rather than in co-operation with the other men (as is typically) because he likes to combine fishing with beekeeping and if he went with the other fishermen it would be too late to start harvesting honey or make a new beehive by the time he returned to camp.

The second fisherman, Mustapha Luminusi was born in Kasulu District in Kigoma Region around 1940 and describes himself as Muha by tribe. He learned how to keep bees and fish from his father in Kigoma, and then around 1957 he moved to Tabora to live with an uncle who was working on the railway. In 1963 he started to work in the reserve at Igululu Camp. This remained his main camp until 1992, and although he has fished in other places. At Igululu he began to keep bees also and, having been taught to by his father when he was a child. Since 1985 he has been a member of the Tabora Beekeepers Co-operative Society in order, he

explained, to get transport to the river and obtain free containers for honey collection. He combines fishing in the dry season with farming and occasional trade in fish in Tabora market, while his wife carries out a small business selling charcoal and other items from the house in Tabora town. In 1993 at camp Mzee Luminusi was often ill and regularly ran out of food, a state of affairs that was the subject of derisory comments from other fishermen because he was seen as a drunkard with little self respect and, as an illustration of this, people would refer to the fact that he lived in a house whose roof had caved in.

At Igululu Camp, Mzee Fongonyo and Mzee Luminusi worked with another man called Mzee Katanta, the three men are neighbours in Tabora town and associate with one another when away from the river. As claim-makers, these men draw on their personal histories and relationships to small groups of other people working as fishermen in Ugalla Game Reserve. But, in talking to them, one does not gain a sense of a collective sense of identity and history drawn on in the same way as 'Galla' Nyamwezi and refugee fishermen do. In terms of assembling a claim, these fishermen will cite general grievances, such as the harassment they are given by the Management, or problems with fishmongers, or their poverty and need for new fishing nets. However these are personal narratives, not an established story drawn upon by different individuals. Despite this, it does not stop these people from putting forward claims concerning issues that relate to their capacity to fish in the reserve, and in this respect the Tabora Fishing and Fish Marketing Unit, or indeed the Usoke or Sikonge Fishing Co-operatives, is an important conduit for fishermen to channel their grievances.

In the previous sections we have examined the background of three groups of claim-makers: members of Usoke Fishing Co-operative, of Pangale and Kigwa Fishing Co-operatives, and Tabora Fishing and Fishing Marketing Unit. It has been argued that each group of fisherman frame its claims in different ways, those from Usoke with reference to 'tradition', refugees with reference to progress and modernity, and fishermen from Tabora Fishing Unit assert grievances without reference to a collective, institutionalised story. Drawing on these backgrounds we can turn to examine a case about how claims were made concerning the use of beach seine nets in 1993.

THE SOCIAL CONSTRUCTION OF A CLAIM: A BAN ON THE USE OF BEACH SEINE FISHING NETS

This case is used as a means of exploring how a ruling by the Wildlife Division to prohibit the use of beach seine fishing nets in Ugalla Game Reserve was brought into effect in 1993, and the responses of different groups of fishermen to this ban. The illustration draws on research material from my first visit to Tabora in November 1992 until my final visit to the reserve in July 1994.

The kind of fishing that takes place in Ugalla Game Reserve utilises canoes and two types of fishing nets: gill nets (*nyavu*) and beach seine nets (*kokoro*). Gill nets are suspended like a curtain across the river and entangle the fish that swim into them, whereas beach seine are drag net used to actively draw fish in. In the dry season of 1993, one could observe fishermen using gill nets on a daily basis at each camp along the river. In contrast to the visible use of gill nets, and despite my constant attempts, I never saw a beach seine net being used in the reserve.

At first I presumed that this was because beach seine nets had been banned and, consequently, fishermen were not using them, but gradually I started to recognise signs of the use of drag nets: people giving me a certain type of fish to eat that was typically caught with a beach seine net (*Ngege, Tilapia sp.*), fishermen accompanied to the river by four rather than one or two helpers, the use of a heavy log canoe in preference to one made of bark, or, in one case, a man who repaired a beach seine in front of me whilst stating categorically that he never used one. The covert use of beach seine nets along the Ugalla River - certainly when I was present - appeared to be clearly linked to the reserve management's attempt to prevent people using the nets in the reserve, leading to fishermen's fears that they would be caught and expelled from the area, as indeed some people were. This in itself could constitute an explanation for why some people tried to conceal a particular method of fishing.

However, in discussions with fishermen it became apparent that the situation was not as straightforward as it first appeared; different people expressed very divergent opinions over the use of this equipment, some saw the ban as being prejudiced against certain groups of fishermen, others were extremely worried about the consequences it would have upon their livelihoods, while still others argued that the river was too small to support the use of this type of net, and so

upheld the ban. People's reactions to a ban on a particular type of fishing tackle emerged as a local issue that was highly pertinent for the actors concerned, here we explore the claims that were made about the nets by different parties.

We can now proceed to examine how claims were presented concerning this type of fishing net, before doing so it is interesting to view Plates 15 - 20 which give an impression of the nature and scale of fishing activities on the river. The photographs were taken at Igululu Camp in July 1993: Plate 15 shows a fisherman setting a gill net across the Ugalla River in the morning. Fishermen then return to the camp for the middle of the day and sit mending nets or playing game such as draughts or cards, as in the case of a group of related Nyamwezi fishermen shown in Plate 16. In the afternoon the fishermen return to draw in their catch, working as a group as in Plates 17 and 18. Plate 19 shows a net being mended after hauling in the catch, and Plate 20 shows fish being prepared and placed on the drying wrack to smoke gently over 2 - 4 days.

Plate 15: A fisherman sets a gill net across the Ugalla River

Plate 16: A group of fishermen play cards through the middle of the day having set their nets in the morning

Plate 17: Fishermen gather on the river bank having brought in their catch

Plate 18: Fishermen canoe along the river as they return to camp

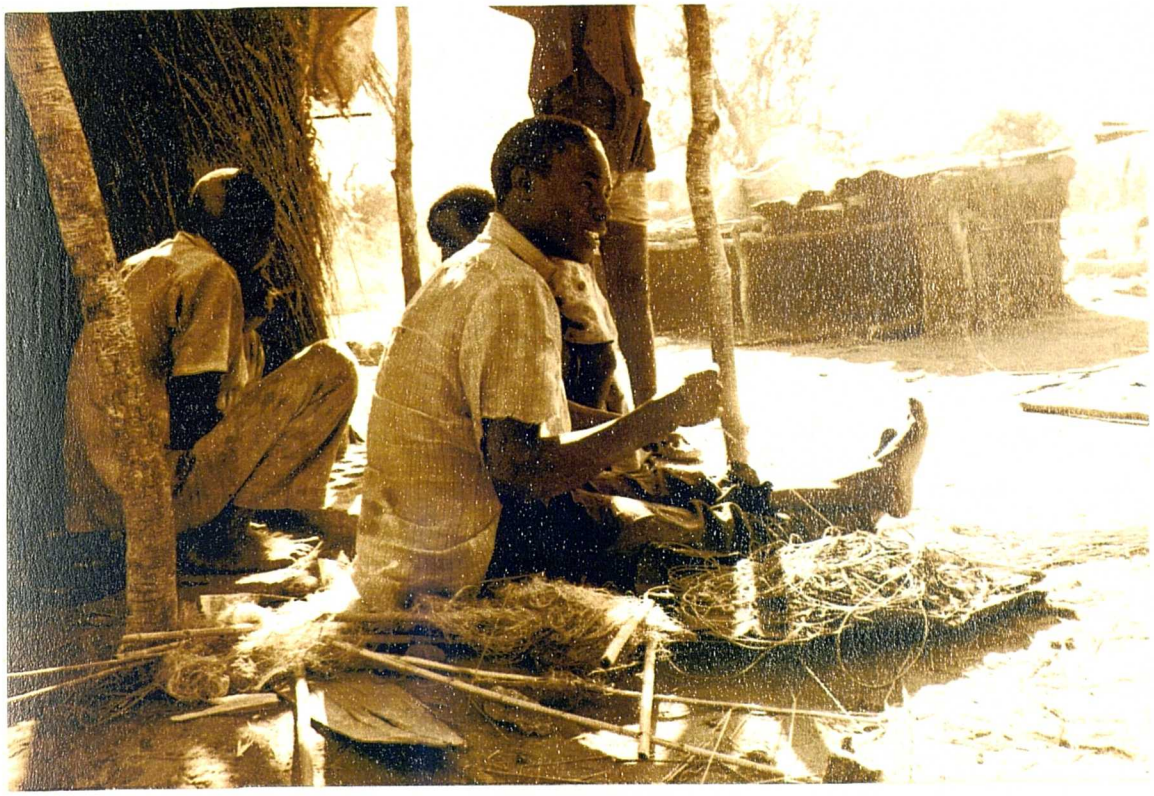

Plate 19: A fisherman mends his gill nets

Plate 20: Fresh fish are prepared and smoke dried

Presenting The Claim

In November, 1992, members of the PAWM unit of the Wildlife Department first raised the possibility of a ban on the use of beach seine fishing nets as a topic for discussion at a workshop on the management of Ugalla Game Reserve held in Tabora town. The idea of banning this type of net was in keeping with a national prohibition on the use of beach seine nets that at the time was being carried through Parliament.

At a smaller planning meeting convened in Tabora town by PAWM in March 1993, the potential ban was again put forward by representatives of PAWM as an important issue for discussion.[226] In support of the ban were the Regional Fisheries Officer, the Project Manager, and representatives of PAWM. Interestingly only 1 representative of fishermen from Ugalla Game Reserve was present at the meeting, and that was the Chairman of Usoke Fishing Co-operative, who also came out in support of the ban. In the period preceding the meeting the Project Manager was anxious to check who attended, or more pertinently, who was not invited. Here we can see a manifestation of the bias by state representatives in favour of the two oldest co-operatives Usoke and Sikonge, as previously mentioned, for the Chairman of Sikonge Fishing Co-operative had also been invited but not able to attend and, for reasons that remain obscure, both men were consistent in their support for the Project Manager at planning meetings. Representatives of Kigwa and Pangale refugee fishermen were not invited, and nor was the Chairman of the Tabora Fishing and Fish Marketing Unit; although there are fishermen who use beach seine nets amongst both these groups.

In formulating the problem, representatives of PAWM argued that the use of beach seine nets contributes to a significant and unsustainable drain on fish stocks in the Ugalla River and its tributaries (PAWM, 1992, 1993). Added factors, were that increasingly large numbers of fishermen were using the reserve, fishing has a detrimental impact on vegetation alongside the river, and productive activities are inadequately controlled by the reserve management.

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[226] Participants of the First Ugalla Planning Group were: 3 representatives from PAWM, the Project Manager of the reserve, the Regional Game, Fisheries and Beekeeping Officers, a senior lecturer from the Tabora Beekeeping Institute, the Chairman of Usoke Fishing Co-operative, the Chairman of Kipalapala Branch of the TBCS, and the village Chairmen from Kilometa 90 and Kilometa 60 on the Mpanda railway line. A similar meeting was held in March 1994. The Regional Fisheries Officer and the Chairman of Usoke Fishing Co-operative were the only people directly concerned with fishing present at the meeting.

These views were based on research carried out by PAWM, namely, an assessment of fishing activities through a survey flight to locate each fishing camp with a global positioning system, and a second flight to determine canoe numbers and distribution; field research to examine the impact of fishing on vegetation through transect techniques; consultation between representatives from PAWM, the Project Manager of the reserve, and Regional Fisheries Officer who furnished details on issues such as the numbers of fishermen working in the reserve and levels of fish productivity. Research on fish stocks was not carried out and, critically, little information was gained from fishermen themselves.

The prohibition on beach seine fishing nets was subsequently written into the Ugalla Game Reserve Management Plan and provisionally approved by the Director of Wildlife:

> "Nets: The use of Kokoro nets on the Ugalla and Wala Rivers is prohibited, with effect from the 1993 fishing season. The minimum mesh size of gill nets allowed by the Management will be 2.5' which will enable fishermen to continue to catch small labeo sp." (PAWM, 1994: 83).

Because the Management Plan had to go through a lengthy process of approval, but support had been given to PAWM's initiative to have the fishing nets prohibited by participants of the First Ugalla Game Reserve Planning Meeting, it informally took effect from the 1st of June, 1993 (although the Management Plan had not yet been approved at that point).

The ban having been passed, it was now in the hands of the Project Manager and the Regional and District Fisheries Officers and their staff to implement it. One has to ask why the Project Manager tried to enforce the ban, given that many other policies in the Management Plan were left unimplemented (such as a ban on tree cutting by fishermen and beekeepers, or the need to issue people with IDs)? In answer to this one can turn in two directions, first, to the Project Manager's relationships with local interest groups, and second, to his relationships with the planners from Dar es Salaam.

One reason appears to be that beach seine nets are a relatively easy target for law enforcement. In order to use this type of net, a fisherman must apply for a permit for four helpers which the officer in charge can refuse. People can be caught fishing on the River by the game scouts working with the hunting company or those who accompany the fishing lorries through the reserve. As part of their claims against the Project Manager, some fishermen argued that he gave

lip-service to the ban because he realised that fishermen would be willing to pay him to let them use their beach seine nets; whether this was true or not is another matter, but it does suggest that fishermen expected the ban to be more flexible in practice than the regulations allow.

In upholding the prohibition, the Project Manager gave support to the planning team from PAWM. This was in a manner that was in his interests to do so given the role the planners were playing in formulating a management plan for the area. In practice these people were distanced from the daily routines of management and had little way of knowing how the ban would be enforced. Indeed, the Project Manager clearly imbibed the planners language, and framed his arguments according to planning documents (PAWM, 1992a, 1993):

> "There are two fishing methods: first, to leave nets over night and second using long drag nets 300 metres, these scoop everything up and are very destructive. At one end there are two people and then at the other end there are four. This second method of fishing even disturbs the food strata of the fish. Fishing is far more destructive than beekeeping...it needs careful monitoring. To dry fish you need to make drying wracks and they can't be transported fresh. To construct drying wracks small trees are used, they are the first victims. Then fire is needed so dead trees are the second victims. So both young and old trees are being taken. Fishermen collect wood upon foot therefore in the immediate vicinity of the fishing camps there is erosion, in turn this causes silting of the rivers...which in the end effects the abundance and diversity of fish so it is rather self-defeating and unsustainable".

In the language that the Project Manager is using we can see an expression of the way he is able to bridge discontinuities between the language of conservation and expert advice coming from the planners on the one hand, and local practices on the other. He is able to frame his arguments according to his own knowledge of productive activities in the reserve, as well as his ability to draw on the information contained in recent planning documents.

In summary: the need for a prohibition on the use of beach seine fishing nets was first raised by members of the PAWM planning team and as such it was an issue generated by outside experts which was subsequently to have critical local implications. The process of legitimating and promoting the importance of a ban took place between senior and regional state representatives, a technical advisor, and a handful of local representatives, key members of the fishing community being excluded from the process. The Project Manager of Ugalla Game Reserve played a crucial role in filtering out particular leaders of the fishermen, even though he - unlike the staff of PAWM - was well aware of the complexity of the local situation; instead he chose to include the

leaders of Usoke and Sikonge Fishing Co-operatives, on whom it appears he could depend. This example clearly highlights the importance of the Project Manager in mediating between experts and state representatives from outside the area and local interest groups. The data used to legitimate the claim was based on some technical and scientific fact-finding but, just as the planning process virtually excluded the fishermen, so also was there almost no attempt to elicit data from fishermen themselves.

Contesting The Claim

Prohibition on the use of beach seine nets in Ugalla Game Reserve served to challenge fishermen's access to resources. Once fishermen started to encounter the ban, they began to respond and to contest what, for many, was viewed as a threat to their livelihood. An interesting part of this process is that the way the local fishermen heard of the issue was confused and the information they received contradictory. This is highly revealing of the nature of resource management in the reserve; interaction between administrators and people who legitimately use the reserve is partial or non-existent. This opens up a wide margin for multiple interpretations to be conferred on management regulations and conservation planning, something apparent in the claim-making process.

Administrative procedures through which fishermen and women should have become acquainted with the ban were not dictated by the planners. The implicit assumption appears to have been that the Project Manager would inform the different fishing co-operatives and that they would tell their members. People who fish in Ugalla come from a wide geographical area and the Regional and District Fisheries Officers informed some fishermen of the new regulations; otherwise, news passed by word of mouth between networks of fishermen and women - in the market place, visiting neighbours and relatives, at the co-operative offices, often through talking to me - and in many cases people only heard after they had arrived in the reserve for the 1993 fishing season.

The first fishermen to be officially informed of the prohibition were the Chairman and committee members of Sikonge Fishing Co-operative. The Regional Fisheries Officer, Mr Mapunda, myself, and a research assistant arranged a meeting in Sikonge on the 31st March 1993.

Ostensibly this was to introduce me to co-operative members, although Mr Mapunda clearly set his own agenda for the occasion.

The Chairman and seven committee members arrived for the meeting. I was duly introduced and given a formal welcome. The Regional Fisheries Officer then launched into a speech dictating each of the decisions that had been made in March 15th Planning meeting in Tabora, afterwards giving the co-operative members a chance to respond.[227] In response all the Co-operative members portrayed themselves to be sympathetic to a prohibition on beach seine nets, in the words of the Chairman, Mr Ali:

> "Before there was control by traditional leaders in the fishing camps, and fishermen used nets of 4' - 5' mesh but now it is indiscriminate. The fish feed on leaves but the nets also take the leaves and this decreases the fish stocks".

In this and the subsequent discussion, the Chairman of the Fishing Co-operative clearly located members of the Co-operative in the camp of 'tradition', assembling their claim against the ban in a language familiar to the planners by asserting their capacity to use the river appropriately. Interrupted by mutters of agreement from the other fishermen, the Chairman continued:

> "The main problem with *kokoro* [beach seine] will be for the Kigwa Fishing Unit [refugees], the Pangale Co-operative [refugees], and the Tabora Marketing [market traders]. You will find that within the distance of one mile there will be 5 Kokoro. They will take five camps. It wont be easy to break this because their co-operatives they advertise sharing and togetherness [*ushirika*].
>
> The co-operative here does not even have 10 such nets and they can be distributed, one at Msato, two at Koga [fishing camps outside the reserve]. Because we share between ourselves there is the camp of Ng'omba, the camp of Misiwe, the camp of Iswanga and other places...there are at least three places where Kokoro can be arranged. For every large place there is room for two kokoro and for every small place there is room for one".

In presenting their response to the issue, the Chairman aligns Sikonge Fishing Co-operative with the interests of the officials and planners, as against those of other, beach seine-using, fishermen. The claim was dramatised in a narrative that emphasised how entrenched the other fishermen are in following bad practices, as opposed to the good organisational ability of members of Sikonge

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[227] These changes were: (i) a reduction in the number of fishing camps; (ii) change in the entry date and phases fishermen can enter; (iii) equal distribution of fishermen at camps and no walking between them; (iv) Usoke and Sikonge Co-operatives to continue to be allowed to allocate people between camps (this raised a cheer from the fishermen); (v) no kokoro nets in the reserve; (vi) no canoes to be constructed in the reserve, and each one to be marked with a separate registration number.

Co-operative. Tellingly, the Regional Fisheries Officer - who rarely leaves his office in Tabora town - did not know the location of the camps being referred to:

> 'Are they in the Reserve'?

The Chairman, echoed by the other men at the meeting:

> 'No, in the controlled area. We won't enter [the reserve], there are the laws of the reserve'.

The Fisheries Officer:

> 'Good, this is what you have been told, this is what every member should be told. Unfortunately the Project Manager was not able to attend this meeting but perhaps if he had heard and saw your arguments he would be pleased'.

In closing the meeting, he proceeded to cover the new regulations for a second time telling people to remember them.

At the time I knew nothing of the Chairman or committee members of the co-operative; it became clear later that in assembling their claim and in placing themselves as 'traditional' fishermen, they were verbally upholding the ban on beach seine nets. In effect, they were saying to the Regional Fisheries Officer 'yes we will support you here' by attacking refugees and other immigrants who are stereotypically associated with the use of the undesirable type of net.

Later I learned that the Chairman is a wealthy Nyamwezi farmer, a great-grandfather with nineteen children from five wives. He possesses a large herd of cattle and goats, a substantial farm, and many fishing nets. As a fishing leader, he has been Chairman of the Sikonge Fishing Co-operative since the 1960s. It is even claimed that he has inherited a ritual capacity from his uncle, and the importance of kinship relations in local fishing are perpetuated through the large numbers of his relatives who work at the river. Each of the other committee members was relatively wealthy, having combining the occupations of fishing, beekeeping, cattle-keeping, and the farming of tobacco and food crops. The general impression is of people who have extensive family ties in the locality, who fish and keep bees in accord with Nyamwezi ideas about the inheritance of skill through kinship, and who have done materially well out of their association with the Co-operative and its support for officials from the Wildlife and Fisheries Departments working at the regional-level.

There is a further aspect of the context to the rivalry between members of Sikonge Fishing Co-operative and the refugees and market traders, for both the latter groups split away from the co-

operative, alleging corruption and malpractice. In this respect we can see that the issue of beach seine nets was also used as a vehicle to attack the other groups while being seen as supporting the local officials. In fact individual interviews revealed very different positions from the united front that the fishermen presented at the meeting referred to: four of the fishermen stated they owned kokoro nets. Another fisherman stated that he just appears to comply with the rules and regulations but what counts is how they are implemented, and another man responded by saying 'we are banned from using *kokoro* but why do the officials use them, we ask ourselves'. This was a reference to the widespread local allegation that the Fisheries Officer and Project Manager both possess beach seine nets and employ people to use them in the reserve. Later in the year one of the fishermen distanced himself from the meeting, complaining of the ban and saying they had been promised transport to the reserve if they supported it. Others were using their nets in the reserve.

Usoke Fishing Co-operative is the other organisation that has been established in the reserve for many years, and which finds equal favour with the Project Manager. As in the case of Sikonge Fishing Co-operative, attitudes between individuals were mixed and at no time were members collectively informed of the new regulations. At the Ugalla Game Reserve management workshop and in discussion with me the Chairman and other committee members did not actively dispute the ban. Like Sikonge Fishing Co-operative, members of Usoke assembled their claims in response to the issue through a narrative of tradition; as a fisherman named Mzee Kaboga argued:

> "A long time ago if someone did something really wrong he was brought here and there was a court and he was chased from the riverside...but now we [at Sengawane camp] have been entered by Natural Resources Officers [i.e. they have beach seine nets in the camp] if they want to stay somewhere what can you reply. Now those people stay to the point where someone can lose [their livelihood] the *kokoro* it takes the small fish. In one week there were eight *kokoro* here, fishing there and there [he pointed], it was like a ditch and after two weeks there was no fish. Until this year I hear that *kokoro* are not allowed, they came to stir this news around. Those people are not like that man over there Mr George [the leader of Kigwa Fishing Unit] he came to consult with us first, he asked our permission, he did well and really he knows how to fish, he is a specialist".

Here we have an interesting difference to the case put forward by members of Sikonge Fishing Co-operative. Whereas in Sikonge there is clear antagonism between them and the refugees, in this case there is support by this fisherman for the refugee leader by this fisherman (and by those who work with him). Although it is not stated here, the refugee leader has extensive experience

in mobilising people and before he fled Malawi he worked as a District Fisheries Officer, being in this sense a 'specialist', that may be seen as corresponding to the category of expert from the position of local fishermen.

If we turn to the refugee co-operatives: amongst members of these co-operatives there is an extremely high ownership or use of beach seine nets. Twelve out of twenty-five people possess beach seine nets in Pangale Fishing Co-operative and all fourteen members of Kigwa Fishing Unit have mutual shares in fourteen fishing nets. This meant that members of these co-operatives would be badly affected by a ban on beach seine nets.

As in the example of Usoke Co-operative, neither Pangale or Kigwa Fishing Co-operative members were informed of the new regulations until they were on their way to the reserve, and were greeted with the information by the District Fisheries Officer of Urambo. On May 6th 1993, Mr Jackson, the Chairman of the Pangale Fishing Co-operative travelled to Tabora town to make an application for fishing permits. He later complained that when he visited Tabora town the District Fisheries Officer did not inform him of the ban, an argument he used to put the case to me that refugees are discriminated against and that the ban on beach seine nets was foremost an expression of prejudice on the part of local officials. The way that Mr Jackson expressed this demonstrated a standing antagonism between the refugees at Pangale Refugee Camp and the Regional Fisheries Officer, commenced due to a situation that arose in the late 1980s. I became aware of this at the beginning of my fieldwork when the Regional Fisheries Officer accompanied me to provide a formal introduction to the refugee fishermen and women at Pangale Refugee Settlement.

After I had been shown around Pangale Camp, the Fishing leader, Mr Jackson, said that I must go with him to talk to his friend, an old Zairean fisherman, who would be jealous if forgotten. On arriving at the man's house, I and the Fisheries Officer ended up surrounded by a large group of fishermen and women who demanded: "what we want to know is why we were not given nets, why are we being prejudiced against". Turning to the refugees I asked them to put the question to the Fisheries Officer who was sitting beside me. He explained at great length that the nets could only be given to co-operative members (not true) and so, although he had argued their case, unfortunately they were not eligible. I learnt afterwards that some gill nets were donated by a

charitably minded Scandinavian man and his daughter, and they had mistaken me for the girl. The Fisheries Officer had decided to distribute the gill nets only to 'local' fishermen. As we drove away, I asked him why; his response was only "these refugees, you see they are nothing but trouble".

This example does support the claim of the refugees that they are discriminated against, as indeed did the prejudice revealed in discussions concerning the refugees between myself and local officials. However, here what is important is the way that refugees' perception of this prejudice became inter-woven with their contestations against the ban on beach seine fishing nets, introduced for environmental reasons.

It is claimed by fishermen and officials that the use of beach seine nets was introduced into the Ugalla River by the refugees in the 1970s. One man, the leader of Kigwa Fishing Unit, Mr George, was instrumental in this and in August 1993, I spoke to him at Sengawane Camp. In contrast to the way members of Sikonge and Usoke Fishing Co-operatives presented their claims, he expressed indignation and anger at the lack of consultation with the refugees by the reserve Management. Implicitly, his anger was directed at what he perceived to be discrimination against refugees:

> "Kigwa Fishing Unit is a multi-purpose co-operative...the United Nations High Commission for Refugees (UNHCR) has finished giving us support but on the whole they help everyone. At Pangale camp we had help getting fishing nets, the Christian Council of Tanzania (CCT) and Oxfam were helping, they gave us nets in 1978 Five *kokoro* [beach seine] were bought in Mwanza which started the co-operative.[228] People were given projects by the CCT to raise themselves up in life and fishing was one of them. In 1980 and 1990 the CCT funded Kigwa to buy nets, and now Kigwa has 14 licenses for *kokoro* (out of 14 members). The refugees think that *nyavu* [gill nets] are backward they are used to using *kokoro* at home. *Kokoro* is a modern thing, it is like telling people to go back to using hoes from ploughs. With one *kokoro* you may get 2000 fish in a catch and then paying helpers is easy, with *nyavu* it may only be 200 fish. Even the Arabs [fishmongers] have refused to come because we are not using *kokoro*".
>
> (Myself:) "The management argue that *kokoro* take too many fish from the river because they were designed for the big lakes, what do you think about this"?
> "The *kokoro* we use are different, these *kokoro* are two hundred yards...in the lakes you would use a very big one. Here they are 2.5' - 3' mesh size. *Kokoro* nets will not finish the fish. In the river the fish are migrant, they have been fishing in the area for years and years and years. If there is no rain then there is no fish but otherwise you can get fish.

[228]A large group of people moved from Pangale to Kigwa Refugee Camp, Mr George included. Mr Jackson choose to stay behind because, he explained to me, he is Secretary of Pangale Camp, and also the *balozi* (leader) for his ten cell unit.

> The fish come up from Lake Tanganyika. One fish has 5-15 million children, no-one can catch this number of fish. The management argues that *kokoro* take fish, food and habitat but this is not true, the bed of the river is sand, not grass, and this is not pulled out. Also Fundikira [the Project Manager] says that nyavu can get as much fish but this is not true, *kokoro* do not get spoilt in the same way that *nyavu* do by hippopotamus and crocodile. Home Affairs told us to go ahead and use the reserve. It stops people roaming and gives them work. There are lots of rules and regulations and security and boundaries where we cannot go...even in this place [Ugalla Game Reserve] it is a problem".

The differences between the way Mr George presents the case in support of beach seine nets and the claims made by the leaders of the other co-operatives is marked. Whereas members of Usoke and Sikonge Fishing Co-operatives turn to tradition and apparently exclusive local elements that endow them with the right to fish in the reserve, in his narrative, he looks outwards to draw on connections to the international community and Tanzanian Government. Mr George is also up front about the importance of beach seine fishing nets to members of the Co-operative and, having been trained as a fisheries officer himself, he chooses instead to question the basis of the expert knowledge that underpins the claims for the need for a ban made by the reserve management. He highlights the role of fishing as part of the support that has been given to the refugee camps by foreign donors to assist individuals to become self-sufficient and argues that beach seine nets are modern and progressive, another point of contrast with the claims of local fishermen.

One point of agreement in the claims of the refugees and those made by members of Sikonge and Usoke Fishing Co-operatives, is in the allegation that local officials are corrupt. In another interview Mr George argued:

> "Fundikira himself has a *kokoro* which was being used at Sengawane. When I spoke to him he claimed that he did not know why the ban was passed. He only went along with Mapunda [the Regional Fisheries Officer] because Mapunda would have accused him of hypocrisy and supporting his own interests, anyway Mapunda's *kokoro* is a very bad one".

This was a common allegation made by fishermen along the river, being used to argue that if officials broke the regulations why should they, the fishermen, comply. After he had returned to Kigwa Refugee Camp he and the Camp Commandant made a formal complaint to the Project Manager about the ban on nets. Thus, we can see the refugees drawing on support from a senior state representative in a way that local fishermen could not.

Fishermen from Tabora Fishing and Fish Marketing Co-operative and Usoke Fishing Co-operative were told of the ban on Kokoro nets on their way to the river in June 1993. In the case of the former co-operative, the fishermen I talked to had previously heard rumour of the ban and sent a letter of complaint to the Project Manager, but apparently no reply was received. As the fishermen went to the reserve the District Fisheries Officer for Urambo stopped the lorry and informed them that they were not allowed to take kokoro into the reserve. He explained that the nets take a lot of fish, especially due to the small mesh size, and there is not enough room in the river. The following day I was at Igululu camp when some of these fishermen arrived and off-loaded their food and nets as the Game Scout officiously checked their permits. Mustapha Luminusi a Muha fisherman (from Kigoma on Lake Tanganyika) said that the people hid their nets and the Arab driver did not mind. Interestingly his friend Katanta Juma responded disapprovingly "this is a small river, not like Lake Tanganyika or Victoria, you cant use *Kokoro*" (4.6.93). Later in the season at least one of the fishermen, who had hidden his net, a member of Sikonge Co-operative who was present at the meeting described above, started to use it surreptitiously up river.

On June 17th 1993 I had to renew my permit to continue carrying out research in the reserve. At the time Mr Fundikira said that everyone had been complaining about the ban on kokoro and added that this was strange because it was the same people (i.e. the co-operative leaders) who gave their consent to the ban. Perhaps, he continued, members do not really have a say in the co-operative. Apparently fishermen/women had started to ask for permits to have nyavu nets in many different camps to make up the income. He concluded that there is no possibility to change the new regulation against the use of kokoro nets.

CONCLUSION

In this chapter, we have looked at how management planning was implemented in Ugalla Game Reserve in 1993 by focusing on a single issue; that of how fishermen contested a ban on the use of beach seine fishing nets. In taking this theme emphasis was placed on analysing a local issue given importance by those people most directly concerned, not an issue defined as of priority by outside planners. In framing the discussion in terms of the notion of 'claims', it has been argued that claim-making is a crucial practice which needs to be taken into account when considering how people use resources in a protected area. By looking at the claims of fishermen, and indeed

beekeepers or other interest groups, we gain an impression of how people situate themselves within the framework of wildlife management for the reserve and, also, position themselves in relation to each other. This helps us to understand how different individuals or groups negotiate access to the reserve and its resources and reveals something of the power relations and processes involved. Moreover, the resources people have to draw on - in terms of knowledge, prior experiences, relationships, institutional connections, etc. - are highlighted.

In the case discussed above, we have focused on how fishermen gain access to resources through the claim-making process. This gives us an insight into the dynamics of resource exploitation and the way that control over resources is negotiated. We have demonstrated how different groups of fishermen, as claim-makers, have sought legitimacy and institutional support in order to maintain their access to fish in the river. By means of the ways that fishermen were told about the ban, and citing their opinions concerning the use of beach seine nets, it has been shown how a ruling by the Wildlife Department was assembled into a local problem. Diversity among fishermen is conveyed in the manner they formed their cases. Here, we have shown as examples, the way fishermen from Usoke and Sikonge Co-operatives aligned themselves to 'tradition' and the 'traditional leadership' which, apparently, controlled access to fishing resources. In contrast, refugees argued that only beach seine nets can be productive and progressive, and that local fishermen are backward. Also we have the cases of fishermen whose grievances do not follow the pattern of an institutionalised story specific to a particular group. Despite these individual cases, however, the way that fishermen use the different co-operatives to assemble their claims demonstrates their capacity for collective organisation.

In the introduction it was argued that the concept of claim-making is premised on the point that human agency confers on people the knowledge and capability to comprehend their social experience and to attempt to solve the problems they are confronted by in life. This is an abstraction for, as we have tried to elucidate, one has to understand how, when, and where people are able to make claims concerning their grievances, and also why these grievances are brought to the fore at a particular time and in a particular place. It is only when situated in a context that we understand how people's agency is drawn into relations of power and how different forms of understanding are used to make or contest a claim. These issues are extremely important if we are to understand what capacity people have to participate in the conservation

process and how, or indeed whether, they do participate at all. They also serve as a way for us to comprehend what meanings people may give to conservation and how they can be enrolled in conservation actions. In the case in question, we have given illustrations of the claims fishermen in Ugalla made to the Management, this researcher, and to planners attached to the Wildlife Department. However, people do not always have the ability to put their claims forward, or a forum in which to do it, or representatives of institutions willing to take their cases seriously enough or with sufficient power and resources to effect the situation of those claim-makers whom they support. This raises the question as to how such a context arose, and one might note in the example of Ugalla Game Reserve that this situation is particularly apparent in periods of institutional change or intervention by outside agencies. At these times, in particular, people's lawful access to resources, and their abiding or not abiding by regulations, is drawn into the spotlight.

The questions regarding when people are able to make claims and how are especially critical, and this should be emphasised as a crucial point, when local people are carrying out illegal or semi-legitimate activities in order to make their livelihoods in a protected area; for they are up against an extremely powerful conservation lobby in East Africa. Planners there are at present eager for people to participate in conservation but, to put it bluntly, it would appear that this participation is only welcome when people can be enrolled to act on the terms the planners themselves set. As the example of fishing nets has amply demonstrated, an issue perceived and expressed as an environmental or technical problem by outside planners may take little or no account of the social life of the people making a claim. This social dimension becomes expressed in the way an issue is transformed into a local problem to which people respond in different fashions. These ways may not be those which conservationists themselves define as appropriate in the context of the management of wildlife within a protected area. In the end it may be that people prepare, assemble, make and dramatise claims at particular times - if there is an audience and if they have a definable, obvious, grievance; generally, bearing in mind how weak the Tanzanian state is in controlling resource use, they get on with the task of making a livelihood; which is why the notion of claims is important but also it is essential that we examine people's actual practices.

8

Observing Beekeepers' Practices

Introduction

As a dimension of social practice, claim-making encompasses the experiences and skills necessary in establishing legitimate interactions between local resource-users and representatives of the state; it also allows people to put knowledge, authority and power to use in particular settings. In this respect, claim-making is an important notion in an analysis of conservation issues. However it cannot be viewed independently of people's situated practices, local knowledge and livelihood concerns, and therefore introduces the need to examine the circumstances which underlie the claim-making process, as is done in the following discussion which focuses on the case of beekeeping in Ugalla Game Reserve.

In taking this line of analysis, it will become apparent that we are dealing not simply with a functional process of claim-making, or the instrumental use of resources, but also with the way people give meaning to the forest environment. In considering beekeeping skills, we become aware that elements which constitute 'the environment' and people's relationships to it are extremely flexible. This flexibility arises through the way beekeepers order, classify and represent their use of forest resources, justify the organisation of their camps, claim ownership of bee-hives, link themselves to international demands for produce, transmit beekeeping skills, and make honey and beeswax production part of their daily existence. In these respects people try to build and maintain social environments, 'social spaces', within which they can work.

Typically, planning for wildlife (biodiversity) conservation within protected areas involves an assessment of vegetation types, of the distribution of key mammal species, and of the nature and extent of human resource use in this natural environment. In the process, species of fauna and flora, areas of land, and forms of human action are classified, prioritised and valued in ways which bring biodiversity conservation to the fore. Focusing specifically on the human dimension, analysis of resource use by those planning for protected area systems does not have to incorporate an understanding of the social life which gives human resource use a dynamic, or

of the meanings people impute to the natural environment. The human dimension is reduced to a physical phenomenon where the specific characteristics of human action are not considered. Through exclusion, this conservation model ends up removing the human dimension from protected area management, despite the fact that planning is likely to raise the need for state regulation over productive activities taking place in pertinent land areas.

In contrast, by giving relevance to local knowledge this chapter tries to portray how people's actions are located within a particular context, generating the social dimension of forest-based production and leading to the creation of particular livelihood styles. It encompasses the way beekeepers socialise forest environments and give meaning to the media they work with in order to comprehend better how beekeepers organise their environment culturally, socially and technically so as to produce honey and beeswax for sale on international commodity markets.

In previous chapters we have argued that historically people from Ugalla have been represented in statistical terms or depicted according to a single economic activity. By characterising people according to a narrow range of attributes, their practices are aggregated and centralised, serving to transform diversity into homogeneity. Such profiles fail to encompass the way human interaction with the environment emerges from diverse and complex desires and interests. De Certeau (1984: xviii) captures this well when he argues that statistical inquiry breaks down people's 'efficacious meandering' into units organised according to the researchers codes, and because of this, only the homogeneous emerges. Through its ability to divide and quantify, statistical analysis can be a powerful tool but because of analytical fragmentation it loses sight of what it claims to seek and to represent, the nature of social life (c.f. Knorr-Cetina & Cicourel in relation to the character of technologies of representation in social science, 1981: 34-35).

By characterising people according to statistical units or specialised occupational groupings (in maps, plans, reports, databases, etc.), their actions are abstracted from the totality of their lives, in effect rendering them passive. In this 'reality' a protected area can be portrayed as an empty space, nature populated by wild animals, and experts must be present to re-organise 'human resource use' according to administrative dictates and protected area systems planning in order to encompass the trade off between conservation and development. The way human action and the environment is re-assembled under the optic of the expert constitutes a displacement of

local knowledge and the imposition of the power of the expert and of scientific understandings (c.f. Haraway, 1989).

Consideration of the relationship between protected area planning and productive activities raises the question of what conservation means to people and how state-led management practices are encompassed in a protected area such as Ugalla. Perhaps at this point, again following de Certeau, it needs to be asked why it is relevant to determine people's 'ways of operating', examining the procedures and possibilities that constitute the innumerable practices by which users encompass a particular context (de Certeau, 1984.: xiv). The answer might be that we need to understand how beekeepers re-appropriate the space that the Wildlife Department tries to structure through its techniques of wildlife management. In this respect, the state may try to organise the reserve but people also attempt to create 'social spaces' in which they can work at least partially on their own terms, as we saw in Chapter 6 (c.f. Moore, 1973). In de Certeau's words, although people may not be able to challenge the dominant form of land use, they may 'escape without leaving' (ibid.: xiii). In short, examining people's practices helps us to understand how conservation policy and planning is re-organised at the local level (Arce, 1993: 3).

At this juncture it is necessary to clarify what we mean by knowledge. It can be stated, following Arce and Long (1987: 5), that "knowledge is constituted by the ways in which individual members of a society or social group categorise, code, process and impute meaning to their experiences". In the case of men keeping bees in Ugalla Game Reserve, knowledge pertinent to beekeeping is generated through their interactions with the environment, with one another, with other resource users, with officials, and with representatives of markets, for instance. This knowledge can be referred to as 'local' knowledge, insofar as it provides people with a style of action and organisation that emerges from social, situational, cultural and institutional factors particular to the locality.

Following Haraway (1988), the concept of local knowledge encompasses a notion of its being embodied in the way people view and interact with the world around them and, as such, is related to a specific context and a particular way in which people position themselves in relation to the objects of their knowledge. The process of generating knowledge takes place on the basis of existing cognitive elements, representations, and practices and, as Arce and Long state

(ibid., 5) is "affected by various social contingencies such as the skills, orientations, experiences, interests, and resources of social interaction characteristic of the particular group or interacting set of individuals, as well as those of the wider audience". In this respect, the practices of men keeping bees in Ugalla Game Reserve imply that knowledge is grounded within their daily lives, resource struggles and dreams for the future. In effect this constitutes a process of organising reality and positioning themselves within the locality.

We should be clear that when we refer to 'local' knowledge, we are not positing a common body of knowledge with an essence that can be counter-poised against expert, scientific knowledge. As Arce (1993: 7-8) argues, a body of knowledge is constituted through the way people construct their world, it is not an accumulation of facts, and there are many forms of knowledge at the local level. It follows from this view that local knowledge may draw on 'tradition', but it is likely to be combined with other elements of knowledge, for instance, scientific information, an understanding of modern technology, and the 'common sense' knowledge gained from living, working and travelling in the many contexts which constitute, in this case, modern Africa.

This view of the makeup of local knowledge is important to stress due to a tendency in certain conservation spheres to view 'local', 'indigenous' or 'traditional' knowledge or 'knowledge systems' as a resource that can be extracted to bolster expert understandings and contribute to management policies and planning actions (McNeely & Pitt, 1985: ix; McNeely, 1995; Kemf, 1993; Kleymeyer, 1994; Alcorn, 1995; and more generally see Warren et al., 1995 and Blunt & Warren, 1996). But the point is that 'local knowledge' is not a condition that can be de-contextualised from people's lives. Furthermore, the desire of experts to appropriate local / indigenous / traditional knowledge and manipulate it for given ends, involves power relations which place those with a scientific training in a strong position vis-à-vis people identified with a locality who have no such scientific background. This holds the danger that local knowledge and practices are treated, at best, as part of an outmoded tradition and, at worst, as manifestations of an ignorance which needs to be transformed through progress (Hobart, 1993). One consequence of these views is that people may simply be rendered invisible in a planning process aimed at transforming their lives and their use of the natural environment (van der Ploeg, 1993; Escobar, 1995; Haraway, 1989). In these contexts people are unlikely to be able to directly challenge rationales behind the management of resources by the state or by

international agencies. This does not mean to say, however, that they don't have their own ways of disputing, resisting or countering planning dictates.

Reference to the fact that planning dictates may be resisted takes us into the issue of practices, for it is only by giving attention to the skill of beekeeping and to the practice of everyday social life in the forest that one can grasp how knowledge is internalised, used and reconstructed by different actors (vide Arce & Long, 1994: 77). The term practice is taken to mean a habitual action or performance, which draws upon an ensemble of procedures, strategies, discourses, social imagery, speech acts, technical manipulations, and schemata of operations (ibid.). In reference to beekeeper's practices, recognition is not simply being given to specialised beekeeping skills, although they are important, but to the way people interact with one another, participate on markets, and encompass management actions in Ugalla. From this perspective, local beekeeping techniques are not themselves immutable, the legacy of 'tradition', but part of an ensemble of knowledge in people's lives. This is not to say that beekeeping in Ugalla is a recent phenomenon, far from it; available evidence indicates it has been practised since before the 1870s, when the first European observers passed through the region (Stanley, 1872; Cameron, 1877; Reichard, 1892). However it is an activity whose form and content has changed over time; new ideas and practices have been incorporated under the influence of trade connections, of immigrants coming into the locality, of colonial extension work, and of wider change in beekeepers' lives.

In this chapter we will explore beekeepers' knowledge and practices in Ugalla Game Reserve, dividing the discussion into a number of sections: (a) establishing a beekeeping camp; (b) use of species in the miombo woodland; (c) how beehives are hung around a camp; (d) the location of beehives in different camps; (e) conceptions of the organisation of a bee colony; (f) representations of hive-making traditions; (g) beekeepers' portrayal of their role in the forest ecology. This is accompanied by Appendix 8 which provides details of the beekeeping tasks that are carried out in the forest with accompanying photographs. This is the first of four chapters on beekeeping, the next takes a historical perspective in order to explain the role the Tabora Beekeepers Co-operative Society has played in providing a collective form of organisation which has enabled beekeepers to produce for international markets. It is followed by the life history of one man, a beekeeper and member of the TBCS, providing a bridge to

Chapter 11 which contains a detailed analysis of the social organisation of beekeeping in Ugalla Game Reserve.

When considering the people who keep bees in Ugalla Game Reserve, we have opted for ease of writing to refer to them as 'beekeepers', but, as mentioned in the introductory chapter, such a categorisation needs qualification; those who keep bees are a diverse group of people and should not be identified as homogenous according to one specific productive activity. We also have to remember that when we refer to the people working in the forest as 'beekeepers' the category encompasses people who have varied beekeeping skills, are young and old, are usually men rather than women, who bring to their work different experiences and outlooks on life, have varying capacities, resources, property and opportunities that they can put into their work, and may be engaged on the basis of a range of labour relations. However, for the purpose of this chapter, in order to place the emphasis on people's practices, the following account brushes over what is in reality a diverse, complex and rich mosaic of people behind their forest-based beekeeping activities.

KEEPING BEES IN THE FOREST

As one travels into Ugalla Game Reserve, cylindrical bark or log hives can be seen hanging in the trees for mile after mile. For purposes of analysis, the beehive as an object, and the camp as a physical location can act as devices enabling us to understand how beekeepers use the reserve to make their livelihoods. As objects attached to a particular location, beehives can help to reveal how beekeepers order their environment and conceptualise the nature of the forest within the game reserve, and this, in turn, conjures up ideas relating to the distribution of resources and practices concerning property ownership, drawing us into the social relations entailed in beekeeping.

In the introduction the element of local knowledge was stressed, and here the relationship between knowledge and organisation should be clarified. Through the process of perceiving and interpreting the world around them, beekeepers organise diverse local elements in order to generate meaningful and significant environments in which to make a livelihood. This process of ordering involves people drawing trees, bees, and their surroundings into their everyday practices. In organising themselves within a given environment, extending a network of camps

into the forest, people who use specific resources and hold in common ideas and practices essential to beekeeping are brought together. By ordering heterogeneous elements into a meaningful and taken-for-granted 'reality', through the course of their daily lives, they bridge change and achieve continuity in the practices that lead to the production of honey and beeswax.

In so far as the organising process is one that can be understood on the local people's own terms, they become actors who belong to Ugalla Game Reserve - among other places. These terms relate, for example, to the cognitive ways they explain their hive-making techniques and represent the locality, and to the way they reflect on how they pursue their livelihoods, attributing meaning to social relationships and items such as honey. In this process, people's stories, procedures, methods, logic, and dreams of order become a performance embodied in a material non-verbal expression, taking place through their actions and practices.

As Law (1994) suggests, it is in their mode of ordering that the character of their agency can become visible to the researcher. This process draws together human and non-human relationships and elements, assembling them in such a way as to generate the animus of social continuity and of change. This becomes manifest in the ways beekeepers establish a camp, claim individual property rights over trees and bee-hives, attribute meaning to bees, and distribute the space of the forest in a form where a relational materialism takes them into asymmetrical interactions between themselves, the forest, bees, and the production of honey.

The Beekeeping Camp[229]

Dry season beekeeping camps are located along the Ugalla River and its tributaries or beside water holes in the woodland. At the centre of a camp is a living area, and beehives radiate outwards for a distance of up to 4 kilometres. The camp provides a locus for the organisation of beekeeping in the forest and can be viewed as a visible manifestation of the social networks that stretch across the reserve, linking people together in social relations that extend outwards to local villages and towns.

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[229] The information in this section is derived from individual interviews conducted with beekeepers throughout the period of research, from observations made when living in or visiting beekeeping camps in Ugalla, and from genealogies/camp histories collected from beekeeper-members of the Kwihara Branch and Ngowa Branch of the TBCS who work in Ugalla Game Reserve (see Methodology, Chapter 1 for further details).

If we consider the features given priority by beekeepers when they discuss how a camp is formed: an area is first found that is not already used for beekeeping, then typically, in the words of one man, "you look for water and if the place is suitable you decide to open a camp... when you do this you build a good strong camp because it is not good to sleep outside like animals in the wilderness".[230] An area's suitability is judged by the presence of water, an ample number of trees for siting beehives, and accessibility to a road or the railway where transport can be gained to take people to and from the reserve and produce can be carried to the Tabora Beekeepers Co-operative Society (TBCS).[231] Once a suitable area has been found, a camp structure is built out of wood, grass, or mud bricks, and the group of beekeepers start to site their hives.

These are each very practical features which are self-evident to the people concerned. However, although it is rarely pointed out in discussion, a group of beekeepers seldom start a new camp in Ugalla without friends or relatives nearby. Indeed they are usually introduced to the area by beekeepers already based there and one can usually trace relations of kinship, affinity, friendship and neighbourhood between people in adjacent camps (see Chapter 11).[232] These relationships have a practical dimension for, to organise themselves to work in the harsh conditions of the forest, beekeepers need the support of others if they are sick or run out of food, and in order to transport their produce.

As stated in Chapter 5, there are an estimated 93 beekeeping / beekeeping-fishing camps in Ugalla Game Reserve, some of which have existed for several decades.[233] Thus the opportunity to start a new camp is limited; certainly beekeepers portray the land within a 2 to 4 kilometre distance either side of the river as 'full of beehives' and woodland areas that have a water source and give access to transport are limited. The fact that beekeepers characterise areas of

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[230] Anthoni Makonyaga, Chairman of the Tabora Beekeepers Co-operative Society, September 1993.

[231] Someone familiar with beekeeping might assume that the quality of flowering plants is foremost in decision-making over where to site a camp, but this is not the case because in a given locality there is enormous variation in the flowering patterns of different tree species between different seasons. Beekeepers assume that if the woodland is undisturbed and there are good trees for hanging beehives in then there will be ample nectar for the bees.

[232] The ideas people hold concerning the way that camps are opened up and transferred between different beekeepers strikes chords similar to those found in discussions on Unyamwezi land tenure patterns (vide Cory, 1955 and Abrahams, 1967a).

[233] See Appendix 6.

Ugalla as 'full' may to some extent be part of a claim-making process to guard against in-comers, although beekeepers' descriptions of the reasons for starting to hang beehives away from the river suggests also that they hold this to be true.

In the region generally, beekeepers do not ask anyone for permission to open a new camp; the forest is categorised as *upori* (*ipori*), a word of Arabic derivation meaning an uninhabited wilderness, and people do not link ideas of land ownership to this concept. Trees and feral bee colonies can be used by anyone who has the capacity to exploit them. In Ugalla Game Reserve specifically, beekeepers operate with the idea that so long as the forest is unused by beekeepers it is there for anyone to exploit. Nonetheless they are fully aware that according to the reserve regulations they should not start new camps in the reserve.[234] As a consequence beekeepers try to choose a site off the route taken by the Project Manager and the game scouts in the course of their duties, and establish a camp as they otherwise would.

To summarise, in organising themselves to start a camp in Ugalla Game Reserve, beekeepers portray consideration of practical factors, such as use of the woodland, a water source, amply trees to hang hives in, access to transport, as paramount. Decision-making on the part of an individual or a group of beekeepers also includes whether there are people they are on good terms with in the locality and whether the Management of the reserve are likely to interfere in their activities. Each of these features necessitates substantial local knowledge as well as the capacity and resources to bring the desired camp into existence.

The Use of Different Tree Species in the Miombo Woodland[235]

A number of pathways radiate out from the part of a camp where people live - towards a pool or the river, to a road, to neighbouring beekeeping camps, and to places where beehives are sited or wood materials found.[236] Each pathway suggests the course taken in the beekeepers'

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[234] There is a ban on new camps being opened and some established ones were closed for management reasons in the early 1990s (PAWM, 1994b)

[235] The data presented in this section is based on interviews with beekeepers and detailed observations made at Kwalungu, Nsontwa 1 and Sengawane Camps (see Methodology, Chapter 1 for further details).

[236] The way pathways radiate out from a camp can be seen in Plate 2, Chapter 5.

daily routines, a manifestation of people's habits within a locality they are intimately acquainted with.

Through the visible signs of beekeepers' presence at camps in the reserve another aspect of their local knowledge becomes manifest, namely their detailed acquaintance with different tree species and their skill in using them for beekeeping purposes. In their employment of these living natural resources around a camp and the routines that emerge, we can see that beekeepers' interaction with the environs is non-uniform as, for instance, a particular place is sought to site a beehives or a particular species of tree is looked for. In this respect the uneven distribution of different tree species, the irregular nature of the terrain, and the way the environs is shaped by the purposeful actions of people, are each features that come together to create very specific localities in which beekeeping takes place. Each locality emerges as a social space imbued with the meanings of individual lives and the collective enterprise of perpetuating beekeeping between generations. Here we can simply provide an introduction to the type of woodland beekeepers are working in, and the key tree species used for beekeeping purposes in Ugalla Game Reserve. Fuller details on trees species used by beekeepers are listed in Appendix 7 Tables 13.3 - 13.6.

The forest surrounding beekeeping camps in Ugalla Game Reserve is a type of woodland known in East Africa as 'miombo' but locally referred to as original/natural forest (*misitu ya asili*) or simply wilderness (*pori*).[237] In the literature miombo is characterised as composed of a high percentage of *Julbernadia globiflora* and of *Brachystegia sp.*,[238] but in fact a wide range of tree species may be found (see Appendix 7, Figure 13.3 for a list of tree species found in Ugalla Game Reserve).

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[237] For research on the miombo woodland, three known vegetation studies have been carried out in Ugalla Game Reserve: a study of vegetation communities in 1939 (Glover, 1939), research by the Miombo Research Centre in 1974 (Nanai, 1974), and data collection by the Planning and Assessment for Wildlife Management Project in 1993 (PAWM, 1994b). Two further studies have been carried out in southern Tabora Region whose results are pertinent to this area (Lawton, 1979, 1980; Schulz and Co., 1973). For further information on vegetation and forest resource use in Tabora Region, some of which contains details pertinent to an understanding of local beekeeping, also see Conyers et al., 1971, Barratt & Mitchell, 1982, Barratt, 1982, World Bank, 1992.

[238] A study by Schulz and Co. (1973) records that in the Wala River Forest Reserve, which bisects the north-east corner of Ugalla GR, Julbernadia globiflora and Brachystegia species make up 50% of all trees over 15cm stem diameter breast height (cited in PAWM, 1994b: 37).

Camps near the Ugalla, Wala and Msima Rivers are situated on a flood-plain dotted with large termite mounds.[239] The trees that flank the river and those that grow on the termite mounds are particular species which act as focal points for hive placing, while between the mounds are large areas of miombo *mbuga* (swamp) where there are few or no trees. Trees found in miombo *mbuga* tend not to be suitable for placing beehives, generally being short and weak and liable to break under the weight of a beekeeper or beehive. However useful species are present, such as *msasambeke* (*Crossopteryx febriguga*) used to make *kontoro*, the hooked poles used for hanging beehives from a tree.[240]

In the west of the reserve the flood-plain is home to groves of borassus palm, *mhama* (*Borassus aethiopum*); although occasionally one will see a beehive made out of a section of *mhama* trunk, in general this species is not used by beekeepers and the palm groves are devoid of beehives. To the far west the land is more open and the vegetation changes, one can see beehives kept in tree species such as *mdungwa (Kigalia aethiopica)* and *acacia* species such as *livindwe* (*Acacia sp.*) and *mtamba* (*Acacia macrothyrsa*).

Beekeeping camps away from the river are surrounded by much denser areas of forest, intersperced with patches of *mbuga* that give a patchy, mosaic-like, character to the vegetation, and beehive distribution is uneven, with hives being concentrated in some areas and non-existent in others. Dense woodland is also good for honey hunting, for a large number of mature trees are found with cavities that attract feral bee colonies; in particular there is a tree called *mkuya* which is referred to as the 'house of the bees' (*nyumbaya nyuki*) because of its hollow form.[241]

In the woodland south and north-west of the river there are hill outcrops - Igulu, Shankangia and Kasontwa - home to a vegetation cover characterised as 'hill-top miombo'. Although

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[239] An impression of this terrain can be gained of this from Plates 1 in Chapter 5. See Milne (1936) for a study of termite mounds near the Ugalla River.

[240] Tree species referenced in the text were identified by the beekeepers, not independently corroborated by myself. The Kinyamwezi names were translated with the use of three inventories, Schulz and Co. 1973, PAWM, unpublished data, 1993, and Cory, EAF.Mss.57.

[241] Common species cut down to obtain honey are *muwa* (*Julbernadia globiflora*), *mbanga* (*Afroromosia angolensis*), *mzima* (*Terminalia sericea*), *mkelenge* (*Terminalia mollis*), *mlama* (*Combretum gueinzii*), *msinde* (*Diospyros mespliformis*), *mgando* (*Erythrophyleum africanum*) and trees known locally as *mkungu* and *mkuya*.

beekeeping camps are located nearby, these hills are not used for beekeeping as they are considered dangerous, due to snakes and wild animals, and there are extensive areas of miombo woodland surrounding the outcrops. Variation in the composition of the miombo woodland and in the nature of the terrain - beside the river, in patches of *mbuga*, on the hills and in the dense woodland - indicates localised diversity in the potential materials and species that are available for beekeeping throughout the reserve.

At camps throughout the reserve, three types of tree are relied on extensively by beekeepers: Julbernadia globiflora (*muwa*), Pterocarpus angolensis (*muninga*), and Brachystegia species. A number of Brachystegia species are commonly used: *miombo* (Brachystegia boehmii), *mtundu* (Brachystegia speciformis), *mnongo* (botanical name unknown), *mshilanga* (Brachystegia longifolia), *mkongoro* (Brachystegia bussei). *Julbernadia globiflora* or *muwa* is a key source of nectar for the main *luhehe* honey crop in June - July, and the bark is used to make beehives, bark-rope, containers, and honey strainers. *Brachystegia* species such as *miombo, mitundu,* and *minongo* flower from August and September and provide nectar for the subsidiary *nemba* honey crop in October - November. The bark of these Brachystegia species may be used for beehives but is not preferred because - depending on the species - it is weak, heavy or difficult to debark in the dry season. *Pterocarpus angolensis* or *muninga* is used extensively for making log hives because it is easy to carve, durable and doesn't shatter. *Muninga* is cut in the reserve by - illegal - timber cutters and, because beekeepers are attracted to the off-cuts of wood they are quick to open camps where timber has been extracted.[242]

In summary, another aspect of beekeepers' local knowledge and skill is a detailed acquaintance with the miombo woodland and the different tree species it contains. Through the reserve the character of the woodland changes, most notably in the contrast between the river flood-plain and denser areas of woodland away from the river. Although there are certain species that beekeepers use extensively, variation in the species that are found and the way they are distributed is reflected in different beekeeping practices throughout the reserve. It should be stressed, however, that differences in beekeeping practices are not solely a consequence of the range of tree-materials that are available but relate also - and to no small degree - to how

[242] For example recently at Ilunde and Kasontwa B Camps, and in the 1940s and 1950s at Siri Mawe, Unjele Misakela and Kamekala Camps.

different individuals and groups of beekeepers have learnt to keep bees and developed their skills.

Hive-Hanging Localities[243]

We have suggested that the beekeeping camp is central to the way beekeepers organise their productive activities in Ugalla Game Reserve. The ability to open a camp and use the forest environment requires a detailed acquaintance with the locality, including knowledge of tree species in the forest and of the actions of other people - officials, fishermen, sports-hunters, etc. Here we continue to explore how beekeepers order their environment and organise their productive activities by focusing on how beehives are sited around a camp. It should be made clear that a beekeeping camp covers a specific area of land and hives will be distributed between trees within this area. Beekeeping camps adjacent to one another have a boundary which the respective camp leaders recognise and over which they, or a TBCS leader, will arbitrate, if any disputes occur. In this section, however, we are concerned solely with how beehives are situated within a single camp.

In portraying hive-siting practices we draw on different forms of information: practical (and accurate) descriptions about where a hive should be placed in a tree, beekeepers' representations of how different people's hives should be sited in relation to one another, and the records of the anthropologist gained from participant observation with a group of beekeepers throughout a season. Emerging from this data is a mixture of description, representation, and folk models which lead one to suggest that it is not enough to try to elicit precisely how hives are hung around a camp, it is also necessary to ask why beekeepers represent their hive siting in the way that they do. These two levels of enquiry may be self-evident to an anthropologist, however, it is worth reiterating in regard to representations - peoples ideas about what things are - that we are not simply dealing with the relationship between a folk model of how things should be and actual observable practices but also, as characterised by Holy and Stuchlik (1983), with the ideological components of people's representational notions. In this case, the way beekeepers depict how hives should be sited around a camp reflects power relations between beekeepers in the TBCS, as well as different

[243] The data in this section is illustrated with the cases of Nsontwa 1 and Msiri Camps where fieldwork was conducted, it is also based on individual interviews with beekeepers who work inside and outside Ugalla Game Reserve (see Methodology in Chapter 1 for further details).

views on how productive activities should be organised within a camp. To expand on this theme, this section covers a number of different points: decision-making in relation to the siting of hives, how beehives are identified, how hives are protected from theft and, lastly, how hives are placed in relation to each other and the way this placement is represented.

Alone amongst forest products the beehive (as an object, its contents and its siting) is the private property of the beekeeper. By siting a hive in a tree, he or she gains personal use-rights over the tree for as many years as a beehive continues to be placed in it. Established beekeepers may own from 500 up to 1000 beehives which means, in effect, that they have substantial personal claims within the forest around a camp.[244] It also means that, as beekeeping is a group activity, beekeepers must have some way of organising how they place their hives in relation to one another and make claims over specific trees. Here we must bear in mind that the property rights and claims of 5-20 different beekeepers will interact together within a camp, however few or many beehives each individual possesses.[245]

In beekeepers' descriptions of how they site a beehive in a given tree there is a tight fit between their descriptions and what can be observed of their practices. These practices appear to be part of the common-sense knowledge of a skilled beekeeper, with a logic that is taken for granted and not mediated by the political or cultural filters essential to people's representations. The correlation between description and practice appears to emerge from the fact that the researcher

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[244] I did not seek to elicit information on beehive density around a beekeeping camp. Beekeepers themselves rightly point out that it depends on the number of trees that exist to hang beehives in and this varies. However it would be possible to identify an average number of beehives in a given area but not through the ethnographic techniques I adopted. A study that is useful in this respect was carried out in Ugalla Game Reserve during 1993 by members of the Planning and Assessment for Wildlife Management Project. The research team determined the density of beehives around four camps in Ugalla Game Reserve: Senga 2, Unjele, Sirimawe, and Kasontwa-B (PAWM, 1994b: 59). Senga 2 and Sirimawe are beekeeping-fishing camps on the Ugalla River established around the 1930s, Unjele is in the woodland north of the river and is said to have been established in the 1940s, and Kasontwa B is in the woodland south of the river and was established in 1991.

The findings of this study are as follows: at Kasontwa B the beekeeping radius was 1.2 kilometres, while at the other camps it was 2 km radius from the living quarters. In these camps the hive density was (i) 64 hives/km^2 at Unjele, giving a total of 886 hives for the camp, (ii) 87 hives/km^2 at Kasontwa B, giving a total of 396 hives, (iii) 71 hives/km^2 at Senga 2 giving a total of 644 hives, the last camp, Siri Mawe, was difficult to assess using this sample technique since the beehives are concentrated along the river banks. These results provide a useful bench-mark through which to calculate the number of hives sited across an area of land, but we have to be aware that there is variation in siting patterns depending in part on ecology, in part on the age of the camp, and in part on the capacity of a group of beekeepers at a given time.

[245] In order to gain an impression of the number of beehives different individuals may possess turn to Tables 11.2 11.3 and 11.4 which contain data on beehive numbers at five beekeeping camps in Ugalla Game Reserve.

is enquiring what an individual does to obtain a good honey crop, and is not touching on questions of people's relationships to one another or property rights around a beekeeping camp.

In siting a beehive, beekeepers display the intimate knowledge that is needed to put the hive in a good location for the bees, while bearing in mind their own practical needs. An appropriate tree has branches that can be climbed and rested on easily when harvesting, a branch that can take the weight of a hive full of honey, and a canopy that can give shade to the hive and attract bees. A beehive is sited high up in a tree for a number of reasons, swarming bees are said to fly near the canopy level, the hive needs to be in the shade, it must be set above the level of fires which sweep through the reserve each dry season, and if it is high up a honey badger is less likely to hear the bees.[246] Only some species of tree have these characteristics, while others are deliberately avoided because they do not fulfil these criteria or attract creatures destructive to the bee colony or are of danger to the beekeeper.[247] Appendix 7, Table 13.3 gives a list of common species of tree used to site beehives in.

Generally beekeepers only place one beehive per tree, and do not site hives in trees adjacent to one another, placing them about 100 meters or more apart; occasionally several hives can be seen in a tree, such as at the camp of Sumputu in the west of the reserve, but this is not common.[248] The rationale beekeepers give for siting hives in this manner is very practical, which is that when a hive is being harvested the bees become aggressive, and if other colonies are located in the vicinity nearby the bees from those hives will also come and attack. For beekeepers who do not wear protective clothing and who harvest in the daytime (in the reserve there is a danger of wild animals when harvesting at night) this can be serious. One could also conclude from this information that these practices emerge from the land-extensive nature of beekeeping in Ugalla Game Reserve, for beekeepers do not encounter an extreme shortage of hive hanging trees or land shortage, as would appear to be the case in other areas of

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246 At Kwalungu and Nsontwa 1 Camps beekeepers placed their hives at a range of heights from 3 to 10 meters from the ground.

247 For instance certain types of trees like *mtonto* and *mkumbu* are slippery and break easily and *mpogoro* have crannies that harbour snakes and make it easy for the honey badger (*Nyegere, Mellivora capensis sagulata*) to climb, or are a resting place for leopards which may knock the hive to the ground, other trees are attractive to ants that gnaw the hive, and tree that elephants like are avoided because the beehive may fall when the tree is shaken.

248 There is no taboo against siting two hives in one tree as Crosse-Upcotte recounts for the Ngindo (1956).

Tanzania.[249]

Once a person has hung a beehive in a particular tree it is said he (or she) 'must' put a mark on the tree, as one man working at Msiri Camp stated: "you always put your hive back in the tree with the mark on it, another person will see that mark. If he is dishonest he will change the mark...people know where their beehives are because it is familiarity and pathways and because you leave a sign on it is easy to say to someone else harvesting your hives 'follow that sign'". Some examples of the signs cut into the trees are depicted in Figure 8.1:

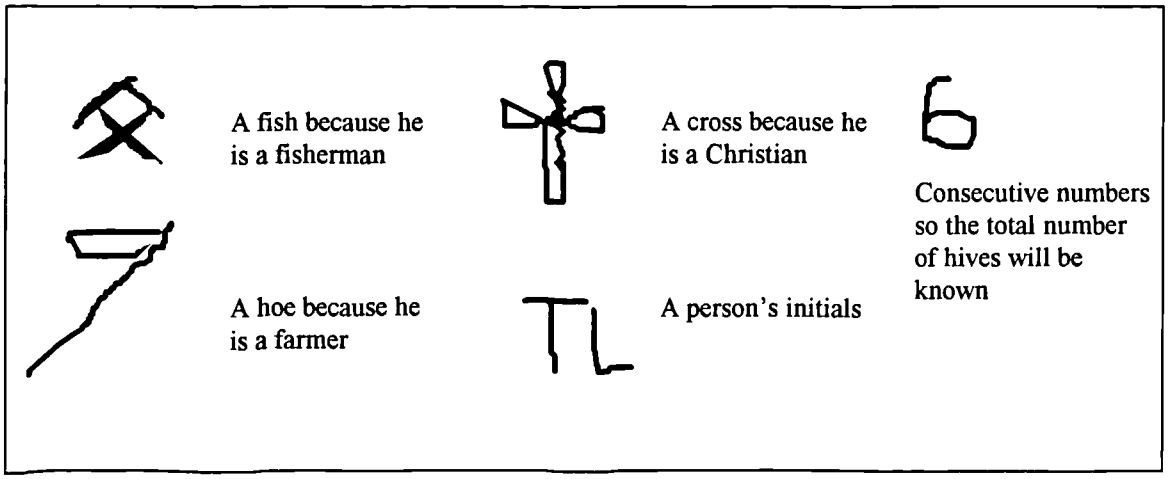

Figure 8.1 Examples of signs used by beekeepers

[249] For example, in parts of Dodoma Region trees for hive hanging are few and far between, and one can observe massive Baobab trees with steps cut into the trunk and many hives placed in the branches. Similarly, where land is short in areas of Kilimanjaro and Arusha Regions one can see trees with many bee-hives in.

I did not seek to elicit information on beehive density around a beekeeping camp. Beekeepers themselves rightly point out that it depends on the number of trees that exist to hang beehives in and this varies. However it would be possible to identify an average number of beehives in a given area. A study that is useful in this respect was carried out in Ugalla Game Reserve during 1993 by members of the Planning and Assessment for Wildlife Management Project. The research team determined the density of beehives around four camps in Ugalla Game Reserve: Senga 2, Unjele, Sirimawe, and Kasontwa-B (PAWM, 1994b: 59). Senga 2 and Sirimawe are beekeeping-fishing camps on the Ugalla River established around the 1930s, Unjele is in the woodland north of the river and is said to have been established in the 1940s, and Kasontwa B is in the woodland south of the river and was established in 1991.

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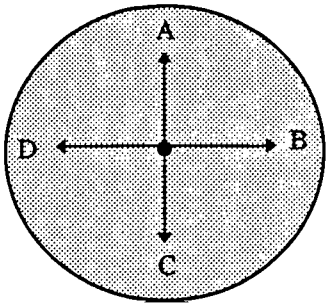
Signs may be used to indicate something a person holds to be important about his or her identity, as a farmer, a fisherman or Christian, or his name, or a number, etc. These markings are one way claims to trees and beehives are made, and they facilitate a beekeeper's labourers in finding the hive to harvest it.

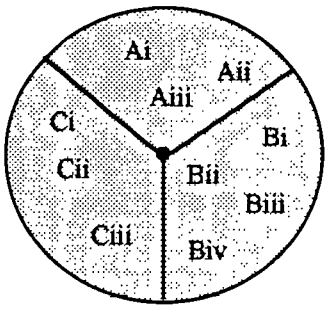
While signs may tell beekeepers in a camp to whom a hive belongs, they do not prevent theft. For this, a protective 'medicine' (in the sense of a charm) is attached to the beehive by some beekeepers; if a thief comes to take the honey the hive will supposedly 'stick' to him and he will not be able to free himself; or, in some versions, the hive sticks to the person as he runs away. The hive medicine is made by specialists, of which there are 3 in the village of Isongwa on the road to Ugalla (interestingly the place where beekeeping extension work has been most prominent and where the TBCS was started). However use of the medicine is apparently always kept secret because, should it causes someone to die, the family will have heard the beekeeper is making use of it and will feel obliged to try to kill him. A number of informants suggested that this medicine has gained renewed importance in recent years with rises in the commercial value of honey and beeswax. Such widely held beliefs point to a level of shared understanding among beekeepers which contrasts with, for example, the case of groups of fishermen who, as discussed in the last chapter, hold very different knowledge, rationales, values and beliefs among themselves.

Reference to the trees which beekeepers site beehives in, to their signs of ownership, and to the use of protective medicine leads us to the question of how beekeepers within a camp site their beehives in relation to one another. Two common patterns of hive siting around beekeeping camps are typically identified by established beekeepers. These patterns can be seen in Figure 8.2, diagrams of their descriptions.

The first is that the area around a camp is divided up according to points of a compass, with each beekeeper extending his beehives out from the camp shelter in a different direction. Stress is placed upon the way the bee-hives of different individuals are kept separate from one another. The second is that the area around a camp is divided between different beekeepers, but each one sites his beehives according to where other members of his family place their hives around a camp. Here the stress is upon placing hives in a relational position to family members.



1. Hives placed around a camp by each beekeeper taking a different direction.



2. Hives placed around a camp by a beekeeper beside those of relatives.

Figure 8.2 Representations of hive siting around a camp

In Number 1, unrelated beekeepers A, B, C, and D each place their hives in a different direction and work in separate areas. In Number 2 Ai hangs his beehives in an area with his relatives, Aii and Aiii, Bi and Ci doing the same.[250]

These patterns were described by James Ngoma and Lioba Chalamila who work in Ugalla Game Reserve at Msiri and Nsontwa 1 Camps respectively:

James Ngoma described the first pattern as follows:

> "the hives are placed according to different directions...if a new person comes into the camp he is told to take a particular direction...to have a direction helps if you are unable to go and harvest because you are sick...the helper can then find the hives. Also we only co-operate on hive harvesting, other than this we keep our activities separate. If a person hangs hives in relation to his sons [as in the case of Lioba Chalamila this can cause problems because it could happen that after he dies the child would take them all [the beehives] and there would be none for other kin".

Lioba Chalamila stood in Nsontwa 1 camp and pointed in different directions, explaining, 'the hives of Nsokoro are here, mine are there, and those of my sons are there and there'...etc.:

> "we are a family so we put our hives together next to one another...my son there, and my other one...[etc.,] we can do this because we are a family and we do not argue. My father when he stopped coming to the forest I took his hives and they were next to mine so that was easy I just started to use them, and then for my sons it will be the same".

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[250] The forest is not divided into clan lands in the sense that it is said to be for the Embu, Mbeere or Akamba in Kenya (Brokensha et al., 1972), nor are beehives located territorially around villages and given clan and village markings as described by Thorp (1943) and Cross-Upcotte (1956) in south eastern Tanganyika. See also Kakeya (1976) and Takeda (n.d.).

During the course of fieldwork it became clear that these patterns are not a description of actual hive-hanging practices, but representations of the way the space around the camp is divided.[251] These two rationales for distributing beehives are widely cited by beekeeper-members of the TBCS, different individuals preferring one method or the other. In Number 1, the value of keeping different people's hives separate is emphasised for practical reasons such as an assistant being able to find a beekeeper's hives easily, and also to reduce the problems which are perceived to be related to kinship, such as inheritance disputes. Some beekeepers also place positive value on working alongside people who are not their kin, for it is said that they may learn different and better beekeeping techniques. In Number 2, the value of family members placing their hives together is emphasised, again for practical reasons for it is said that kin co-operate together and support one another, together with reasons related to inheritance practices.

Behind the rationales cited for these representational notions about hive distribution around a camp there are also ideological components. Many similar quotations to those above were given by informants, however these two were chosen deliberately to demonstrate the political aspects of beekeepers representations, for they are a description by a TBCS branch chairman, Lioba Chalamila (who is the focus of attention in Chapter 10), and an ex-Chairman, James Ngoma, between whom there is much antagonism (as described in Chapter 11). James Ngoma, who describes hives siting as in Number 1 down-playing the positive value of kinship, was putting across a case against Lioba Chalamila who, it is reputed, is favouring his family and other kin as he builds up his position in the TBCS. In turn, Lioba Chalamila describes James Ngoma's camp as 'full of thieves' which he explicitly links to the fact that it is not a small family camp in the woodland as his is. This is just one example, but it does give an impression of the way representations of hive siting can be used to different ends. It also underlines how a lack of 'fit' between what is described and what can be observed is not simply a question of the difference between a folk model and practice.

In fact, it can be noted that although people state that these are two entirely different patterns of hive-siting, another interpretation is that they are representations of the same thing; for even if a

[251] In a discussion on Ngindo beekeeping in south eastern Tanganyika in the 1950s, Crosse-Upcotte points to a similar disparity between representation and practice: "the Ngindo hold a theory of recognised forest zones, each the monopoly of the lineage best qualified by long residence to conduct 'the spirit agency', but in practice systematic zoning of beehives proves fallacious" (1956: 84).

beekeeper hangs his hives in a particular area separate from his friends, as in No.1, it is likely that over time his sons or other assistants will also start to hang their beehives in this area (a fuller appreciation of these features can be gained by reading Chapter 11 on the organisation of beekeepers within a camp).

In considering how beekeepers actually site their beehives in relation to one another around a camp, we can compare the description given by Lioba Chalamila of Nsontwa 1 in Figure 8.2 (No. 2) with Figure 8.3 which is also Nsontwa 1. This is a diagrammatic sketch based on information I collected from Nsontwa 1 when accompanying beekeepers to harvest their hives in June-July 1993, and from information on beehive distribution derived from vegetation transects I carried out in December 1993.

According to Figure 8.3, the hives of different people are spread out around the camp irrespective of their kin or non-kin relations to one another. Conversations held when visiting these hives in the course of honey cropping suggests that siting is influenced by a mixture of factors, where water has been found; two or three people may have spent time making hives together and then subsequently hung them nearby; a person may deliberately distribute his hives in order to gain the maximum advantage of different sites. Another example, in one direction - towards the west - a concerted effort has been made to hang a large number of hives for an exceptionally long distance from the camp shelter because it is said that one of the people in the next camp, Nsontwa 2, is a man they label a witch whom they do not want to come close to. From this sketch of hive-siting at Nsontwa 1, we gain a very different impression from the way that Lioba Chalamila wishes to represent beehive siting as emerging from the cohesive nature of family relations within his camp.

In summary, the distribution of hives around a camp emerges over a long period of time and incorporates decision making associated with practical factors, social relationships and individual idiosyncrasies. Each of these factors involves decision-making based on the considerable knowledge of the local environment which is necessary for successful beekeeping. Certainly the location and position in which a beehive is placed is extremely important, for it is the main form of hive management that beekeepers engage in, other than ensuring the hives are kept in good condition.

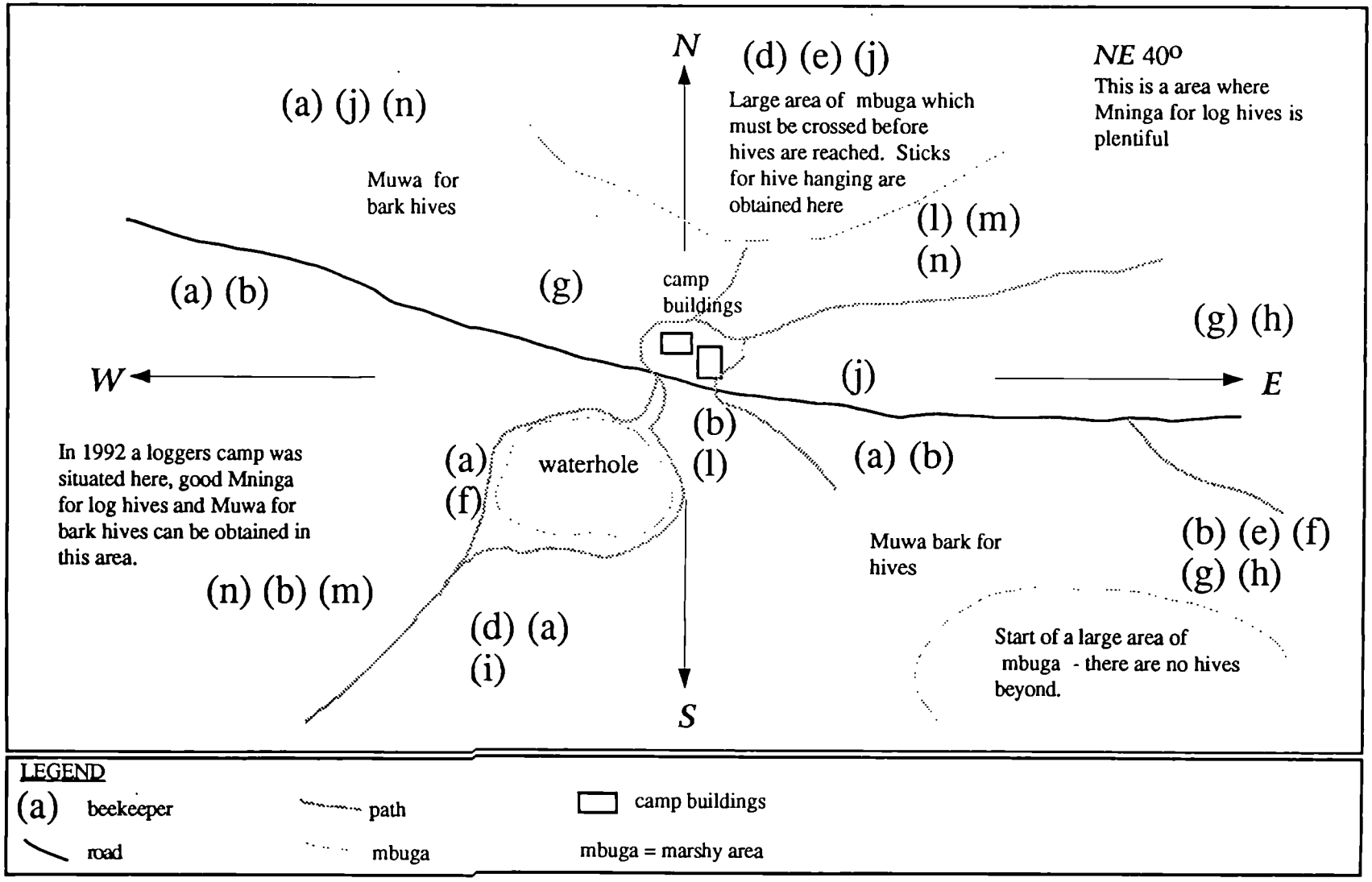

Figure 8.3 Diagrammatic sketch of hive siting at Nsontwa 1 Camp

However, although there are many very practical reasons why a hive is put at a particular point in a particular tree, hive-hanging practices are not simply a question of finding the most productive place in the forest. This has been illustrated by the way hive distribution is represented by beekeepers and the rationales they give. Exploring how beehives are distributed around a camp, we see another element that contributes to our impression of how they order their working environment. The location of beehives is critical in this process of ordering, because it signifies attachment to a particular locality, and the flow of beekeepers' daily lives within the forest takes place around these objects. These are important elements which constitute a style of using the forest for the production of honey and beeswax.

Situating Beehives in Different Camps

We have identified the dry season beekeeping camp as a central locus for the production of honey and beeswax in Ugalla Game Reserve, indicated some key tree species used for beekeeping, and discussed how beehives are sited around a camp. This leads to another important feature of local beekeeping, namely that established beekeepers tend to site their beehives in multiple locations, moving between 2 and sometimes 3 camps through the year. In this respect one cannot isolate the activities of beekeepers working inside Ugalla Game Reserve from those outside, for a person may have hives in the reserve and at a place many kilometres away.[252]

A notable feature confronting local beekeepers is an extreme variability in productivity from season to season in any one location and also between different locations in the same season. What for one group of beekeepers may be a 'good' year for production, for another group may be 'bad', even within the relatively small geographical area of Ugalla Game Reserve. The reasons productivity fluctuates are multiple and complex but relate to variable rainfall levels, the distribution of ground water, air temperature, the number of bee colonies, the composition

[252] It is common practice for beekeepers to travel long distances from their homes to their beehives, and the different camps of one person may be many kilometres apart. For example, popular beekeeping sites for members of the kwihara Branch of the TBCS from Usizya Village where they live are: Malongwe - 100km, Goweko - 50km, Koga - 105km, Ugalla - 120km, Wala - 75km, Iswangala - 95km. A critical factor in determining each of these locations was that people - usually co-operating together in small groups as members of the TBCS - can get access to transport to particular beekeeping areas, by rail as in the case of Malongwe and Goweko, by bicycle as in the case of Wala, by bus as in the case of Koga and Iswangala, or by TBCS lorry as in the case of beekeeping camps in the Ugalla Game Reserve.

of different tree species in an area, etc., (c.f. Clauss, 1992).[253] Siting beehives in different locations is one strategy beekeepers use to ensure that a good honey crop can be obtained on an annual basis. In the words of one man:

> "you have to have many camps because in order to hang beehives you can't just have one place. If you proceed to put your hives up a group of bees they come and live in the hives and some they stay and some they runaway. Then you put your hives in another place in order to trap the bees...bees may miss food in one place so they move, and if you have a camp in another place they move there and then you won't lose...if your farm does not produce a crop then you need somewhere else as well".[254]

As this quote implies, a beekeeper cannot secure a harvest each year in a single location; the bees may stay but they may not.

In deciding the locations for camps, decision-making takes in a range of ecological, social and practical factors: access to transport, a place where friends and family are working, good woodland, for example. Typically, a beekeeper with hives in Ugalla Game Reserve will have another camp outside which he can travel to without having to confront restrictions as in the reserve, he is also likely to possess a few beehives near his village where honey can be readily harvested for guests or if money is needed.

In summary, the way beekeepers put their beehives in different places in the forest, often many kilometres apart, is an integral feature of honey and beeswax production in the region. The brief description above does not do justice to the decision-making guiding where people choose camps in which to situate their beehives. Nor does it convey the intimate knowledge of local conditions this decision-making is based on, both ecological and organisational. One issue which should be indicated however, is the fact that incorporation into beekeeping practices geographical areas within and beyond Ugalla Game Reserve serves to shape the many social networks which link camps in the reserve to other forest areas, to local villages and towns, and to the TBCS, among other places.

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[253] Factors such as rainfall, humidity, frost, insects, soil nutrients can each effect the flowering patterns of trees. In addition, variations in climate, hive temperature, conditions of the hive, variations in nectar flows, presence of water, strength of the colony, pests, and human interference each have an influence in causing bees to stay or abscond from the beehive.

[254] Steven Moses, July 1993.

'Bees Are Cunning They Get Everywhere'[255]

One integral aspect of beekeeping knowledge so far unexamined is the understanding beekeepers have concerning bees. We can focus on the linguistic categories that express how they conceptualise the activities of bees and what takes place within a bee-hive, naturally such concepts affect the beekeepers' behaviour and practices. A feature that becomes apparent is that many beekeepers have an extremely detailed knowledge of the movements of bees outside the bee-hive, based on observation in the forest and on their farms. However, their understanding of how a bee colony operates within a hive is limited and, because a hive is not inspected, is based on what they see when cropping the honeycomb. Knowledge about how bees produce honey and wax is obviously an integral part of effective beekeeping, raising the question of what understanding beekeepers have of the natural history of a bee-colony?

The extent of the understanding of different beekeepers varies, and this must obviously relate to the depth of individual comprehension, but there is also a pattern to the distribution of knowledge. Skills of the type pertinent to beekeeping are acquired through practice and, in the area in question, through association with the TBCS (honey and beeswax purification techniques); the skills are not gained through formal education. Such practice takes time and experience, thus beekeepers of longest standing who are members of the TBCS are those credited by others to be authorities; these people are elderly men who are Nyamwezi or from a closely related tribe. In Ugalla Game Reserve one does not encounter people who challenge their authority, basing the challenge on alternative experiences or significantly different ideas, for instance those acquired from keeping bees in (as they are called locally) 'modern' frame hives, or on techniques acquired outside western Tanzania.

This is illustrated well by a technique of data collection: when I conducted interviews in beekeeping camps if questions were asked collectively the oldest beekeepers would invariably reply, with young or less experienced men remaining silent. If these less experienced men were asked alone, they might give their own interpretations, but more often they would say they didn't know or defer to the opinions of established beekeepers. Differences in understanding

[255] The information contained in this section is based on group interviews with camp members from 5 camps in Ugalla (as appear in Chapter 11), on individual interviews with the same people, on discussions carried out when accompanying beekeepers to harvest their hives (from 4 camps, in the west and centre of the reserve), and on interviews held with members of the TBCS with camps within and outside Ugalla, as described in Chapter 1, Methodology.

arose between people taught by different men but there tended to be homogeneity in ideas held by those who learnt from the same person.

If we turn to the terms beekeepers use to describe their activities, as listed in Table 8.4, we are confronted by a mixture of Kiswahili and Kinyamwezi. The beekeepers spoke Kinyamwezi when in the forest (the research was conducted in Kiswahili) but their beekeeping terminology mixes local Kiswahili and Kinyamwezi. The first and second columns of Table 8.4 reproduce terms which are commonly used in the forest by those people among whom ethnographic research was carried out. (The terms listed in columns 1 and 2 are those which emerged during the course of beekeeping activities, I did not seek to ascertain a comprehensive list of all known terms) Beekeepers are also aware of standardised Kiswahili beekeeping terms picked up from the radio or the Tabora Beekeepers Co-operative Society, but these words are different from the Kiswahili they use among themselves.

Nyamwezi	Local Swahili	Standard Swahili	English
nzuki	nyuki	nyuki	bee (*Apis mellifera*)
	kupakua asali	kufuga nyuki	to keep bees
	mpakuaji	mfugaji	beekeeper
kukong'onga	kubagua asali		to honey hunt
mkong'ongo	mbaguaji		honey hunter
uki, mbusi	asali	asali	honey (from *Apis mellifera*)
	sega (masega)		beeswax
	makapi		honey comb
sinda/wansinda	unga, chana		pollen
	gundi	gomo la nyuki	propolis
wansinda	chakula		nectar/honey flowers
	maji	maji	water
	asali baridi		honey (from *Trigona togensis*)
wanzuki			honey beer
upula			stingless bee (*Trigona togensis*)
mpunje			stingless bee (*Meliponidae*)
nzuki	nyuki	nyuki	honey bee (*Apis mellifera*)
n'genye	vibarua	watenda-kazi	worker
nyampingwe	nyuki kubwa	dume	drone
mtemi	malkia, mfaulme	malkia	queen bee

Table 8.4 Local beekeeping terminology[256]

[256] See Glossary and Appendix 8 for further beekeeping terms.

In Tanzania to keep bees is referred to as *kufuga nyuki* (Kis., to rear bees), and beekeepers as *wafugaji wa nyuki* (Kis., rearers of bees) described in the same way as the keeping of domesticated animals, *kufuga ng'ombe* (Kis., to rear cattle), for example. But in Ugalla beekeepers commonly refer to themselves as *wapakuaji* (Kis., people who harvest) following the verb denoting harvesting, *kupakua asali* (Kis., to remove honey from a hive). The local term places emphasis on the act of taking the honey, in preference to the idea that beekeepers domesticate the bees. Beekeepers also distinguish beekeeping from honey hunting, referred to in local Kiswahili as *kubagua asali* (Kis., to separate the honey comb) and someone who hunts honey as *mbaguaji* (Kis. divider of the comb) or in Kinyamwezi as *kukong'onga* (literal meaning unknown) and the honey hunter *mkong'ongo* (literal meaning also unknown).

Beekeepers say that there are three different species of bee in Ugalla Game Reserve: the honey bee *nzuki* (Kin.) also known as *nyuki* (Kis.) (*Apis mellifera, sp. adansonii*) and two types of stingless bee *upula* (or *ipula*, Kin., - *Trigona togensis*) and *mpunje* (Kin. - *Meliponidae*).[257] It is the variety of bee known as *nyuki* which is kept in a hive or honey hunted. Whereas *mpunje* are tiny 'sweat-flies' that try to drink from people's eyes when in the forest; *upula* produce honey referred to as *asali baridi*, literally 'cold honey' because it is aromatic and not harsh on the throat like normal honey. Also the wax of *upula* is used by beekeepers as bait smeared into beehives to attract a swarm of bees *nyuki*. Despite the role of *upula* in beekeeping they are never kept in hives, their honey and wax being taken from anthills or from the ground.

Referring specifically to *nyuki*, the bees kept in hives: beekeepers recognise that there are three types of bee in a colony, the *n'genye* (Kin., workers, in local Kiswahili *vibarua* and in standard Kiswahili *watenda-kazi*), the *nyampingwe* (Kin., - the drones or *dume* in Kiswahili), and the *mtemi* (Kin., - lit. chief, the queen bee) who is also referred to by the Kiswahili term *malkia* (queen) or, less commonly, *mfaulme* (king).

The *n'genye*, *nyampingwe* and *mtemi* are said to have specialised tasks in the hive: *n'genye* (workers) act as soldiers and workers who collect the nectar, defend the hive and build the honey comb. When foraging they are said to go to collect nectar *chakula* (Kis., lit. food), water *maji* (Kis. water), pollen *unga* (Kis., flour) also referred to as *chana* or *sinda* (Kin.), propolis

[257] Other stingless bees are known about by beekeepers who have observed them on their farms but it is said that there are no further types near the Ugalla River (see Smith, 1954).

gundi (Kis.- *gando* or *gomo la nyuki*), and ready-made wax *sega* (Kis. *masega* = plural) to be constructed into honey comb, known as *makapi* (Kis. - lit. husks). The *nyampingwe* (drones) are held to be the servants who stay in the hive, although some people make reference to them collecting water because they see them near the river. With regard to the *mtemi* (queen), some beekeepers say that the *n'genye* and *nyampingwe* are two tribes who have to live in the same hive and the *mtemi* is the chief who must rule over them, others say that the *malkia* (queen) is the one who gives eggs and this is all she does. They will also add that there are two types of beetle that live harmlessly in the hive with the bees, *koron'getwa* (Kin.) which are small and *takila* (Kin.) which are larger and bring leaves into the hive.[258]

If one asks what sex the different bees are this causes confusion and people tend not to know, it being apparently something beekeepers do not consider.[259] The *malkia* (queen) is said to be the only one who can lay eggs and therefore it is concluded that she is the only female, but if the terms *mfaulme* (king) or *mtemi* (chief) are used the sex of the queen bee becomes perplexing, and then, because the *n'genye* is the worker, beekeepers conclude that it is clearly male, and the servant, *nyampingwe*, is female. Here we can see the way that human socio-biological categories are being extended to the bee colony.

In relation to how bees produce wax and honey, some beekeepers argue that wax (Kis. - *masega*) is brought into the hive, the worker bee then making it into honey comb. They believe also that propolis (Kis. *gundi*) is collected ready-made from the forest. Beekeepers in some areas had accounts which were strongly influenced by ideas derived from European beekeepers in colonial times (through the TBCS), namely that wax and propolis are made by the bees, but how, they do not know.

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[258] They say that these beetles do not harm the bees. They are also not aware of any diseases that affect the bees, although because dead drones are seen at the entrance of hives many people reason that there must be something that makes them sick (they are actually excluded from the hive by the workers).

[259] The queen (*malkia*) is female, the workers (*n'genye*) are underdeveloped females and the drones (*nyampingwe*) are male. Until relatively recently the sex of bees perplexed people in Western Europe. It was widely believed that the 'queen' bee was a king who ruled the hive and that bees propagate from gathering their seed from flowers, or some thought following the bible, the cadavers of oxen. This symbolism was founded on biologically incorrect understandings about the reproduction of bees, which only started to be challenged in the late nineteenth and early twentieth centuries with the development of apiculture as a science. Worker bees are female but undeveloped and do not mate, whereas the 'king' (queen bee) is female and reproduces through mating with a drone or drones which are the male bees. If the queen is killed, one or more of the worker bees are capable of producing eggs but the eggs are unfertilised and only produce drones.

In regard to the production of honey (known as *uki*, *mbusi* (Kin.) or *asali* (Kis.)), analogies are commonly made to the making of *ugali*, the maize dish cooked daily.:

> "once they have built the hive they carry out the work of taking the flowers and then they bring them and they mix them to make honey comb and then when they have built the comb they go out and look for nectar they can put into the comb after they have put some pollen in and then they put in some water and prepare (*kuchambua*) the mixture to get honey".

> "To make honey this is the really big work...it is like cooking maize meal (*ugali*). To make the honey the bees use flour [pollen] and mix it with nectar in the honey comb...you have to mix the nectar with the flour in order to make the pollen stay in the cells because it is very powdery. The bees sometimes fly over-head to collect a certain gas in the atmosphere which they take into the hive to make the honey ripe[260]...[someone else butted in]...the bees go all around the forest to seek different chemicals (*chemicali*) to make the honey...[and the speaker continued]...and then the bees make a lot of noise and when you hear the sound of the bees they are giving heat to the hive which reduces the amount of water in the wax cells and this cooks the honey, it is cooked like *ugali*. Honey is the real food of the bees".

Again in the accounts of honey production it is apparent that beekeepers observe bee behaviour, linking this to ideas such as the need for 'chemicals' and relate this to a daily activity which they are familiar with, namely cooking *ugali*.

A large repertoire of characteristics are conferred on bees by beekeepers. They are based on detailed observations of the character and movements of the bees, but for interpretations people often draw on elements of human social life and practices, as we have seen in the case of bees 'cooking' honey like maize porridge. If we take some examples of bee characteristics: 'bees are cunning, they get everywhere' - said because of the way bees will immediately come to drink from water exposed in the camp, or steal maize meal as if it is pollen if a sack is left open. 'Bees are hungry' - said to explain why they have started to consume the honey they have produced. 'Bees they like to move' - said to describe the readiness of this type of bee to abscond from a beehive[261], relating to a commonly held idea that bees will move from the hives of the beekeeper in one camp to other hives he possesses in another part of the region.[262]

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[260] He was describing the mating flight of the queen bee.

[261] The type of bee that produces honey in this area easily absconds from the beehive, and bees also tend to swarm at the end of the rains coinciding with the period when beekeepers are in the forest. Beekeepers can list a series of reasons why they swarm, such as ants, the honey badger, cobwebs stopping them from foraging, lack of food, or because the hive hasn't been re-hung or closed properly.

[262] An interesting case of the movement of bees I encountered, but found no beekeeper working in Ugalla Game Reserve who knew of it (or acknowledged they did), was of a man who is a traditional healer and lives on the

Two aspects of the relationship beekeepers have to bees appears to be important to their sense of what it is to be a beekeeper, the first is referring to their not being afraid of bee-stings, the second to the way many people eat the bee-brood when harvesting. To be a beekeeper equates with not being afraid of being stung by bees; this lack of fear arising out of their experience, and being part of a beekeeper's inheritance. It is also said that bee-stings protect from some forms of sickness. One does find, though, that it is older men who have a life-time's experience of living and working in the forest who will most readily harvest honey without any protective clothing. On a number of occasions I heard elderly and skilled beekeepers chiding young men who they saw as being lazy or arrogant, with the taunt that they were afraid of bees or not strong enough for them. The lack of fear of many beekeepers contrasts markedly with the reaction of local women and non-beekeepers, who may be terrified of bees and often become hysterical if a swarm of bees alight in the village.

The second element important to being a local beekeeper is that bee-brood and honey are consumed in large quantities directly after a beehive has been harvested. Old Nyamwezi beekeepers (who are also hunters, honey hunters) know a range of songs and stories about honey hunting and many highlight this 'indulgence' which appears to be an important part of what defines a person as a honey hunter. Today, even though honey hunting has declined considerably, when harvesting hives the brood-comb is something people partake of with great pleasure. Past extension work in Ugalla has tried to stop this practice so it tends to be denied or concealed until one actually observes people cropping their honey.

In summary, we have discussed some of the linguistic terms people have for bees and beekeeping (with others included in Appendix 8). These terms help to capture something of the way that the activities of a bee colony are conceived, with different interpretations being inserted in the 'gap' between what beekeepers can observe and what takes place within the closed bee-hive. Ideas such as the one that bees move from place to place between a person's bee-hives, or that bees cook honey in the same way as a person makes maize meal porridge,

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outskirts of Tabora town. This man's healing speciality was the fact that he had some 'special' bees which he kept in a hive just outside his house (normally bees are kept away from the homestead), the honey from these bees was said to have medicinal properties and was sold mixed with water (not as beer though) in Coca Cola bottles to his clients, unfortunately he would not expand on what this would treat. Apparently the colony of bees was handed down through his family; and, when the person who kept them died they would fly of their own accord to one of the children, who the bees determined would carry on the tradition.

help us to locate the rationales behind different beekeeping practices. They also serve to pinpoint how people engaged in the activity represent the nature of beekeeping and what it is to be a beekeeper.

Representations of Hive-Making 'Traditions' Through Ugalla[263]

In the two final sections of this chapter we move from a focus on the beekeeping camp to consider how beekeepers working in Ugalla Game Reserve locate themselves in relation to a collectivity, as well as to other categories of people working in the forest. In this first section we turn again to focus on representations, this time in relation to what beekeepers portray to be hive-making 'traditions'. The following section discusses how a group of established beekeepers portray their impact on the forest in Ugalla Game Reserve.

Beehives are cylindrical in form and four different types are made and recognised by beekeepers working in Ugalla Game Reserve.[264] Plates 21 - 26 are included to assist the reader in identifying these hives (also Plates 53 - 62 included in Appendix 8 depict how these hives are made and how trees are debarked for this purpose). Of the four types of hive, two types are made of bark and two are made of log. Bark hives are referred to as *mizinga ya magome* (hives made of bark). Plates 21 and 22 show a *mzinga wa mambo* (a hive that is pegged) and the position in which such a hive is likely to be hung, while Plate 23 shows a *mzinga wa kushona* (a hive that is sewn) (see also Plate 7 in Chapter 5). Both types of bark hive are suspended 'horizontally' from the tree because if placed upright they are liable to break under the weight of the honey. Then there are two types of log hive, referred to as *mizinga ya magogo* (hives made of log). Plate 24 shows a log hive fixed horizontally in the branches of a tree, known as *mzinga wa kulazwa* (a hive that has been laid down), while Plate 25 shows a log hive that is vertically suspended from the tree and Plate 26 is of two new log hives bound with

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263 This information is informed by interviews held with 100 established beekeeper-members of the TBCS, who have at least one beekeeping camp within the reserve (see Methodology, Chapter 1 for further details). In considering how beekeepers represent their skill, who one talks to and where they work will, obviously, lead to different replies. The material given in this section is based on discussions and observations made from beekeepers who have camps in the east and who live in Itetemia Ward and who are members of the Kipalapala Branch of the TBCS, and in the centre and who live in Uyumbu Ward and who are members of Isongwa Branch of the TBCS.

264 The English names given to these hives are a direct translation from local Kiswahili terms. Crane (1977: 4) classifies these hives as: wood (hewn/hollowed) long horizontal and long upright, and, wood (bark) long horizontal and squat horizontal.

bark rope and ready to be put in place. This type of hive is simply referred to as a *mzinga wa magogo* (hive made of log).

If one travels through the game reserve, each type of beehive can be observed in different areas; with one or another type predominating at different camps. Here we are concerned with how beekeepers represent the distribution of these beehives, and what this reveals about how they consider beekeeping knowledge and skills to be acquired.

Beekeepers characterise different areas of the reserve according to different hive-making techniques, which they refer to as 'traditional' (*mazoeo / mafundisho yaliyotokea zamani / ya asili*), and relate these techniques to the places where people come from. The distribution of these hive-making techniques is represented in Figure 8.5: 'people of Sikonge' make *mizinga ya magogo* suspended vertically from the tree, 'people of Uyumbu' make *mizinga ya magogo* placed horizontally in the tree, and people from 'Ukonongo' make bark hives *mizinga ya magome*. The type of bark hive is not specified but usually 'sewn' bark hives are being referred to because 'pegged' bark hives are generally recognised as a recent phenomenon (although where they came from and how is a matter of dispute).

Plate 21: A ‘pegged’ bark beehive

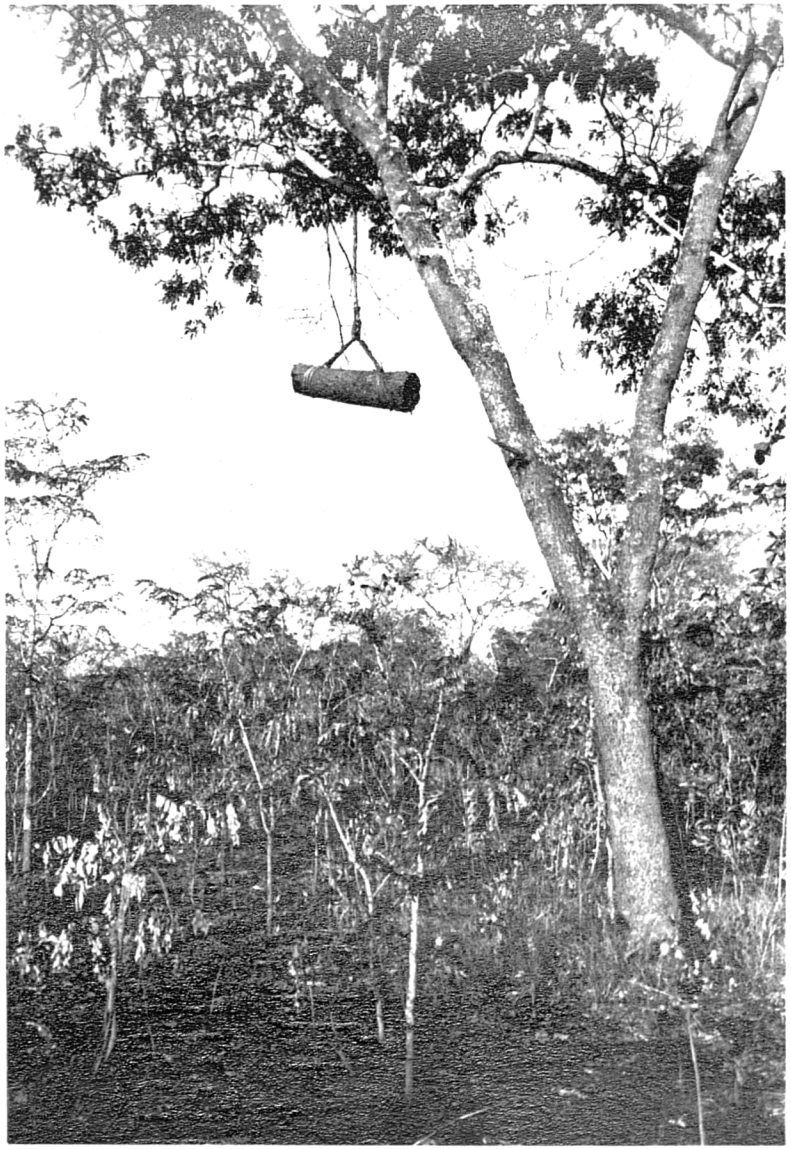

Plate 22: A bark hive suspended in the tree canopy

Plate 23: 'Sewn' bark beehive

Plate 24: Log beehive placed horizontally in the branches of the tree

Plate 25: A log beehive suspended from a tree

Plate 26: Newly made log beehives with hive-hanging poles tied to them

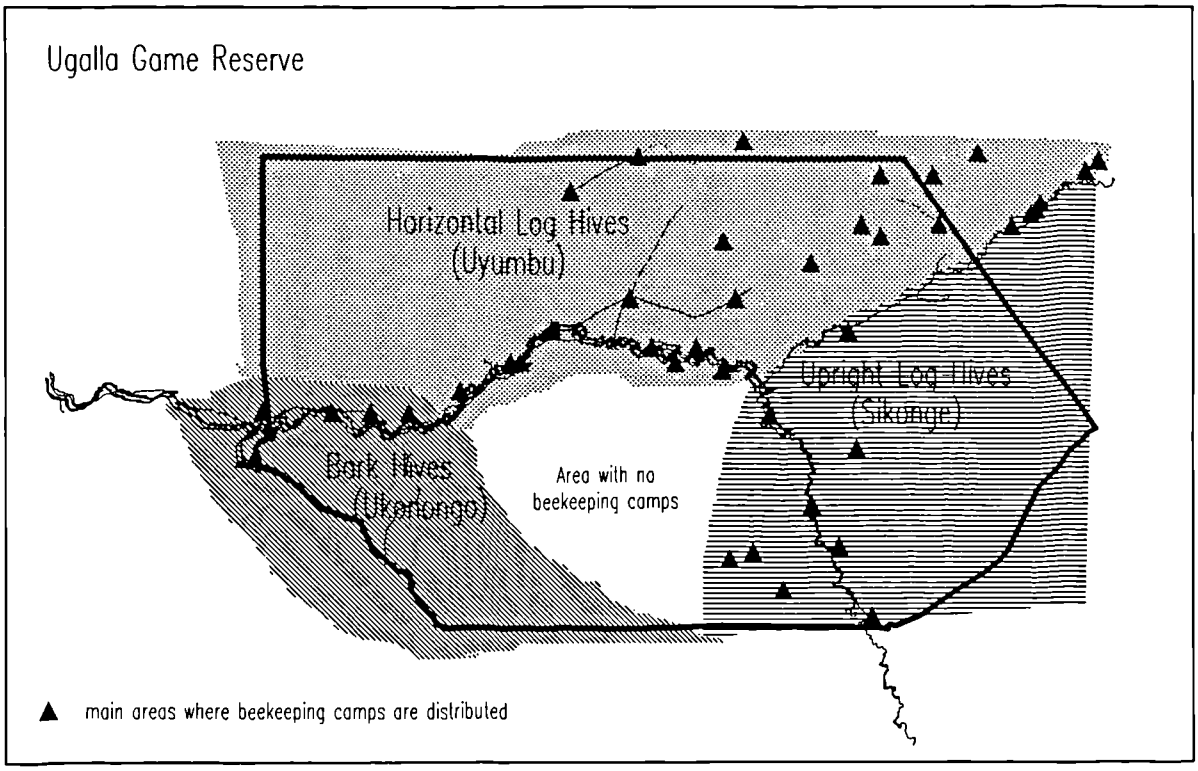

Figure 8.5 Representation of hive-making 'traditions' across Ugalla Game Reserve[265]

To explain this 'cognitive map', a number of connections need to be unravelled. Beekeepers characterise their hive-making techniques as 'traditional'; this so-called 'tradition' is associated with a skill being transmitted within someone's clan by means of kinship relations.[266] Hence beekeeping knowledge is said to be inherited by a son from his father, a nephew from his uncle or a grandson from his grandfather.[267] It is a skill a person acquires through upbringing not through formal education. As one renowned beekeeper expressed it: "this is the life we lead, it is what we practice and our parents have taught us...you see inheritance is not just beehives it is also knowledge". People associate different clans with their places of origin, hence the connection between a place and particular hive-making skills. In reference to Ugalla Game Reserve specifically, following Figure 8.5, it is said that beekeepers from Sikonge work in the

[265] Source: own diagram.

[266] Here the Kiswahili term *ukoo* is translated as clan. In this context *ukoo* conveys a broad notion of kinship through common patrilineal descent; it does not refer to a particular form of corporate kinship group, in the sense in which the term is used in kinship studies. I found the word *ukoo* was often used when people knew they are distantly related but could not trace a specific kinship tie.

[267] Inheritance practices are explored in greater detail in Chapter 11.

east, those from Uyumbu in the north and along the river, and those from Ukonongo in the south-west.

Once someone has learnt to keep bees, it is said that they persist with a particular technique because, as one beekeeper stated: "it is like a class of students, the way they are taught is what they know and people like to do what is easiest for them". Associated with the practices a person has been taught, are beliefs about the beehives which bees prefer. Typically in interview these beliefs are put forward as rationales to explain why a particular type of hive is made. For example, people from Ukonongo are said to believe that bees will enter a bark hive quicker than a log hive, whereas people from Sikonge say that bees prefer to stay in a log hive because it is cooler than bark.

One interesting aspect of the way hive-making practices are held to be geographically entrenched across Ugalla Game Reserve, is that beekeepers portray these techniques as 'traditional', and therefore long-standing. In fact, just as the way beekeepers learn to make beehives is far more diverse than they are represented to be, so also many changes have taken place in their practices within living memory, as well as outside it. As examples: first, horizontally-placed log hives appear to have been initiated by colonial beekeeping extension work.[268] Second, pegged bark hives were developed through extension work in western Tanzania and, at camps in the east of the reserve, the beekeepers concur that an in-comer taught others to make them after 1982. Third, upright log hives have gained recent popularity with beekeepers encouraged to make them by the TBCS because they last far longer than bark hives, thus being less environmentally destructive. These examples point to the fact that although there are long standing hive-making practices in the area, the types of hives that are made are not themselves 'traditional' as they are portrayed to be. One issue this raises is why beekeepers choose to portray their practices according to 'tradition' which will be explored in the next chapter.

In summary, this section has explored a representation of the distribution of hive-making techniques across the woodland of Ugalla. Observation of the distribution of beehive types

[268] Smith, 1950, 1957b; Ntenga, n.d., a/b/c/d; a 'sewn' bark hive, and horizontal and upright log hives can be traced in the accounts of Europeans who visited Unyamwezi in the mid-nineteenth century (see Speke, 1863, Burton, 1860 and Reichard, 1892).

through Ugalla would suggest that people's practices are flexible and heterogeneous; however, from this representation emerges ideas concerning how skills are transmitted between beekeepers, which is linked to ancestry, 'tradition' and to the spatial distribution of knowledge and practices.

'To Destroy the Forest Through Beekeeping is Impossible'[269]

We have suggested that the beekeeping camp is a locus of activity within the forest and introduced the miombo woodland and tree species that are important for beekeeping. This raises the issue of how people who keep bees portray their relationship to the forest and the effect that beekeeping has within the reserve. To explore these ideas I want to draw on an interview with nine notably skilled beekeepers; their views are influential because each is among the leadership of the TBCS and has a camp in Ugalla where, as established beekeepers, they play a crucial role in organising and teaching many other men to keep bees and live in the forest. The sub-text to this interview meeting was the fact that these men were putting forward claims regarding their access to the reserve. The Management argue that beekeepers are destructive and therefore should be controlled; they, unsurprisingly, dispute this argument. For our purposes what is relevant is that they show such a passionate interest in the forests of Ugalla Game Reserve, to the extent that they make claims about it. Moreover, these claims are based on a detailed knowledge of forest ecology.

There are two main beekeeping practices held by the Management of Ugalla Game Reserve to be destructive: first, cutting and debarking trees to make beehives and, second, burning vegetation when honey cropping (PAWM, 1994b). Both activities are at the centre of disputes between beekeepers and state representatives charged with managing Ugalla, giving rise to conflicts which have a history spanning back to when the reserve was first gazetted in the 1950s. Very simply, officials responsible for managing the area have portrayed beekeepers as too primitive, resistant, or incapable of adopting new practices, and too careless to put out the fires they light when honey harvesting. Unsurprisingly there are large disparities between the

[269] The material presented in this section is based on a group meeting with 9 senior members of the TBCS at the end of the period of fieldwork. 6 of these men were people with whom I had interacted on a regular basis in Ugalla Game Reserve when living at Nsontwa 1 and Kwalunigu camps. By implication I could thus put their statements into perspective. Beyond this interview, the material is supported by the many discussions I held with different people and observations made when in the forest (see Methodology, Chapter 1 for further details).

views of state representatives and the claims of beekeepers concerning the impact of beekeeping on the forest.

In the interview I held with the nine beekeepers, these men had heard from the radio or government officers of the effects that deforestation could have on rainfall, soil fertility and biodiversity loss and, indeed, as an example they cited the case of the Amazon Basin. Nearer to home, they listed examples of parts of the region where extensive tree cutting is occurring, citing tobacco farming, charcoal making, lumbering, agriculture, cattle-keeping, the growth of settlements and firewood collection. By implication, then, they have a perspective against which to judge their own use of the forest.

Referring to the woodland in Ugalla Game Reserve as *misitu ya asili* (Kis., original or natural forests), they argued that it regenerates of its own accord:

> Ezebion Mateso: "If you move from this place today then in five years the trees will have grown. And you would find trees of every species, *muwa, miyombo, mininga*, the trees grow by themselves, they distribute their seeds, which sprout and continue to grow, and then later you encounter the trees themselves".
>
> Peter Patrick: "To destroy the forest through beekeeping is impossible. If you say I am going to go and cut log hives, you would cut them...but when you do this the trees come back and the flowers carry on blooming. The forests are very big and new trees continue to sprout, whilst others are saplings. If you are in a place and some of the trees are cut then after three years you will see that the forest has closed in on itself again. We only depend on what we see which is that every year trees come up without anyone bothering to grow them. So with real confidence it is possible to say that the forest will continue."
>
> Steven Moses: "You cannot cultivate traditional trees, the trees only grow by themselves. Unless there is a technology that can be devised to try to get the seedlings from the natural forest it is not possible to grow the trees. Now even if you obtain advice saying that you should go and plant a tree and you go and plant one and look after it, then what? You are wanted somewhere else and cannot continue to take care of it [i.e. you would leave the forest at the end of the dry season and the tree would be left untended]".

Very clearly these beekeepers rely upon what they have observed working in the forest over a period of time. (This characterisation of miombo woodland is actually in keeping with what is scientifically known about the forest, for it is held to be a 'plagio-climax', a vegetation community which has formed and is maintained through continuous human agency (Morris,

1970: 155)).[270] The views of these men and those of the forestry experts might converge in relation to the way forest growth is shaped by human activities; however they hold different perspectives on the role people should play in managing, or not managing, the forest. Experts would support the view that the forest needs to be managed in order to control the destructive impact of human activity (e.g. PAWM, 1994b; World Bank, 1992). However, these beekeepers consistently argued that the forest is self-regenerating, 'grows by itself', therefore they have no significant role either in destroying it or facilitating the growth of new trees. These beekeepers leave the trees alone apart from withdrawing the materials they need or burning it when necessary, and they see that it looks after itself.

These beekeepers were clearly promoting the view that they do not have a destructive impact on the forest and therefore no measures should be taken to control their actions. They put forward their case by linking forest change in Ugalla to their life experiences, to their family histories, and to their local knowledge. In this sense their statements are based on the 'truth' of personal observation and the certainty of their genealogies. A historical event that these men referred back to in support of their argument is the fact that Ugalla was inhabited until the mid-1920s, and therefore much of the woodland has regenerated since that time. The names of beekeeping camps, for example, act as testimony to past human settlements:

> George Masudi: "My camp is in the place that my father lived before he was moved [due to sleeping sickness]. And now it is a really big forest. There was someone, my grandfather, who had already got some beehives and still we continue to use them".
>
> Mwana Superiano: "There was one camp, Misikela, west of Unjele, that was a logging camp. All the trees were cut down, this was a long time ago though [1940s and early 1950s]. Now there are really good trees there. They [beekeepers] can go on and on using a camp, like the camp of Unjele it was the camp of my grandfather and his relatives and still it is being used without any problem except that it is full of beekeepers! [laughter]".

Beekeeping practices depend on the use of forest resources, only occasionally are materials, such as wire and nails, brought into the area. All of the men at the meeting readily declared that they cut and debark trees, but in putting forward their case they disputed the idea that this would have a detrimental impact on the forest; they argued that it is only intensive activities that

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270 The presence of old specimens of *Hymenocardia acida* across the region is apparently indicative of past cultivation (Lawton, 1979, 1980), as is the composition of grass-species found in the *mbuga* (Glover, 1939), which suggests that areas now forested were once settled. When walking with beekeepers south of the Ugalla River in woodland which, to my amateur eye, appeared dense and untouched, I would often uncover pieces of old pottery which suggested that people had once lived there.

are destructive. If there is intensive timber cutting then obviously the forests will disappear, but beekeeping is not seen to contribute to this.:

> Mzee Anthoni: "I agree with my companions that the trees won't be finished by beekeeping even in the lifetime of my great grandchildren. Perhaps if the officials said 'now move from Tabora and go to live in the forest then the trees would finish...if there is intensive tree cutting then obviously the trees will finish".
>
> John Malumba: "Beekeepers cut trees for making bark hives, even with log hives the trees are destroyed and you have to use bark rope to hang the hives...this is necessary."
>
> Daudi Katete: "We have been told that we kill trees, but a beekeeper does not take the bark of every tree. A skilled beekeeper will know which trees will agree to let him debark. He can examine the tree, if it is good he starts to debark, if it is not he doesn't. When he has made the rope he closes the hive and re-hangs it. Hanging beehives will not finish the forest because it is really hard work, really hard work".

Observing beekeepers at work in the forest, it was notable that the use of bark or wood is related to what is needed for a particular task and how much work a person can fulfil at a given time, use of the trees was not judged against a sense that trees are a scarce resource. This is despite the fact that the men being interviewed were, to varying extents, fully aware of the messages government programmes tried to convey:

> [John Malumba]: "Myself if I live to be one hundred then my family will have grown to more than two hundred people. Over a long time people do increase is this not so and they would start to move, maybe onto the road to the game reserve, this is development. The government made plans that the region will continue, we will continue until family planning makes us decrease![laughter]".

In this discussion, a case was being put forward in which use of the environment through beekeeping is not destructive and therefore the activity does not need managing in Ugalla Game Reserve. Part of their case is based on detailed personal observation of forest regeneration, which suggest that they can continue using a beekeeping camp for decades and do not find that materials become limited. Taken together with the fact that they could not keep bees if they did not use forest materials, this helps to explain why attempts to prevent beekeepers in the reserve from debarking or cutting trees have consistently failed.

Issues related to beekeeping and vegetation burning were not raised in this meeting and people who work in Ugalla will not readily discuss why they burn the grass. The reasons for such reticence on the part of beekeepers is not entirely clear although partly it may be due to the fact that historically they have been the butt of administrative blame for the forest fires that annually

sweep through Ugalla Game Reserve. It is possible that burning is also associated with Nyamwezi ideas concerning the ritual danger of working in the forest (Blohm, 1931, 1933a/b).

When I discussed the issue of burning with men working at Kwalungu and Nsontwa 1 Camps their replies were to the effect that 'burning is good because it makes everything clean', expressed through the Kiswahili term *safi* implying clean or pure. This has a practical dimension in that wild animals and snakes can be observed, but it also implies security and cleanliness. One thing that is clear is that the administrative view that burning is the result of carelessness and accidents on the part of beekeepers misses the point that it is in fact intentional, burning creates a 'clean' environment which is good to work in.

In summary, this interview meeting with nine senior beekeeper-members of the TBCS is a good case to show how people seek to create a 'social space' for themselves in Ugalla Game Reserve through claim-making about the environment. The local knowledge which emerges in their arguments was used in the context of local politics over their presence in the game reserve, however this is not simply a strategy for it is about something which is important in their lives, the forest and its ecology, about which they hold extensive knowledge.

CONCLUSION

In this chapter we have explored how beekeepers use their knowledge and practices to form the social environments in which to work. Taking, as a starting point, the position that planning for wildlife management in protected areas tends to compress human social action into descriptions of physical phenomena and instrumental rationales, it has been argued that such an approach avoids incorporating consideration of the richness and diversity that constitutes local social life. In the process, conservation policies are devised and plans formulated appropriate to a national planning framework for wildlife management, however this framework does not always relate to what actually exists at the local level. This implies that when implemented, the models underlying conservation planning may lead representatives of the state and of the international community to ignore social action present in a given locality. If planning models leave little room for an appreciation of how local people perceive, interact with, give meaning to, and utilise the natural environment, manifestations of conservation failure - illegal resource use, poaching, etc. - need hardly come as a surprise.

For the anthropological researcher an important challenge is to understand how and why local people oppose external categorisations and techniques of control; in a word, how people try to escape from management impositions without leaving room for state representatives, such as the Project Manager of Ugalla Game Reserve, to domesticate their 'social spaces' through enrolment into managerial rules and norms. For local beekeepers, the skill of producing honey and beeswax for sale on international markets is an integral part of their livelihood. In this sense, we can identify local knowledge as constituting one of the main conditions that provides beekeepers with a style of action and organisation that expresses how they draw the forest into their lives through different categories, forms of ordering, and representations which constitute the attribution of meaning to their experiences.

Obviously 'knowledge' is an extremely abstract element, which we can only view through its manifestation in beekeepers' practices and in the observations they may make to a researcher about the world around them. In this respect it is important to look at people's practices, their 'ways of operating' in order to understand how a group, such as the beekeepers working in Ugalla Game Reserve, organise the space which the state tries to structure through its techniques of wildlife management. In previous chapters we have looked at how the different interests groups associated with Ugalla Game Reserve contribute to local diversity, at how techniques of management are implemented in the area, and at how claims are made vis-à-vis people's access to the reserve and its resources. All this constitutes a social complexity which planners have to confront in order to generate appropriate policy and planning. Examining people's practices helps us to understand how conservation policy and planning is assimilated at the local level.

By focusing on local beekeeping knowledge we gain an insight into how beekeepers re-appropriate the 'natural space' of Ugalla Game Reserve. It has been argued that through their local knowledge they have developed a style of action and organisation which emerges through the social, cultural and institutional factors particular to the locality and we have explored this by examining how a beekeeping camp is started, by referring to the extensive knowledge and uses beekeepers have for different tree species, by considering how the environment around a camp is ordered and hive-siting represented, by giving examples of the linguistic categories beekeepers use to refer to the activities of bees, by looking at how they represent the spatial distribution of their hive-making knowledge and practices, and lastly, by citing beekeepers'

claims concerning their role in forest ecology. In all these respects we see that beekeeping knowledge is grounded in peoples' daily lives, experiences, resource struggles and dreams for the future, constituting a process of organising reality and positioning themselves in Ugalla.

A number of issues raised in the preceding discussion should be reiterated, for they are particularly pertinent to the chapters that follow. The first relates to the manner in which beekeeping knowledge is distributed among people and transmitted to others. We have argued that although, obviously, one encounters different levels of individual comprehension, there is a pattern to the distribution of knowledge. Skills of the type pertinent to beekeeping are acquired through practice, not being gained through formal education. This practice develops from experience, elderly beekeepers of longest standing being the ones credited by others to be beekeeping authorities. In addition, we have emphasised that for beekeepers who work in the forest of Ugalla Game Reserve there is little significant challenge to this authority in terms of people entering the area with significantly different beekeeping experiences or ideas. One implication of this is that this distribution of knowledge starts to reveal something about the nature of collective organisation among beekeepers working in Ugalla Game Reserve, a featire the TBCS plays an instrumental role in perpetuating.

This leads to a second issue raised in the chapter, which concerns how beekeepers represent the way in which beekeeping skills are learnt and acquired. Here we argued that beekeepers characterise their skills as 'traditional', being transmitted within a clan. This is not complicated; in effect they are arguing that beekeeping is a skill a person acquires through upbringing rather than through formal education, it is something learnt within a family. In reality, beekeepers develop their skills in more diverse ways than they represent. For the discussion which follows, however, what is important is that they locate the skills within the domain of tradition and that they link this tradition and the knowledge associated with it to places of origin, kinship relations and a sense of territoriality. As we shall see in the following chapter, this relates also to how beekeepers organise themselves within the TBCS and how they are attached to international produce markets. Indeed 'tradition' is an important local idiom which serves, amongst other things, as a means to ward off newcomers from beekeeping in Ugalla.

This takes us to the last issue: at various points we have suggested that beekeeping camps form the focus of social networks between the forests of Ugalla to local towns and villages. Here we have concentrated on the materiality of camps and beehives, linking them to knowledge and practice; however, the nature of the social relations and organising practices which underpin these networks will be explored in greater depth in Chapter 11.

A topic deliberately left untouched in this discussion is the question of how beekeepers are able to connect to international honey and beeswax markets through their beekeeping techniques. Production for these markets is central to processes of local organisation, it is also critical in terms of the way phenomena generated outside the area - fair trade for example - become assimilated into the understanding and practices of people using the reserve. Given that the region surrounding the Ugalla River can be characterised accurately as a honey and beeswax producing area, then tracing these commodities becomes vital to understanding how beekeepers organise themselves, and how, through their practices' they extend the boundaries of Ugalla beyond their immediate environs. This we shall explore in the following chapter by giving our attention to the Tabora Beekeepers Co-operative Society.

9

The Organisation of Beekeeping for Different Produce Markets

Introduction

Beekeeping has been distinguished herein as a form of local resource use entrenched in Ugalla Game Reserve, and, continuing with this topic, the present chapter will examine the manner beekeepers are organised in relation to produce markets. In order to do so a historical perspective is taken; this involves a different mode of analysis from the preceding chapter but it is necessary in order to appreciate the role of honey and beeswax in shaping people's style of operating in Ugalla. The thrust of the discussion focuses on the part a co-operative, the Tabora Beekeepers Co-operative Society Ltd. (TBCS), has played in developing an international market for local honey over the last forty years. In Chapter 8 the question was raised as to how beekeepers have assimilated change into their practices; here it is argued that through the vehicle of the TBCS, producers have been able to bridge spatial and temporal discontinuities inherent in production for the international market, over and against production for themselves and local markets, adopting different processing techniques and making new linkages between themselves, the forest, and external actors.

The role of markets in shaping local organisation raises issues of wider relevance to consideration of community-based conservation initiatives. Those conservationists who promote development oriented conservation schemes, recognise the organisational power and development potential of the market. However, the market they wish to introduce is a regulated market, controlled by the state with support from the international community. The perceived need for regulation arises because the attribution of value is seen to derive from, on the one hand, retaining stocks of natural resources ('sustainable natural capital'), whilst, on the other, controlling the tendencies of the 'free' market, where more value may be reaped from the exploitation of resources rather than from their retention.

One practical direction support for the regulated market takes is the call for local people to receive sufficient 'benefits' from wildlife for conservation planning to be made effective. A key assumption is that the receipt of 'benefits' can lead to change in people's practices, causing them to integrate forms of resource maintenance into their livelihood strategies, thus encouraging support for conservation initiatives. Underlying the incentive structures, i.e. 'benefits', considered necessary to dissuade local people from poaching or other illegal resource use, is the idea that one source of value - goods or income derived from the illegal use of wildlife - can be replaced with another of equal or greater value to the people concerned - through sustainable hunting, culling, income from tourism, retention funds, etc. (especially if the risk incurred by illegal activity is raised through increased law enforcement and penalties). An example to illustrate this view comes from the Luangwa Valley, where researchers have argued:

> "If access to wildlife resources were better regulated so that most local meat hunters were not acting illegally, the opportunistic killing of elephants and rhinos would have to be more profitable for the transition to illegal activity to occur. A wildlife authority has the power to increase the opportunity cost of poaching by increasing legitimate earning potential within protected areas" (Leader-Williams & Milner-Gulland, 1993: 614).

From this perspective, the choice between resource destruction or resource conservation is a question of where value lies, coupled with how risk is distributed. In this context, the market becomes a device to regulate people's behaviour in relation to wildlife resources and, as such, people can only exploit options defined by the state and/or donor community. If follows that such exploitation is based on logical, rational decision-making with outcomes defined by policy-makers and entails that people accept being enrolled into conservation programmes (c.f. Leader-Williams et al., 1995c; PAWM, 1995a).

A critical issue is that the notion of incentive schemes misses the fact that people's livelihoods are not simply a question of where value lies. Furthermore, the idea of 'benefits' is a way of trying to incorporate local people's needs into the market for wildlife products, but it carries with it enrolment into planning initiatives, and potential loss of valued autonomy. These initiatives may be well formulated development projects, but examples from the Tanzanian case suggest they may also be paternalistic, ill thought out and imposed on local people (see Appendix 3 for examples of conservation initiatives in Tanzania). Livelihood activities are not a question of transparent rational choice leading to one option being replaced by another of equal (market) value.

People consider and exploit a variety of alternatives according to the constraints they are confronted by and the possibilities open to them at a given time. Their choices are shaped by their needs and desires, by the task of meeting obligations, and of finding security, identity and status. The social interactions entailed in making a livelihood bring a multiplicity of values to bear on particular goods and relationships, enabling people to pursue different ends in life; these ends may not be those established by powerful outsiders or even by power-holders within a locality. Moreover, a number of distinct networks of production, consumption and exchange are likely to exist around any given natural resource. Economic action is socially situated, rooted in on-going networks of inter-personal relationships and cannot be explained through models of atomised actors or by reference to individual motives alone (Granovetter & Swedberg, 1992). Nor can it be explained through an approach to African societies which conceives people as being a part of clearly identified 'communities', in which individual desire is given over to the collective good (Gibson & Marks, 1995). In this sense, to try to replace people's illegal utilisation of wildlife resources through enrolment into a legal market defined by programme designers and regulated by the state can be highly inflexible and unlikely to be effective in achieving conservation aims or in supporting long-term development goals.

Markets, therefore, are not simply concerned with the generation of value, but also with the organisational processes through which people's knowledge and practices are generated, technology internalised, power relations negotiated, claims made to resources, and social relations maintained in interaction with processes of production, consumption and exchange. This chapter tries to elaborate on the organisational aspects of the market through pursuing the case of honey and beeswax production in Ugalla Game Reserve.

By taking an historical perspective to explore the consequences of changing markets for beeswax and honey, we should be clear that our understanding of markets cannot be divorced from the knowledge, practices and social interactions which generate these products. We cannot assume 'the market' to be an abstract aggregate geographical form which penetrates people's lives, or is resisted through the 'survival' of non-wage forms and 'traditional' patterns of family and household organisation which must either contribute to the capitalist system or become further eroded over time. In the context of Ugalla we have shown the detailed knowledge that enters into beekeeping skills and the way in which people create social environments in which to work. In accepting that market processes are culturally mediated and

related to social practice, we can gain an insight into the way the market is 'modelled' in Ugalla (Dilley, 1992: 3).

We do not find it helpful to refer to honey and beeswax as 'commodities' solely and take this as a premise to analyse beekeepers' all-encompassing attachment to 'the world market'. Although production is oriented toward the sale of produce, honey, in particular, is given different values with commoditised and non-commoditised relations of exchange interacting together, driven, defined and contested by the actions of specific actors. In this sense, it is helpful for us to question "how, when and by whom commodity values, over and against other types of value, are judged to be central to the definition of particular social relationships and specific goods" (Long, 1997: 223). This leads to consideration of how features assimilated into beekeepers' practices, as described in Chapter 8 and Appendix 8, enable producers to participate on international markets.

Here it is helpful to draw on the work of Geschiere (1992: 159; also Fisiy & Geschiere 1991), who argues that in order to understand how groups cope with the impact of the world market and recognise their own reflections in what analysts call 'the forces of the market', we need to study the 'peculiar expressions' of those forces at the local level. Through examining 'hybrid patterns of kinship, witchcraft and 'the market'' in Cameroonian societies, he argues that 'the market' may be present in those personal spheres which still constitute the core of local patterns of organisation. This view does not accept that 'the market' necessarily transforms these spheres into universal capitalist relations of exchange. In this chapter it is argued that the creation and perpetuation of local patterns of organisation in Ugalla Game Reserve have been facilitated by a co-operative, the Tabora Beekeepers Co-operative Society Ltd (TBCS). By its means, producers have built up networks to consolidate their use of the space and, through their local knowledge and discourses, come to deploy local representations of the market (Geschiere, 1992), in particular through a language of 'tradition'.

In order to explore these themes, the following section analyses the historical development of markets for bee-produce, which takes us to an examination of how the TBCS became established, gaining relevance for beekeepers, and the role it has played, and continues to play, in linking beekeepers to markets for their produce.

HISTORICAL DEMAND FOR HONEY AND BEESWAX

Honey and beeswax are products that have played a part in people's livelihoods since at least the middle of the nineteenth century. However, market destinations for produce have changed, accompanied by transformations in production and the use of the products in local social life. Because honey and beeswax have persisted as mediums imbued with multiple values, commoditised and non-commoditised, they have continued to contribute to people's ambitions and aspirations and have played an important role in shaping the way a particular group - 'beekeepers' - are situated in Ugalla. However, despite these different alternatives, without the prospect of overseas markets for honey and beeswax beekeepers might have sustained little interest in maintaining a presence in present-day Ugalla Game Reserve. Instead, because of overseas markets, beekeeping is a flourishing industry which offers a means of livelihood for those with the skill to carry it out. Perhaps because of the very viability of beekeeping as a lucrative source of income it has become bound to people's ideas and representations concerning Ugalla as a source of historical identity and beekeeping as a 'traditional' occupation, inherited through the generations.

In considering how beekeepers have become attached to markets for their produce, the historical material that is available suggests a complex process in which the dynamics of beekeeping opportunities have been a part of wider transformations in people's lives. Due regard also has to be given to the way new actors, such as Congolese immigrants, local traders of Arab and Asian extraction, and the Catholic White Fathers, have played a historical role in opening people's eyes to the possibility of new markets, creating linkages, and assisting beekeepers to exploit new possibilities.

The Late Nineteenth Century (1870s -1890s)

Comparison of present-day beekeeping with historical accounts suggests there has been change in the way that honey and beeswax are produced. In the nineteenth century, two methods of obtaining honey were practised alongside one another: 'honey hunting' and 'beekeeping' (Reichard, 1890: 241; Stanley, 1872: 264-8; Kandt, 1919)[271] These activities were dimensions

[271] The first Europeans to pass through the area near the Ugalla River and record beekeeping or honey hunting activities were Sir Henry Morton Stanley accompanied by Dr David Livingstone in 1872-3, Verney Lovett Cameron in 1875 and Reichard, 1880-3. Earlier descriptions from other areas of Unyamwezi are based on the travel accounts of Burton and Speke from 1858-9 who were the first Europeans to travel through the region.

of the way people inhabited the forest, utilising the woodland for productive purposes and incorporating wood, bark, fruit, roots and leaves into their material culture.[272] Honey hunting in the forest was also imbued with cultural meanings that emerged in stories, songs, and practices. A picture is created in which honey hunting and beekeeping were merged with other hunting and gathering pursuits and were not clearly differentiated as 'work', in opposition to other aspects of their lives.

Indications that honey hunting and beekeeping coexisted near the Ugalla River contrast with the present-day historical descriptions of local beekeepers, and with the views of beekeeping experts (Smith, 1961; Ntenga, pers. comm., 1993; Kihwele, pers. comm., 1993; Crane, 1977, 1983), all of whom portray hive beekeeping as a phenomenon that has evolved from the more primitive activity of honey hunting of which there has been a concomitant decline. The distinction between honey hunting, which involves the search for feral bee-colonies in hollow trees, and keeping bees in hives is important because they are two very different orders of activity, each involving the production of honey and beeswax, but in different ways as far as the beekeeper's role is concerned. These experts appear correct in suggesting that in the course of time there has been a rise in beekeeping and decline in honey hunting; however, transformation does not appear to have followed an evolutionary pattern of development. A representation of the linear transformation of honey hunters into beekeepers only emerges if one abstracts these activities from other aspects of people's lives. If explanation for change in productive methods does not rest on the rationality of 'progress', we need to examine how producers have re-oriented themselves towards new demands for bee-produce, and the manner in which the two types of activity were affected by wider change in forest-based lifestyles.

In reflecting on the nature of production and the changing values conferred on bee-produce, we have to remember that honey and beeswax are two separate items with very distinct properties and uses, although they come from the same source, the honey-comb. This is interesting because it opens up the possibility for different networks of circulation to develop around the

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[272] The information presented in this section is drawn from the accounts of European travellers, settlers, missionaries and military men (Bohm, 1888; 1883-5; Burdo, 1881, 1885; Burton, 1859; 1860; Cameron, 1875; Grant, 1864; Kaiser, 1883; 1883-5; Kandt, 1919; Speke, 1863 (1978); Stanley, 1872; Swann, [1910] 1969: 212; Langheld, 1909; Fonck, 1910; Decle, 1898; Hore, 1892; Becker, 1887), secondary sources (Koponen, 1988; Roberts, 1968a, 1970; Roberts & Sutton, 1968; Shorter, 1972; Abrahams, 1967a), early ethnographic sources (Blohm, 1931, 1933a/b, Bösch, 1930; Reichard, 1881-3; 1883-5; 1886; 1892) and oral historical material that I have collected, some of which is presented in the text.

two items, with either or both affecting the methods of production and subsequent exchange. In addition, the intrinsic and very different nature of the two products lends itself not only to different uses, but also to different methods of circulation and exchange. Honey is difficult to transport, being heavy and sticky, it is also unstable and will readily degenerate when left in high temperatures. This means that it is well suited to localised transactions but its quality is difficult to maintain over long distances in difficult conditions. Wax, in contrast, can easily be moulded and carried from the forest, it can then be remoulded at a later stage of the journey, while its quality remains unaffected by transportation.

Historical references to the end-uses for honey reveal little of how it entered into circuits of exchange or market transactions, but because of its character as an item that could be either consumed or exchanged, we can infer that it was a medium imbued with *multiple values. One* feature that is apparent, however, is that the value given to honey was regionally specific, for there is no evidence to suggest that it was demanded as an item of long-distance trade, which would have imbued it with different, non-local, values.

In the region bordering the Ugalla River in the second half of the nineteenth century honey was consumed by itself, as a sweet porridge, or combined with millet in a calabash to be stored for times of hunger or warfare. It was also a key ingredient in a type of beer known as *kangara*, whose value as a food and as a medium for social interaction was significant. As a constituent of *kangara*, honey was placed as an offering in shrines to the ancestors, and on its own it was given as an item of tribute to a chief,[273] it was also used as a base for herbal medicines. As an item of local consumption, honey was eaten as a fermented mixture containing pieces of crushed comb, bee-chitin, and bee-grubs. In this form it was stable in character and considered a delicacy, but outside observers considered it to be 'dirty', and, because it was heavy, difficult to carry, subject to seasonal fluctuation, and of unstable quality when purified, it did not lend itself to being traded outside the area.[274]

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[273] Cory, 1955; Bösch, 1930; and an interview I conducted with Mtemi Nsokoro Mvulla, Ugalla River Station, July 1994.

[274] An example of the way honey was viewed as 'dirty' by travellers appears in Burton who states: "the African hoards his store... [of honey]... till it reddens, showing the first stage of fermentation: he will eat it after the second or third year, when it thins, froths, and becomes a rufous-brown fluid of unsavoury taste; and he rarely takes the trouble to remove the comb" (1859: 287).

This picture of honey as a medium of locally specific values is complicated by the presence of caravan routes which ran through the Ugalla region: south, into central Africa westwards, northwards, and to the coast. Caravan routes that grew up after the 1840s meant that travellers and traders passed through Ugalla, Ugunda and Ukumbi.[275] Along these routes, honey was traded as food and in beer; and calabashes of honey were provided in return for the tribute (*honga*) travellers paid for safe passage through the chiefdom.[276] In the second half of the nineteenth century, Ugunda (to the eastern flank of the Ugalla River) became an important area for the production of crop surpluses taken to Tabora; this is conjecture, but trade may well have included honey because there is evidence that it was sold in Tabora market.[277]

The use of honey as an item of consumption and of exchange along the trade routes suggests it was imbued with values which were spatially varied. It is also likely that fluctuations in the passage of people along these trade-routes affected the demand for honey.[278] Part of the spatially varied values that emerge in relation to honey are linked to the fact that it entered into market transactions in trade centres and stopping posts. Here we can refer to the work of Moore (1986) on the Chagga of Kilimanjaro, who argues that not enough attention has been paid to the way in which the ivory and slave trades, the provisioning trade, and raiding and trading in cattle were interlocked (1986: 29). Similarly Roberts (1970: 51-2) argues that in order to sustain long-distance trade in ivory and slaves other patterns of production were transformed. In the case of the Ugalla region, attention needs to be given to the effects the provisioning trade had in changing the nature of local food production, honey production

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[275] In the first half of the nineteenth century a trade route was opened up between Lake Tanganyika, north of the Ugalla River into Ukimbu and westwards to the coast at Kilwa (Shorter, 1972; Macqueen, 1845; Cooley, 1845). By the second half of the century, this had moved northwards to by-pass warfare in the area of Usangu, while another route cut through Ugunda and Ugalla from the north going southwards to Lake Tanganyika and into present day Zambia.

[276] Mwenye Chande (trans. Harries, 1965); Bohm and Kaiser, 1883-5, Reichard, 1890; Cameron, 1877; Langheld, 1909; Fonck, 1910. Mwenye Chande, a Swahili trader who passed through the region in the 1870s, makes reference to: "the chief of Ugala was called Kasagura, we put out fifteen cloths and gave them to him, but he gave us nothing, only a little honey of bees in a calabash" (trans. Harries, 1965: 239). Also Bohm & Kaiser, explorers who lived in Ugunda, were given honey as a gift when they became 'blood brothers' of one of the chiefs of Ugalla (1881-3).

[277] Reichard, 1881-3; 1883-5; 1886; 1892; Burton, 1859. Burton describes the price of honey in a market in present-day Tabora town as varying in price "from one to three cloths for a large gourd full" (1859: 287), and was used by the Arabs for *sukari za asali*, honey sugar, and *siki*, vinegar. Further to the west, in the market of Ujiji, Stanley states: "the Wangwana and Arab slaves bring slaves, fuel, ivory, wild fruit, eggs, rice, sugar cane, and honey from the Ukaranga forest (Stanley, 1878: Vol. II, 3-4).

[278] For example there was extensive warfare in the region in the early 1870s and this deterred travellers from passing along the trade routes north of Ugalla.

included, and giving rise to new forms of value, such as commoditised relations of exchange. In terms of the change in the nature of honey production, for example, travellers' accounts describe beehives lining the caravan routes and honey hunting taking place in the interior.[279] This can be interpreted variously, but one conclusion could be that provisioning long distance caravans played a role in promoting the significance of beekeeping either alongside or over and above honey hunting.

Looking at the networks of circulation of beeswax in the nineteenth century, we can see a contrast with honey. Contemporary oral historical information suggests that before the last quarter of the century wax was disposed of as 'waste' and buried in the ground.[280] Despite oral histories describing wax as 'useless' to inhabitants of Ugalla - accounts that link 'utility' to market value - a functional value was given to wax as a sealant in household objects and medicinal implements.[281] As in the case of honey, demand for wax and its associated value was spatially varied. The accounts of European travellers describe wax being sold in the markets of trade centres such as Tabora and Kigoma, although the uses to which it was put are unclear (Burton, 1859; Swann, 1969; Cameron, 1877). In the area of Tabora town, Burton recorded 'dips' of candle wax being burnt as a light in Arab households (Burton, 1859: 287). This information suggests that wax, like honey, was given only regionally specific value for trade networks did not extend outside the area.[282] Also, that it entered into spatially varied

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279 For example Burton observed that honey abounded throughout the country and "near the villages log-hives...hang from every tall and shady tree. Bees also swarm in the jungles" (Burton, 1860, Vol. II: 287). The 'country' that Burton observed was that of the caravan routes and trade centres. In the same volume Burton makes reference to two types of honey, it is unclear whether the different types he refers to are, on the one hand, the honey of *Apis mellifera adansonii* (the honey bee) and, on the other, that of *Trigona sp.* (species of stingless bee), or whether the honey acquired in the forest was from the honey bee but was honey hunted and simply dirty and full of wood chips as it is apt to be today.

280 Contemporary informants rationalise this on the basis that if it was not buried children would have burnt their feet on the wax as it melted in the sun.

281 Reichard, 1892; Cameron, 1877.

282 I can find no reference to beeswax being an item of commerce in pre-colonial trade between Unyamwezi and the coast. This is interesting given the prominent role the Nyamwezi played in the caravan trade and the range of products they traded. Slaves and ivory were important items of trade, however a wide range of other natural resources were shipped from the coast (e.g. coconuts, coir, copal, aloes, gum, arrow root, vegetable dies, drugs, cowry shells, turtle shells, hides and rhino horn). In 1811 some beeswax was traded from Zanzibar, and between 1838 and 1859 occasional and minute quantities of beeswax are recorded as bought by the French, Americans, and British (for home markets and sent to India) (Nicholls, 1971: 352). This contrasts with Angola and the Congo where, for tribes such as the Chokwe and Southern Lunda, beeswax was an important item of trade following the decline of the slave trade from the1840s (Birmingham, 1986: 247-8; Clauss, 1992). Nyamwezi settlers in Garanganze (part of present day Zambia) traded in beeswax, but only after 1870 when trade moved from the east to the west coast (Birmingham, 1986: 247-8). One explanation why there appears to have been little

networks of use and exchange. However, in contrast to honey, because wax cannot be consumed, and because its local use was not extensive, its value appears to have been peripheral in people's estimation compared to that of honey.

Summing up, honey and wax circulated in different and spatially varied regimes of value through the second half of the nineteenth century. As an item of consumption, honey was versatile and mediated a range of social transactions. Despite this, it was an unstable medium, appropriate to the local context, but its circulation did not extend over great spatial distances. Wax, on the other hand, was given little value except when used as a sealant or in areas where there was Arab demand, and even in these cases circulation was limited to the regional context.

The German Colonial Period (1890s - WW1)

In the late nineteenth century new actors entered the region bringing with them an understanding of different uses for beeswax, together with knowledge of distant markets as well as the capacity to buy, sell and transport produce overseas. In sum, they helped generate new market opportunities for the sale of beeswax.

Today, local informants say that wax started to be given 'real' value, by which they mean monetary value, when Catholic missionaries began to settle in the region.[283] According to ecumenical doctrine there are important associations between beeswax and the symbolism of the Virgin Mary and of Christ which necessitate that beeswax candles are used to celebrate mass.[284] The first Catholic church was at Kipalapala where the Tabora Beekeepers Co-

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or no trade in beeswax between Unyamwezi and the east coast of Africa could be related to demand. Demand for beeswax in Portugal (the Bangewelan west coast being Portuguese territory), a Catholic country (where wax was needed in the production of church candles), may have been higher than for Britain, America, or Arabia which were key trade destinations for goods from Zanzibar, and trade between Zanzibar and France (also Catholic) was minor.

[283] Catholic missionaries entered the region after 1878-9 with a number of churches being established from the turn of the century. This information is based on interviews with beekeepers from Ugalla, I do not have independent corroboration from missionary sources. For example, George Ntiyama the first Chairman of the TBCS stated: "the leaders of the church began to build their churches. Now when they began to build the churches this is when they really wanted candles. We had not heard that wax could be used in shoe polish, or for paint, or tar, we had not heard these things. All we knew was that wax was used in church candles and that its use was for this, but this was a really long time ago" (8.7.94).

[284] In the Catholic church it was held that the worker bee is a virgin and therefore the wax she produced is used to symbolised the flesh of Christ born of the Virgin mother. Some early Christian writers spoke of the bee itself as a symbol of Christ born of the Virgin. St Ambrose (340-397AD) wrote: "[b]ees all have the power to propagate

operative honey plant is located (the Sisters of Mary continue to make church candles there). Although the relations of exchange that arose between local people and missionaries remain obscure, one can infer that they were not fully commoditised, given the ritual symbolic associations of beeswax for the White Fathers. What this very limited demand does appear to have done, however, is to have stimulated production in certain areas along the Ugalla River and to have made local inhabitants aware of different uses and circuits of exchange. This preceded the demand for beeswax that arose in the German colonial period.

From the turn of the century until the First World War, beeswax was one of German East Africa's foremost exports. This included beeswax produced near the Ugalla River, as it was a key beekeeping / honey hunting area near an important administrative centre (Tabora town). Beeswax was systematically transported from Tabora after the central railway reached the town in 1912 (Iliffe, 1979: 130-5; Sayers, 1930; Wright, 1986: 586-8).[285] To stimulate production, as well as to gain income, the German administration accepted beeswax in lieu of hut and poll tax, and oral accounts suggest this was a popular means of payment in Ugalla.[286]

In the historical accounts of several informants who keep bees in present-day Ugalla Game Reserve and whose families originate from the area, the figure of an Arab appears who went to Ugalla to buy wax (nick-named *Katumbondani* - 'stomach-[hidden]-inside' - because he was very tall and thin): "Arabs came to teach us to make wax, and yes we saw that it could be wealth, but until we had the wealth itself [money] we did not believe them".[287] Other

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but in the exercise of this power they retain the virginal integrity of their bodies and as virgins beget offspring..." (quoted in Root, 1937: 725). In addition the candle wick symbolises the soul of Jesus Christ and the flame of divinity which absorbs and dominates both Christ and the Virgin. Beeswax candles started to be used in the Christian mass in the seventh century. In the eleventh century they were placed on the alter and in the seventeenth century legislation was passed making obligatory the use of candles containing 65% beeswax in the Paschal candle. Candles used for other purposes could be 25% beeswax, although in places of shortage the Episcopal conference could decide on the relevant percentage (New Catholic Encyclopaedia, 1967: 23-4).

285 Asian traders accompanied the railway and rapidly established themselves in Tabora, while Arab communities had been based in the region from the 1840s. One can presume that the now well established connections that exist between Asian traders and the beeswax trade date from this period.

286 The use of beeswax to pay tax would have taken place sometime after 1896 when the first tax was implemented in German East Africa (AWSIH, 1916: 19-20). In an account based on research between 1896 and 1916, Blohm records Kaswika, Chief of Ulyankulu-Urambo, inciting people within his chiefdom to put up beehives and take their wax to sell in Tabora for rupees and with the rupees pay their hut tax (Blohm, 1933: 68).

287 This 'Arab' may have been a European because locally the term *mwarabu* (an Arab) is used synonymously with *mzungu* (a white man or stranger). In 1859, Burton witnessed the Tabora Arabs teaching people how to

descriptions emphasise the role of men of Congolese origin who married locally and initiated a trade in wax with the local Arabs or Asians, making inhabitants aware of the monetary value of wax.[288] Informants also tell of their fathers or grandfathers carrying wax on foot a hundred miles or more to trade in Tabora town (before the mid-1920s). These historical accounts stress that the honey produced alongside the beeswax started to be thrown away because it could not be carried in large quantities from the forest, a situation which continued to be reported into the 1950's (Smith, 1955a, 1957a, 1958a; 1959). This state of affairs was exacerbated after the population of Ugalla were resettled between 1925 and 1927 and they had to walk long distances to return to the river on a seasonal basis.

In passing we have referred to the wax trade and the railway, in fact change in the means of transportation played a critical role in facilitating the beeswax trade, as did specific kinds of traders who accompanied the railway, particularly people of Asian extraction. Until the railway reached Tabora in 1912 foot porterage was the only means to reach the coast, with goods being carried not by animals but by people. Even with the presence of the railway, throughout the German colonial period, foot porterage was the main mechanism for regional trade and it was not until the 1930's that motor vehicles really started to enter the region to become used for purposes of administration and trade. Despite these conditions a vigorous trade in wax took place, although honey, unlike wax, could not easily be transported on foot because it is heavy, sticky and degenerates in heat.

The overseas market that developed for beeswax in the German colonial period was a key change from previously when local demand for honey set the parameters of production and exchange. Trade in beeswax between local men and the White Fathers was part of a process in which new actors emerged to play key roles in the wax trade - the White Fathers, German administrators and traders, local traders of Asian and Arab extraction. Associated with this, commoditised values were being conferred on wax. New techniques were developing around obtaining the wax, cleaning and setting it, and transporting it. By the 1890s and early twentieth

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strain honey through bags of plantain straw or matting (1859: 287), which might suggest that they played a part in encouraging the adoption of new techniques in the region.

[288] Large numbers of men were brought from the Congo into the west of German East Africa to act as foot soldiers and apparently some remained and became settled in the region. Oral histories I collected from Ugalla also make frequent reference to individual Congolese men who were instrumental in teaching people how to fish in the river.

century change in production and markets were not simply a matter of haphazard connections, for through such features as taxation the German Colonial Government explicitly pressurised people to produce wax. This was not simply a question of the exertion of external pressure, for certain local actors such as local chiefs, Congolese immigrants, and even beekeepers/honey hunters themselves, played an instrumental role in developing the trade.

One feature that starts to emerge is that, when markets for produce opened up outside the area - first for beeswax and later for honey - beekeeping became an increasingly attractive option over and above honey hunting, for reasons explored below. The exportation of wax by the Germans expanded the local scale of previous demand. Although this is not discussed above, one feature which is important to bear in mind is that honey and wax production is characterised by years of dearth and years of glut. It was only after external markets started to develop for beeswax that production could be oriented beyond the capacity of local people to consume honey in years of glut. In this sense, it can be suggested that distant demand for beeswax was a significant feature in disciplining people for the production of honey, which later occurred in the region, linking it to long distant circulation and to more regular processes of production at the local level.

The British Colonial Period (1920s - 1960s)

As the British administration became established after the First World War, beekeeping extension work was initiated in Tabora Region (1925+). Here we have a shift with a bearing on beekeeping practices, whereas formerly we have a view of demand stimulating any changes that took place in production, and to a limited extent new wax purification practices being initiated by people categorised as 'Arabs'. With the British colonial administration we witness a concerted attempt to initiate and develop new production techniques in order to transform the face of local beekeeping.

After 1925, a government entomologist was based at Morogoro and colonial officers sought to introduce new 'improved' beehives and methods, promote production of honey and wax, and raise the quality of wax for export (Ntenga, n.d. (a); Harris, 1931), with modernisation along scientific lines being considered essential for progress.[289] For people from the region bordering

[289] Harris (1932), for example, tried to introduce a new type of wicker beehive and the use of a type of queen excluder, together with improved wax preparation methods.

the Ugalla River, the sleeping sickness resettlements that were formed after the mid-1920s became the context in which modern production methods were initiated. The push towards new beekeeping techniques was underpinned by the notions of British colonial experts of 'traditional' beekeeping as being 'cruel' to bees, inherently environmentally destructive, of low productive capacity, and 'primitive', with native understandings held to have been limited to "their main qualification...an indifference to bee-stings" (Harris, 1932: 3).[290] The authorities in Tabora District (an area which encompassed the northern bank of the Ugalla River) also attempted to control people's use of honey for the production of honey beer and its distillation into a spirit, *moshi* (lit. 'smoke'), ostensibly "to check orgies", although this was part of wider colonial ideas holding the utilisation of honey and agricultural produce in beer to be wasteful (c.f. Long, 1994).[291]

In the 1930's beeswax was considered to be a key cash crop for people in rural areas surrounding the Ugalla River, with relatively large quantities being exported from the region (Ntenga, n.d.(b)), facilitated by local Asian traders and Arab hauliers who had become well established in their role as 'middlemen' in this trade, as they are still today.[292] The beeswax which was produced entered into networks of exchange that extended to European markets feeding a demand as a multi-purpose ingredient in industry while, simultaneously, local use and its associated value was very limited.

In contrast to wax, demand for honey from the forest region near the Ugalla River was still localised in the early twentieth century, especially when compared with other forms of production that people could engage in to make a livelihood and bring in an income. This is well illustrated by an interview I held with George Ntiyama the first Chairman of the TBCS (who started to work near the Ugalla River in the 1920s) who argued that:

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[290] Dr Maclean, the sleeping sickness officer who was responsible for resettling people from Ugalla wrote: "The resettlements also serve, to a limited extent, the purposes of beekeepers (in one settlement nearly 3000 hives are distributed over an area of ten square miles)", he proceeded to speculated on the need for improvement (Maclean, TNA.Mss.1733/9 (69), 1926, Tabora District Annual Report, Appendix A). In records of the Uyowa and Bugomba sleeping sickness concentrations (1937) there is a picture by Bagshawe which shows a wicker bee-hive of the type that was being promoted by extension workers (Moffet, 1939-40: 1-10; Bagshawe, RH.Mss.Afr.s. 3059).

[291] TNA.Mss.1733/20 (105), 1926.

[292] Bagshawe, 1936, RH.Mss.Afr.s.3059; Rodger, 1954. Bagshawe's account refers to Arab traders carrying truckloads of beeswax from outlying areas to Tabora town.

> "fish...it was more money than honey...because if you carried a container of honey, the person with the load of fish would get far more money...eight shillings, and then he could buy clothes and everything, even there was enough for a hoe. But you with one container of honey you couldn't get eight shillings, you would get two shillings with luck or one and a half for it all. Now your friend with the *ndala* (carrying pole) of fish has benefited. So people they follow the income" (14.7.94).

This situation only began to change with the use of motor transport and new demands grew for honey from outside the region with, for example, during the Second World War it was required as a sugar substitute.[293]

In post-war Tanganyika the British colonial Government tried to rationalise the management and exploitation of natural resources. One outcome was to start the Tanganyika Territory Beekeeping Section (Beekeeping Research Institute) in 1949 as a branch of the Agricultural Department located in Tabora town. The Beekeeping Officer in charge of this Division was F.G. Smith, a man renowned for the role he played in trying to develop the beekeeping industry in western Tanganyika. Members of the Institute carried out research, worked towards trying to improve beekeeping methods and technology, reduce forest destruction, increase production, raise product quality, and establish stable markets for honey and wax. Being an important beekeeping area and near to Tabora, the Ugalla River acted as a 'focal point' for extension assistance (Smith, 1958a). Energy and effort was put into developing honey production in ways that were to have important consequences for beekeepers working along the Ugalla River, as we shall see in the following section.

Summarising the discussion so far, the historical material available indicates that along the Ugalla River honey was a *medium of consumption and* exchange imbued with multiple and spatially varied values. Along the caravan routes and at trade centres it entered into market transactions, but it was also given non-commoditised values by the practices of the local inhabitants. We have here a picture of an item of considerable worth in people's everyday lives, whose circulation was restricted to networks of consumption and exchange within the region. This created a situation that did not change until the middle of the twentieth century when factors such as the problem of transport linkages started to be overcome and new demands arose.

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[293] It was transported from Tabora District to Arusha town where soldiers were stationed, and exported abroad in quantities that reached a peak of 837 tons annually (Smith, 1956b: 1).

Wax was a medium with a utilitarian function for households where it was available. As with the case of honey, there was some territorial variation in the value it was given because it was used in Arab households and sold in Tabora town and other trade centres, but this market was limited, and consumptive use restrictive. This state of affairs changed with the entry of two new social agencies, the Catholic Church and the German colonial state; their demand, its satisfaction facilitated by local Asian and Arab, bears witness to the entry of wax into commoditised relations of exchange which extending the network of circulation into the international arena.

Change in the demand for honey and wax appears to have played a part in altering the way the two items were produced along the Ugalla River, although production-related change was also associated with broader transformations in the lives of people in the region of the Ugalla River. The above discussion covers a period in which beekeeping was becoming an increasingly specialised economic activity, separated from other aspects of life. In this respect, although honey hunting has continued to be carried out in the Twentieth Century, it was once an integral part of a way of life that is no longer followed (in particular with the decline of African hunting, the two activities being closely entwined) and, as the descriptions of beekeepers given below suggest, was not an appropriate means of production for fulfilling new demand. This demand meant that production was oriented toward international markets, but this orientation took place in interaction with the local sale and consumption of produce, as continues to occur in the present day.

The Beekeeping Officer for Tanganyika, F.G. Smith, played an instrumental role in the formation of the Tanganyika Honey Organisation, later renamed the Tabora Beekeepers Co-operative Society. As it is central to the organisation of beekeeping and the way beekeepers are attached to produce markets in Ugalla Game Reserve, I wish to focus on this co-operative in the following section.

THE TABORA BEEKEEPERS CO-OPERATIVE SOCIETY LTD.

After the human population was moved from Ugalla in the mid-1920s, men continued to keep bees or honey hunt as part of their seasonal presence in the area. At that time, these activities were oriented towards the production, by beekeeping and honey hunting, of beeswax for sale to

traders for overseas markets. The mid-1920s corresponded to a decline in local demand for honey from Ugalla, people valued it when they were in the forest for consumption in beer or as food, but large quantities were thrown away because it was difficult to carry (a two to four days walk) and its local market value was considered negligible. Moreover, even when honey was taken from the area, at the village-level only a certain amount of honey could be absorbed, whether it was consumed directly or sold. Village consumption could not expand to encompass additional surpluses as there were no outside markets. This was not the case with beeswax, which was readily transported from Ugalla on foot to trade centres or bought directly at the river by traders of Asian or Arab extraction. However, although this market existed and could readily expand, the terms of trade were extremely unfavourable for the producers and the quality of beeswax they produced was poor due to bad processing techniques.

The formation of the Tanganyika Honey Organisation (THO, later to be renamed the TBCS) marked the start of a dramatic change in honey production in the Ugalla River Game Controlled Area (Ugalla Game Reserve). According to the representation of one beekeeper, it was like 'an injection' which stimulated production and linked people to markets in new ways, enabling beekeeping to become a means for them to realise individual livelihoods, aspirations and social standing. The THO made available transport to convey produce to a depot where it could be processed; it provided beekeepers with access to containers; and it guaranteed a market for all produce at a set price (irrespective of the quantity an individual produced). Because the Co-operative carried out marketing functions it acted as intermediary between beekeepers and international buyers (as it continues to do).

One implication of this was that in spheres where beekeepers had little or no capacity, such as administration, book keeping, standardisation of produce quality, organisation of transportation, and interactions with buyers and government officials, management was taken out of their hands and placed under a separate manager with appropriate expertise, enabling the organisation to act on behalf of beekeepers and assisting them to secure a far higher price than they had hitherto achieved. The Co-operative price also started to act as a regional standard because beekeepers now had the option of selling produce to the THO (TBCS).

The colonial and post-Independence history of Tanzania is littered with cases of the failure of co-operative organisations (for examples vide Coulson, 1979, 1982; Cliffe et al., 1975; Boesen

et al., 1986), this raises the question of how the TBCS has managed to be so 'successful' in the sense that it linked (and continues to link) producers to an export market for honey?

It can be argued that social processes precipitated by the start of the Co-operative emerged from the way three different agents coalesced: the Director and employees of the government Beekeeping Research Institute, a group of Catholic White Fathers, and the producers themselves. Individuals from among each group drew on prior social experiences and expertise to act as a means of achieving the collective aim of ensuring a guaranteed market for honey at prices beneficial to producers, and to achieve individual aims in keeping with people's different desires, plans, institutional allegiances, etc. In the event, the TBCS catalysed changes in beekeeping in Ugalla Game Reserve, and over the last forty years it has - with economic ups and downs - provided a vehicle for established producers to make a substantial part of their livelihoods in the reserve, and promoted people's attempts to attain their social and political aspirations.

To analyse these processes, the concept of 'institutional social configuration' is helpful because it gives us a means to understand how the life-experiences and agendas of different individuals shapes processes of social change. This concept has been formulated and used by Arce (1989) to analyse producer-bureaucrat relations in an irrigation unit in western Mexico. In considering the TBCS, the way Arce (ibid.: 24) expands the concept of 'social configuration' to encompass institutions bears consideration. For him, the "institutional social configuration is fundamentally a relation between a model of the government, that is, on the one hand, a representation of an interrelated set of concepts or notions that explains and administers the supply and delivery of agricultural services to the producers and, on the other hand, the individual action of those persons responsible for the implementation of the model".

In the case of the TBCS it is important to consider how the model of a co-operative managed to have meaning for producers and to become embedded within their social life. Thus the White Fathers, the staff of the Beekeeping Research Institute and the producers were able to transform a situation through the vehicle of a co-operative bringing different strategies, forms of resource management, choices, opportunities and constraints to the fore. Although this process has raised problems and contradictions, an international market was obtained for honey, linking it to demand, values and meanings which were not locally derived; consequently, the market value

of honey increased dramatically for producers. This leads to the question: what local knowledge, values and social resources have been drawn into the organisation of the co-operative, and what implications has this had for beekeepers attachment to produce markets?

Government Experts, the White Fathers, and Local Men

The Tanganyika Honey Organisation (THO) formed from the coalition of three different agents: the Beekeeping Research Institute (BRI) in Tabora headed by F.G. Smith, the Catholic Society of Missionaries for Africa commonly known as the 'White Fathers' (because of their white robes), and a group of men who fished or hunted and kept bees or honey hunted along the Ugalla River. Each of these agents made different contributions to the Co-operative and, importantly, neither the White Fathers nor Government experts sought to interfere with the organisation of local beekeeping. This enabled local men to maintain and develop their own knowledge, skills and modes of operating in the forest in ways that were appropriate to their lives and to the constraints they encountered. Moreover it opened up the possibility for people to employ new strategies, deploy social resources, and it within the constraints in which they lived and worked it opened up opportunities and generated certain choices.

Francis G. Smith (known as 'Beeswax Smith') was the Territorial Beekeeping Officer and Director of the Beekeeping Research Institute he established between 1949 and 1962. His initial task was to improve the quality of wax exports, but his remit expanded to include the development of honey production.[294] Smith's formative influence on beekeeping research and practice in Tanganyika emerged from a world view which promoted the value of scientific knowledge in the advancement of Africa; for him local beekeeping was primitive and needed to be modernised.

The THO was initiated by Smith after he had become aware that locally produced honey was of poor quality and was often thrown away (Smith, 1956b: 4). [295] In order to stimulate the production of honey as an export commodity he promoted the need for honey presses, together

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[294] See for example: Smith, 1951a, 1952, 1955a/b, 1957a/c.

[295] Many other small beekeeping schemes were initiated by the colonial government in western Tanganyika in the 1940s and 1950s but failed. For example, the Uyowa Pilot Scheme and Ushirombo Honey Hunters Association (TNA. Mss. 4283982, letter from the Provincial Office to Member for Local Government; Rodger, 1954: 24; Shorter, 1972: 46-55).

with the organised collection and marketing of produce from a central depot. He suggested the depot should be in Tabora so that honey from the north, west, and south of the country could be cleaned, packaged and transported under supervision and with expert advice from members of the Beekeeping Research Institute. As a model for the beekeeping association, Smith drew on information about the 'Kilimanjaro Native Coffee Union', a successful produce-marketing co-operative in the north (1994: 66).[296]

According to the account of Smith, employees of the Beekeeping Research Institute worked in close collaboration with the THO in the 1950s, locating the 'Ugalla River Basin' (the area of land now within Ugalla Game Reserve) as a 'focal point' for beekeeping extension.[297] The extension workers operated from Isongwa Village where the initial beekeeper-members of the THO were based. At a camp next to the Ugalla River, a honey store was built with a corrugated iron roof and a honey storage tank, and several honey presses were placed there. This camp was that of the first Chairman of the TBCS, George Ntiyama.

Thus we can see that at the start of the THO Smith contributed knowledge of apiculture and a legitimacy to the aim of the organisation due to his status as a scientific expert and a British civil servant. He also drew on knowledge and experience of produce quality, production techniques, and overseas markets. Smith's autobiography as well as present-day accounts from Tanzanian beekeeping experts represent him as a benign eccentric eager to improve the lot of beekeepers, but beneath this facade he was also a man of his times, integrated into the colonial service and making a research career and lifestyle for himself and his family.[298]

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[296] In Smith's words: "I applied [the model] to groups of beekeepers in Western Province who were keen to organise themselves to market the honey which was otherwise being wasted. After two or three years of exploring the market and developing the techniques, I was able to hand over the whole organisation of collecting and marketing the honey to the Co-operative" (Smith, 1994: 66-7).

[297] Smith defined a 'focal point' as one where there is vegetation suitable for beekeeping, where the people have a beekeeping tradition, where there is scope for increased production of beeswax and honey, and there is no alternative cash crop (Smith, 1958b: 15). In the Beekeeping Division's Annual Report for 1958, Smith was to write: "this area is the present field of activity for the Tanganyika Honey Organisation. The Assistant Beeswax Officer, Beekeeping Instructor and Beekeeping Auxiliaries give every assistance to the development of this organisation through propaganda and instruction on the correct time to collect the honey comb, how to collect it without spoiling the quality, how to press it and pack it in honey tins and how to check its quality" (Smith, ibid.: 2).

[298] Ntenga pers. comm., 1993; Shirima, pers. comm., 1993; Smith, 1951a, 1954, 1956a, 1957, 1960, 1994.

The second influence on the start of the co-operative was the Catholic White Fathers. Whereas Smith contributed scientific knowledge and beekeeping experience to the Co-operative, the White Fathers gave financial support, became involved in its management, and imbued the organisation with a particular ethos arising from their background as members of the Catholic Church.

The THO was initially run by a Nyamwezi priest, Father John Kabeya, and later managed by a series of European priests; by all accounts, each of these men was devoted to the job. The White Fathers became active in the beekeeping field to "try to help the local people raise their standards of living".[299] The fact that Father Kabeya was a beekeeper himself, as were some of the local men trained to teach the catechism, appears to have been the factor that stimulated support for a beekeeping project as opposed to an initiative in another realm of local economic activity. In the involvement of the White Fathers we see a manifestation of their need to be active in the locality, orienting beekeepers towards a market and, in effect, trying to convert people through practical collaboration and guidance.

At the time of the establishing of the Co-operative, the German 'Misereor Campaign', a charitable organisation, donated a lorry and a free loan of 50,000 DM. The Archbishop permitted the priests to carry out business activities and build a honey cleaning plant upon Church-land in Kipalapala Village, where the Catholic Seminary is based. Beyond these material and practical effects, the role of the Catholic Church is interesting, but hard to pin down. Today local Christian beekeepers' represent the Catholic Priests as having provided them with 'a way forward in life', and this spiritual orientation, coupled with the way the priests were trying to improve people's material lot in life, can be interpreted as part of the part they played in establishing elements of modernity in the area. This furthered the role the Catholic Church had played in previously transforming people's lives in the sleeping sickness settlements through Catholic education and affiliation and, at an economic level, creating conditions for new markets to be established in buying beeswax.

In spite of these features, the way the White Fathers ran the beekeeping association left scope for local men to draw on their own resources and modes of organisation. In this respect the

[299] Tabora Archdiocese Archives.Mss.326.617.

critical feature appears to have been that the Fathers, who were key players in the day to day running of the association, confined themselves to the sphere of produce marketing and did not try to affect how honey was being produced.

The last group of people drawn into the co-operative were the beekeeper-members themselves. Most had prior experience of beekeeping and honey hunting although all carried out other forest-based activities, such as fishing and hunting, for it was only with the start of the Co-operative that honey and wax production became a specialist occupation. Early members of the Co-operative were mainly, although not exclusively, Catholic, and they lived in the area of Isongwa Village north of Ugalla Game Reserve. This had previously been a resettlement site (Kakola Sleeping Sickness Settlement) for people evacuated from south of the Ugalla River. I would argue that, in a circuitous fashion, this location is not coincidental, the Catholic Church already had an established mode of operating in the area, people were familiar with outside intervention, and, of particular importance, many men who lived in the area went to Ugalla on a seasonal basis and laid claim to their connection to the area. Each of these features contributed to making people open to new possibilities, providing them with a focus for their personal needs and designs.

Seven men were instrumental in starting the association; five were from families who had been evacuated from Ugalla in the 1920s, and all were going to the river on a seasonal basis. The leader of this group was a man named George Ntiyama who had been a much reputed hunter before turning to beekeeping. Today he commands enormous local respect from beekeepers in Ugalla and is still widely referred to as *Kiongozi wetu* (our leader). In the early 1960s, many other men joined the Co-operative, by then renamed the TBCS. If one speaks to those old men who still go to the river, they refer to themselves as having been the ones to 'build' the Co-operative - a verb they use both literally and figuratively.

George Ntiyama gave me an account of the start of the THO/TBCS that is of interest not simply because of its content, but also because of the context and form of the interview.[300] In 1993, when this and subsequent interviews were carried out, George Ntiyama was 86, somewhat deaf but very lucid. These discussions were conducted in a European-style room

[300] The interview which is quoted in the text was conducted in May 1993 with the assistance of Mrs Mary Mafuru (née Shirima), a Senior Instructor at the national Beekeeping Training Institute in Tabora.

which contrasted with the more familiar village-setting. In giving interviews, George Ntiyama has constructed a normative story-line in the form of an interview schema that he has internalised and which reflects a European way of associating things and events. This illustrates well the role the TBCS has played in transforming the lives of many local men who have promoted it.

The words of Ntiyama and his way of representing the start of the co-operative is worth quoting at length because of the centrality of his role in forming the TBCS:

> "Tabora Beekeepers [TBCS] started because the missionaries saw a need for it. There wasn't a means for people to sell their products except through Arabs and Indians who gave a low price. And they saw there was no unity between beekeepers to obtain things such as clothes for harvesting. They came to me with these thoughts and said "really you have a source of wealth but at present there is a problem because you go to get the honey and then sell it to Arabs and Indians and it is they who are making the profit". Myself I was a Catechist at the Mission for many years. Father John [Kabeya] expressed these thoughts to me. I said to him that it would be possible and started to produce the honey together with him [Father Kabeya kept bees] and then other priests who we spoke to began to join in. There were seven of us in the group, the fathers were Father John himself, Father Ambrosi Kaseka, Father John Maganga, Father Otto who was Dutch, he is the one my son is named after, and then there was Father William".

Mzee Ntiyama proceeded to retrieve a large photograph album from his bedroom and opened it to reveal a photograph of the corpse of Father William laid out on his deathbed.

> "I can show you, look this is Father William. I took the photograph because he refused me when he was alive. We obtained the space for the grave and buried him ourselves [the beekeeper shareholders]. The last priest was Father Matheo Shija. We also had the luck to be joined by two primary school teachers, Johni Samala was the name of one, the other I have forgotten. They gave one hundred shillings each as a share in the association, each person gave one hundred shillings so we had nine hundred as starting capital. Before getting this money Father John had to beg the Archbishop Brazaville to let them carry out business. He said yes, continue with your work.
>
> Father Kabeya kept bees in Kipalapala. He started to buy modern hives and then had some log hives. Ntenga [then a young man from Ukonongo who worked for F.G. Smith and was later to become the first Tanzanian Director of the Beekeeping Department] made hives at this time.
>
> We learned to produce raw honey which hadn't been cooked, and then we obtained honey extraction presses from the Beekeeping Officer [Smith] and then we had the hat and gloves to harvest with. A few people had a bee-smoker and we obtained buckets

> to put the honey in. Then initially other priests bought the honey...we obtained a market in...[Northern]...Rhodesia until it was banned by the President.[301]
>
> Father Vincent took over the leadership of the association from Father Kabeya...he called me and said that he would show me how to run the association because the priests would always be moving on. I asked him how I would do it because I was not learned and had not been to school, but he said that he would teach me. He told me to go and find other beekeepers and we could learn to act as a group. We will help you and direct you in the leadership. He said: 'the priests will help you in the work of God'. The other beekeepers saw me...[keeping bees]...and said "its not a hard path to follow, we can start". Then we had the capacity to begin with our occupation. They started to learn that in order to look after the honey it had to be raw [unheated]. Of the beekeepers, I was the first, the second was Lazaro Kakuya, the third was Mfaume Masanja, the fourth was Salum Munyense, the fifth was Yoshwa Kiyungi, the sixth was Hasani Mwewe, there is still one more...I will remember. They have all died now, Salum Munyense only last year. Then there was also Yoshwa Matongo but he started later on.
>
> Wax, at first we were afraid to sell wax because there was a problem with the price, and in itself it is not food. So I myself collected the wax together and found someone who was willing to give a good price so we sold it and people had money to pay their taxes with. You understand that in the time of the colony people were rogues. Indians and Arabs were the ones who were buying. After 1961 we lost the [honey] market in Rhodesia and said that we would find a market somewhere else. We started to get a market in Holland and Britain. We went very slowly at first and in about 1966 had to ask support from the Mission in Germany. The first leader was Kabeya and then Vincent. Then Father William became the manager and later Father Tardiff".

In his description, George Ntiyama conveys a picture of the beekeeping co-operative having been established according to ideas and practices within the orbit of the Catholic church and emphasises the role played by a group of priests in giving it an initial impetus and continued support. However there was more to it than this, the case of a man such as George Ntiyama provides a good illustration of the way that local men managed to draw on the inputs made available through the TBCS and link them to existing social resources, practices and modes of organisation. In Ntiyama's case specifically, we can see how association with the Catholic Church provided him with an orientation and repertoire of strategies in order to get by in life. These issues shall be explored in the next section.

In summary the role the TBCS has played in transforming honey production along the Ugalla River rises out of a combination of three elements, serving to transform the co-operative model into an organisation appropriate to the local context. From F.G. Smith and members of the

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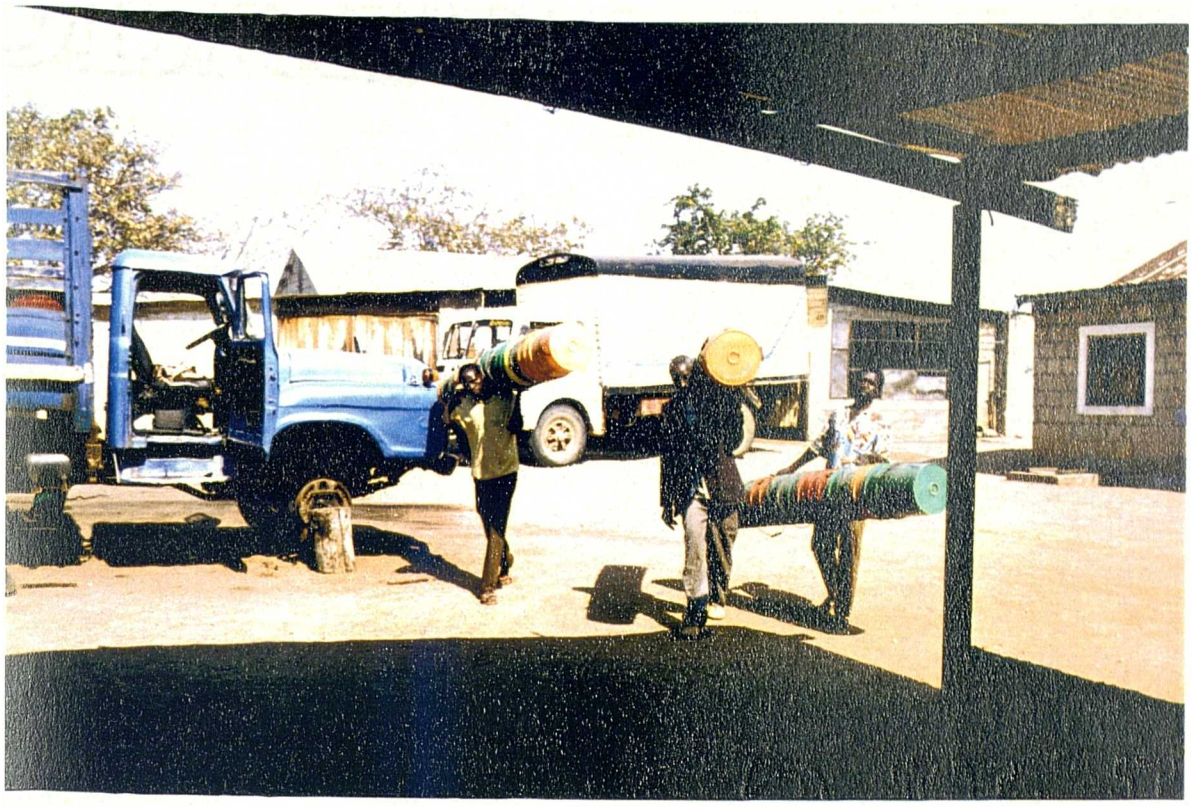
301 After Independence in 1961 the Tanzanian Government took a hard line in its stance against what it regarded as racist colonial countries in southern Africa, which included Northern Rhodesia.

Beekeeping Research Institute came the idea of orienting people's honey production towards overseas markets, developing new techniques, reducing the 'waste' of traditional practices, and purifying honey and wax into acceptable market products. Perhaps surprisingly, given his view of local beekeeping as 'primitive', Smith initiated very practical 'appropriate' ways in which produce quality could be improved and clearly identified that beekeepers needed transport, containers, and a basis for collective organisation. From the priests came a charitable yet materialistic orientation towards 'improvement' in standards of living through financial support and good management. This management aspect is critical because it meant that books could be kept, lorries maintained, produce cleaned to high standards, while, importantly the priests were able to interact capably with representatives of international markets. Last, but not least, the co-operative was given support at the grassroots level by men who saw it as a way forward in new forms of socio-economic action, but who could still draw on knowledge and practices familiar to the forest context. For individuals a share in the TBCS became an aspiration, a means to material success, and a means of being competitive. In this fashion, modes of organisation were being combined together and re-oriented in new 'trajectories' of progress. Plates 27 - 28 overleaf give an impression of the Co-operative factory today, with workers preparing containers and the lorry for the coming beekeeping season.

One last, self-evident feature of the Co-operative should be made explicit, namely the fact that all those drawn into it were men: priests, beekeepers, and the employees of the Beekeeping Division. Few attempts were made to make beekeeping viable for women, which helps explain why the view that beekeeping is a 'traditional' male task is so entrenched, and why today there are only 3 women beekeepers in a Co-operative with over 1000 members.[302]

[302] The Beekeeping Research Institute did initiate a project to try to draw women into beekeeping in Ukonongo which failed, ostensibly because beekeeping was regarded as a 'male task' (Ntenga, personal communication 1993).



Plates 27 - 28: The Tabora Beekeepers Co-operative Society

Plate 28

Tradition, Local Identity and 'The Market'

It is clear that the TBCS would not have become established as an organisation if local men hadn't perceived it to be an opportunity, opening new courses of action. A primary reason they entered the association was because it opened up new markets for honey, but this was not all, for people's desire to retain the freedom to make a livelihood at the Ugalla River was also important. Here we must bear in mind that these local intentions were established within a broader political context; the 1950s and 1960s were a time of political change, and local challenges were being made to people's entitlement to enter the Ugalla River Game Controlled Area (Ugalla Game Reserve). In this cause, the Co-operative conferred legitimacy on what was now decisively referred to as 'beekeeping', gave institutional support to people's claim-making, and linked 'beekeepers' to influential advocates, such as Director of the Beekeeping Research Institute, F.G. Smith, and the Catholic Church.

Knowing in retrospect how successful the Co-operative was in establishing an export market for honey, we have to explore how local people were able to translate the ideas of Smith and the White Fathers into their own terms and points of reference. At least three factors appear to have been crucial:

First, local men held within their repertoire of skills the ability to produce honey and beeswax. Few attempts were made to introduce new production methods, although techniques were encouraged in the sphere of product purification to make honey and beeswax appropriate for sale on overseas markets. In effect, this meant that skills appropriate to the locality and to people's lifestyles could be carried out without radical challenge from new, and perhaps unsuitable, methods of production.

Second, local men possessed long-standing experience of producing honey and beeswax for different markets as well as for non-commoditised transactions. In terms of markets, they held a repertoire of knowledge against which to judge and act on new possibilities. In this respect, although changes were wrought by the Co-operative, there were local idioms of understanding to guide people's decision-making. Furthermore, historical dealings with 'Asian' and 'Arab' traders, in encounters which went against the producers, together with the hardships faced in the forest, made advantages conferred by access to transport, containers, a guaranteed market,

and a basis for collective organisation, all too apparent in their experience of how to retain their freedom and livelihood at the Ugalla River.

Third, producers drew on existing relations of production and forest-based organisation to incorporate and adapt co-operative principles and practices. One can argue that this was part of a process of translating meaning, something that gave people a conceptual framework and mode of operating through which they could readily latch on to what the White Fathers were trying to do. Of this forest-based organisation we can in particular cite experience and membership of local Nyamwezi societies in the sphere of hunting and fishing.

Each of these three features were important in laying the foundation of ideas and practices which enabled local men to see the Co-operative as a vehicle which could act as a means of fulfilling different needs, aims and ambitions. This will be expanded in greater detail below.

Production skills, knowledge of markets, and prior immersion in local occupational associations meant that individuals had a stock of social experience to draw on which could act as means of bridging the context of production and of TBCS affairs. In this respect, collective experiences like those described in Chapters 3 & 4 - such as evacuation from Ugalla, interactions with local administrators, stories that grew up around the laws and hypocrisy of the Game Department, experience of wage labour and of hardship - shaped a collective stock of knowledge in relation to the capacity to keep bees in the Ugalla River Game Controlled Area (Ugalla Game Reserve). Life experiences that appear unrelated to the observer could be drawn on by those local men of similar backgrounds giving meaning, value and identity that entered into people's encounters, generating a modus operandi which appears to have been effective in meeting an international demand for local honey, while translating at local level the importance of an organisation such as the TBCS.

In Chapter 7 reference was made to a Nyamwezi fishing society that, according to contemporary accounts, existed along the Ugalla River. We should bear in mind that many of the Nyamwezi 'fishermen' kept bees and were influential in establishing the beekeepers association. Others, such as George Ntiyama, the first Chairman of the TBCS, were hunters and reputedly members of a local hunting society. During the course of fieldwork beekeepers

and fishermen would make a connection between the older forms of fishing organisation and the TBCS. For example, Mzee Masanja, a fishing leader, argued:

> "Bees...[beekeeping]...they are especially of these times, we sat and we watched the bees, fish they have gone. We understand that it is this you see, in those times it was fish, a sea of fish. But we went on and in the end it was beekeepers...[the TBCS]...they entered into [the] fishing [society]. Yes this is why we say that fish gave birth to Tabora Beekeepers".

Mzee Masanja describes one form of organisation related to fishing, as having 'given birth' to the beekeepers co-operative. His discourse expresses a local way of representing the relationship between the two associations and of conceiving new market relations, a 'sea of fish' being relocated as bees. However it would be too simplistic to say that one association evolved from the other. Relations and organisation between fishermen contributed a mode of organisation and local knowledge that reverberated in the way people brought their experiences to bear on the formation of the new organisation, it did not provide a blueprint to draw on.

Organisational aspects that appear to have been important, as we explored in Chapter 7 with the case of 'Nyamwezi fishermen', were an established style of leadership, a structure of authority, and a way for men within and between different camps to relate together, organising themselves especially through kinship relations. There is also the element of knowledge transmission, for membership of specialised societies conferred on people the capacity to work in the forest having learnt through experience under a recognised 'expert'. It will be remembered that Chapter 8 discussed how beekeepers represent hive-making techniques to have been learnt, here we draw on the same theme. These ideas resonate in beekeeping practices associated with the TBCS today, for beekeeping knowledge is said to be 'inherited' between male kin and it is only with experience that one can become a member of the TBCS and be deemed a 'beekeeper'. Other features with roots in an older way of operating are the way social ties such as kinship were linked as an critical element in the new economic activity, and the way 'tradition' became an idiom through which to express their ties to the market. Again, as was argued in the last chapter, a feature that has contributed to organisational continuity in beekeeping was - and remains - the fact that it has not borne witness to the entry of new groups or individuals with substantially different knowledge, technology, experiences, counter-narratives, practices and forms of institutional support which could be used to challenge local practices, as in the case of fishing. Furthermore, continuing with the comparison of beekeeping with fishing, it is harder for the state to control beekeeping,

influencing the practices which take place, for beekeepers are dispersed within the forests of Ugalla, being far more 'invisible' than fishermen who can be readily encountered at riverside camps.

Perhaps another reason people held the beekeeping co-operative to have been a 'way forward' was that previous forms of association no longer gave them the basis and legitimacy with which to interact, not only with the market, but also with immigrants, new economic entrepreneurs and local officials, each of whom had designs on resources in Ugalla Game Reserve (as described in Chapter 4). In the past the fishing association were a means through which local people tried to protect the established order, but in the 1950s and 1960s this had been undermined, as with the entry of refugees to the river. This is not, of course, to suggest that local manifestations of fishing or hunting societies were the last bastions against the market, far from it, for historically Nyamwezi 'secret societies' developed in relation to long-distance Swahili trade.[303]

The issue of legitimacy is important, the TBCS was formed just prior to Tanzanian Independence when local political moves were being made to reclaim the 'homeland' of Ugalla as described in Chapter 4. These moves prompted the Game Department to upgrade the status of what was then the Ugalla River Game Controlled Area to a game reserve with stricter regulations on entry and resource use. This was also a time when the established rights of beekeepers, fishermen and hunters were being challenged both by local politicians and by employees of the Game Department. On a number of occasions representatives of the Beekeeping Institute gave institutional legitimacy to the claims beekeepers made vis-à-vis their right to work in Ugalla Game Reserve.[304]

With the establishment of a guaranteed market for honey at a good price, beekeeping flourished in Ugalla Game Reserve as a specialised dry-season occupation in its own right and not as a

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[303] As a historical caveat, these secret societies gained importance in the mid-nineteenth century. Ranger argues that with long-distance Swahili trade horizons were broadening and people began to see themselves within a network of other men and other societies. During this time the 'secret' or 'dance' societies flourished in Unyamwezi, providing a means to establish relations with other communities. As the ivory trade increased so did the importance of the hunters guilds and the value of secret societies as 'mutual aid associations', acquiring an inter-tribal character through their extension along trade routes. These associations spread rapidly with trade, generating new networks of communication, ideas, opportunities and giving people access to new goods (Roberts, 1970; c.f. Ranger, 1969, 1975; Cory, 1955, n.d. EA.Mss.105).

[304] For example, when the Ugalla River Game Controlled Area was gazetted in 1954, and again in 1965 when the Game Department banned beekeeping in the reserve (WD.Mss.Ugalla Game Reserve) - see Chapter 4.

sideline to hunting, fishing, or the production of wax through a mixture of beekeeping and honey hunting, as it had been previously. From the accounts of beekeepers, the TBCS seems to have opened up the possibility for a person to be ambitious, a means to 'raise oneself up in life'. Indeed, although they lived hard lives, with many having worked as labourers on plantations, tsetse-fly projects or the railway, these beekeepers were modern men, some educated to 'teach the catechism' or be 'primary school teachers', while others were well-travelled through enrolment in the army, and many had embraced Christianity or Islam.

The change and competitiveness associated with the start of the TBCS is captured in the words of Anthoni Makonyaga, Chairman of the TBCS in 1993, and son in law of Ntiyama the first Chairman of the TBCS:

> "The people who were moved...[due to sleeping sickness]...they went to Kasontwa to find trees and honey hunt and get two or three buckets of honey and that was all. This honey was eaten and the prices were very low, three shillings for a whole bucket. Now we have continued and we have reached a point where we are tired of walking, and our fathers made beehives of log and bark and myself I looked so that I understood how to increase my beehives and when the co-operative started the hives really started. This was because it was like an injection, you brought twenty buckets with you and one of your companions would see and say I will bring forty buckets, and someone else would say I will take sixty buckets, and another one hundred, myself I reached two hundred and twenty [2.2 drums] and the others were left behind, they were astonished in Ugalla, two hundred and twenty, they said, it is true.
>
> Yes it was like this when the co-operative began, and also the price began to rise, up to forty shillings. Yes this is why it was like an injection, every single person arrived and the hives became many because of the money. It was food [income], it became a proper market. Many people learned to keep bees and some for whom it wasn't in their clan...[*ukoo*]. They were groundnut farmers but everyone hung beehives. Others were Tusi...[Tutsi]...who kept cattle and they also hung beehives. But most of them were from clans [with beekeeping/honey gathering traditions], it is a clan within themselves, although for others it is income generation. They went honey hunting but were tired of walking long distances, and they were not sure of whether they would get the honey so they started to make beehives".[305]

This representation of beekeeping in Ugalla and of the start of the TBCS gives us a flavour of local perceptions of the opportunities offered by the new honey market. Beekeeping started to emerge as a way to ensure productivity, in contrast to the vagaries of honey hunting and

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[305] Clauss (1992; personal communication, September 1996) and Wainwright (1988; 1990; personal communication, January 1995) discuss a beekeeping project at Kabompo in the North Western Province of Zambia in the 1980s. Wainwright is connected to the TBCS, and there are similarities between the two projects. The analogy between the TBCS acting as a stimulating 'injection' to local beekeeping finds parallels in the case of the Zambian honey project.

associated life-style, beehives were private property placed in a known location where, with the knowledge and skill, a person could anticipate his harvest and orient himself toward the future through putting in resources, employing labour and training his sons. People started expanding their hives from a few to many hundred. The leadership of the TBCS actively stimulated this by setting a target for each member of 40 new hives per annum for each member, a quota George Ntiyama remembers having been reached in 1962.[306] Some men, like Joshua Ntiyama, the older brother of George Ntiyama, are reputed to have possessed over 2000 log hives during this period (less than and up to 1000 beehives being more common).

To summarise, particular local organisational elements entered into the TBCS and made it possible for producers to bring into their encounters and relationships with the White Fathers and beekeeping experts existing cultural categories and organisational practices. In contemporary accounts a positive picture is created of the manner this provided individuals with a means of "raising themselves up" in life. However, this should not obscure certain contradictions generated by the TBCS and the negative effects for people outside this core of producers, issues we can now turn to.

Economic Success, Market Contradictions & the Idiom of 'Tradition'

It has been suggested that honey sold to the Co-operative, as opposed to beeswax sold to local traders, opened up the possibility of very real material gains. This is captured in discussions with beekeepers who often point out that 'bees' have been the 'foundation' of their life, bringing a sense of autonomy and pride, and, for some, powerful positions within the beekeeping organisation and village contexts. In interviews many present-day beekeepers express similar sentiments to those which follow:

> "For some people tobacco is their main income earner, but myself I haven't grown tobacco because my work is beekeeping. With beehives I have succeeded [obtained ones wish] to live, and my children have succeeded with beehives, and I have built a house from it, the house was built solely through the income from beekeeping. I have reaped all this for myself, it is something of this time. To turn and do something else would really be a task" (Mzee Anthoni).

> "Myself, my main income comes from beekeeping. Beekeeping pays for all things, yes indeed it is my life. I stopped and grew tobacco for five years but my life is beekeeping that is all" (Mwana Masudi).

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306 Well established beekeepers who can afford to employ labour to make beehives for them are likely to reach a target of 15-25 per annum in the case of log hives, but for many men this is an unattainable number because they do not have the food, money to employ labour, incentive, or time in the forest.

> "As soon as I left school my father took me to the forest, this is what I know. It is something that I can do, it is something that assists with many different problems, yes I lean on the bees" (Mzee Daudi).

Despite these accounts of success, economic change associated with the TBCS has not always been positive. For individuals there have been many failures, and new markets have been accompanied by contradictions. As examples, when the value given to honey became far more commoditised it reduced household consumption, and a dramatic rise in honey prices had negative implications for honey beer brewers, many of whom were women.

Moreover, the TBCS itself has, like other Tanzanian co-operatives, experienced hard times in maintaining an export market and in paying producers for their produce. Inability to pay producers for credit owed has caused people to seek markets elsewhere, although, as Appendix 9 suggests, many do this while continuing to maintain the connections and inputs the co-operative can give through selling some of their produce to it (c.f. Fisher, 1997). As one man reasoned:

> "Yes there are problems with the TBCS making payments but people still continue to be members because those people on the black market they are just like concubines, so you cannot...the TBCS is like somebody's wife and you should respect it whereas those people on the black market they are just there to see that you don't progress. So they are there just to make sure that there is nothing [no produce] coming here. But the moment this one [the TBCS] breaks them they are going to get the disadvantage...yes it would help to pay us because we are strangled by the black marketers" (Moses Simon).

At an individual-level, contradictions generated by the TBCS are illustrated well by the life history of George Ntiyama, the first Chairman, in a situation that is by no means unique. Like several founder-members, he was from a chiefly lineage in Ugalla and moved with his family to the sleeping sickness resettlement camp of Kakola (Isongwa Village). After resettlement he went back to the river on a seasonal basis, and today one can trace numerous ties of kinship and affinity between him and other men who work or worked along the Ugalla River. The income he derived from honey sales enabled him to educate his eldest son and daughter, who now hold high positions in the civil service. But in order for beekeeping to continue in his family he purposely had to decide to keep his youngest son from being formally educated in order that he would learn to keep bees as an inheritance. Thus, the TBCS enabled him and his family to raise themselves up in life, but at the same time, and despite the old man's own beekeeping aspirations for his sons, it has been the means by which members of the next generation have

moved on (another example is that of the Project Manager of Ugalla Game Reserve, as described in Chapter 6 - his father was a founder TBCS member and Ntiyama is his uncle).

The sense of competition and capacity to do well out of beekeeping after the start of the TBCS raises an interesting issue. If we conjure up a stereotype, in Southern Tabora Region signs of economic success are kept muted with people being loath to reveal any assets they may have. In the popular view, ostentatious display of wealth can generate jealousy from family and neighbours and this in turn is associated with witchcraft (*uchawi*) accusations. The social circumstances beneath this stereotype are obviously complex (c.f. Thompson, 1985; Abrahams, 1994), but it does pinpoint an issue, which is the question of how success in beekeeping could be socially encompassed and rendered 'acceptable' according to the values of the local society?

The preceding quotations convey a flavour of the way that in the early years of the Co-operative, beekeeping led to new ties to the market and new ways that claims could be made over peoples entry to Ugalla and access to resources. However, despite, and perhaps because of, change, beekeeping has become couched in people's discourses as a 'traditional occupation'. Locating it as 'traditional' conveys the sense that it is an ancient activity inherited by certain clans from Ugalla. In this sense, tradition appears not to be a mode of operation and set of established practices and routines dictating how to accomplish actions, but a language through which beekeepers can encapsulate their practices, their relationships to the market, and the legitimacy of their presence in Ugalla (c.f. Geschiere, 1992).

As a discursive way of representing their productive activities, 'tradition' implies forest-based knowledge known only to certain people, kinship relations which enabled the occupation to be 'inherited' and, by the same token, take a person's agency out of any economic success; the identity of being 'Galla' and from certain clans which established certain people's access to resources against those of others or against challenges to people's entitlement made by the state (c.f. Ranger, 1983). One senses that an occupation situated in the realm of 'tradition' was considered far less open to resentment and jealousy than something 'new'. Even so, beekeepers working in Ugalla Game Reserve today carefully conceal - from one another, outsiders, and officials - how many beehives they possess and how much honey or beeswax they produce.

Before concluding, an illustration can be given of the way a language of tradition finds expression at the TBCS, an 'invented tradition' can be recalled in the form of a song that is performed at the start of every formal meeting, equating present-day TBCS beekeeping with being a Galla (*Mugalla*) honey hunting in the forest.[307]

The words of the song are as follows:

Wantumbi [You the forest dweller]
Oh-yayawane [it is me]
Wamekasa [I belong to the tradition of honey gathering]
Oo-yayawane [Yes, it is me]
Kakubita mulugo [As a honey gatherer I don't own a house]
Ndisiuli Kakulima busiga [And I don't grow sorghum]

[chorus]: *Mwesenga muletouse* [I belong to the forest]
Muleletouse mubugala [A Mugalla is a forest dweller]
Muleletwingi [It is where he belongs]

Wansinda [Honey flowers]
Oo-yayawane [It is me]
Wamekasa [I belong to the honey hunting]
Oo-yayawane [It is me]
Kakubita mulugo-si buli [And I don't even keep animals]
Mulalatouse mubugombo muleletwingi [Yes, it is me of the forest]

[chorus]: *Mwisenga muleletouse* [I belong to the forest]
Muleletouse mubugala [A Mugalla is a forest dweller]
Muleletwingi [It is where he belongs].[308]

The fashion in which the song is rendered is important, it takes place at the beginning of a meeting, everyone stands up and is obliged to join in, and the style is reminiscent of an anthem. It is sung, for instance, at the AGM on the 5th of May in front of beekeeper-representatives from each of the 36 TBCS branches, the Management and Co-operative workers, officials from the Co-operative, Natural Resources Sectors, Members of the Beekeeping Training Institute, representatives of the management of Ugalla Game Reserve, and visiting researchers. The anthem-like quality of the rendition draws on a ritual of the Tanzanian nation state, which in itself is associated with the British colonial practice of singing 'God Save the Queen' - an emotionally and symbolically charged sign of membership, reflecting unity, helping those

[307] By 'invented tradition' we mean a ritual practice which seeks to inculcate certain values and norms of behaviour by repetition and which automatically implies continuity with the past (Hobsbawm, 1983: 1).

[308] Recorded at the TBCS AGM 5.5.93, discussed by George Ntiyama in an interview on the 14.7.94, and the translation was assisted by a reproduction of the TBCS song found in Nguvava, 1989.

beekeeper-members, state representatives, and the management gain an ideological consciousness of the collectivity (Hobsbawm, 1983: 11). I asked George Ntiyama, the first Chairman of the TBCS, why this song had been adopted and he replied that they began to sing it when the Co-operative began because the beekeepers were, and are, continuing work started along time ago (significantly, many of today's members do not originate from Ugalla and do not speak this dialect).

In summary, we can say that processes of social transformation triggered by the TBCS have not necessarily been positive, especially for groups such as beer brewers, or even beekeepers outside the Co-operative. For individuals, new opportunities expose difficulties, also choices have to be made and the perceptions of others encompassed or deflected. In short, the way change has been (or is) experienced may have been far more painful than people's aspirations would allow.

In 1962 the Tanganyika Honey Organisation was registered with the government as an official co-operative and renamed the 'Tabora Beekeepers Co-operative Society Ltd'.[309] The TBCS honey cleaning plant and offices were located on land leased to the Catholic church in Kipalapala near Tabora town. By the late 1960's the TBCS had over 2000 members who came from parts of Tabora, Kahama, Kigoma, Rukwa, Mbeya, and Shinyanga Regions although southern Tabora Region which includes Ugalla Game Reserve has always been a stronghold for membership.[310] Despite public ownership of many enterprises in Tanzania after Independence (1961), the organisation remained semi-private, apparently with the support of President Nyerere.[311] Furthermore, honey and wax production for beekeepers working along the Ugalla

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[309] After Independence co-operative societies were strongly encouraged, and agricultural co-operatives became a focus for rural development policies and intervention.

[310] In 1993 geographically, 77% of TBCS members are from Tabora Region, most of whom are concentrated in the south, 11% are from Rukwa Region, 10% from Shinyanga Region, and 2% from Mbeya Region (figures calculated by myself from membership lists). Between 1990 - 1993 between 60% and 80% of the total Co-operative produce was from southern Tabora Region where Ugalla Game Reserve is located (figures calculated from unpublished and 'raw' productivity data for each TBCS branch).

[311] The TBCS is a government registered Co-operative and linked to the CUT, the national trade union organisation, but it has never depended on membership of a co-operative union, and in its operation it is akin to a private business operating under the wing of the Catholic Church. The support of Nyerere is described in a letter from the Archbishop of Tabora to the Co-operative Manger [30.6.72]: "Dear Father, Recently I had an interview in Dar es Salaam with the President, in the course of which the TBCS happened to be mentioned...He called in Mr Masanja to find out more...and he ended by saying that he did not want the co-operative to be taken over by a Union...The people, he knew, trusted you in this work, and trust was a very important factor in any such understanding as the co-operative. He did not wish to see it dissipated. He added that you were one of the men in

River has never been interfered with by Government officials as part of national development planning in the way that agricultural production and even fish production on the Ugalla River has been.

To conclude this section, the process through which a particular configuration of people and institutions came together to form the TBCS has been described. Different social, financial and expert resources were drawn into the organisation: the White Fathers contributed management skills and a religious ethos, Smith and employees of the Beekeeping Research Institute beekeeping expertise, knowledge of production standards for international markets and legitimacy, and the producers contributed local knowledge, experience of markets, facets of prior modes of organisation, and a collective stock of knowledge. Each of these features gave meaning and substance to the model the White Fathers and Beekeeping experts were trying to introduce. Thus we can say that the 'success' of the TBCS in linking producers to international honey markets has been because, like many valuable co-operatives around the world, it has operated in the sphere of marketing, not production. The applicability of the TBCS for producers has also been facilitated by the fact that although new people have entered into beekeeping in Ugalla Game Reserve, they have not been groups with their own counter-narratives, knowledge and bases of institutional support, as in the case of fishing.

The establishment of the TBCS has not been without difficulties in terms of economic contradictions and personal dilemmas for those concerned. In this respect, the idiom of 'tradition' has played a role in disguising the many ways that beekeeping has changed to become a new economic activity. Representations of 'tradition' are also in keeping with people's territorial and resource-use claims to Ugalla vis-à-vis the wildlife authorities and government administrators.

CONCLUSION

The preceding discussion has tried to present the significance of an organisation, the Tabora Beekeepers Co-operative Society Ltd (TBCS) in successfully linking beekeepers to international markets for honey, and more peripherally for beeswax. This organisation has been

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the field who worked to put their policies into practice, he wanted you to continue to do so...Yours in Christ, Archbishop of Tabora" (TA.Mss.2663/72).

central in moulding forms of local organisation in Ugalla Game Reserve and raises issues of wider applicability to people-oriented conservation initiatives in Tanzania.

One of the main objectives in this chapter was to show how commodities like honey and beeswax can be vehicles around which local organisation can take place and new forms of 'development' can be constructed. Both honey and beeswax embody a multiplicity of values and become mediums that allows us to view how diverse individual actors perform in the market. In this chapter the emphasis has been on the way in which producers culturally mediate the market and relate it to their skills, social practices and understanding, giving it meaning through idioms such as that of 'tradition'. In this respect, the process of commoditization involves the way in which people's perceptions of the production of honey and wax are made possible through a local attribution of value. Beekeepers from the Ugalla use their experiences and their sense of history to create social environments and a mode of operating which enables the production of two forest products to take place.

In this configuration, the representation of benefits are defined and the market controlled or regulated by issues of power relations between local people and, in this case, state-led wildlife management within a protected area. By producing two products for international markets, local interests in effect oppose the powerful conservation lobby, in what appears to be a complex field of claims over access to natural resources in East Africa. In this field of claims and counter-claims, the market is presented by supporters of community-based conservation schemes as the means through which conservation-related conflicts can be resolved. Exaggeration of the prospective benefits of the market may, in some cases at least, represent an inability by conservationists to appreciate what is happening at local level. This lack of appreciation of the local situation - ostensibly due to the short time frames of projects and consultancies, restrictions within terms of references, methodologies designed to monitor fauna and flora not human social life, but beyond this due to a lack of critical reflection about science and development intervention - leads many in favour of community-based conservation initiatives to exaggerate the role both the market and local participation can play in conservation-related planning. Simultaneously, the historical trajectory of produce like honey and beeswax in shaping local organisation in a region, is underestimated. The chapter follows the idea that honey and beeswax have complex biographies which need to be understood, in order to prevent a common exaggeration of the prospective benefits of a market or of

conservation scheme while ignoring local people's own capacities, especially, it must be said, if these capacities do not uphold the value of conservation-related planning.

In this sense this chapter does not take local people attachment to 'the world market' as the only phenomenon that can explain the constitution of local markets and the strategies of producers, like those examples of people's strategies given in Appendix 9. Instead it explores historically how objects (honey and beeswax) and processes (commoditization / non commoditization relations of exchange) have defined particular social relations and the character of specific goods. In other words, how the forces of the market have generated 'peculiar expressions' and local patterns of organisation. The chapter identifies historically the different statuses given to honey and beeswax using historical accounts and local information. From the late pre-colonial period to the present we have identified different chronological periods in which local people, their social relations and the specific character goods have been imbued with have changed. Within this framework the institutional analysis of the Tanganyika Honey Organisation has led us to identify three different agents instrumental in change: first, the Beekeeping Research Institute in Tabora, second, the Catholic Society of Missionaries for Africa, the 'White Fathers' and, third, a group of local men who fished, hunted and kept bees along the Ugalla River. The chapter suggests that processes related to the different status of honey and wax, to people's historical experiences, and to the association of different actors, generated a coalition which led to the creation of a relatively successful co-operative, the Tabora Beekeepers Co-operative Society.

In the establishment of the TBCS three important elements have interacted, so-called 'tradition', local identity and the market. In this respect, local experiences of dealing with forest-based production and also of resettlement into sleeping sickness concentrations accompanied by the entrapments of modernisation, provided a local stimulant to action. These experiences coloured the new organisation, not as blueprint but as a way of visualising future outcomes and possible benefits. In effect it enabled producers to bring into their encounters and relationships with the White Fathers and beekeeping experts existing cultural categories, experiences and organising practices. The TBCS provided a positive picture of the manner in which individuals could raise themselves up in life, this was not without contradictions and negative effects on some people outside the core of producers, nevertheless this experience did allow local actors to strengthen their own capacities in relation to honey, wax and the forest,

repositioning themselves vis-à-vis the Tanzanian state, British Colonial traditions and their own history as members of an 'invented tradition', namely the identity of being 'Galla' and the sense of collectivity this was linked to.

This chapter has tried to demonstrate the importance of the TBCS and how Tanzania honey, in spite of circulating as a commodity to distant markets has not became an 'alienable commodity' but instead carries with it properties built up through the process of production and circulation. Honey and Beeswax sold to the TBCS and ultimately the 'fair trade' market contrasts with the case of beeswax sold to local traders, which is melted and combined with other wax with no concern for produce origins. In this way it shows us how important has been the TBCS in brining about change and meaning to forest production and how important it has been as an organisation in allowing local producers a flexible capacity for interacting with different markets, allowing them to distinguish and attribute different meaning to these markets. This process of social transformation have not necessarily been positive for groups such as beer brewers, or even beekeepers outside the Co-operative, nevertheless the cost and difficulties have been part of a long voyage of discovery that have included the most varied domains, from technology, re-interpretation of history, the re-positioning of local knowledge and the making of political claims.

10

The Case of Ambrose Lioba Chalamila, TBCS Chairman

Introduction

This chapter is intended to act as precursory to Chapter 11. The case which follows derives from the life-history of one man, Ambrose Lioba Chalamila, Chairman of Kwihara Branch of the TBCS. This illustration is used as a point of anchorage for the discussion in Chapter 11 which explores the social composition of five camps in Ugalla Game Reserve, two of which are those of Lioba Chalamila and his fellow beekeepers. Lioba's life story gives individual expression to some of the processes which have been referred to earlier in this thesis, including resettlement from Ugalla due to sleeping sickness, the way groups of men have 'repositioned' themselves in the area, the use of 'tradition' and 'Galla' identity in giving meaning to local beekeeping and to working in Ugalla, and the way in which forest-based skills are said to be transmitted through kinship relations. Here we wish to gain an insight into how the experiences of a man such as Lioba Chalamila, are brought to bear in his approach to beekeeping, in the situations he encounters, and in his role as Chairman of a local branch of the TBCS.

Obviously, to give an account of a person's life history necessitates discretion on the part of a researcher; in the many conversations I held with this local beekeeper I was interested to try and elucidate what elements had come together in his life which he gave significance to in order to explain who he was, why he was a beekeeper, and how he held a position within the TBCS. This information, and the experiences my own research derived from, helped me to understand the social relationships and realities which exist between men who keep bees. In making reference here to my experiences, my own actions, such as visiting people and asking questions - the bread and butter of ethnographic research - touched on antagonism, jealousy, feelings of animosity, friendliness, or hospitality which positioned both myself and my research in unknown territory. For instance, this material refers to a conflict between the families of two brothers; in the household of one I was greeted with warm hospitality, in the other I confronted suspicion, resentment and jealousy. Only in retrospect did such feelings become meaningful for analysis of the fieldwork experience as anything other than personal or methodology

inadequacy. Indeed in hindsight it becomes more clear that if a researcher doesn't encounter difficult situations it may be because he or she has disregarded issues significant to the lives of the individuals with whom he or she has met.

I first met with Lioba Chalamila at a workshop run by the Wildlife Department's Planning and Assessment for Wildlife Management unit (PAWM) on the future management of Ugalla Game Reserve. The workshop was held in Tabora town in November 1992 and was attended by 60 people: senior level Tanzanian civil servants, expatriates working in the conservation sector, and representatives of local interest groups. During the course of the meeting, one of the people who stood up and spoke in support of the importance of Ugalla Game Reserve for beekeepers was Lioba Chalamila. This was my first encounter with a man who is a respected local beekeeper and representative of other beekeepers; a person who was obviously articulate and ready to put forward a case without being intimidated. I later came to realise that in order to have been invited to the workshop he must have been on good terms with both the Project Manager of Ugalla Game Reserve, and the Manager of the TBCS, demonstrating a good degree of political acumen on his part.

Two months later when, in order to start research, I was at the TBCS trying to establish who the beekeepers were who worked in Ugalla Game Reserve and where they lived, the TBCS Manager suggested that I talk to Lioba Chalamila, the Chairman of the local branch of the Co-operative. I was taken to his house by a man named Peter Malima, the Manager of the TBCS shop, and as we walked through the village, Malima commented off-hand and in a negative way that in his view Lioba Chalamila was not a good Chairman and that he was incapable of dealing with beekeepers' problems because, to use an English phrase, he was 'all mouth and no action'. In this brief exchange of views, I was presented with a very different perspective of the man. In fact, as the time of my research progressed, Lioba Chalamila came to act as a key person in enabling me to gain access to local beekeepers and mobilising them to support my interests.

As a result of the assistance Lioba Chalamila gave to my research, I became known to him and his family, and the following account presents some of the details of his life. It transpired that he is a well-established local beekeeper: he has kept bees in Ugalla Game Reserve since 1961. In 1993 he possessed 686 log bee-hives - a significant number by local standards. In 1993 he was Chairman of Kwihara Branch of the TBCS and by 1996, after the period to which this description refers, he had become overall Chairman of the Co-operative. During the course of 1993, in his role as Branch Chairman for the TBCS, Ambrose Lioba Chalamila represented

local beekeepers in a number of contexts, not only at the Co-operative but also as a member of the Board at the Beekeeping Training Institute in Tabora. Because of this latter position, as well as due to the convenience of his residence near Tabora town, the Project Manager of Ugalla Game Reserve drew him into planning meetings concerned with the management of the reserve. Also, in the forest he is one of a number of people who oversee the TBCS project apiary, some 25 kilometres from Ugalla Game Reserve.

Lioba Chalamila's work as a beekeepers' representative is in two main geographical areas: around the village of Usizya, where the main TBCS warehouse and the majority of the 94 TBCS Kwihara Branch members are based, and in a portion of Ugalla Game Reserve where forty-five beekeepers from Usizya place their beehives. These beehives are situated at five adjacent camps: Msiri, Kwalungu, Nsontwa 1, Nsontwa 2 and Katala, of which two are the camps of Ambrose Lioba Chalamila and his family (Kwalungu and Nsontwa 1). The main focus of Lioba Chalamila's activities as Branch Chairman is on behalf of these 45 beekeepers, when preparing to go to the reserve and in the forest itself he helps to arrange transport, organise the acquisition of people's permits, and distribute honey containers.[312] At the end of the beekeeping season he tries to ensure that members sell their honey to the Co-operative and that they receive speedy payments for their produce.

A number of elements are drawn into Lioba Chalamila's capacity to keep bees and act as a representative of other beekeepers. Important in these elements are: being a committed Catholic, a member of the Chama Cha Mapinduzi (CCM, the ruling political party of Tanzania), and involvement in community affairs (in addition to support for local members of the TBCS), for example, membership of grassroots Christian and funeral groups. Also, importantly, the origin of Lioba Chalamila's family is Ugalla. Although they were evacuated from the area in the mid-1920s, the life of his father and other members of his family have provided a base for Lioba Chalamila in the reserve in ways that he holds to be of value. In particular, it enables him to stand within the ground of 'tradition', a tradition which is embedded in the idiom of kinship relations, in the history of resettlement from Ugalla, and in the language that the potentially lucrative nature of TBCS beekeeping is couched within.

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[312] Of the 94 members of Kwihara Branch of the TBCS in 1993, approximately 64 lived in Usizya Village, 7 lived in Tabora town, 9 in neighbouring villages, and the 14 remaining people came from Mibono and Igombe some distance away. The latter were members of Branch because they get paid for produce quicker than if they belonged to another branch. A further 26 beekeepers in Usizya Village keep bees at camps known as Nkasi 1, Nkasi 2, Kilala 1, Kilala 2 and Selege at Malongwe on the central railway line. There is a deputy chairman of Kwihara Branch of the TBCS who oversees their activies in preference to Lioba Chalamila.

In respect to Catholicism, not only does this provide Lioba Chalamila with a personal outlook on life, it is also of importance in the TBCS because, as explained in Chapter 6, although it is open to shareholders of any religion, the majority of members are Catholic and the Co-operative is closely aligned to the Catholic Church. Support for the CCM also has practical consequences within the TBCS: the Village Chairman of the CCM works as a secretary to the TBCS Manager and therefore sits in the Manager's office overhearing any discussions that take place. For Lioba Chalamila to obtain a permit for himself and other branch members to work in Ugalla Game Reserve, payments have to be made to the Chairman who may otherwise obstruct the activities of the local beekeepers.

Lioba Chalamila draws on family relations in his capacity as a beekeeper, a sphere which is important to explore in greater depth. He is 53 years old (1993) and lives in Kwihara Kitongoji of Usizya Village, having been moved in 1974 by the Government from Migwewe an outlying hamlet, as part of the process of planned villagisation. Several members of Lioba Chalamila's family also live in Usizya Village, and here his connections to Ugalla start to become clearer. Lioba Chalamila's grandfather, Katanta Mganga Chalamila, was the chief of an area of Ugalla known as Ukuba. This was about twenty five kilometres north of Lioba Chalamila's present beekeeping camps, and is the place where Lioba Chalamila's father, Martin Katanta Chalamila, was born in 1910 (deceased 1995).

In the mid-1920s, when people were evacuated from the area because of sleeping sickness, the family were resettled in Sikonge. 40 years later, Martin Katanta, his two sons, Lioba and Mwamba and their families, decided to move to Migwewe on the outskirts of Usizya Village. Martin Katanta chose to move to Migwewe because he had relatives there and his family hoped to benefit from the services Tabora town could provide, although the move was prompted by witchcraft-related problems back in Sikonge. The family have been based in the Migwewe/Usizya area ever since, although they retain a connection to Sikonge, in particular because the sons and grandsons of Martin Katanta have all married women from the area.[313]

[313] In the village in question, there is a tendency for residence on marriage to be virilocal, with men seeking wives from outside the village. This is most typically the case in relation to a man's first bridewealth marriage. The picture becomes far more complex when one takes into account the frequency of divorce, remarriage, children born out of wedlock, and co-residence between a couple who are not married. Vide Abrahams (1967a: 43) for a discussion of marriage patterns in Northern Unyamwezi and Abrahams (1994) for a discussion on witchcraft in Tanzania.

Lioba Chalamila's house, like most houses in the village, is unostentatiously made of mud bricks and thatch, with no outward display of goods and possessions. Over time one becomes aware that he is doing relatively well in life; aside from beekeeping, he has a farm of five and a half acres which he cultivates with his wife, youngest son, and the employment of casual labourers. The food obtained from this farm is divided between use in the household, the upkeep of beekeeping labourers in the forest, and local sales of maize and rice. As an outcome of savings generated through beekeeping and farming, Lioba Chalamila has acquired a plot of land in Tabora town on which he intends to build a house and start a grinding mill.

Lioba Chalamila has a wife, Anastasia, whom he married in the late 1950s, and two grown up sons, Stephen and Mateo. In giving birth to Mateo, Anastasia suffered an infection which caused her to be incapable of bearing more children, a state of affairs that she and her husband express as ill fortune. Also, since the birth of her son, Anastasia has regularly experienced periods of incapacitating ill-health and pain. Because her two sons are now grown up, Anastasia has no children or dependants to look after she carries out household chores - water carrying, firewood collection, cleaning, cooking - for herself and her husband alone. Like other women she starts to weed and hoe the land towards the end of the dry-season before Lioba Chalamila has returned from the forest, and works on the farm alongside Lioba throughout the rainy season. Later, after the harvest, she cleans and de-husks the crop. In a good year they hope to harvest 30 - 45 sacks of maize and 5 sacks of rice, and to sell a large percentage. Also, throughout the year she sells small quantities of produce outside the house, such as guava's, spinach, and groundnuts.

It is interesting to note that Anastasia has never been to the forest where Lioba Chalamila's bee-hives are kept. When I asked her why, she laughed and explained to me that beekeeping "is not our work, it is not normal for a woman, this is men's work". She stated that her main and only role in beekeeping is to produce food for her husband and son to take, and to spend time preparing the raw ingredients before they leave. On return from the forest and after the produce has been sold, money from honey and wax sales is used for a variety of things depending on how good the beekeeping and agricultural harvests have been. Regular items include salt, soap, hair oil, matches, kerosene, cooking oil, and if they have guests, meat and sugar. In addition, they have to cover health payments because she is often ill, and she will also buy cloths (*kanga*) for wearing.

Turning to the sons of Lioba and Anastasia: in 1995, Stephen and Mateo were aged 30 and 27 respectively and lived together a few doors away from their parents. Stephen married a woman called Maria in 1986 and together they farm three and a half acres next to Lioba' plot. In addition to farming, and like his father, Stephen is committed to keeping bees, having already become a shareholder of the TBCS. Mateo on the other hand does not wish to marry yet, a state of affairs which is perceived as a problem by his family. Because of his unmarried status Mateo still assists his parents on their farm, as well as working as a part-time musician in Tabora town, but although he has spent time at Kwalungu Camp, he is not a beekeeper. In 1993, when in the forest, Stephen and his cousins would tease Mateo, saying that he was afraid of bees. This was puzzling to me because he was participating equally alongside the other men. In conversations with Mateo I was presented with the image of someone who felt he was compelled to keep bees because his grandfather did, and father and brother do, and because there are few other occupations open to him. Given the choice he did not want to be a beekeeper but wished rather to be a successful musician and travel by plane to Europe. On a number of occasions Stephen tried to enrol me into the task of persuading his brother that he should settle down, get married, and stop dreaming of places that, in Stephen's view, he could never visit. In the characterisation of Mateo as 'afraid of bees', his family were actually portraying his reluctance and its resultant tensions.

The tendency by Mateo to dream of other places and possibilities appears to have been something that his father has frowned upon. He prevented his son from entering secondary school, for example, arguing that he needed to follow a manual occupation in life, even though Mateo appears to be very bright and it would have been possible to pay for his school fees. In the course of research I encountered many cases of beekeepers who have prevented one or all of their sons from being formally educated because they argued that this was in direct conflict to the acquisition of forest-based skills and capacity to carry out manual labour, and that schooling would take them no-where in life because opportunities are not available.

There is an aspect of the life circumstances of Mateo and Stephen which has an important bearing on both Lioba Chalamila's close family relations and his work as a beekeeper. Apparently, throughout his teens Mateo periodically lapsed into a state of incoherence talking in what can be loosely translated as 'gibberish' for days on end; the cause of Mateo's affliction was diagnosed by a traditional practitioner (*mganga*) as due to witchcraft. Stephen was also dogged by misfortune, after seven years of marriage he and his wife had borne no children, a problem which troubles the couple enormously and creates friction between them. In 1994, after I had left Tanzania, Stephen reputedly suffered an illness whose cause was associated with

witchcraft deriving from the same source as his brother. According to the explanations of both men, the witchcraft was caused by their aunt, Lioba Chalamila's eldest brother's second wife, Editha Sepeti, sister of a previous Minister of Natural Resources for Tanzania. To explain these witchcraft accusations I must elaborate on the relationship between Lioba Chalamila and his elder brother, Mwamba Chalamila.

In his prime, Martin Katanta, the father of Lioba and Mwamba, was a skilled hunter who, although he would not elaborate upon it to me, was apparently a member of a Nyamwezi 'secret society' for hunting.[314] As part of his hunting activities he used to honey-hunt and keep a few beehives. In the late 1980s, Martin Katanta had become too old to go to Ugalla, although he was not forgotten, for when I stayed at the beekeeping camp of his family, the memory of him they relayed to me portrayed him as the archetypal 'true Galla', a man who was held to be strong and fearless, and with the capacity, I was graphically informed on several occasions, to face a lion with only an axe.

Martin Katanta's sons, William Mwamba and Ambrose Lioba, were born in 1938 and 1940 respectively and as children he taught them forest-skills by working in Ugalla around Kwalungu where Ambrose Lioba Chalamila keeps bees today. The way their family history is embedded in the landscape of Ugalla emerged when I accompanied the family in the forest: for example, Lioba would point out features of the scenery, such as a bee colony in a fig tree, that he remembered from his childhood, or when walking in the area of Kasontwa he would tell tales of how his grandfather and family had hidden there from soldiers during the First World War; as he said: "Ugalla is the place that has been our guardian, that we have known, since we were small". This history is also the past of Mwamba, his elder brother, who for many years worked along the Ugalla River. However, during my stay in the reserve, no mention was ever made of Mwamba and he never visited the camp even though he is a close neighbour of Lioba in Usizya Village, which would lead one to expect that they would keep bees together and/or interact in the village on a regular basis.

To explain why Lioba and Mwamba do not work together, we can trace how their occupational paths and lives divided. In 1954 Lioba left primary school and went to work in Shinyanga as a labourer on the cotton harvest. Soon after, he married his first and only wife, Anastasia Steven,

[314] Hunting as practiced by Martin Katanta involved the use of specialist knowledge and skills, which drew upon detailed understandings of particular environments and linked the hunter to a community of others.

and "invested the cotton money in bees". During the 1950s and 1960s, Lioba, Mwamba and their father began to expand the number of beehives they possessed, because, according to Martin Katanta "wealth entered the door of the bees, if you owned many hives then really you had money".

The new dedication to beekeeping on the part of Martin Katanta and his sons mirrored the activities of many other men, because this was the time when the TBCS was starting up, led by people from Isongwa and Usizya Villages who had forest camps along the Ugalla River. Indeed, like many other men who work as beekeepers in Ugalla Game Reserve, Martin Katanta became a TBCS shareholder in the early 1960s and describes himself as having helped to 'build' the Co-operative (as described in Chapter 9). However, like the men who helped to found the TBCS, Martin Katanta was of an older generation, someone born when the Germans were still in power, who was not formally educated, and who practised the local religion. He was also brought up from early childhood to farm and work in the forest, and although he was a skilled hunter it appears that his skills - certainly for beekeeping or honey hunting - were less imbued with market rationales than those of his sons' generation.

In contrast to their father, Lioba and Mwamba were born in a village that had been part of a sleeping sickness resettlement camp and went to a Catholic mission school. Like many people of this background, the brothers adopted the religion they were schooled in.[315] In the case of Lioba Chalamila, he grew up to be part of a group of Catholic men who, for the first time in the region, specialised in beekeeping in addition to other forest based skills, for it was only with the initiation of the TBCS that a significant income could be generated from honey and he could foresee a future by putting energy into beekeeping and the affairs of the co-operative.

The story of Mwamba Chalamila is different from that of his brother: although Mwamba worked at Kwalungu and kept some beehives, he followed his father's activities more closely, preferring to hunt rather than to keep bees. In the 1970s and early 1980s, Mwamba became a successful ivory poacher, one of a number of local men who sold ivory to Burundian traders operating in the region. In 1986, however, an elephant attacked him, breaking his ribs, crushing

[315] In collecting genealogies and life histories from the families of beekeepers and fishermen who work in Ugalla Game Reserve it is striking that one can trace a generational jump between parents who were pagan and children (now usually grandparents themselves) who were converted. A marked feature of these conversions was that siblings could be of different Christian denominations, typically Moravian or Catholic, and it is not uncommon to find some siblings who are Islamic and others who are Christian. In the explanations people give, one common reason for these differences related to the type of schooling they received.

his collar bone and partially disabled him to the effect that today he finds it difficult to carry out hard labour on his farm or in the forest. After this accident, Mwamba turned to beekeeping as a source of income, but rather than working with his brother he started a camp on the road between Ipole and Ugalla.

We now come to the heart of the present-day problems between the family of Lioba and the family of Mwamba Chalamila. According to members of Lioba's family, when Lioba and Mwamba were young they got on well with one another but as they grew older Mwamba's work as a poacher led to a serious rift between the two brothers. Apparently, at the height of his poaching career Mwamba had been relatively wealthy. One can see this by such signs as the large house he lives in, with a corrugated iron roof, and the second wife from a well-to-do family and how own large family whom he supports. Although now the roof is in a state of disrepair and the house has a generally dishevelled atmosphere about it, several unmarried daughters living there with their children. At the time when Mwamba was wealthy Lioba was poorer, but, according to the allegations of Lioba's family, Mwamba was unwilling to assist him; then, after being injured by an elephant, his wealth dissipated with the large family to support and he started to 'beg' Lioba, who in 1987 became a TBCS leader, for assistance. Mwamba's family in turn, allege that Lioba is 'greedy' and does not wish to assist his relatives in times of hardship. Aside from the different careers of the two men, there are also contrasts in outlook which can be seen through the way that Lioba is a devout Catholic, but his brother, although baptised, will not go to church. Lioba links his Catholicism and the daily practice of going to mass to being a teetotaller; his brother, on the other hand, is a heavy drinker.

The demands for support made by Mwamba of Lioba after his accident brought to a head long-standing tensions that have now emerged in a deep-seated family dispute, and here we come back to the basis of the witchcraft accusation imputed by Lioba's family of the wife of Mwamba. Antagonism between the two families can be witnessed in the fact that Lioba and Mwamba live across the road from one another, but neither they nor their wives are on speaking terms. Even so, on occasions such as the death of a granddaughter of Mwamba and the death of Lioba and Mwamba's father, personal animosities have been put aside and the whole family has come together to grieve.

The antagonism between Lioba and his brother has been exacerbated by Lioba's increasing success in affairs of the TBCS, a success that Mwamba, although now a beekeeper, has not been able to emulate. Furthermore, over the years Lioba has drawn the sons of Mwamba and

of Martha (a deceased sister of Lioba and Mwamba) into working as his beekeeping apprentices, in preference to assisting Mwamba. In the case of Mwamba's sons, Kaombwe and Zachari, they will not even speak to their father, referring to him in a derogatory way as a *majangiri* (poacher), a state of affairs which, according to Kaombwe's wife, first started when Mwamba married for a second time.[316]

After leaving Tanzania, I was informed in a series of letters that after the death of Lioba's father in 1995, Stephen and his wife, Mateo, and their cousin James and his wife all intended to move from Usizya Village to get away from the 'problems' they experienced there. They planned to go to a place called Mibono where a sister of Lioba lives, however Lioba and Anastasia Martin were going to remain because of Lioba's involvement in TBCS affairs. In effect the role of Lioba Chalamila in the TBCS is extremely influential in life decisions which implicate not only himself but also his immediate family and wider kin.

CONCLUSION

This discussion has been anchored on the case of one man, Ambrose Lioba Chalamila, who keeps bees in Ugalla Game Reserve. It has been argued that a particular configuration of knowledge and experiences have been instrumental in shaping Lioba Chalamila's capacity to make a livelihood from beekeeping and in acting as a representative of other beekeepers. These experiences are embodied within who Lioba Chalamila is as a person, and emerge in his knowledge of beekeeping and the locality, in his relationships with other people, in the way he encompasses different events as he encounters them, in his own resource-use and skills, and in the part he plays in shaping the practices of others whom he teaches. These features enable him to give particular meaning and value to social interactions pertinent to beekeeping and to the forest environment within which he works with others, sharing particular normative expectations and commitments in order to cope with the difficult livelihood situations he experiences alongside others.

In the personage of Lioba Chalamila, we have a man who is highly articulate when speaking to a local audience, despite little formal education, and who has a degree of political acumen which enables him to maintain his leadership position in the TBCS despite local factionalism

[316] Abrahams (1981) provides a discussion of intergenerational conflict which gives a perspective to this case. Apparently, upon a father's divorce and subsequent remarriage sons typically place a social distance between themselves and their father.

and tensions, as well as to promote the interests of a particular group of beekeepers - those who work with him in Ugalla Game Reserve - within the TBCS and to different representatives of the state and donor organisations (as well as to this researcher). Part of Lioba Chalamila's capacity is drawn from the manner in which he is able to enrol family, relatives and men residing in the same area into beekeeping activities. It also derives from the institutional support he gains through his association with the Catholic Church and CCM (ruling party of Tanzania), and through his membership of the TBCS, and involvement in community affairs.

Implicit in his actions and in the position he holds as a local leader is the fact that he purports to be a 'Galla' Nyamwezi whose family originate from Ugalla, the area where he keeps bees, and is acknowledged as such. Lioba Chalamila's family were resettled from the area in the mid-1920s due to a sleeping sickness epidemic, and were part of a process in which local men later re-established themselves and their activities on a seasonal basis despite the best efforts of the authorities. Because of these family connections, claims of origin are linked to a personal genealogy, situating both tribal identity and connections to Ugalla as 'fact' within his life-history. The locally situated nature of this history emerges in the knowledge Lioba Chalamila holds of Ugalla, in terms of forest resources use and information drawn from the collective stock of local knowledge that influences his actions. This 'tradition' serves to reinforce his legitimacy with other men who keep bees and gives weight to his decision-making (such as where to situate a beekeeping camp, in defining the boundaries between camps, or when to harvest the honey crop). In Chapter 9, it was argued that at least three elements enabled local men to identify with the TBCS at its start: their skill in honey and beeswax production, long-standing experience of produce markets, and existing forest-based relations of production and forms of organisation. Dimensions of each of these elements are reflected in the configuration of life circumstances and family history of Lioba Chalamila, and reverberate in his interactions with others and his way of acting in the forests of Ugalla where he keeps bees with his family and other men.

This case reveals the personal constraints within which Lioba Chalamila operates to make a living, his dependence on hard manual labour, making ends meet out of very little, his wife's sickness, having few children, and family conflicts, to mention but a few of these constraints. At a very personal level, we are witness to the twists and turns of family fortunes entwined with the opportunities and limitations derived from making a living from agriculture, beekeeping and the recent ivory trade. Painful choices may be involved in the pursuit of market opportunities;

in this respect the witchcraft accusations between Lioba's family and the family of his brother are highly pertinent, because, from whatever personal motives and reasons they derive, these accusations catalyse around conflicts linked to the pursuit of power, money and material resources. Thus, Lioba Chalamila's involvement in beekeeping and the TBCS plays an extremely important role in life decisions, which implicate not only himself but also his immediate family and wider kin.

It was argued in Chapter 8 that in order to appreciate how people cope with the arduous conditions and constraints they are confronted with in making their livelihoods in Ugalla Game Reserve, beekeeping has to be located within a broader understanding of their lives. The discussion here has attempted to convey how one man, Ambrose Lioba Chalamila, brings his experiences, relationships, and organisational capacity into conjunction with his skill as a beekeeper and as a representative of other beekeepers. In portraying different facets of his life, it has become apparent that he holds many connections to other people - family, friends, neighbours, TBCS employees, officials, a researcher, etc., - connections which have an important bearing on his ability to work effectively in Ugalla and to situate himself within the leadership of the TBCS. In this respect, Lioba Chalamila's endeavours are generated in interaction with those of others, creating inter-dependencies between the needs, interests, values, and understanding of different individuals and the corporate beekeeping activities they engage in; as we shall explore in greater depth in Chapter 11.

11

Keeping Bees As A Means of Livelihood

Introduction

In this, the penultimate chapter of the thesis, we turn attention to how people come together to make a livelihood in Ugalla Game Reserve. Continuing with the example of beekeeping, and drawing on issues that have previously been identified - the nature of beekeeping knowledge and practices, the organisation of the TBCS, and beekeepers' relationships to the market, the life-history of one man - we must ask how people have developed the means to cope with the situations which confront them in making a living. Here the question can be considered of how the strategies and practices of men keeping bees involve the enactment and management of different sets of social relations to make their livelihoods possible. It is hoped that the information furnished in this chapter will provide a glimpse of the richness of the lives of people who work in Ugalla Game Reserve, underlining the fact that the dynamics of resource exploitation is not driven simply by people's needs, but also their desires, memories, dreams, and aspirations for the future.

In Chapter 2, an overview was given of themes integral to approaches to community-based conservation. The discussion highlighted two important aspects of these approaches, which are the idea that local people should be drawn in a participatory fashion into decision-making involving conservation planning, and the idea that development-related conservation initiatives should operate through local institutions, for which the concept of 'community' is located in a key position. Notions of participation and of community involve models of human society and of social action. Both concepts have been drawn from development thinking in the broader sense, but conservation approaches place emphasis on a consideration of how people - living in aggregate units, communities, groups, societies, tribes, etc. - act on the physical/natural environment. We have already argued that thinking pertinent to conservation planning carries the danger of subsuming social action within theories and models appropriate to a biological understanding of the world. This has the danger of excluding consideration of the nature and complexity of human social life - all that one might term 'the human condition'.

We have to remember that it is easy to reduce social complexity, to portray rural African people as good or bad for wildlife, or driven by the irrevocable forces of grinding poverty and of the market, but essentially what we are discussing is how people get on with their lives against the constraints, alternatives and choices open to them. If conservation planning, and the type of knowledge and ideologies on which it is based, is viewed as external to people's actions and is perceived as being imposed on them it is hardly surprising that in many cases they may react against the ideology and partially or wholly reject the offered knowledge and forms of conservation planning. In this chapter, we do not wish to take further issue with these concepts and arguments which emerge in relation to people-oriented planning initiatives, but to provide an insight into some of the social relationships engendered in working in Ugalla Game Reserve and into the complexity, indeed richness, of the social action which constitutes people's livelihoods.[317]

Here we give precedence to the organising processes that emerge from the way local people try to make a livelihood for themselves, in order to explore how they achieve particular types of interaction with natural resources and the environment taken more broadly. The thrust of this analysis is to highlight the social organisation behind livelihoods that wildlife conservation policies, laws and management practices must engage with to be effective.

In the following ethnographic account of five beekeeping camps, the dry-season camp is viewed as an organisational arena which can act as a vantage point through which to understand how people make an important part of their livelihoods in Ugalla Game Reserve. Taken as an organisational arena, the camp is a social and spatial location where shelter is found, people eat and work, labour is mobilised, income generated from the production of honey and beeswax, property owned (in the form of beehives), relationships managed, stories circulated (such as those described in Chapter 6), state representatives encountered, obligations created and fulfilled, security gained, time organised, a sense of identity cultivated and personal significance and group identity affirmed (c.f. Wallman, 1984; Long, 1997a; for classic studies which examine the role of dry-season camps in African livelihoods see Evans-Pritchard, 1940, and Colson, 1962).

[317] For studies examining the concept of community and of participatory development in African wildlife conservation, vide Leach (1994), Leach et al. (1997), Murphree (1994), Little (1994), Berger (1989), Seymour, (1994).

In terms of how people make a living, the beekeeping camp is a location where beekeepers stay for only a few months annually. The way scholars have portrayed the relationships between camp and village in western Tanzania is worth examining. Ethnographic sources suggest that for the Nyamwezi, Fipa, Tongwe and Kimbu (who populate the region surrounding Ugalla Game Reserve) there are cultural oppositions between the forest wilderness and the village, the former representing the domain of the wild and the latter the domain of the domestic. It is argued that these oppositions are linked to a male-female dichotomy in productive tasks, men being associated with the forest domain, that is with an area of potential danger, where people may get lost or sick, and which is inhabited by wild animals and malevolent spirits (Willis, 1966, 1968a; Shorter, 1969b; 1972; Abrahams, 1967a; Blohm, 1931, 1933a/b; Kakeya, 1976).

The work of Shorter is an example of how binary dichotomies have been used to explore forest resource use (Shorter 1972). In a discussion on beekeeping as practised by the Kimbu, whose homelands are to the south-east of Ugalla, Shorter argues:

> "the camp itself is a permanent fixture...[the huts]...are typically Kimbu structures. In the homestead they are called *idindiga* but in the forest they are called *inkunga*. The camp buildings are often surrounded by a high stockade of wooden stakes, or a fence of thorn branches. This is called *igagaala* in the homestead but *ixangaalo* in the forest. The forest has its own vocabulary, even for objects which in all respects are identical to those at home. This is because of the deep-rooted opposition which is felt to exist between homestead and agriculture on the one hand and forest camp and forest pursuits on the other" (Shorter, ibid.: 50; cf. Abrahams, 1967a: 12).

Structural dichotomies, such as those put forward by Shorter and Willis, are one way of creating analytical abstractions on forest resource use and may provide a method of making sense of the meanings people give to their world. However, one can become locked into an analysis of binary oppositions, which, in the case of the data presented in this chapter, cannot adequately encompass the way beekeeping is rooted and given social significance within the everyday lives of the people concerned.

Also, importantly for the subject under scrutiny, we are considering a context in which colonial and post-colonial policies and administrative practices have been highly influential in creating spatial and conceptual distances between forest and village contexts, and in shaping how people move between the two. One cannot locate a separation between forest and village (nature / culture) simply in the domain of culture, but must also linked it to historically specific planned social change. Take for instance the role of sleeping sickness evacuation policies in moving people away from forest contexts, a situation repeated in the post-Independence 'villagisation'

programmes, and of the influential position wildlife and forestry conservation has played in regional land-use policy. Such state-led initiatives have also been linked to attempts to control people's movements in ways that reinforce gender divisions, for example the strenuous efforts the colonial state made in keeping women in the countryside, on the farm and subjugated to male 'guardians' (Mbilinyi, 1989: 213).

This chapter uses an alternative approach to that concentrating on structural oppositions, in that it is taken that people give meaning and value to their social interactions and to their relationships with the forest environment through interpretation of their social experiences and understanding. This meaning serves to link experiences accrued in different social settings in ways which would become obscured in positing binary oppositions between forest and village. These settings include homes, bars, farms, the TBCS, Tabora market, the football ground, houses of friends and relatives, government offices and other places of work - together with the relationships held between people in these contexts: wives, children, lovers, officials, TBCS employees, strangers, development planners, researchers, etc. In this respect, the social construction of the institution that is a 'beekeeping camp' is rooted in people's life experiences and inter-personal relations in ways that cut across, make connections between and 'distantiate'[318] different localities.

Vincent's (1977: 58) analysis of agrarian society as an organised flow based on the movement of people for livelihood purposes, is pertinent to this discussion of how people are present within Ugalla Game Reserve. She argues that if one focuses on a spatial unit, three major axes of organised flow can be observed: first, the movement of personnel in and out of the observed place and time; second, the links of this same aggregate of personnel with persons in the past; and third, the links of the same personnel with individuals outside the analytically bounded unit. To apply these observation to the case of Ugalla Game Reserve: people move into and out of the area in different seasons of the year, also, as earlier chapters have shown, people hold - or create - historical connections to others in the past through kinship, ethnicity and discourses of

[318] To 'distantiate' is taken from *distantia* variously meaning 'being apart in space; the space lying between two objects; the space to be passed over before reaching an object' (Shorter Oxford English Dictionary, 1984). Here distantiate refers to the way people's actions and understanding may be seperated by different spatial contexts, but at the same time they may internalise, and therefore carry with them, memories, knowledge and experience of one context in ways that can affect their course of action in the other. This is a connection which does not have a cause and effect, people may react to something in the same way in the two different places, or they may react in different ways, but what is important is the fact that it is people's capacity to internalise features that confront them and use their experiences to make connections between diferent situations and places (c.f. Marsden & Arce, 1995; Arce, 1997: 182).

tradition, and lastly, people working in the reserve hold many connections to others outside the area. This last point is important to stress, for the people under study are primarily men and it should not be forgotten that each has a family and others also engaged in the joint venture of the common livelihood who are absent from the illustrations. Moreover, the people with whom we are dealing are not simply 'beekeepers', for beekeeping is only one of the multifarious activities that these men, and those to whom they are attached, engage in to make a livelihood. Returning to Vincent, she brings to our attention the importance of studying how the exploitation of natural resources is enmeshed within situated practices and social networks that cannot be fully understood by focusing only on what is 'visible' within the boundary of an area.

In order to explore relationships held between people working in the reserve and the relationships these people have to others living and working outside the area, Mitchell's (1969: 1-50) overview of social network analysis is helpful.[319] Mitchell distinguishes two sets of characteristics associated with social networks: first, morphological characteristics, namely the relationship or patterning of links in the network in respect to one another (anchorage, density, reachability, and range), second, interactional characteristics, which are the nature of the linkages themselves (content, directness, durability, intensity and frequency). These characteristics will help to pinpoint the character of interactions that generate forms of organisation among beekeepers.

People working in Ugalla Game Reserve have developed numerous networks around the exploitation of natural resources, whose range stretches from the immediate vicinity to the international context where timber, animal trophies, beeswax and honey are traded. This does not mean that for an individual the relationships he or, very occasionally, she engages in are necessarily a replica of those outside the game reserve; within the forest, people live in small groups within which relationships are direct, frequent and intensive. These groups are constituted by only a select few of the people whom a beekeepers knows and interacts with the rest of the year in other places. Although there is continuity in norms, shared expectations, and common agreements between forest and village contexts, the forest also conjures up particular obligations, dependencies and constraints, and to live and work there involves specialised skills. Moreover, the habits of daily life are different (for example men cook, wash, collect firewood

[319] The concept of social network is used to refer to "a specific set of linkages among a defined set of persons, with the additional property that the characteristics of these linkages as a whole may be used to interpret the social behaviour of the persons involved" (Mitchell, 1969: 2).

and clean the camp, all normally women's tasks). Conversely, social relations promoted in the forest may be durable, but they 'disperse' within the village; some men are friends, neighbours or kin, but others only come together in relation to TBCS/beekeeping affairs.

The links between the social relations and practical necessities generated in the forest camp, and those of people's 'home' context, are important. In order to keep bees, a person must mobilise resources in the village, he cannot simply rely on resources (material, social) he encounters on reaching the forest; through relations of kinship, affinity and gender, food provisioning takes place and beekeeping labour is acquired. Similarly, social networks associated with the TBCS are important in providing access to transport, containers and markets. Beekeeping relations, therefore, have a bearing on inter-personal networks and material activities and work and social relationships in the village (for instance on the inter-household networks involving men).

Reference to the relationships between forest and village contexts leads to an important analytical issue, namely a tendency in development literature to portray 'the household' as the key social unit at the heart of people's livelihoods. This unit is closely associated with a primacy given to the role of agriculture as the core component of rural people's livelihoods in sub-Saharan Africa, implying that analysis of land-holding is critical to livelihood studies (vide Elliot, 1994: Pearse, 1980; Chambers & Conway, 1992; Bernstein, 1992).[320] One can presume that this stereotypical focus on the household is because "in every society there are easily identifiable groupings, 'households', within which people live, and which are recognised as society's basic building blocks" (Crehan, 1992: 87). Implicit in these assumptions is the influence of at least two approaches to the study of agrarian society: the first being a micro-concern with 'the community' which takes as its minimal unit of analysis the family farm; and the second being a macro-concern with 'the peasantry' (Vincent, 1977: 57; c.f. Hill, 1986: 8-15; Long, 1984: 4-6;). Furthermore, there is a long history of locating agriculture as 'proper' work in rural areas of colonial and post-colonial Tanzania.[321] Economic activities outside agriculture (such as those associated with forest resource use, food selling, or artisanal

[320] Studies on cattle-keeping (e.g. Monod, 1975) and hunter-gathering tend to be an exception (e.g. Woodburn, 1968).

[321] For example Bagshawe, Annual Report for the Western Province, 1936, RH.Mss.279-360.

enterprises) or which cut across rural-urban divisions are held to be peripheral to the core of African rural livelihoods, namely agriculture structured around the family farm and household.

Such a focus is, however, problematic when considering beekeeping, fishing and hunting, as forms of livelihood, for one is confronted by activities that cannot simply be reduced to an understanding of household relations or of agricultural organisation. As Long (1997a: 11) argues: "in many situations confederations of households and wide-ranging interpersonal networks embracing a wide variety of activities and cross-cutting so-called 'rural' and 'urban' contexts, as well as national frontiers, constitute the social fabric upon which livelihoods and commodity flows are woven". The beekeeping camp is of signal importance for men's education, identity, friendship, trust, parental bonds, obligations, and support networks: all elements which form or constitute social bonds that transcend the exclusive importance of the household. (This is in contrast to the situation of women in this region whose social networks and organising practices appear to be very different in terms of both morphological and interactional characteristics.).[322]

Turning more specifically to the case of western Tanzania, in a number of discussions on the Nyamwezi, Abrahams (1967a, 1978, 1981) highlights a reduction in the size of the household unit which has occurred in recent years (resettlement exacerbating nucleating tendencies that had their roots in the colonial era, von Freyhold, 1979: 61). He emphasises the tendency of men to build their domestic organisation on the basis of marriage in contrast to wider kinship ties, and stresses the role of the marriage relation and domestic group as being at the heart of Nyamwezi productive and reproductive organisation (Abrahams, 1978: 83). In a later discussion, he touches on issues related to men's seasonal migratory movements, suggesting that marriage is linked to: "crucial domestic level supports for the ecologically important freedom of movement which men have recently enjoyed in the area; for they...[marriage relations]...provide a man with the possibility of establishing, and through polygyny perhaps expanding, his own viable domestic enterprise in a village community without the necessity of daily contact with and aid from local kinsfolk" (Abrahams, 1981: 109).

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[322] Through practices such as firewood and water collection, cooking, child care, agricultural labour, petty food selling, and beer brewing, women organise their relationships in different ways. In Usizya Village where the beekeepers referred to in this chapter came from, I could find no women's organisation equivalent to the TBCS, and two of the main non-agricultural occupations open to women, food selling and beer brewing, had the organisation of production around labour and social relations closely linked to the household and inter-household networks.

Suppressing opinion over the fact that Abrahams appears to take women to be a fixed point of reference in men's lives, I would argue that while it may be the case that the marriage relation facilitates men's seasonal migratory movements, empirical data on beekeepers working in Ugalla Game Reserve suggests that, in contrast to the view of Abrahams, kinship does in fact play an important role in the organisation of production and, as a local idiom, helps to ensure the perpetuation of beekeeping skills between generations. This introduces a complexity which Abrahams' notion of the household as an independent unit for production purposes, does not encompass.

In the context of beekeeping in western Tanzania, one cannot deny the importance of the household as a locus for social relations, decision-making, knowledge and action critical to people's livelihoods, and, more specifically, crucial to men's ability to spend long periods of time carrying out forest-based occupations. Similarly, inter-household relations between men who need to organise themselves to go to the forest are important. However, focusing attention on the household alone, would mean ignoring other loci which may be as critical to people's livelihoods and social reproduction, and which cannot simply be subsumed within the household as an analytical unit. Therefore, because of the centrality of the forest location for understanding the livelihoods of men who keep bees, the analytical point of entry must be, from our point of view, the forest camp.

Following on from this discussion, the body of this chapter is divided into two main sections: the first explores the social composition of five camps in Ugalla Game Reserve, discusses kinship relations and the practice of inheritance in perpetuating people's ability to keep bees near the Ugalla River, and raises issues pertinent to the gender dimensions of beekeeping. The second section provides a glimpse into the organising practices that enter into beekeepers forest-based activities.

THE BEEKEEPING CAMP AS AN ORGANISATIONAL ARENA

The case of Lioba Chalamila presented in the last chapter leads into empirical data on the social composition and organisation of five beekeeping camps in Ugalla Game Reserve, two of which are the locations where he sites his bee-hives. In 1993, approximately 45 men worked at these camps, the majority of whom lived in or near Usizya Ward. Those who were beekeepers in

their own right were members of the Kwihara Branch of the TBCS, and therefore under the authority of Lioba Chalamila, its Chairman.

In examining beekeeping in Ugalla Game Reserve, it becomes important to capture the character and nature of interactions that take place among people working in the forest. As a researcher staying in a beekeeping camp, one is confronted by questions concerning how people mobilise resources, transmit their knowledge, shape the transfer of property, and work both as individuals and as part of a collectivity. Such questions lead one to ask how the occupation of beekeeping enables men to give meaning to their circumstances and to harness available social resources so as to secure a living. These questions suggest that an important issue with a bearing on considerations of resource conservation in the reserve is the need to see how beekeeping practices enable individuals to experience their relationships with other people, the state, and the market, for instance.

It has been argued that in order to appreciate how people cope with the arduous conditions and constraints they are confronted with in making their livelihoods in Ugalla Game Reserve, their beekeeping knowledge and practices have to be located within a broader understanding of their lives. The discussion in Chapter 10 attempted to convey how one man, Lioba Chalamila, brings his experiences, relationships, and organisational capacity into conjunction with his skill as a beekeeper and as a representative of other beekeepers. In portraying different facets of his life, it became apparent that he holds many connections to other people - family, friends, neighbours, TBCS employees, officials, a researcher, etc., - connections which have an important bearing on his ability to work effectively in Ugalla and to situate himself within the leadership of the TBCS. In this respect, Lioba Chalamila's endeavours are generated in interaction with the ventures of others, creating inter-dependencies between the needs, interests, values, and understanding of different individuals and the corporate beekeeping activities they engage in (c.f. Long, 1997a: 10-12; Arce, 1989). Two features integral to the way these people come together to make their livelihoods are their organising practices, as referred to in Chapter 8, and the inter-individual networks which emerge as part and parcel of their social inter-dependence. By considering the social relationships which arise between people keeping bees, we start to generate a picture of the morphological and interactional characteristics of the social networks which have grown up around the exploitation of natural resources in Ugalla Game Reserve (c.f. Mitchell, 1969).

As explained in Chapter 9, the TBCS is a marketing co-operative not directly involved in production. Despite this, interactions linked to how members gain transport to and from the forest and sell their produce mean that TBCS relations play an influential role in decision-making and organisation between men when in the forest. The social relationships associated with the organisation of the TBCS are those which emerge from a formally constituted group, where dimensions concerning formal membership and leadership authority are significant in defining what roles and responsibilities members have towards one another, and the obligations the co-operative holds to members in the forest. However, linked to these formally defined co-operative ties are other types of social relationship in which associations of kinship, affinity, neighbourhood relations (in the village or town), gender, friendship, and labour relations are brought to bear on beekeeping activities. These activities include the production of honey and beeswax (harvesting, hive-making, honey straining, etc.), daily life within a camp (cooking, eating, sleeping, washing, collecting water and firewood, etc.), and the less regular interactions which take place between people in different camps (for example to borrow food, medicine, tobacco, to settle disputes, and to discuss matters such as the availability of transport).

To explore the relationships between men keeping bees in Ugalla Game Reserve, the following discussion covers a number of areas: preparation for the beekeeping season, a summary of the origins of five beekeeping camps, an analysis of the social composition of these camps, and the gender relations of resource use. First it will be helpful to provide an overview of the composition of a beekeeping camp.

A Schematic Overview of the Composition of a Beekeeping Camp

For purposes of analysis, the social ties between people within a beekeeping camp can be divided into two categories: 'horizontal' ties between beekeepers, and 'vertical' ties between beekeepers and their assistants. All members of a camp are likely to be men, although very occasionally a woman beekeeper or assistant (wife, girlfriend, daughter) will be present, and people confer respect on those older than themselves irrespective of the working relations they hold.

In terms of the 'horizontal' ties: within a camp there will be a core of men who can be characterised as 'established' beekeepers, it is between these men that 'horizontal' ties are most apparent. 'Horizontal' ties emerge between a group of beekeepers who work together and are

an expression of the fact that these men are likely contemporaries of one another, usually friends or neighbours in the village or town context and who are perhaps related through ties of kinship or affinity. Established beekeepers working together in Ugalla Game Reserve will also be fellow TBCS shareholders. These 'horizontal' ties exist not only within a camp, but enable men to establish networks of interaction between camps in a given locality. Furthermore, men positioned in a 'vertical' fashion to a particular stratum may themselves form 'horizontal' ties among themselves.

To understand how these 'horizontal' ties emerge, one has to locate beekeeping in relation to a man's life. One must be aware that the occupation can be lucrative, but it takes time to become profitable; a person cannot 'get rich quick'. A man needs to acquire skills and knowledge of how to keep bees in a particular locality, he must build up the number of beehives in his possession, mobilise labour to assist in maintaining, harvesting and making the beehives, as well as be capable of organising transport and produce sales; none of these things can be carried out alone: each depends on the relationships a person holds to other beekeepers, and the contacts these men build up both individually and collectively with key individuals such as employees of the TBCS (the Manager, the drivers, the Secretary, the Bursar), produce buyers (local Asian or Arab traders, beer brewers, civil servants who trade in small quantities of honey), and government officials (the Project Manager of Ugalla Game Reserve, the Regional Beekeeping Officer).

The portrait of an established beekeeper is of a man who is middle-aged, has been keeping bees for many years, has adult sons or grandsons to assist him in the forest, and a wife or close kin at home to aid in food provisioning. Other occupations, such as farming or petty business, feed into beekeeping because they provide resources to support a man and his labourers when in the forest. Likewise income from bee-produce may be used for different livelihood needs and desires (such as to buy fertiliser or invest in a business venture). In effect, success or failure in different spheres of life - employment, marriage, offspring, social standing - may reflect in a person's capacity as a beekeeper (c.f. Thompson, 1984, on an analysis of the social capital and life-cycle wealth village men may accumulate in Tanzania).

Established beekeepers play an important role in generating networks of interaction between camps through which support and co-operation can be gained. For instance, assisting each other when food runs short (e.g. lending maize meal) or someone becomes ill (e.g. lending a bicycle

for transport or medicine), operating together through the medium of common membership of the TBCS to gain transport (e.g. a TBCS leader sending a letter to the main office asking for a lorry to be sent to the forest), settle disputes (e.g. if someone alleges that another has harvested his beehives), or negotiate with state representatives (e.g. to gain a permit from the Project Manager to enter the reserve). These interactions are commonly referred to by the beekeepers themselves as 'mutual support through necessity'.

In relation to 'vertical' ties: these established beekeepers also draw others into their sphere of influence (in terms of resources, knowledge, experience, power in the TBCS, social standing, family origin) and by implication into beekeeping. These people include married sons, nephews or male relatives who expect to become beekeepers, unmarried sons or grandsons who are obliged to assist (as they do on the family farm), and labourers employed for a season. Established beekeepers provide a means for others to acquire a permit to work in the reserve (through listing them on their licences as 'helpers'), and enable non-TBCS members to gain transport and sell honey through the co-operative (people who do not wish to pay for a share of T.Shs. 2000 or be committed to the TBCS). In this respect, the importance of associations between 'established' beekeepers and more 'junior' beekeepers who have beehives at a camp but have not attained, or are too poor to have attained, the range of resources the other men can draw on in terms of income, food, relatives, status in the TBCS, etc., is evident.

The transition between a person being an assistant and becoming a beekeeper in his own right corresponds with other stages in a man's life. Young unmarried men are expected to assist their parents on the farm and at the beekeeping camp, although unsurprisingly not all follow these parental designs, when they do they get some remuneration for their beekeeping work, but there is a sense that this is within the family. When asked why and when they became committed to beekeeping, perceiving it to be a life-occupation, many of the younger men interviewed cited marriage and subsequently the birth of their first son as a turning point which convinced them of the need to give the son an occupation and direction in life. Here also we are witness to the role gender relations play in beekeeping; although a few women do keep bees or act as assistants, they tend to be those who are widowed, who assist their fathers when unmarried, or their husbands once married. Rarely is an attempt made to teach a young women how to keep bees (even by female beekeepers) and so generally they do not have the skills to carry out the occupation even if they inherit some beehives and would contemplate working as Independent beekeepers.

Taking 'vertical' ties between an 'established' beekeeper and those employed to assist him specifically, two types of helper can be identified: first, wage labourers, and second, assistants who have formed an apprentice-type relationship to the beekeeper.[323] Labourers are likely to come from the same village area as the beekeeper, they may be people he is familiar with but they need not be well-known or related to him. Typically, they are employed for a single harvesting season and are paid a percentage of the produce or cash, depending on what agreement has been established at the beginning of the season.

A beekeeping assistant (apprentice) is paid on the same basis as a labourer, however he will help the beekeeper for a number of years and is usually related to him through ties of kinship, though of a younger generation. In contrast to a wage labourer, the jobs the assistant carries out in the forest become merged with wider, unpaid kinship obligations, as well as the aspirations a man holds for his sons in the future. In principle, through this work, men gain acquaintance with a particular locality, learn how to keep bees, start to make beehives of their own and begin to invest in tools, clothing, and possibly a share of the TBCS. In the process these assistants become beekeepers in their own right, and if they are close kin may inherit the beekeeper's hives, or, if he his alive but too old and infirm to go to the forest, may support him with income from his own bee-hives. In reality, men may move away from their parental homes and, by implication, family beekeeping camps, in search of other work and possibilities, although equally some do stay or return after a number of years.

A notable characteristic of the membership of a beekeeping camp, is the manner in which certain individuals site their hives in the camp for many years - becoming 'established' beekeepers - while the presence of other people is impermanent. This characteristic creates is further compounded by the movement of people to and from a camp within a given beekeeping season and year, and over a period of many years and amounting to a particular 'organisational flow' in people's activities over time.

[323] The term 'apprentice' is used with hesitation because it is associated with labour relations that have arisen in a different historical and geographical context. In Europe, the term apprentice implies that the person is reciprocally bound by legal contract to serve an employer who instructs him in a trade for a given number of years. This contrasts with the relations between a beekeeper and his assistants because here the enduring nature of the labour relations are not associated with a legal contract, formal agreement, or even a set period of time, instead being associated with ties of kinship combined with mutal residence in a particular area.

Continuity at different beekeeping camps in Ugalla Game Reserve appears to be provided by the established beekeeper or beekeepers whose camp it is and who may have been working together literally for decades, indeed some since the 1930s and 1940s. When these individuals move house, are struck by misfortune, witchcraft-related or otherwise, or when they become sick or die there will be a major change in the ownership of beehives and membership of the camp. Therefore, as an organisational arena, the beekeeping camp can reflect dimensions of the life-cycles of a group of individuals, as well as the twists and turns of individual fortune.[324] In addition we have to consider that the existence of different camps in Ugalla is affected by Management decisions, as illustrations provided earlier in the thesis suggest.

Over the years people will be attracted to a camp but remain only temporarily. They may become disheartened or choose to keep bees elsewhere, perhaps because they have moved house from one village to another and it is no longer expedient to keep bees in a particular area, or because they have failed at beekeeping, or because they have decided they would prefer to work elsewhere. A sense of impermanence in the membership of a camp is compounded by the presence of temporary labourers who move on after a season.

This mixture of long-term continuity and transience in camp membership is further off-set by the dynamic character of the composition of the camp at any given time. On the one hand, interactions between people are very intensive due to the small numbers present and the conditions in which they live, on the other hand there is a dynamism associated with the presence or absence of particular individuals. For example, certain individuals may not go to the forest due to illness or because other opportunities have arisen. This is especially the case for the secondary honey flow in October and November when people engage in preparing their farms for the coming rainy season and it is not considered an 'obligation' to go to the forest as it is in June. Other people may leave early or remain late in the season at a camp. Although it should be stressed that beekeeping is never a solitary project, people stay in groups in Ugalla, disliking to be alone, afraid of the incursion of wild animals, and worried in case they lack assistance in times of sickness or misadventure. Having provided this overview we can move to consider the illustrations from Ugalla.

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[324] Abrahams' paper (1977) on the social and ecological factors motivating people to move house reverberates with the motivations and dynamic behind the actions of beekeepers in opening and closing camps or in moving to keep bees in another location.

Preparation for the Beekeeping Season

To illustrate how men come together to form and re-constitute the relationships essential to their work in the forest at the start of a beekeeping season, we will focus on a group who went to Ugalla Game Reserve from Usizya Village in 1993. This section provides an insight into the practical tasks and interactions which underpin the organising practices entailed in working in the forest.

For the duration of the rainy season, between December and April, the TBCS is relatively quiet as people are engaged in agriculture. But by April and early May, men start to prepare themselves for the beekeeping season and employees of the Co-operative are more active. In Usizya Village, where the main factory of the TBCS is, this preparation is marked by a number of Co-operative meetings. In 1993, members of the Kwihara Branch of the TBCS held a branch meeting on 24th April to discuss issues to be put forward for the forthcoming annual general meeting, with debate focusing on a call the TBCS manager had made for honey to be harvested without the use of smoke.[325] Following this, the TBCS AGM took place on the 5th of May and brought the Chairmen and Secretaries of each of the 36 TBCS branches, the TBCS management and officials from the Co-operatives and Natural Resources sectors of Government, together. The 1993 AGM agenda included the importance of penalising people who sold produce to external sources, change in the date beekeepers could go to Ugalla Game Reserve, work at the TBCS Msongwa project apiary, the need to hold the management accountable for the loss of funds, and a call to the Archbishop of Tabora to reinstate a white priest as manager of the Co-operative.

For men living in Usizya Village these formal meetings were part of the process of bringing themselves together for the forthcoming beekeeping season, vying with representatives of other branches for a particular position in the co-operative, interactions through which transport and other practical concerns were negotiated. Outside the formal meetings, these men were arranging the practicalities of going to the reserve; for example Lioba Chalamila played an instrumental role in helping people to obtain permits from the reserve management; at people's houses one would hear of labourers looking for beekeeping work, and as the time approached, maize was cleaned, milled and prepared by women in the beekeeping households, while other small items such as tobacco, salt, beans and malaria tablets were obtained in Tabora Market.

[325] An account of this meeting is included in Fisher, 1997.

During this period, I would frequently overhear friends and neighbours discuss events at the TBCS, particularly concerning the actions of Lioba Chalamila and the TBCS Manager, both key players whom the others relied on.

For these men and those associated with them, common residence in the same village was a critical factor in dictating their capacity to act as a single group under the auspices of the TBCS. This group was, however, only corporate in regard to TBCS affairs and the practicalities of living in the forest. Among themselves there were different networks of interaction, with people being drawn together around neighbourhood relations, who was related to whom, who was a friend of whom, which churches people went to, and the places where they socialised. Those people who shared a beekeeping camp together, and were contemporaries of each other, tended to interact regularly in the village context.

Following the TBCS AGM, Lioba Chalamila persuaded the TBCS Manager to provide his group of beekeepers with transport to Ugalla Game Reserve in the middle of May. As the time approached, people carried drums, buckets, sacks of maize and minor living effects and piled them up in a corner of the factory yard, they then proceeded to wait while money was sought to buy diesel and a new battery. Eventually on the 24th of May the lorry set out carrying most of the beekeepers and their assistants. As it takes a long time to reach the reserve, they slept together around the lorry in Ipole town on the first night. The lorry then broke down, but managed to travel as far as the entrance to the Reserve (Msiri Camp) and off-loaded everyone's utensils, but presenting them with the problem of how to carry heavy drums to their camps (eventually solved with my assistance). Ten days later Lioba Chalamila arrived with his relatives in my pickup and in his capacity as TBCS Branch Chairman, immediately held a meeting to discuss the honey harvest and different issues.

The point being made is that through the very practical process of attending meetings, obtaining permits, preparing food, discussing events, employing labourers, ensuring tools and containers were in good condition, negotiating with the TBCS over access to transport and the distribution of co-operative containers, travelling, and sleeping in close proximity these beekeepers were in effect organising themselves together both as part of a larger corporate group and in the smaller groups which would be a basis for interactions throughout the coming season. This capacity for organisation was associated with the fact that people live in the same village and are members of the same branch of the TBCS, and although of different opinions were able to generate some

common basis of agreement concerning practical issues. Other, less inclusive, networks existed among groups of beekeepers.[326] Based, as these networks were, on relations between men living in the same neighbourhoods and village, on ties of kinship or affinity, on friendship and also on church connections, they provided a means for people to organise with one another so as to go to particular beekeeping camps, and to work together throughout the season. During this period, Lioba Chalamila played an important role on the beekeepers' behalf, negotiating the need to obtain permits from the Project Manger of Ugalla Game Reserve, and gaining access to transport over and above the claims of other TBCS branches. Once in the reserve, the men went to live and work in their separate beekeeping camps.

A Summary of the Social Origin of Five Beekeeping Camps

The camps these men when to in Ugalla Game Reserve are: Msiri, Kwalungu, Katala, Nsontwa 1, and Nsontwa 2. All are within a 40 kilometre radius of one another, being at most 6 hours walk apart. Figure 11.1 is a map that shows the camps' relative locations.

[326] Personally, having stayed in the forest with these men it was a surprise to experience the social distance that existed between certain men when back in Usizya who appeared to be close to one another when in the forest. Also the way that some men knew one another well through their beekeeping work, but this did not extend to other members of their households. This became all too apparent when I tried to hold group interviews with their wives and discovered several women hardly knew one another, particularly if they lived in different neighbourhoods. The only type of event other than TBCS affairs that appeared to draw these men together collectively were funerals held in the village.

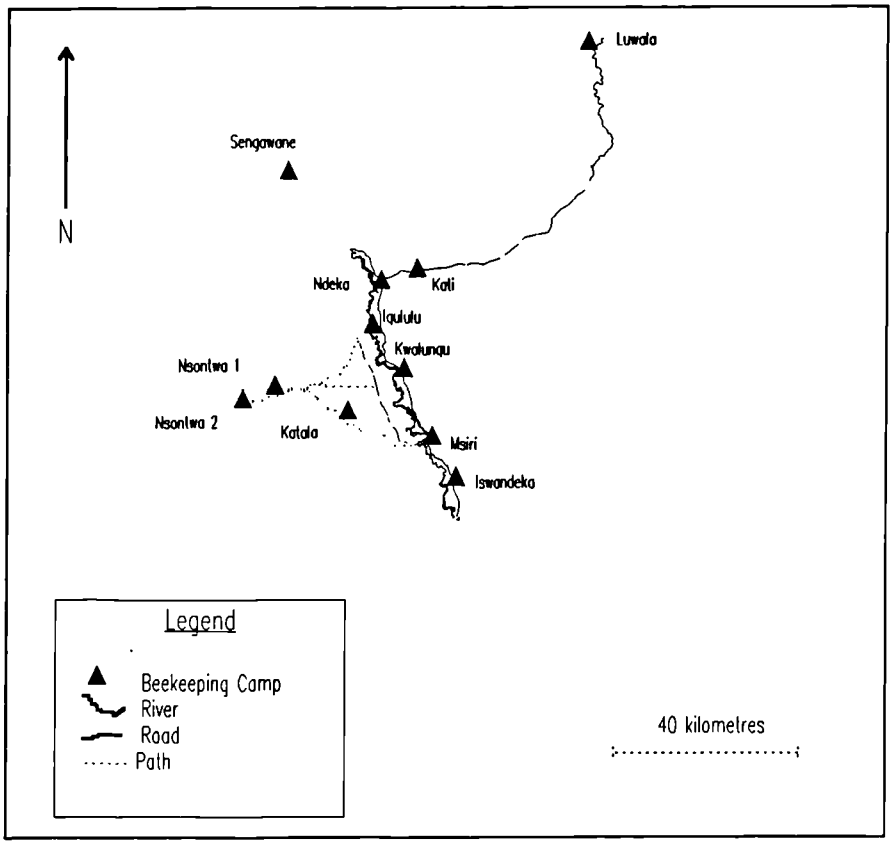

Figure 11.1 The location of Msiri, Kwalungu, Nsontwa 1, Nsontwa 2 and Katala Camps[327]

Here is a summary of the social origin of each camp (as portrayed by people mentioned in the text below) which helps us to understand how each camp grew up:

Kwalungu Camp was opened in the 1940s by Lioba Chalamila's father, Katanta Chalamila (zz), who in 1993 was still alive but no longer went to the forest (hence his name does not appear in Table 11.2).[328] Until 1991, Lioba Chalamila kept bees at the camp together with a friend, William Nsokoro (m). However in 1991, the Project Manager closed the camp to give wildlife better access to the river, and to extend his control over the movements of fishermen

[327] Source: base map, Lamprey 1994, unpublished digital computer map data. The exact location of these camps and their position relative to the reserve boundary are deliberately left obscure in order to protect the identity of informants.

[328] Chapter Four describes a number of tsetse control experiments that were initiated from the Kakoma Tsetse Experiment Station Ugalla (Ugunda) in the 1930s. Kwalungu camp is situated within an area of land demarkated for experiments which people could not enter, burn or hunt in, therefore it was only after the station had been closed that local people could use this area. The family of Katanta Chalamila came from the area of Ukuba which is in the interior from the southern bank of the river near Kwalungu, and his familiarity with this area influenced Katanta Chalamila's decision to start a camp there.

distances they have to walk.). In response, Lioba Chalamila and his assistants moved to the neighbouring camp of Igululu, while William Nsokoro moved to Msiri; they split up because the beehives of each group extended in these opposite directions, making it possible to harvest them from the neighbouring camps.[329]

Msiri Camp is a fishing - beekeeping camp that has existed for over seventy years, and because it is sited at an entrance to the reserve, it is a busy camp which may hold 40 to 50 people at the height of the fishing season.[330] The men who keep bees at the camp today are mainly from Usizya Village, one of whom, James Ngoma (bb) has worked there since the 1940s, while the others began more recently, in the 1980s, after, he claimed, he 'introduced' them to the area. James Ngoma was the first Chairman of the Kwihara Branch of the TBCS and in the 1970s he managed to persuade the Co-operative to start transporting beekeepers to the portion of the reserve where he works, setting a precedent perpetuated in the present-day.

Msiri and Kwalungu are both examples of camps beekeepers consider to be 'full', allowing little room for beehive expansion; this is not the case with Katala, Nsontwa 1 and Nsontwa 2 which each have a water source and are surrounded by good woodland. Recent in-comers are starting to place their beehives at these camps in preference to Kwalungu and Msiri.[331]

Katala Camp is a small beekeeping camp in the forest, started in the early 1960's by a certain Michael Manyoni and his sons, together with William Nsokoro (m). Michael Manyoni died in 1975 and his son Francis continued to keep bees there until he himself died in 1981, at which point William Nsokoro moved to Kwalungu.[332] In the mid-1980s a nephew of William Nsokoro, Kulwa Simoni (s), and his friend Abdullah Katanta (u), the son-in-law of Josephat

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[329] Where necessary I will refer to Kwalungu (Igululu) or Kwalungu (Msiri) to distinguish the camp where beehives are located but the different camps where individuals stay.

[330] In the Nineteenth and early Twentieth centuries, trade caravans crossed the Ugalla River at Msiri and the site itself was a substantial fishing village before people were evacuated from Ugalla (1925-1927). Administrative reports from the 1930s note the presence of fishermen at this location (Bagshawe documents, RH.Mss.Afr.s.279-360).

[331] While being extremely wary of the accuracy of the figures (see below), Tables 11.2, 11.3, 11.4 list the total number of beehives at each camp as 1351 at Msiri (probably closer to 2000), 1838 at Kwalungu, 732 at Katala, 766 at Nsontwa 2, and 537 at Nsontwa 1. These figures would support the case that there is room for expansion at Katala, Nsontwa 2 and Nsontwa 1 in comparison to Msiri and Kwalungu.

[332] As in the case of the family of Katanta Chalamila, Michael Manyoni's family apparently lived in this area before the sleeping sickness evacuations.

Kisato, (hh), worked for William Nsokoro and decided that they wanted their own beekeeping camp, asking him to 'introduce' them to Katala, and subsequently they re-opened the camp.

Nsontwa 1 and Nsontwa 2 Camps: if one continues for about twelve kilometres along the road from Katala one reaches Nsontwa 1 Camp and, six kilometres further on, Nsontwa 2 Camp, started in 1991 and 1992 respectively. As a result of the tighter controls being exerted over beekeepers by the Wildlife Department a number of people from Kwalungu and Msiri Camps decided to start keeping bees in the south of the reserve where, they believed erroneously, they were outside the jurisdiction of the Project Manager.[333] These camps were chosen by Lioba Chalamila who has detailed knowledge of the area, having hunted there with his father in the past.

Plates 29 - 31, overleaf, are of Katala, Nsontwa 1, and Nsontwa 2 respectively (Plate 2 in Chapter 5 is of Igululu Camp). Plate 32 is of the total provisions taken to the forest by men working at Kwalungu and Nsontwa 1 Camps in the June harvesting season of 1993. In regard to Plate 29, note the radio being held up, the carefully constructed beds, and the way tools and items are hung in the rafters. Plate 30 depicts Nsontwa 1 which was a rapidly constructed shelter, a good shelter had been built but the Project Manager deemed that they had to pull it down because it jutted too far out into the track (!). At the end of the year, after harvesting had finished, the men from this camp spent time constructing themselves a nice shelter. Both Katala and Nsontwa 2 camps in Plates 29 and 31 are made from the off cuts of timber left by illegal loggers who had been cutting near the camps.

[333] Before the reserve became a 'National Project', moving from regional to central administrative control, the southern portion was under the jurisdiction of the Regional Development Directorate in Rukwa Region. In practical terms, because Ugalla is remote and was not given administrative priority, control over people working in the southern half of the reserve was negligable. After the reserve became a 'National Project' the whole area was placed under a single Project Manager, however in the early 1990s many beekeepers and fishermen did not realise this was the case.

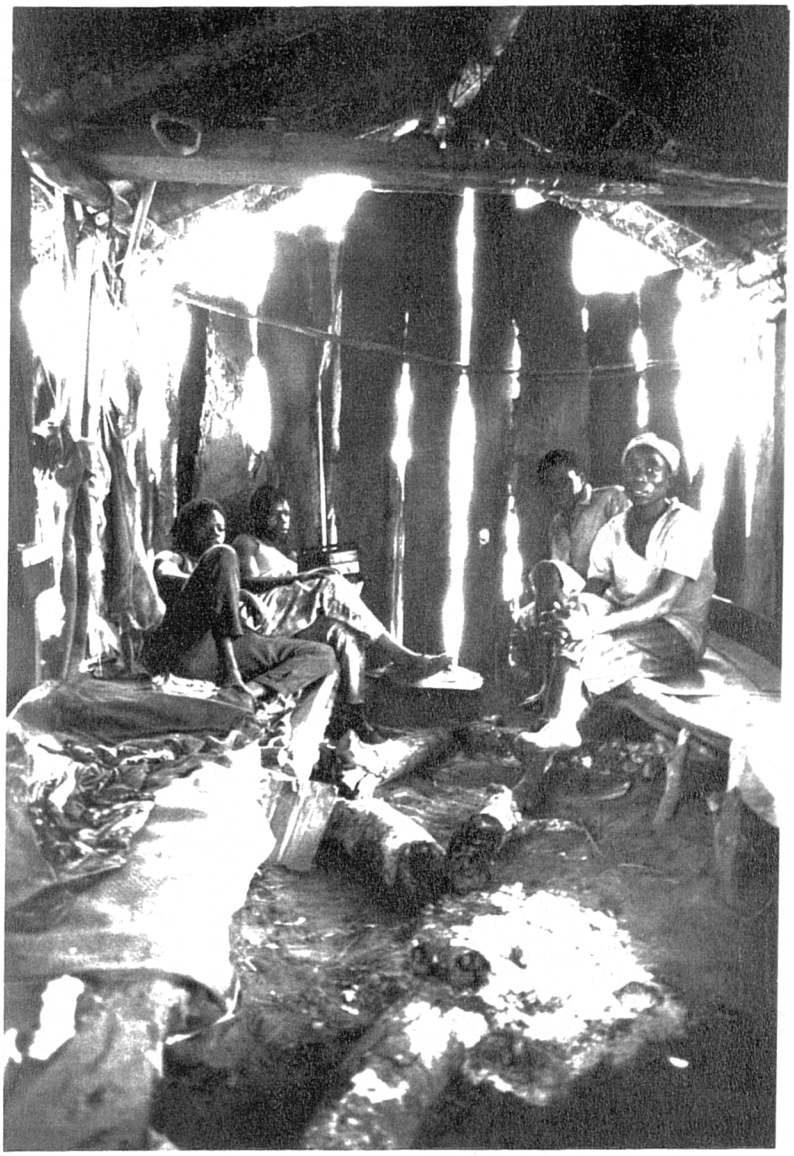

Plate 29: Men at Katala Beekeeping Camp

Plate 30: Men at Nsontwa 1 Beekeeping Camp

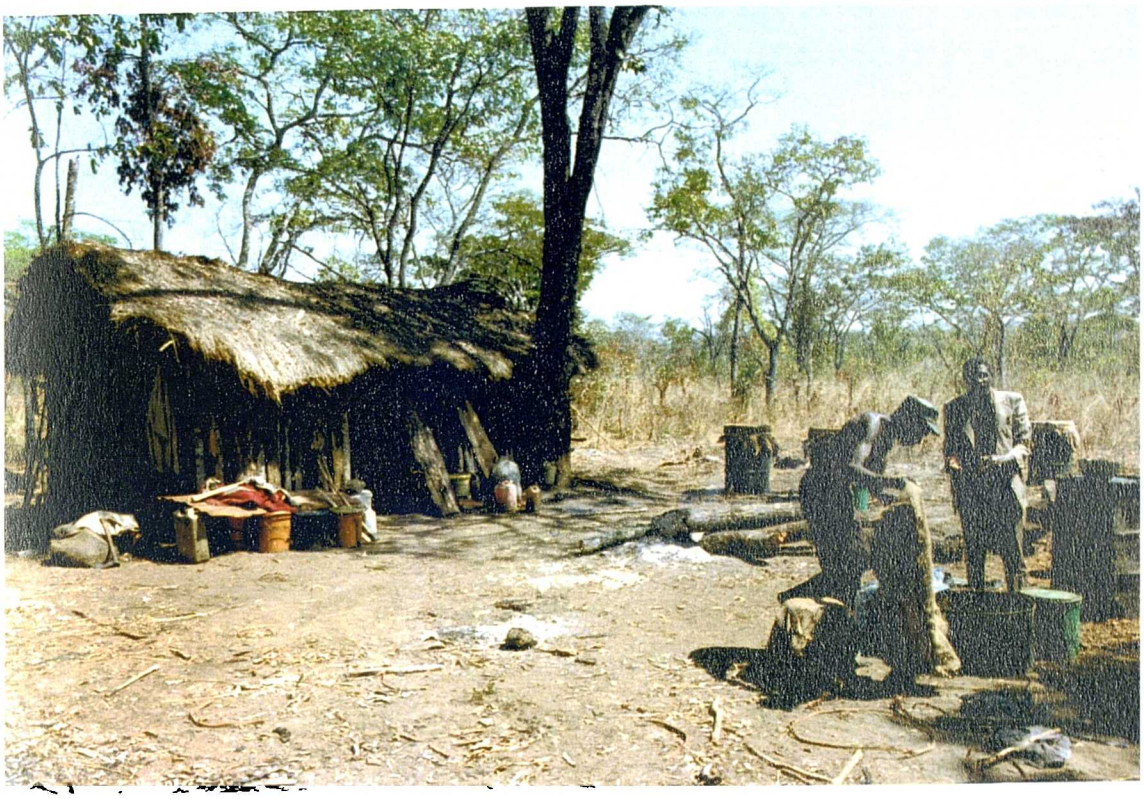

Plate 31: Men at Nsontwa 2 Beekeeping Camp

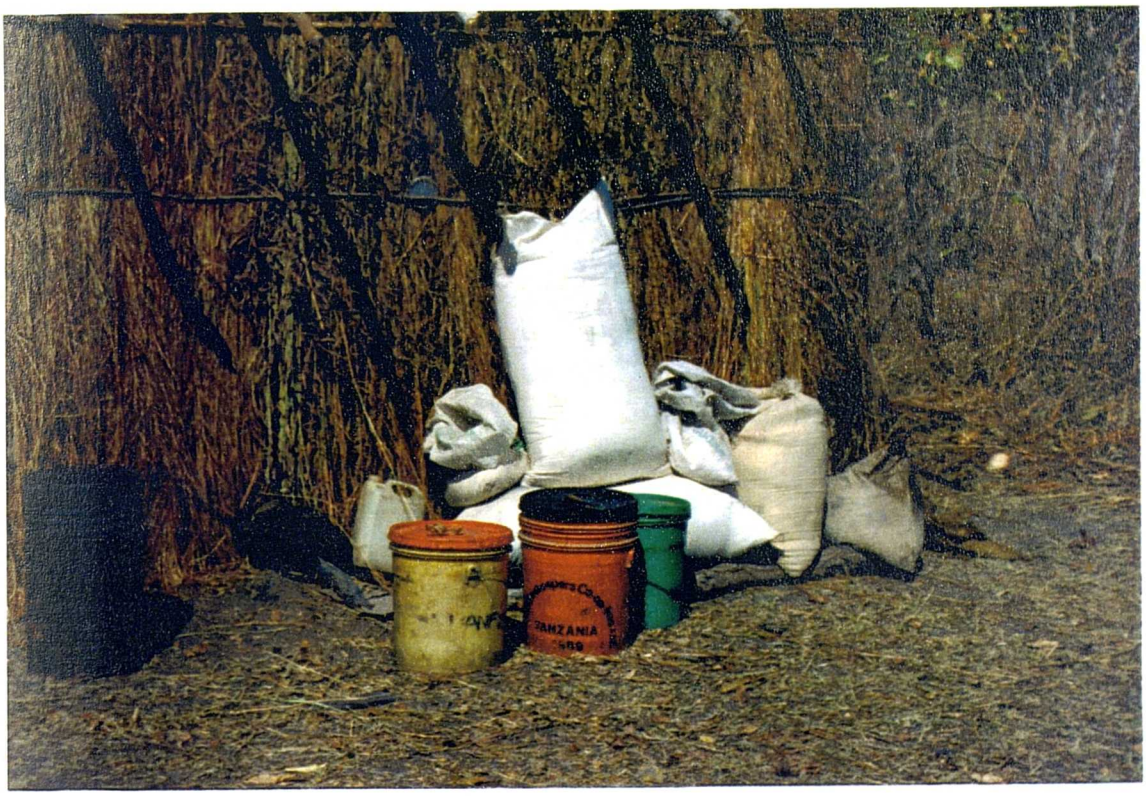

Plate 32: Provisions taken by men working for the beekeeping season at Kwalungu Camp (beans, salt and maize meal)

An Analysis of the Social Composition of Five Beekeeping Camps: Kwalungu, Msiri, Katala, Nsontwa 1 & Nsontwa 2

An examination of the social composition of five different camps will facilitate an analysis of the relationships and interactions which take place between men keeping bees at these camps. Tables 11.2, 11.3, and 11.4 summarise information on the members of each camp, their relationships to one another, age, date they started to keep bees at the camp, TBCS shares, fishing activities, hive numbers and additional camps where beehives are located. The beehive estimates should be read with caution; they are a rough estimate (they also do not include beehives people may have on their farm or near their village). Despite misgivings, estimates are included because they give an idea of the numbers of beehives a person possesses in relation to others.[334]

[334] It is extremely difficult to obtain figures on the number of beehives a person owns, questions concerning assets are intrusive, evolking fears concerning state control and taxation. Moreover, people often simply do not know how many hives they own because they don't count them, or because the hives have perished.

Name & designation	Status	Age (1993)	Date Started	TBCS shareholder	First Camp	Estimated hive numbers	Second Camp	Estimated hive numbers	Total hives
Kwalungu & Nsontwa 1 May-July									
(a) Ambrose Lioba Chalamila, second son of camp founder	BK	53	1961 (1955)	Yes	Kwalungu	log 480 bark 80	Nsontwa 1	log 140	700
(b) Stephen Lioba, first son of (a)	BK	28	1982	Yes	Kwalungu	log 25 bark 5	Nsontwa 1	bark 25	55
(c) Mateo Lioba, second son of (a)	A	25	1984	No	Kwalungu	log 8	Nsontwa 1	-	8
(d) Kaombwe Mwamba, first son of (a's) elder brother	BK	36	1977	No	Kwalungu	log 100 bark 20	Nsontwa 1	log 20	140
(e) Zachari Mwamba, second son of (a's) elder brother	A	32	1981	No	Kwalungu	-	Nsontwa 1	bark 25	25
(f) James Stanley, first son of (a's) younger sister	A	25	1989	No	Kwalungu	log 9	Nsontwa 1	log 14 bark 80	103
(g) Paul Herman, 'shemeji' of (a) (wife's half-brother)	BK	29	1984	Yes	Kwalungu	bark 20 log 66	Nsontwa 1	log 14 bark 80	180
(h) Charles Leroy, employee & friend of (g)	L/BK	34	1990 (1975)	No	Kwalungu	log 4	Nsontwa 1	bark 50	54
(j) Peter John, employee of (a), neighbour of (b) & distant affine of (a)	L/A	21	1990	No	Kwalungu	-	Nsontwa 1	log 35	35
(k) Ali Mbilila grandson of (a's) grandfather's brother	BK	70	1985 (1939)	No	Kwalungu	log 29	Nsontwa 1	log 16 bark 8	53
(l) Mashaka Kagogo, employee of (a)	L	26	1987	No	Kwalungu	-	Nsontwa 1	-	-
(m) William Nsokoro, friend of (a)	BK	51	1965	Yes	Kwalungu	log 154	Nsontwa 1	log 22 bark 60	226
(n) Mathew William, son of (m)	A	18	1991	No	Kwalungu	log 20	Nsontwa 1	-	20
(o) John Caini, employee of (m) and distant kin of (dd)	L/A	22	1991	No	Kwalungu	log 20	Nsontwa 1	bark 30	50
(p) Thomas John, employee of (m) and brother of (j)	L/A	18	1991	No	Kwalungu	-	Nsontwa 1	bark 20	20
(fe) Mustapha Luminusi,	BK(FM)	53	1980	Yes	Kwalungu	type ? 128	Igululu	Log 30	158
(dc) Juma Fongonyo	BK(FM)	58	1978	Yes	Kwalungu	type ? 70	Igululu	Bark 20 Log 20	110
(ba) Kulwa Katanta Juma	BK(FM)	58	1985	Yes	Kwalungu	type ? 120	Igululu	Log 20	120
Kwalungu October - November									
(q) Sauli Mihayo, employee of (a), distant relation of (g)	L	28	1993	No	Kwalungu	-	-	-	-
(r) Prince Athenas, son of (a's) younger sister, half brother of (f)	L/A	29	1983	No	Kwalungu	log 36	Katala	bark 25	61

Table 11.2 Information on beekeepers working at Kwalungu and Nsontwa 1 Camps in 1993

Name & designation	Status	Age (1993)	Date Started	TBCS shareholder	First Camp	Estimated hive numbers	Second Camp	Estimated hive numbers	Total hives
Msiri & Nsontwa 2 May - July									
(bb) James Ngoma, founder of the camp	BK/FM	73	1940 (1936)	Yes	Msiri	log 200 bark 100	-	-	300
(cc) Caleb James, eldest son of (bb)	A	13	1992	No	Msiri	-	-	-	-
(dd) Caini Yongolo, distant affine of (bb)	BK	55	1951	Yes	Msiri	log 200 bark 20	Nsontwa 2	log 11 bark 80	311
(ee) Aprili Caini, eldest son of (dd)	A	27	1992	No	Msiri	-	Nsontwa 2	log 10 bark 20	30
(ff) Abraham Tembo, friend, neighbour of (dd)	L/BK	63	1990	No	Msiri	-	Kasisi 1	log 30 bark 20	50
(gg) Tito Maganga, employee of (dd), friend of (ee)	L/A	26	1992	No	Msiri	-	Nsontwa 2	bark 20	20
(hh) Josephat Kisato, friend, neighbour of (bb)	BK	67	1989 (1976)	Yes	Msiri	log 100 bark 55	Nsontwa 2	log 9 bark 55	219
(ii) Luka Josephat, third son of (hh)	A	20	1992	No	Msiri	-	Nsontwa 2	log 1 bark 16	17
(jj) Desteni Josephat, fourth son of (hh)	A	20	1990	No	Msiri	-	Nsontwa 2	log 16 bark 30	46
(kk) Mishek Kasimba, neighbour of (bb)	BK/FM	70	1989 (1934)	Yes	Msiri	log 296 bark 4	Luwala	log 230	530
(ll) Simoni Mishek, second son of (kk)	A	22	1989	No	Msiri	log 75	Luwala	log 20	95
(mm) Sauli Mishek, third son, of (kk)	A	26	1988	No	Msiri	log 60	Luwala	log 25	75
(nn) Mishek Tomas, eldest daughter's son of (kk)	A	15	1993	No	Msiri	-	-		-
(oo) Deo Gratias Katuni, friend, neighbour of (kk)	BK	69	1990 (1946)	Yes	Msiri	log 60	Nsontwa 2	bark 10	70
(pp) Mustapha Juma, neighbour of (oo) (kk), wife's father's brother of (kk)	BK	62	1992 (1949)	No	Msiri	log 26 bark 49	Luwala	bark 27	102
(qq) Noah Masese, related to (bb)	FM/BK	?	?	No	Msiri	type? 30	?	?	30
(rr) Eric William, employee of (qq)	L	20s	?	No	Msiri	-	-	-	-
(ss) Richard Joseph	FM/BK	?	?	No	Msiri	type? 28	?	?	28
(tt) David Joseph, son of (ss)	A	20s	?	No	Msiri		-	-	-
Nsontwa 2 May - July (dd) (ee) (ff) (gg) (hh) (ii) (jj) (oo) have hives									
(uu) Jonah Kisato, younger brother of (hh), distant affine of (bb)	BK	60	1992	No	Nsontwa 2	log 11 bark 95	-	-	105
(vv) Noah Mateo, married to the daughter of (uu)'s wife's half sister	L/BK	30	1993 (1988)	No	Nsontwa 2	-	Ukwamba	bark 60	60
October - November (bb) (cc) (dd) (ee) (hh) (ii) (jj) (oo) (pp) (rr) (tt) went to Msiri not (ff) (gg) (kk) (ll) (mm) (nn) (qq) (ss) didn't.									
(ww) Kulwa Alexander, employee of (hh)	L	20	1993	No	Msiri	-	-	-	-
(xx) Mark Simoni, employee of (hh)	L	18	1992	No	Msiri	-	-	-	-
(yy) Juma Abdullah, employee of (bb)	L	16	1993	No	Msiri	-	-	-	-

Table 11.3 Information on beekeepers working at Msiri and Nsontwa 2 Camps in 1993

Name & Designation	Status	Age (1993)	Date Started	TBCS Shareholder	First Camp	Estimated Hive Numbers	Second Camp	Estimated Hive Numbers	Total Hives
Ilunde May-July									
(s) Kulwa Simoni, co-founder of camp & son of mother's brother's daughter of (m) who is his'njomba'	BK	22	1987 (1985)	Yes	Katala	log 157 bark 150	Kwalungu	log 20	327
(t) Marki Saul, younger sister's son of (s) who is his 'njomba' & employee	A/L	18	1992	No	Katala	log 5	Madutu (location unknown)	bark 9	14
(u) Abdullah Katanta, co-founder of camp & friend & neighbour of (s)	BK	26	1987	Yes	Katala	log 140 bark 120	-	-	260
(v) Haji Ali, son of the younger sister of (u) who is his 'njomba' & employee	A/L	22	1992	No	Katala	bark 10	-	-	10
(w) Ramadani Choma, husband of (u's) second youngest sister & employee	L	26	1993	No	Katala	-	-	-	-
(x) Manyau Faraji, friend & neighbour of (s) and (u)	BK	36	1988	Yes	Katala	log 70 bark 40	-		110
(y) Tito Manyau, son of (x)	A	16	1993	No	Katala	-	-	-	-
(z) Joeli Zakenko, friend & neighbour of (s), (u), (x),	BK	24	1989 (1984)	Yes	Katala	log 70 bark 20	Kilala 2 (at Malongwe on the central railway line)	log 80 bark 120	290
(zb) Shemi Kitente, neighbour of (s) (u) (x) (z)	BK	39	1992 (1980)	No	Katala	bark 50	Ipululu (location unknown)	bark 200 (I suspect this is false)	250
Katala October - November (s) (t) (u) (v) (w) went to the camp (aa) (x) (y) did not								NB (aa) sold his hives to (u), whose hive count includes these hives	

Table 11.4 Information on beekeepers working at Katala Camp in 1993

Two men have kept bees at these camps for many years; Lioba Chalamila (a), the Kwihara Branch Chairman who's life history was portrayed in Chapter 10, and James Ngoma (bb), ex-Chairman of the Kwihara Branch of the TBCS. The beekeepers who work at these camps describe themselves as 'following' one or the other of these two men. In this context, the verb 'following' refers to allegiances within the TBCS, although beekeepers also use the term in reference to the transmission of beekeeping knowledge through the practice of inheritance. Here we can see two different groups, those people at Msiri and Nsontwa 2 who follow James Ngoma, and those who work at Kwalungu and Nsontwa 1 who are close to Lioba Chalamila. The men working at Katala keep themselves slightly apart, although they are independent beekeepers they are younger and outside the peer group of the main beekeepers in the other camps. Even so, the two founders of the camp, Kulwa Simoni and Abdullah Katanta, described themselves as 'following' Lioba Chalamila because he is the present-day TBCS chairman who has assisted them to take up beekeeping.

If we turn to Table 11.2 and consider the relationships between men who follow Lioba Chalamila: there are six beekeepers at Kwalungu and Nsontwa 1 camps, two of whom are established, Lioba Chalamila (a) and William Nsokoro (m). Since Kwalungu Camp was closed, William Nsokoro has moved away from Lioba Chalamila at Kwalungu to Msiri but he still works at Nsontwa 1. He does not have the number of beehives one would expect from someone who has been keeping bees since 1966, indeed at Kwalungu his portion of the woodland is surprisingly empty. One reason for this is because his wife has been ill for many years and he has had little time and few resources to devote to beekeeping.

Of the other men who work at Kwalungu and Nsontwa 1, Stephen Lioba (b), Kaombwe Mwamba (d), and Paul Herman (g) were all beekeepers in their own right. In the case of Stephen and Kaombwe, one gained an impression in the course of daily life and beekeeping activities that they were still Lioba Chalamila's apprentices, both being considered his sons. In contrast, although Paul Herman was still young, because value was placed on his role as Lioba Chalamila's *shemeji* (brother-in-law), he was drawn into daily decision-making in ways the other men were not. This could be witnessed as the two conferred in the early morning when - still huddled around fires in the living shelter - people discuss what jobs will be carried out in the day, or when Lioba Chalamila turned to Paul Herman in making decisions over whether to move from one camp to another.

The status of Ali Mbilila (k) differs rather from that of Stephen, Kaombwe and Paul. Although the young men treat him respectfully, he was not the established beekeeper one might expect of a man in his seventies. Instead he has very few beehives, being by village standards extremely poor, as well as partially blind and turning senile. The background to his situation is that although he learnt to keep bees as a young man and has extensive knowledge of the woodland, local customs and history, he worked as a servant at the Mpanda mines (to the south-west) for most of his life. After retiring and moving to Usizya village in 1984, he took up beekeeping with the aid of Lioba Chalamila having seen, in his own words, that *kumbe mali iko hapa* (really there is wealth here - i.e. in beekeeping associated with the TBCS). For Mzee Ali, the importance that kinship relations could play as a resource in beekeeping, was apparent in the support he was given when he moved to Usizya Village, and in the way the young men, his kin, assisted him in the camp; indeed because of the old man's disabilities, he would not even have found his beehives without help.

In addition to the six beekeepers at Kwalungu, there were three fishermen who had beehives at the camp (and who moved to Igululu when the camp was closed) and who were members of the TBCS: Kulwa Katanta (ba), Juma Fongonyo (dc), and Mustapha Luminusi (fe). These men took up beekeeping and became TBCS shareholders under the influence of Lioba Chalamila, however, they did not work with him and considered themselves to be fishermen first and foremost, integrating fishing and beekeeping tasks during the course of a day.

Moving away from the camp of Lioba Chalamila, to that of another important beekeeper, James Ngoma and the men who follow him. It can be observed from Table 11.3 that there are six beekeepers at Msiri, four of whom are established. They are James Ngoma (bb), Mishek Kasimba (kk), Caini Yongolo (dd), and Josephat Kisato (hh). In addition, Caini Yongolo and Josephat Kisato, together with Deo Gratias Katuni (oo), and Jonah Kisato (uu) also work at Nsontwa 2 camp.

In Usizya Village, Josephat Kisato, his brother Jonah Kisato, and Mishek Kasimba reside near James Ngoma in Kwihara *kitongoji* (hamlet), while Caini Yongolo lives in Masimba *kitongoji* and is a distant affine of James Ngoma. Deo Gratias Katuni (oo), and Rajabu Ali (pp) have only recently started to keep bees at Msiri, having been drawn to the camp to work as labourers for Mishek Kasimba. Although both men are middle-aged they learnt from their families when they were young. Deo Gratias Katuni is a friend, neighbour and fellow

churchgoer to Kasimba, while Rajabu Ali is both a neighbour of Kasimba and his wife's father's brother. Two fishermen, Noah Masese and Mateo Samweli also have a substantial number of beehives at Msiri Camp but live elsewhere (Tutuo).

Working at Msiri, James Ngoma and Mishek Kasimba both fish as well as keep bees, although their fishing activities tend to be confined to catching food. Neither man keeps bees at Nsontwa 2, James Ngoma is severely asthmatic and stays at Msiri Camp because if he is ill he will have access to transport out of the reserve, and Mishek Kasimba works at another camp on the Wala River called Luwala where he can get transport with the TBCS Manager who also keeps bees there.

In the life circumstances of James Ngoma we are witness to a man who has been successful through his role in the TBCS, but now that he is getting old and no longer holds the office of Chairman, his status and influence have diminished. The decline of his material and social standing can be witnessed in different aspects of his life; his once expensive corrugated iron roof has blown off, his sons work elsewhere, and his young, third, wife has deserted him leaving behind six children of school age.

Another dimension of James Ngoma's situation is that there is considerable antagonism between him and Lioba Chalamila, the present TBCS Branch Chairman. In 1993, the conflict between the two men would manifest itself in small actions and comments. One such example arose when I first travelled to Ugalla Game Reserve in the company of Lioba Chalamila and his family. James Ngoma also needed transport and asked Lioba Chalamila to request if he could have a lift in my pickup; this message was not relayed to me but Lioba Chalamila nevertheless told him that I had said there was no space. James Ngoma arrived a week later, having got a lift as far as Ipole (70 km) and then walked for four days, turning up with swollen feet and bad asthma. After this he was extremely resentful in his interactions with me, for in his eyes I had favoured Lioba Chalamila. Such antagonism was woven into the way that men from Kwalungu / Nsontwa 1 and Msiri / Nsontwa 2, followers of Lioba Chalamila and James Ngoma respectively, interacted over TBCS affairs, although this was not clear-cut because some individuals were closer to or more distant from one another on other bases.

We can contrast the situation of James Ngoma with that of Mishek Kasimba (kk), who started to work at Msiri in 1988 having retired from the police force. In his childhood his father taught

him to fish and keep bees at a camp upriver from Msiri, and on retirement he had the knowledge, capital, labour and organisational skills to draw on in order to start fishing, and rapidly acquired a large number of beehives at Msiri and Luwala. The success of Kasimba's work emerged in the way that he met an annual income target of beating the minimum civil service wage (his aim - which he achieved - was Tshs.100,000 in 1993, double the minimum wage). We can see that his approach to beekeeping is very different from that of James Ngoma, highlighting the way people bring diverse life experiences to the occupation.

If we move on to consider the beekeepers at Katala Camp, Table 11.4 shows that there were five beekeepers, Kulwa Simoni (s), Abdullah Katanta (u), Manyau Faraji (x), Shemi Kitente (zb) and Joeli Zakenko (z). These men were friends and, all except Shemi Kitente, neighbours in Usizya Village. Also Kulwa Simoni is the nephew of William Nsokoro (m), while Abdullah Katanta has children by a daughter of Josephat Kisato (hh) (although he and the daughter were no longer on speaking terms). When Kulwa Simoni and Abdullah Katanta first started to work at Katala they employed their friends Manyau Faraji and Joeli Zakenko as labourers, and also a more distant acquaintance, Shemi Kitente. In so doing they attracted them to the camp to start as beekeepers in their own right. In 1993, Shemi Kitente stopped keeping bees, I suspect that he had AIDS although, because he had a habit of drinking and appeared to tell blatant lies, he was also disliked and discriminated against by men like Lioba Chalamila, which may have deterred him from the occupation. Each of the other beekeepers at Katala was young, and building themselves up in life, for example, Manyau Faraji through his work as a carpenter and Kulwa Simoni through employment at Tanganyika Mission Press in Usizya Village.

The character of Katala Camp can be set against impressions gained from other camps; these young men are a peer group who arrive in the forest complete with radios, fashionable clothing and haircuts. Here a contrast can be made with Igululu fishing-beekeeping camp: in 1993 there was a large number of young male labourers at the camp amongst whom arguments and fights would develop, if someone ran out of food the other men might not help, and theft, smoking and drunkenness were common practice. This atmosphere was a characteristic of many large camps on the river, but was far removed from that of Katala, where the young men were obviously on mutually good terms, extremely hard working and competitive, and had organised the camp well, for example in having made beds, chairs and even carved wooden plates for themselves, aspiring for the camp to be a 'cool' place (i.e. hip, fashionable).

In TBCS-related decisions-making (when to leave the forest for example) with older beekeepers from the other camps, Kulwa Simoni and Abdullah Katanta would joke about being the *wazee* (elders) of Katala (despite being put in their place by the older men). The absence of more established beekeepers is not without pitfalls however, because in beekeeping matters they are inexperienced; for instance, although they had constructed a comfortable, solid shelter, it was too close to a water-hole and animals passed through the camp on their way to drink, rendering it dangerous. In the case of Katala we can see very clearly how the 'horizontal ties' emerge between a group of friends and contemporaries forming the basis of a beekeepers' group, who in 1993 started drawing relatives into the camp, people who may potentially remain in that location for many years, although equally they may move on.

This is a good point at which to elaborate on the employment of assistants and labourers. Although the discussion is pertinent for each of the camps we can, for brevity, focus on the case of beekeepers at Kwalungu and Nsontwa 1.

Table 11.2 shows that at Kwalungu and Nsontwa 1 beekeeping helpers, both assistants and wage labourers, were divided between Lioba Chalamila (a), William Nsokoro (m), and Paul Herman (g). Lioba Chalamila employed Peter John (j), Zachari Mwamba (e) and Mashaka Kagogo (l) in May - July and Peter John and Sauli Mihayo (q) in October - November. Lioba Chalamila considered himself to be teaching Stephen Lioba (b), Mateo Lioba c), Zachari Mwamba (e), Kaombwe Mwamba (d), Paul Herman (g), James Stanley (f), and Prince Athenas (r) to keep bees.

In Lioba Chalamila's interactions with these young men - all of whom he referred to as his 'sons' - family relations were given significance and expressed by phrases such as 'we share together' and 'we are a family therefore we are one', which they graphically contrasted with 'dangerous' camps such as Msiri and Igululu where there is infighting between beekeepers and fishermen, theft, and, from the perspective of Lioba Chalamila, disregard of others. Thus Lioba Chalamila treats them as his assistants, assuming or hoping that in time they will 'inherit' the occupation, of which more will be said below. The young men themselves appeared to support this, privately they expressed the desire to have a camp of their own away from their father, but they acknowledged this was a problem because their father relied on them. In this respect it begins to become clear why it is common for assistants to possess their own beehives. As

Table 11.2 reveals, this is the case with (b), (c), (d), (e), (f) and (r) all 'sons' of (a). Also (n), for example, was given twenty hives by his father (m) to begin to learn how to keep bees.

William Nsokoro (m), employed John Caini (o) and Thomas John (p) in May - July together with his son Mathew William (n). In October - November William Nsokoro's mother was ill so he did not go to the forest himself, leaving his harvesting to John and Mathew. Because Mathew is William's son he was trying to teach him how to keep bees in order to 'set him up in life', a task not aided by the fact that Mathew is deaf and has a habit of sauntering through the forest. Many jokes were made about trying to teach him to walk with due care and attention to wild animals and snakes. Thomas and John had also started to work for William Nsokoro on an annual basis and began to make their own hives at Nsontwa 1.

The men who assist at each of the five camps under study received remuneration for their work irrespective of whether they were family or employed labourers. Two main types of labour are given and paid for in the forest: harvesting assistance and hive-making assistance. In principle payments are standardised among TBCS members: for harvesting assistance the payment is one fifth of the honey, and a fixed fee is given for a new beehive - in 1993 T.Shs.300 for a log hive. If there are two or more helpers the fifth of the honey is divided up; if not, one helper will receive the whole share. Wax is kept by the beekeeper and does not enter the equation.[335] In practice payments vary, this is particularly the case where the helpers are the sons of the beekeeper. If they are young and unmarried remuneration is very flexible being considered part of the family income. Typically I was told 'they get a little for clothes and things'. Older, independent sons are given the same or even more generous payments than those received by wage labourers.

In terms of payments made at the five camps under study, continuing with examples from Kwalungu and Nsontwa 1: four people employed labourers, Lioba Chalamila, William Nsokoro, Paul Herman and Kaombwe Mwamba. Taking the case of Lioba Chalamila, in June-July 1993, he obtained 20 buckets of honey from the two camps and 36.5 kilos of wax. In October - November he only harvested .5 of a bucket of honey which was later consumed. The honey was sold to the TBCS for T.Shs 100,000 and half the wax was sold to the TBCS for T.Shs. 9,425 and the other half sold to Asian traders for T.Shs. 16,800. These sales included

[335] This is probably because wax has historically been considered a subsidiary product by the TBCS, and it is the co-operative that has played a role in standardizing the payment of assistants.

the honey that he had paid to his helpers: in June-July, Peter John was paid 2 buckets of honey, equivalent to T.Shs. 10,000, Zachari Mwamba received 1 bucket of honey worth T.Shs. 5,000, and Mashaka Kagogo received T.Shs.7,800 (T.Shs.300 per beehive).[336] In October, knowing that the year was poor, Lioba Chalamila reduced his helpers to two: Peter John and Sauli Mihayo, who received T.Shs.5000 and T.Shs.3000 respectively (see Appendix 9 which provides fuller examples of the payments made).

We can see from this example that although payments for harvesting are given in principle as one fifth of the produce, the amount varies in practice; Peter John and Zachari Mwamba received different payments in accord with the amount they had assisted Lioba Chalamila. Zachari was also helping his brother Kaombwe but I could not ascertain how much he was paid. In October payments were varied and in cash because Lioba Chalamila only obtained half a bucket of honey but could not let the men leave the forest without any remuneration. Sauli told me that he had been hoping to receive T.Shs.10,000 instead of the T.Shs.3,000 he received but he could see that times were hard.

Linked to the payment of apprentices and wage labourers is, the fact that beekeepers must provide food for them. Table 11.5 summarises the food and items that were taken to the forest by different members of Kwalungu and Nsontwa 1 in June - July. (See also Plate 33 which is a picture of the food containers taken to the forest, which are those provisions referenced in this table).

[336] To put this in context, in 1993 the minimum monthly wage set by the Government was T.Shs. 5000.

Person	Maize	Beans	Salt	Nsansa (relish)	Dagaa (fish)	Tobacco	Medicine	Other
(a)	2 sacks grown	10 kg grown	5 kg bought	2 kg grown	–	snuff bought	6 Malaria tablets	soap
(k)	2 buckets 1 grown	1.5 kg bought	–	–	–	tobacco bought	–	soap/ newspaper
(b)	2 buckets grown	5 kg grown	0.5 kg bought	1.5 kg	–	tobacco bought	–	soap/ tomato puree
(c)	–	–	–	–	1 kg bought	–	–	soap/ yeast for beer
(j)	–	–	–	–	–	–	–	soap
(h)	1 bucket grown	2 kg grown	1 kg bought	–	–	–	Hedex	potatoes grown/ soap
(g)	5 buckets grown	10 kg grown	0.5 kg	–	–	tobacco grown	–	soap/paper
(f)	1 bucket bought	–	–	2 kg grown	–	tobacco bought	–	soap/ newspaper
(e)	–	?	?	–	–	tobacco grown	–	soap
(d)	4 buckets bought	1.5 kg bought	–	–	–	tobacco bought	–	Onions grown
(l)	–	–	–	–	–	–	–	potatoes grown

key: grown = produce grown by members of the person's household
bought = produce or items obtained in a local market or shop

Table 11.5 Goods taken to the forest by beekeepers working at Kwalungu and Nsontwa 1 Camps between 4th June - 17th July, 1993

From Table 11.5 it can be seen that Lioba Chalamila (a) was supporting others in the forest, namely, Mateo Lioba (c), Peter John (j), Mashaka Kagogo (l), and Zachari Mwamba (e) who also relied on his brother for food. Young unmarried man, like Mateo Lioba, Peter John, and Mashaka Kagogo work their parents land and could not independently support themselves. Paul Herman (g) carried food for himself and his helper Charles Leroy (h), although Charles also took a bucket of maize because he carried out some work for himself. Similarly, Kaombwe Mwamba (d) took enough food for his brother Zachari (e). The aspect of food provisioning is important: it provides a clear link between production in the household and in the forest and the gender relations associated with this production. One has to ask where and from whom food or potential income is being diverted from within a household in order to support beekeeping. The capacity a beekeeper has to feed employees is highly influential in determining the number of people he can support in the forest, and by extension the levels of productivity that can be obtained.

One final point can be made, which is that within each of the beekeeping camps were men of different ages, there was a clear deference by younger people of those older than themselves. This is a normal feature of interactions between young and old in towns and villages and the camps were no exception. In these situations where no women were present, the younger men generally took over duties such as cooking, carrying water, and collecting firewood, usually women's tasks.

To summarise, in this section data on the social composition of five beekeeping camps has been explored. Analysis was facilitated by the schematic use of descriptions of the 'horizontal' ties that develop between a group of men, usually contemporaries of one another living in the same village, as they become established beekeepers, and of the 'vertical' ties they form with other men. The relationships which underpin these analytical ties play important roles in generating and maintaining the networks of interaction which exist between forest camps in Ugalla Game Reserve, and in drawing other men into keeping bees in the area.

The 'Tradition' of Inheritance Among Men who Keep Bees in Ugalla

A practice left implicit in the preceding discussion is that of inheritance; this takes us to the heart of the dynamics of beekeeping and how it is perpetuated in Ugalla Game Reserve, and therefore deserves greater consideration.[337] Through the process of inheritance, knowledge and property are passed on in such a way that existing beekeepers ensure that their relatives continue with the occupation. In this respect, it is a clear example of the significance of beekeeping in men's lives, because inheritance idioms reflect a long process of gaining shared experiences, understanding, values, and also the acceptance of the authority of certain men, for people do not inherit automatically from their relations. It is part of individuals being inculcated with certain skills, becoming familiar with peers and elders, and entering into beekeeping networks within the forest and the village. As observers, however, we have to be careful not to oversimplify the notion of inheritance for not only are there considerable disparities between principle and practice but there are ideological notions bound to beekeepers' representations of inheritance practices in Ugalla (c.f. Holy & Stuchlik, 1983; also Chapter 8).

[337] For discussions on inheritance practices among the Nyamwezi, see Abrahams (1967a), Cory (1955) and Bösch (1930).

Coming back to issues raised earlier in the thesis, through the kinship relations underpinning inheritance, men re-enact and give new meaning to the historical relationships certain families claim to have held to Ugalla throughout the Twentieth Century, and as such it can be argued that it is a manifestation of the process of 're-positioning', as discussed in Chapter's 3 and 4. Inheritance leads us to consider why working in Ugalla Game Reserve, specifically, is important to certain families, and helps us understand the way new people come into the area, and how honey and wax production is organised; each feature giving a particular dynamic and meaning to resource use, surely important for conservation-related considerations.

Trying to unravel ideas and practices associated with the concept of inheritance is not easy; many people will state that they have inherited "bees" from a family member, but this does not mean that any beehives came into their possession. When they do inherit hives, they are not obliged to take up beekeeping or to work in the camp of the deceased relative. To complicate matters further they may not have learnt to keep bees from a relative, but, when asked, they cite a father, grandfather, or uncle as the one whom they are 'following', by inference the one who has passed on the tradition.

Despite this complexity, four main elements can be discerned: (i) the transfer of property between generations, (ii) the transmission of knowledge and skill, and (iii) the idiom of kinship. These elements suggest that the concept of inheritance incorporates ideas and practices broader than the transfer of property alone. In order to illustrate ideas associated with inheritance, and to elaborate on each of the four elements, we can draw on the quotes listed in Box 1:

Box 1: Notions of inheritance

Lioba Chalamila: "beekeeping is hard work...to come here and enter the TBCS a person must build a camp...this is very hard work, you only follow it if it is in your clan.[338] [Although new people have been attracted to beekeeping because of the TBCS]...they come to work and they see money, they see money, but those people who endure are those people who keep bees through following the custom of their clan. Others start for two or three years, they make some beehives but if they lose out they sell them, someone whose work it is by custom if he loses or he profits it is just the same. It isn't just learn and begin. Beekeepers they must keep on and on and they have children, and those children have children. At the TBCS we are a collectivity of beekeepers and others they desire this just the same but they are prevented because they do not have the means and we would frustrate them".

James Ngoma: "[Beekeeping is something in someone's clan because]...it is like this because it is our work, for example, this child of a white person, yourself, immediately you were old enough your father sent you to school to study. When you stop you will know many things. This is the same as myself and my child, when he began to get on in the world I assisted him. I see that many people today are maybe twenty five but they finished in the classroom when they reached the age of seven. Myself I pushed my sons to come to my school and now they have a camp and myself I am tired of work, that you have seen for yourself Mama. Myself I will eventually stop going...[to the forest]...and my son has a comfortable camp, and the other has a comfortable camp and he has children and they too will follow him in the manual labour.

It is like school completely, like Sukuma people with their cattle, they wont leave them. The Sukuma decides to hide his child in the forest if the child is told to got to school, he would die if the child went to school...the child of a real Sukuma when he reaches home he remembers the cattle, or the child of an Arab he remembers the lorry...this is why it is like a clan. Most beekeepers are from clans, it is a clan within themselves, although for others it is just income generation"

Stephen Lioba: "I keep bees because it is a living and can be combined with farming, being born into a family that keeps bees is important, if you were educated or had a better means of support you would take it".

Mateo Lioba: "because it is in my ancestry, and I have inherited it...one is compelled to inherit it".

James Stanley: "because we are used to beekeeping and it is within our clan, I feel happy and relaxed doing it. If I am doing other work I will leave it at the time of the harvest, it is in my blood, my grandfather kept bees...But it depends on income you couldn't say it was good if you did not get money. It is the traditional custom of this country [country = Unyamwezi]".

In these explanations a range of motives are given as reasons why people keep bees, nevertheless we can identify that inheritance is constituted by the coming together of ideas and practices associated with tradition, kinship and economics. We can argue that among men keeping bees in Ugalla the idiom of kinship is used as an important basis for constituting beekeeping groups, as a way of mobilising resources, and as a means through which men can

[338] In reference to the Kiswahili term *ukoo*, see Chapter 8, section on representations of hive-making traditions.

assist and become obligated to one another in the forest. Association of the notion of inheritance with ideas about kinship and tradition in the context under consideration, suggests that it is used as a basis for apparently immutable claims over access to Ugalla Game Reserve and its resources. Such claims are closely linked to membership of the TBCS for these beekeepers, and their anxiety to protect an economically lucrative occupation from the entrance of all and sundry.

To take the first element of inheritance, the transfer of property: a beehive is private property which belongs to an individual beekeeper. According to abstract kinship principles, the person with most right to inherit beehives is the first-born son through a bride-wealth marriage (personal field notes; Abrahams, 1967a; Cory, 1955; Bösch, 1930); in reality, beehives can be divided and several of a person's near relatives may inherit the hives, including brothers, daughters and wives of the deceased man; as a TBCS member stated, 'a man who is generous will think of his brothers'.[339] Nonetheless when there is family tension, as in the case of Lioba Chalamila and his brother, the question of who inherits what property can lead to conflicts between individuals.

Historically, beehives were not considered to be of great value, for they readily perished (Cory, 1955). However with membership of the TBCS and the manner in which it links beekeepers to an export market for honey, a large number of beehives can be a substantial asset. Inheritance rules are in fact enshrined within the regulations of the TBCS, for shareholder-members fill in a card stating who will inherit not only their beehives but also their TBCS share. Here we have a long-standing practice being drawn as 'tradition' into regulations - established by the Catholic White Fathers - in effect trying to achieve a discipline of continuity among members as a basis for progress. (Such techniques of regularising 'customary practice' have a long tradition in the colonial administrative system, as for example the Nyamwezi and Sukuma customary law codified by Cory, the Government Sociologist; vide Moore, S. F. 1986).

[339]Cory's work is drawn on by Abrahams in his discussion on the inheritance of property. Cory elaborates by stating that: "Beehives normally only last for two or three years, though one type (migogo) made from mninga, mkola, mkambati, etc., may last as long as fifteen years. Every man has his own mark which he puts on his beehives. 'It is chiefly in Kahama Sumbwa that property consists of money and beehives, where a man with only thirty hives is considered to be poor; a rich man may have a hundred or more. A ward does not feel that he ought to inherit these commodities if they are taken over by a guardian, both being easily expendable or destructible". (Cory, 1955: 6).

In considering rules concerning inheritance, we have to view the transmission of property as part of a broader process. As mentioned in Chapters 8 & 9, this process is associated with how beekeepers are organised through the TBCS, with the way they are linked to the market, with how they learn to keep bees, and the social relations of beekeeping. Explanation of the other elements of inheritance will help to elucidate these features.

Second, the concept of inheritance includes the sense of a skill and knowledge being transmitted between generations within a family and a clan. Beekeeping can be economically lucrative but this takes a long time to establish and a person must acquire the requisite skills to keep bees in a particular locality. This has been amply demonstrated in the discussion of beekeeping practices in Chapter 8, and in Chapter 10 through the case of Lioba Chalamila who is teaching his sons to keep bees.

The importance of knowing how to keep bees, as distinct from the acquisition of beehives, is illustrated clearly by the many cases I encountered during field research of women who at some juncture had inherited beehives, but rapidly sold them. This highlights clearly why the inheritance of property is difficult to abstract from a person's up-bringing as a beekeeper because, in addition to the fact that beekeeping may seem a personally unattractive option to such women, for they do not hold the requisite knowledge. As one woman stated to me: "I did not know how and I had no children to help me". The option of learning to keep bees through schooling or extension work is not available. Reference to children takes us to the crux of the practice of inheritance, kinship relations.

The third element, the idiom of kinship, should be elaborated in greater detail. To explain why it is given relevance by men at beekeeping camps in Ugalla Game Reserve, we can start with the work of Abrahams (1981, 1967a/b). Based on research carried out in northern Unyamwezi in the late 1950s, 1960s and mid 1970s, Abrahams argues that the Nyamwezi kinship system cannot easily be classified according to ethnographic terminology relating either to unilineal or to cognatic descent. Instead he suggests that it is best to view the system as a "combination of a range of structural and behavioural features... oppositions between male and female, proximal and alternate generations, joking and avoidance, familiarity and respect, and kinship and marriage themselves" (Abrahams, 1981: 111). He follows this with the idea that ties of kinship and affinity are considered highly significant in a person's life and: "concern essentially relations between persons who are or who consider themselves to be linked genealogically by a

parent-child relationship or through a series of them, and such relationships should ideally possess both a jural and a physical base" (ibid.).

If we draw on Abraham's argument and relate it to beekeeping in this locality, the parent-child relationship, and more specifically the father-son relationship, appears to be is highly significant. Men wish to see their sons set up in life, moreover an established beekeeper needs assistance, and hopes that in his old age they may support him. This can be illustrated by examples from the case of Lioba Chalamila and his family given in Figures 11.6 and 11.7 (contained in back folder of this thesis).

Figure 11.6 illustrates: Katanta Chalamila (zz) kept bees together with his son Lioba Chalamila (a) at Kwalungu Camp until he became too old. Having become an established beekeeper in his own right, Lioba Chalamila then stepped into his father's shoes, drawing his genealogical sons (b) and (c) into the occupation. His brother's sons (d) and (e), and his deceased sister's sons (q) and (f) also keep bees at the camp, all of whom are referred to by Lioba Chalamila as his 'sons'.

Once Katanta Chalamila retired, the grandfather - grandson relationship was no longer present at this camp, although in Table 11.3 it can be seen between Mishek Kasimba (kk) and Peter Tomas (nn) who work at Msiri Camp. Typically this arises when a boy has been brought up by his grandfather, a common practice in the region particularly after the death of a parent or as in the case of Peter Tomas, following a divorce. In Lioba Chalamila's family, this is also the case for Prince (r) and James (f) who lived with their grandparents (zz) since their mother, Martha, died when they were children.

Undoubtedly, according to this information the father-son relationship, as defined by Abrahams, is an important organisational feature among beekeepers. But we should be wary of taking this at face value for the picture is far more complex than it first appears. The features underpinning this situation are highly revealing about the way kinship is used by beekeepers to explain why they keep bees together, but, unsurprisingly, kinship relations in themselves are not a determinant of who will keep bees together and where. We can compare the truncated genealogy in Figure 11.6 with the more detailed genealogy of Lioba Chalamila's family in Figure 11.7. (a & b; see Folder at the back of this thesis; included in the folder are Figures 11.8 and 11.9 which contain genealogies of the relations between beekeepers at Katala, Msiri, and

Nsontwa 2 Camps, they can be used for comparison and furnish further details to the information provided in Tables 11.3 and 11.4, but they are not discussed here).

Three simple observations from comparison of Figures 11.6 and 11.7 can be used to illustrate the above points. First, it is Lioba Chalamila (a) not his older brother Mwamba (za) who has taken over the beekeeping camp from Katanta Chalamila, the father of Lioba Chalamila. Second, the sons of Mwamba (d, e) and Martha (r , f) keep bees with their father's brother and mother's brother respectively, not with their respective fathers. Thirdly, Lioba Chalamila's wife's half brother, Paul Herman (g), and a distant cousin of Lioba, Ali Mbilila (k), keep bees at the camp of Lioba Chalamila.

To explain these observations, if we consider the situation of Lioba Chalamila and the case presented in Chapter 10, it will be remembered that his brother, Mwamba, stopped working with their father Katanta Chalamila, leaving Lioba at Kwalungu. Then, in the late 1980s, when he did decide to take up beekeeping, antagonism between the two brothers was too great for him to contemplate moving to Kwalungu. This helps to explain why he, as the first born son, did not inherit hives at the beekeeping camp.

In terms of why certain kin, or indeed affines, and not others work in a beekeeping camp together, an additional dimension of considerable importance is residence in the same geographical area. Close residence, combined with friendship or good neighbourly relations, helps explain why one finds improbable kin or affines keeping bees together. The practical organisation which enters into the journey to Ugalla, as previously described, and the mutual support and obligations that arise in the forest, are critical features of beekeeping and therefore the kinship relation, or indeed affinity, becomes relevant when these other features are also present. When people are related to one another but live in widely dispersed geographical areas, these organisational features are not possible and therefore the relevance of kinship becomes tenuous for the occupation of beekeeping.

The importance of common residence emerges in the case of Ali Mbilila (k), a distant cousin of Lioba Chalamila who moved to Usizya from Mpanda. It was only after he had moved that Lioba Chalamila invited him to keep bees with him at Kwalungu camp and the kinship tie was given importance as a reason to explain why they kept bees together. To take another example, Lioba Chalamila's wife's half brother, Paul Herman (g), is close to Lioba Chalamila when

working in the forest and has a homestead in Usizya and is a close friend of his sons, Stephen and Richard. While Peter Steven, Lioba's wife's full brother is also a beekeeper but lives several miles away and does not come into regular contact with the family.

It is also very common for young men to start keeping bees with one of their male kin, but gradually decide that they want to start a camp of their own. For example, Stephen Lioba, Mateo Lioba and Stanley Adriano were discussing starting their own camp away from that of their father. In this case the inheritance of beehives between generations within a single camp is made more complex.

These observations lead us to suggest that relations of both kinship and affinity can be the starting point of, as examples, village-level beekeeping networks the basis of support for individual and group projects within the TBCS, the means to acquire labour for beekeeping, and of the basis for creating a supportive working environment in the forest-context where people need the help and support family members can give in times of sickness, food shortage, and during the long periods individuals are thrown together with a small group of others. However relations of both kinship, and affinity, are but two of a number of social relationships people draw on to give themselves the organisational capacity to make their livelihoods in Ugalla Game Reserve.

Referring more specifically to the way notions of inheritance are linked to ideas concerning kinship. Many of the beekeepers with whom research was carried out were keen to stress that beekeeping is inherited, an idea that extends to encompass the notion that beekeeping (or honey hunting) is passed on as a tradition in a person's clan. The quotes given in Box 1 provide an impression of the way property transfer, local knowledge and kinship relations are brought together within the practice of inheritance; beekeeping being a skill that a child (boy) grows up to 'know' which he may easily adopt alongside the transmission of property. The comments made by Lioba Chalamila in Box 1 are revealing, for he implies that it is only through family custom that a person gains the endurance for beekeeping, others may take up the skill they do not persist.

However Lioba Chalamila also links the notion of inheritance to the idea that the TBCS is a collectivity of beekeepers who would prevent others from joining, one means of doing this being to claim that beekeeping is their 'traditional inheritance', as elaborated in Chapter 9. This

is where the connection of the relationship between notions of kinship, the practice of keeping bees, and of acquiring beekeeping skills becomes more convoluted. Use of terms like 'tradition', 'custom', and 'clan' suggest not only social relationships but also that inheritance and these associated concepts are drawn into an idiom used to exclude others from profiting from their associations with international produce markets and to erect invisible boundaries around the forests of Ugalla. Certainly, the practice of inheritance ensures that a particular mode of livelihood - beekeeping - will be maintained and perpetuated through a diverse array of local expressions.

The Gender Relations of Forest Life

The last aspect of the social composition of a beekeeping camp to be raised here, is notable through absence, namely the presence of women. At Kwalungu Camp, Lioba Chalamila could not recollect a time when a woman - other than myself - had stayed at his camp, which he rationalised by saying they brew honey beer and cause drunkenness and fights. Occasionally I encountered women in other areas of the reserve; to put this in some context, in June 1994, 3 out of 173 applications for a beekeeping permit were from women, and between 8-15 women applied to act as beekeeping assistants. More commonly female refugees fish in the river or organise labourers to work for them having come from places where this is considered acceptable, but they do not keep bees.

Part of the reason women do not go to the reserve is because they are discouraged from doing so by staff of the Wildlife Department. The Project Manager of Ugalla Game Reserve argued that:

> "they are hooligans, we do not like hooligans. You see there is no police express car to take them away. You see we have a negative attitude because they encourage dubious activities and in principle there has not been a case of any woman making serious business. Whenever they go it is for rioting. [What about the refugee fisher-women? I asked] Yes refugees...they are disciplined, they usually go with their husbands...but most women are street dwellers".

In putting forward this argument, and in trying to discourage women from using the reserve, the Project Manager perpetuates a long colonial tradition where local administrators tried to stop women from going to the Ugalla River so as to prevent permanent settlement.[340]

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[340] According to oral histories I have collected, and archives sources (TNA.mss.11771/11515; Bagshawe Diaries, RH.mss.279-360; RH.Mss.microfilm, Tabora Provincial Book, Reel No. 19; Tabora District Book, Reel No. 20;

However, present-day actions on the part of state representatives cannot fully explain why women are largely absent from beekeeping camps. In seeking further details, because observations and empirical data from the forest cannot be drawn on, it is necessary to move to the context of Usizya Village.[341]

In 1993, the beekeepers from the five camps at the centre of this study lived in 26 different households.[342] Of these households, 24 had adult women residing in them, constituting 35 women in total (excluding girls still of school age). These women employ themselves through a range of income generating activities, which would suggest that they are hard working and within their capacities, entrepreneurial. However none of them kept bees or assist in beekeeping in Ugalla Game Reserve, reflecting a common situation in southern Tabora Region.

A typical response of a woman to the question of what work she carried out was, "I'm only a farmer and person of the house". But this reply concealed a wide range of domestic and productive tasks. In addition to child rearing, food preparation, water carrying, firewood collection, cleaning, etc., all occupied themselves with preparing seed beds at the end of the dry season, farming throughout the rains, and gleaning the harvest. Also, in 1993 some women brewed beer or cooked meat to sell to people passing through the village, 2 women made clay pots for sale and others sold small foodstuffs outside their houses (salt, cooking oil, dagaa (dry sardines), farm produce, etc.). Also, in a good year for the agricultural harvest (unlike 1993) many of the established beekeepers sell surplus agricultural crops, an activity which women partake in.

Rodger, 1954), in the 1950s, when Ugalla was gazetted as a Game Controlled Area, it was argued that children should go to school and women should stay at home to look after the children. These documentary sources reveal a perception that if women did not go to the forest, permanent settlement (which the authorities were anxious to prevent) was less likely to occur.

[341] The following information is based on a household survey I conducted in Usizya Village, on interviews with the women concerned, and on observations made when visiting beekeepers homes or at the TBCS (see Methodology section).

[342] These are the households of a, b, d, e, f, g, h, j, zz, k, m, p, s, u, x, z, bb, dd, ee, ff, hh, kk, oo, pp, uu, (also fe, and ba). Because they are the houses of male beekeepers, almost by definition they are 'male-headed' (unless the men are in the forest?), this creates a particular bias because there are a significant number of households in Usizya run by women without a man in permanent residence. The 26 households exclude those of assistants and labourers working at the camps, although there is some overlap because unmarried men usually life with their fathers or grandfathers.

If we consider the women from families of the men who keep bees at Kwalungu and Nsontwa 1. Lioba Chalamila, Stephen Lioba, Kaombwe Mwamba, Zachari Mwamba, Charles Leroy, Prince Athenas, and Ali Mbilila were all married but none of their wives or daughters have been to Ugalla Game Reserve; Peter John and Mateo Lioba were still young and unmarried, and the wife of Paul Herman had left him. Lioba's father, Katanta Chalamila's second wife, Agatta Mwasi, had never visited Kwalungu camp and nor have her three daughters, the sisters of Mwamba and Lioba. Agatta said this was because: "cooking, women cook, they can't hunt and they can't stay in camp on their own", and, she explained, "women are afraid of being stung". She is a renowned local healer but in order to collect herbs she said she only "goes to the forest nearby", implying that this was different from the forest in Ugalla. Her husband overheard my questions and laughed at what he assumed to be my naiveté, "if they stayed with the men a 'thief' would come and the husbands would loose them', he explained, expressing a commonly held association of women in the forest with rape or promiscuity. He did not hold with the idea that his daughters should have or could have learnt forest skills when young.

Anastasia, Lioba Chalamila's wife, stays on her own at the homestead when he is in the forest. She acknowledged that beekeeping "is possible and has wealth inside it" but her part was to provide food for the men:

> "men aren't really afraid of bees but women are so scared, the men go to the forest whilst for them [the women] they stay behind and take care of the house and property. I have only been to the forest nearby at Usenge where I helped to take the hives down and smoke the bees. Women don't keep bees because it is men's work. Bees sting a lot although myself I know how to remove the sting but many women are afraid to go to the forest. Women's work is near the house because they have responsibilities like children and grandchildren. For women the work is more on the agricultural side although young women could go to the forest".

In another discussion Anastasia said she would like some beehives of her own if she could persuade someone to make them. I pointed out that she was surrounded by a family of beekeepers, to which she replied "yes, but they have their own families to care for".

Like Anastasia, Maria the wife of Stephen does not have children to look after when her husband is away. Once I tried to persuade her to come to Ugalla for a short trip with her husband but she stoutly refused and said "it is not our custom, not of women, this is the work of men". Interestingly, Maria was anxious to point out that bees have been highly significant in her life, not only because they provide an income, but also because she said of her husband: "bees brought us together"; apparently her grandfather, by whom she'd been brought up, was a

reputed beekeeper in Sikonge, and this had been important in Stephen's choice of marriage partner. Several women made similar comments during the course of fieldwork.

Helena, the wife of Kaombwe agreed with Anastasia and Maria that: "we are not accustomed to this work, it is a man's job" adding that she could try to keep bees but she doubted it, at present she has three young children to care for. Mwajuma, the wife of Ali Mbilila, expressed similar sentiments adding "bees they like men, it is hard work and for men". Many such statements were made by both women and men to explain why women do not keep bees.

In the case of money from beekeeping, in many, although not all of the households of the beekeepers listed above it is the main source of cash income - although it depended on how much a person had developed the occupation - and its overall contribution to the household varied according to other sources of income such as agriculture, labouring or business. As an impressionistic view, it appeared to be that in a year when the agricultural harvest is poor the money from sales of bee-produce is needed to buy maize and other food items for consumption, or for urgent payments such as health care. In a better year, a woman is given money to buy clothes for herself and the children and in some cases for a '*mradi*' (project) such as a small shop, beer brewing, food selling or tailoring. In many cases if there is any money left from necessities it is invested in men's status items that can readily be resold, such as a radio or bicycle, and in projects such as the plot of land Lioba Chalamila owns. My personal impression from the households visited in Usizya Village was that decision making and control over money from bee-produce remained in the hands of men.

These brief illustrations suggest that both men and women frown on women going to camps in the forest either to keep bees or to assist; a situation bolstered by the views and practices of the Project Manager of Ugalla Game Reserve. However, although in the area of this study beekeeping is carried out by men solely, there are a few courageous women who go to camps to assist or to keep bees in other parts of Ugalla. In the examples of the women above, women state that they cannot go to the forest because of dependants or commitments at home, however women such as Maria and Anastasia, who have no children, make us aware that the situation is more complex than simply that they are occupied by other tasks. In order to take on the task of beekeeping, a woman needs to possess and accumulate property in the form of beehives, she must acquire a skill that men learn over many years of working in the forest; she would have to be strong and determined in the face of social pressure, and would need capital and labour, and

develop social networks for support in the forest. It is by no means easy for women to have access to each of these ingredients, although there are certainly some women who manage it, especially when they are widowed and have adult sons to assist them.

DAILY LIFE, PRODUCTIVE ACTIVITIES AND INTERACTIONS BETWEEN CAMPS

In the preceding discussion we have explored some of the social relations that exist between men working at five camps in Ugalla Game Reserve. These relationships are enacted and given their character through the interactions which take place between men in the forest and the practices around which these interactions arise. This section is intended to provide a glimpse into these organising practices by means of three cameos of work in the forest: daily life in a camp, relations of production, and interactions between beekeepers in different camps. As before this will be carried out by focusing on the case of Lioba Chalamila and the men who were at Kwalungu and Nsontwa 1 camps in 1993.

We can separate people's relationships in the forest into two different domains, the first within a camp, in which the organisation of people is oriented towards daily activities, such as sleeping, cooking, eating, washing, etc., as well as for purposes of honey and wax production, and the second, where members of different camps form networks with one another - for example, to borrow food, medicine or tobacco or discuss matters such as the availability of transport and the shortage of water.

As regards Box 2, the point of including these anecdotes from a particular day in 1993, is that they portray an image of daily life - sleeping, smoking, washing, eating, cropping honey, sharpening tools, joking and talking - in which men of different ages are in close physical contact and interaction with one another.

Box 2: Daily life at Igululu Camp, 12th of June 1993

Men with beehives at Kwalungu Camp lived at Igululu Camp. They stayed in a solid, one roomed structure, arranging their sleeping mats on the ground around a fire each night. The 12th of June started around 5.30am when Ali Mbilila (k) woke up complaining of the cold. Everyone dozed again, to be disturbed by Mzee Mbilila and Paul Herman (g) arguing over newspaper for tobacco; the old man was trying to borrow some but John argued his paper was precious and would end "like *ugali*" (maize porridge). This prompted the younger men to spend the day teasing Mzee Mbilila that he should give up smoking because it was bad for his health. They got up and wandered around the camp cleaning their teeth and tying their sleeping cloths around honey that was being strained, to prevent the bees getting in.

By 7.30am they all left to harvest, with everyone in good spirits, talking and laughing. It took an hour to reach Kwalungu Camp where they had their beehives and had lived until moved by the management. The walk was accompanied by complaints about how the Project Manager had burnt their camp down and the distance needed to walk to crop their honey. After a few hives had been cropped everyone sat down in the shade and ate large quantities of the brood comb dipped in honey, as usual this was the only sustenance they had until the evening meal. As they walked and inspected the hives, the consensus was that it was a bad year, with hive after hive being empty. As the day wore on spirits fell, with complaints that their luck was bad and the bees were lazy.

Typically, as this group of men walked in the forest, communication alternated between silence, comments pertinent to the task in hand, intense discussion, and hilarity. On the day in question, Lioba Chalamila (a) started to tease his assistant, Peter John (j), that the fashionable, mock fur, waistcoat he was wearing would make the hunters think he was a gazelle. Peter John responded by pointing to me and saying 'watch it, she'll write that down', making everyone laugh and start to tease me about my note-taking habits. Walking through the heat of the day, conversation became more muted.

By 5.00pm they returned to Igululu, those people not carrying buckets of honey carried firewood. Once there, the honey was separated according to whom it belonged, then the men trooped down to the river to shave and collect drinking water. On return Kaombwe (d) and Zachari (e) went to play cards with men in the fishing camp, Lioba Chalamila (a) rested, and Paul Herman (g) made a fire on which Peter John (j) and Mashaka Kagogo (l) proceeded to cook *ugali* and relish. When it was ready, Lioba Chalamila ate separately with Ali Mbilila and Paul Herman, I ate alone, and everyone else ate together from a large pot.[343] After eating people sat around the fire talking as they did each night, discussing all manner of issues, on the night in question, for example, on the problem of Kwalungu camp being closed, asking me about high-rise flats in Europe, telling religious stories and arguing about Jesus' skin colour. As it got late and I went to bed (9.40pm), the men moved into their sleeping shelter and lit a fire for warmth, and the younger men could be heard laughing and giggling nervously because a lion was circling the camp and no-one wanted to sleep near the door.

Discussion of resource exploitation, poaching or the motivating factors for people's actions within a protected area, can all too readily become removed from the habits, meanings and values that people bring to their livelihood activities. Time spent in the forest involves the

[343] It is common practice for portions of food to be divided up and for people to eat seperately, particularly women and men, elders and youngers, or guests.

exchange of information, opinions, stories, and jokes between groups of men who may not come into such close and regular contact with each other for the rest of the year, but for whom such interactions may be a formative configuration and a taken-for-granted part of their existence. These elements provide the social foundation of the beekeeping experiences of the individuals concerned, forming common associations (c.f. Barth, 1982). To this description of daily life we can add a further cameo, that of the division of labour between this group of men when they are engaged in a productive activity, honey cropping.

The Division of Labour Between Men Cropping Honey

Table 11.10 summarises the tasks that were carried out over the period of one week at Nsontwa 1 camp from the 21st and the 27th of June until the 4th of July 1993.[344] Decision-making for the next day's work was made in the evening or early in the morning; in terms of harvesting, Lioba Chalamila was the main person making decisions, indeed in quite an authoritarian manner. As tasks became more diverse, independent beekeepers acted more on their own initiative followed by their paid assistants.

[344] This period of time was arbitrarily chosen, but could be said to be typical for a period in which harvesting takes place. For a detailed account of beekeeping tasks at Kwalungu and Nsontwa 1 during 1993 turn to Chapter 8 and Appendix 8, especially Table 13.8.

Date	Harvest	Strain Honey	Bark Rope	Make Hives	Mould Wax	Re-hang Hives	Honey Hunt	Other
21.6.93	1. Lioba Chalamila Peter John Kaombwe Mwamba Zachari Mwamba Stephen Lioba (the hives of (a)) 2.Paul Herman Charles Leroy Mashaka Kagogo (the hives of (g))			1. Mashaka Kagogo (a hive for (a))				
22.6.93	1. Lioba Chalamila Stephen Lioba Zachari Mwamba Peter John James Stanley (the hives of (a)) 2. Paul Herman Charles Leroy Mashaka Kagogo (the hives of (g))			1. Mashaka Kagogo (a hive for (a))			1. Kaombwe Mwamba Mustapha Juma (who came to stay at Nsontwa 1 for this purpose)	Camp building, everyone assisted in the morning
23.6.93	1. Lioba Chalamila Stephen Lioba Zachari Mwamba Peter John James Stanley (the hives of (b)) 2. Paul Herman Charles Leroy (the hives of (g))			1. Mashaka Kagogo (a hive for (a))			1. Mustapha Juma Mateo Lioba	Kaombwe Mwamba had Malaria Ali Mbilila had toothache so they both stayed in the camp
24.6.93	1. Lioba Chalamila James Stanley Zachari Mwamba Peter John (the hives of (e)) 2. Paul Herman Charles Leroy (the hives of (h))	1. Lioba Chalamila (his own honey) 2. Kaombwe Mwamba (his own honey) 3. Stephen Lioba (his own honey) 4. Paul Herman (his own honey)		1. Mashaka Kagogo (a hive for (a))			1. Mustapha Juma Mateo Lioba	

Table 11.10 Beekeeping tasks carried out by men at Nsontwa 1 Camp between 21st of June - 4th July 1993

Date	Harvest	Strain Honey	Bark Rope	Make Hives	Mould Wax	Re-hang Hives	Honey Hunt	Other
25.6.93	1. Peter John Kaombwe Mwamba Stephen Lioba Zachari Mwamba James Stanley (the hives of (j, k, d)	1. Lioba Chalamila (his own honey) 2. Kaombwe Mwamba (his own honey) 3. Stephen Lioba (his own honey) 4. Paul Herman (his own honey)		1. Mashaka Kagogo (a hive for (a))			1. Mustapha Juma Mateo Lioba	
26.6.93	1. James Stanley Stephen Lioba Peter John Ali Mbilila (the hives of (k, b)	1. Lioba Chalamila (his own honey) 2. Kaombwe Mwamba (his own honey) 3. Stephen Lioba (his own honey) 4. Paul Herman (his own honey) 5. Ali Mbilila (his own honey)		1. Mashaka Kagogo (a hive for (a)) 2. Lioba Chalamila (a hive for himself)				
27.6.93	1. Ali Mbilila Stephen Lioba Zachari Mwamba James Stanley (the hives of (d, e)	1. Lioba Chalamila (his own honey) 2. Kaombwe Mwamba (his own honey) 3. Stephen Lioba (his own honey) 4. Paul Herman (his own honey) 5. Ali Mbilila (his own honey) 6. Zachari Mwamba (his own honey) 7. Mustapha Juma (from honey hunting)		1. Mashaka Kagogo (a hive for (a))	(Kaombwe Mwamba and Mateo Lioba walked to Kwalungu to clean the wax of Kaombwe Mwamba and Lioba Chalamila, first stage)			Charles Leroy stayed in the camp with Ali Mbilila who had cut his leg badly Mustapha Juma and Mateo Lioba were trying to dig a new well
28.6.93	1. Stephen Lioba James Stanley Zachari Mwamba Peter John (the hives of (f))	1. Lioba Chalamila (his own honey) 2. Kaombwe Mwamba (his own honey) 3. Mustapha Juma (from honey hunting) 4. Paul Herman (his own honey) 5. Zachari Mwamba (his own honey)	1. Kaombwe Mwamba Zachari Mwamba	1. Mashaka Kagogo (a hive for (a)) 2. Charles Leroy (a hive for himself) 3. Paul Herman (a hive for himself)	Kaombwe and Richard still at Kwalungu			Ali Mbilila was injured and stayed at the camp

Table 11.10 Beekeeping tasks carried out by men at Nsontwa 1 Camp between 21st of June - 4th July 1993 (continued)

Date	Harvest	Strain Honey	Bark Rope	Make Hives	Mould Wax	Re-hang Hives	Honey Hunt	Other
29.6.93	1. Zachari Mwamba James Stanley Peter John Lioba Chalamila Stephen Lioba (hives of (a))		1. Lioba Chalamila	1. Mashaka Kagogo (a hive for (a)) 2. Stephen Lioba (a hive for himself)	1. Zachari Mwamba (own wax, first stage) 2. Kaombwe Mwamba (own wax, first stage) 3. Paul Herman (own wax, first stage) - they sat together			Ali Mbilila stayed at the camp
30.6.93				1. Mashaka Kagogo (a hive for (a)) 2. Stephen Lioba (a hive for himself)	1. Charles Leroy (own wax, first stage) 2. Paul Herman Zachari Mwamba Kombwe Lazaro (set the wax of each of them)		1. Mateo Lioba Paul Herman	Ali Mbilila stayed at the camp Mateo Lioba and Kaombwe Mwamba returned from Kwalungu with a sack of wax
1.7.93			1. Paul Herman Charles Leroy (enough to hang the hives of both) 2. Kaombwe Mwamba (enough to hang the hives of both)	1. Mashaka Kagogo (a hive for (a)) 2. Stephen Lioba (a hive for himself)			1. Mateo Lioba Mashaka Kagogo	Salum Katambalila stayed at the camp Mustapha Juma returned to Msiri
2.7.93		1. Ali Mbilila (his own honey)		1. Mashaka Kagogo (a hive for (a))		1. Kaombwe Mwamba 2. Peter John 3. James Stanley (assisting each other to hang their own beehives)	1. Mateo Lioba	Ali Mbilila still injured and Zachari Mwamba was ill, Stephen Lioba and Peter John stayed to look after Absalom
3.7.93		1. Ali Mbilila (his own honey)			1. Stephen Lioba Zachari Mwamba (first stage of the wax of Lioba Chalamila from Nsontwa 1)	(Lioba Chalamila, Stephen Lioba, Kaombwe Mwamba, James Stanley, Peter John and Paul Herman at Kwalungu re-hanging beehives)	1. Paul Herman Mateo Lioba	Ali Mbilila at the camp
4.7.93							1. Mateo Lioba Zachari Mwamba Charles Leroy	Ali Mbilila at the camp

Table 11.10 Beekeeping tasks carried out by men at Nsontwa 1 Camp between 21st of June - 4th July 1993 (continued)

Beekeepers describe harvesting as a collective activity within a camp, but despite this we can see from Table 11.10 that the beekeepers at Nsontwa 1 did divide into different groups, with a clear division of labour existing between Lioba Chalamila (a) and Paul Herman (g). Typically Lioba Chalamila was accompanied by Stephen Lioba (b), Peter John (j), Zachari Mwamba (e), James Stanley (f), and Kaombwe Mwamba (d). Ali Mbilila (k) and Mateo Lioba (c) would sometimes go too although Richard became preoccupied with honey hunting (i.e. searching for feral bee colonies in the forest) and Mzee Mbilila cut his leg too badly to walk. Paul Herman worked separately, with Charles Leroy (h), occasionally taking Mashaka Kagogo (l) for further assistance. During this period William Nsokoro was also at Nsontwa 1 but he had built a temporary shelter closer to Nsontwa 2 (he was next to a better water hole than the one at Nsontwa 1) and therefore detailed information is not held on his beekeeping activities.

Box 3: A productive task, honey cropping, 22nd June 1993

The produce of Stephen Lioba was being harvested: Zachari Mwamba climbed the tree and lowered the hive, Peter John held the rope to prevent the hive crashing to the ground, Kaombwe Mwamba cut the comb from the hive, and each person, with the exception of Lioba Chalamila and myself, carried buckets of pounded honey comb back to the camp shelter. Stephen did not assist because he said he felt tired. It was not essential for the person whose produce was being collected to carry out the work, although the owner would be the one who would decide whether to harvest a hive or not. Lioba Chalamila would walk around advising but did not engaged in the physical work. Each person knew how to carry out each activity and they would swap around, in part at least according to preference, although harvesting tended to be left to Kaombwe or Stephen, the most experienced of Lioba Chalamila's apprentices.

In reference to Box 3, in terms of prioritising whose hives should be harvested, Lioba Chalamila had the largest number of hives and was employing people specifically for this purpose, but the cropping of his hives was interspersed with cropping other people's. Mainly it appeared to depend on whose hives were situated in a given area and whether there were enough buckets to keep the produce of different individuals separate. When actually cropping honey there was a division of labour between individuals.

A productive activity such as cropping honey is another aspect of daily life within the camp. In relation to the division of labour, Lioba Chalamila advised and tried to influence decision-

making in regard to harvesting the honey, although it was up to the owner of a beehive as to whether it was harvested or not. One feature that is important though, is the fact that the divisions of labour and of authority as significant in the interactions which occurred between individuals within a camp, it did not take place between different groups of men working in separate camps.

A further dimension can be added to this picture, namely the inter-personal networks that develop between men in different camps as an essential part of the mutual support and practical organisation needed in the forest.

Interactions Between Beekeeping Camps

Figure 11.11 is a diagram representing the purpose for interactions between people who have beehives at the camps of Lioba Chalamila with others at Msiri, Katala and Nsontwa 2. It is intended to give an impression of the practical movements which takes place between beekeeping camps.[345] It covers a period between the 3rd of June and the 17th of July 1993 which is the time that the group of men attached to Lioba Chalamila spent in the forest.[346] It is intended to represent the key practical reason for and frequency of people's movements between the camp where Lioba Chalamila and his group stayed and men in other camps.[347]

[345] The diagram reveals nothing of the intensity or density of relations between individuals, indeed it has inherent limitations, namely that individual and collective interactions between camps are not distinguished, a single movement has multiple purposes with opinions or information communicated differently to different individuals, and it is hard to portray situations where people deliberately avoid interaction with one another. Despite these limitations it does give an impression of the reasons why people move between camps.

[346] The other beekeepers referred to in the text stayed in the reserve between the 25th of May and the 7th of July 1993.

[347] The diagram should not be confused with a diagrammatic representation of the network of ties and affiliations within and between beekeeping groups as in Villarreal (1994: 95), or representations of the characteristics of social networks as in Mitchell (1969).

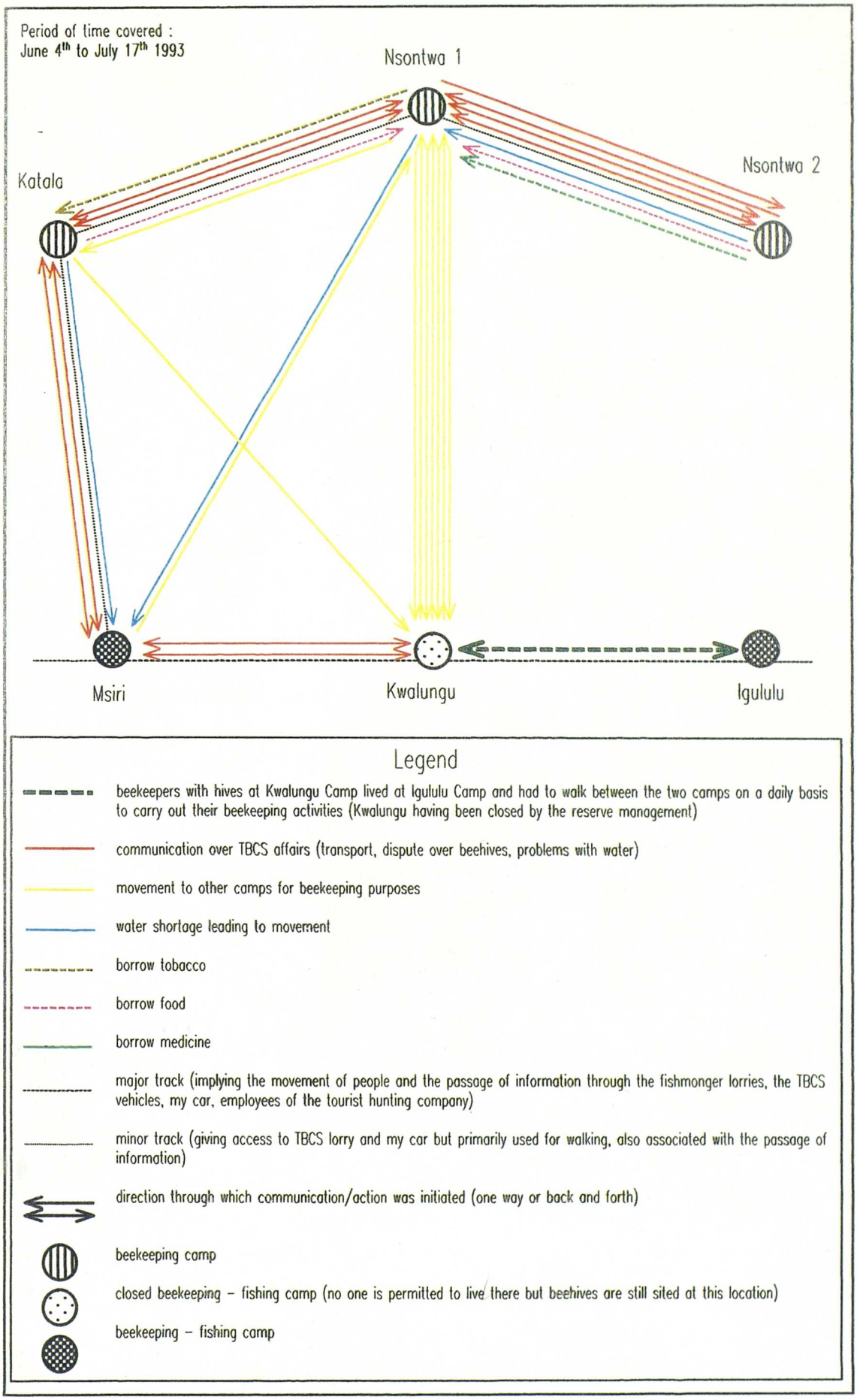


Figure 11.1.1 Practical Reasons for Movements between beekeepers at Kwalungu/Nsontwa 1 Camps and those at Msiri, Katala & Nsontwa 2 Camps

Interactions and movements that took place between Kwalungu/Nsontwa 1 camps and Msiri, Katala and Nsontwa 2 can be divided into four types:

(i) for beekeeping purposes, harvesting etc., (yellow lines on diagram 11.11), and, in 1993 specifically, this included movement between camps due to water shortage (light blue lines);

(ii) for TBCS affairs (red lines);

(iii) to borrow food (pink line), tobacco (brown line) or medicine (light green line);

(iv) the passage of people, information and goods based on the movement of vehicles (black dotted lines). Each of these practical reasons for movements are elaborated on in Boxes 4 - 7:

Box 4: Movements for beekeeping purposes

The diagram portrays multiple movements between Kwalungu and Nsontwa 1 because many of the beekeepers and their assistants hang their beehives in both localities.

(i) After William Nsokoro (m) arrived with his assistants (p) (n) (o) on the 25th of May, they went to Kwalungu but found there was little honey to harvest, so they moved instead to Nsontwa 1 and built a temporary shelter where they would have company close to the beekeepers at Nsontwa 2.
(ii) On June 16th, after Lioba Chalamila and the other beekeepers from Kwalungu (b) (d) (e) (g) (h) (j) (k) (l) (c) (f) had finished harvesting they moved to Nsontwa 1 with the aid of employees of the tourist hunting camp who were passing in a vehicle and offered to carry their drums and sacks of maize for them in return for some honey.
(iii) On the 22nd of June, Mustapha Juma (pp) walked up from Msiri to Nsontwa 1 in order to try his luck honey hunting, although Lioba Chalamila worried that he didn't have a permit for the camp, he remained for a week collecting honey and eating alone.
(iv) Between the 25th and 28th of June William Nsokoro (m) and his son Mathew (n) went to stay at Msiri to wash in the river and collect some food, returning to make new beehives.
(v) Mateo Lioba (c) and Kaombwe Mwamba (d) subsequently travelled back to Kwalungu to purify Lioba Chalamila's beeswax and re-hang Kaombwe's beehives
(vi) On the 4th of July, after Mateo and Kaombwe returned, Lioba Chalamila (a), Stephen Lioba (d), James Stanley (f) and Paul Herman (g) also walked to Kwalungu to re-hang their beehives. Also during this time, Kulwa Simoni (s) and his assistant Marki Saul (t) from Katala went to Kwalungu to harvest some of Kulwa Simoni's beehives.

If we are to consider these short journeys for beekeeping purposes described in Box 4, it is notable that they are based on decision-making and activities dependent on where the different individuals have hung their beehives. One thing that did not take place, and this is important, is co-operation between beekeepers or assistants from completely separate camps for honey and wax production purposes. For example no-one from Nsontwa 2 would have contemplated

assisting people from Nsontwa 1 to harvest their beehives, although someone with beehives in two camps would move between the camps to tend them.

Box 5: Interactions between members of different camps for reasons associated with the TBCS

Movement between camps for TBCS purposes took place on a number of occasions. I drove Lioba Chalamila, the TBCS Kwihara Branch Chairman together with (b) (g) (d) (e) and (j) down to the reserve, (c) (f) (k) (l) had come ahead in the TBCS lorry. On the 3rd of June, we entered Msiri Camp at the entrance to the reserve and were confronted by the men from Msiri, Katala and Nsontwa 2. They described their journey to the reserve, the TBCS lorry had brought them as far as Msiri but as it kept breaking down it would take them no further and now they were stuck with no transport for their drums or sacks of maize to their camps. Before leaving the TBCS, Lioba Chalamila had been led to believe by the TBCS Manager that another lorry would come down and therefore he counselled that they should walk to their camps and wait until Monday when their baggage could be carried by lorry. Lioba Chalamila proceeded to enquire about honey production that year; receiving a mixed response, Mishek Kasimba (kk) had already obtained the large quantity of one drum of honey from 13 beehives, but others had not been so lucky. We proceeded to Kwalungu (Igululu) and proceeded to start harvesting honey.

A week later, on the 10th of June, I drove Lioba Chalamila, (g) and (h) to Katala, picking up (oo) (hh) at Msiri. At Katala we encountered (s) (u) and (x) and Lioba Chalamila got out of the pickup while I then proceeded with (g) and (h) to carry a sack of maize to Nsontwa 2, picking up (m) and (n) as we returned to Katala where a meal had been made and a meeting was held. The issue of the water shortage was top of the agenda, and Lioba Chalamila collected information on how much honey people had cropped. He suggested that if the TBCS truck arrived (it still hadn't) they should fill the drums with water from the river and transport them up to Katala and Nsontwa 2. This prompted a general discussion on how long they should all stay in the reserve.

By the 17th of June Lioba Chalamila and beekeepers at Kwalungu (Igululu) had finished harvesting their hives and moved to Nsontwa 1. On the 23rd and 24th there was a movement of people and communication between Nsontwa 2 and Nsontwa 1 because people at the former camp were desperate to leave the reserve, due to the lack of water and food; being a TBCS representative Lioba Chalamila has to give written authorisation that a lorry should be sent to pick them up. This prompted a meeting to be called on the 26th at which Caini Yongolo (dd), Josephat Kisato (hh) and Jonah Kisato (uu) arrived from Nsontwa 2, and Kulwa Simoni (s) and Manyau Faraji (x) came from Katala (having been informed when they came to borrow food the day before), they later relayed the discussion to beekeepers at Msiri for whom it is too far to comfortably walk. Again a debate ensued about how and when to leave the reserve, and in the end each person contributed a 70/= share to pay for a person's fare to Usizya Village from Koga which could be reached through a day's walk. Other issues were also raised such as someone harvesting someone else's hives, and why I had not given James Ngoma (bb) a lift to the reserve. In the event Mishek Kasimba (kk) managed to travel with a fishmonger to Tabora town and, after further consultations between beekeepers at Nsontwa 1 and 2, eventually a TBCS lorry arrived on the 4th of July.

Box 5 is an account of the way beekeepers came together for TBCS purposes when in the forest. It is notable that Lioba Chalamila played a key role in relation to certain issues, such as

when to leave the reserve, and his decisions were made in interaction with established beekeepers from the other camps. The issues they were concerned with collectively related to a private grievance (made public due to the fact that James Ngoma was the ex-TBCS branch chairman and still had a following among men in this group), to the water shortage, transportation, theft of produce, and production targets. They were not concerned with the beekeeping that was taking place in each camp.

Plates 33 - 38 are pictures of a group of beekeepers from Nsontwa 2 Camp preparing to leave the forest on the TBCS lorry at the end of the season. In Plates 33 and 34 honey is being poured into drums in preparation for the journey to the TBCS purification plant, each persons produce being kept in a separate drum. Plates 35 to 38 show men loading honey onto the TBCS vehicle and hurriedly gathering their possessions together in order to leave on the lorry.

Plates 33 - 34: Pouring honey into containers to be transported to the TBCS

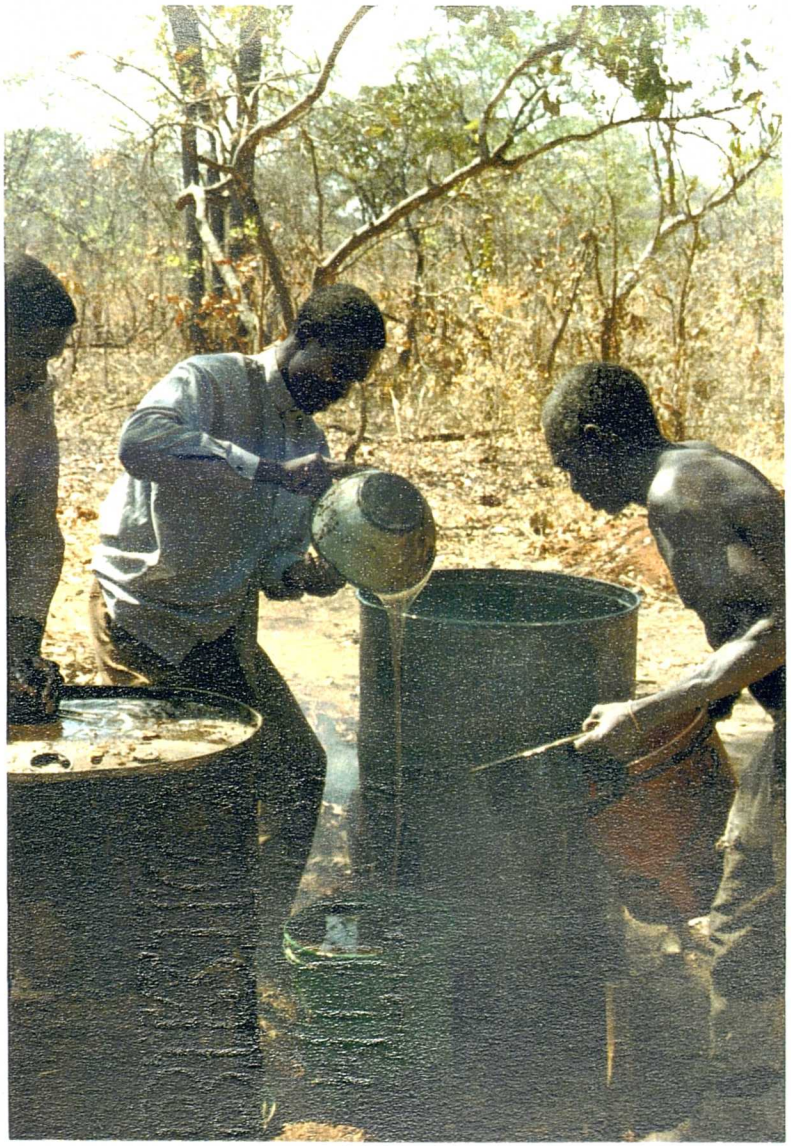
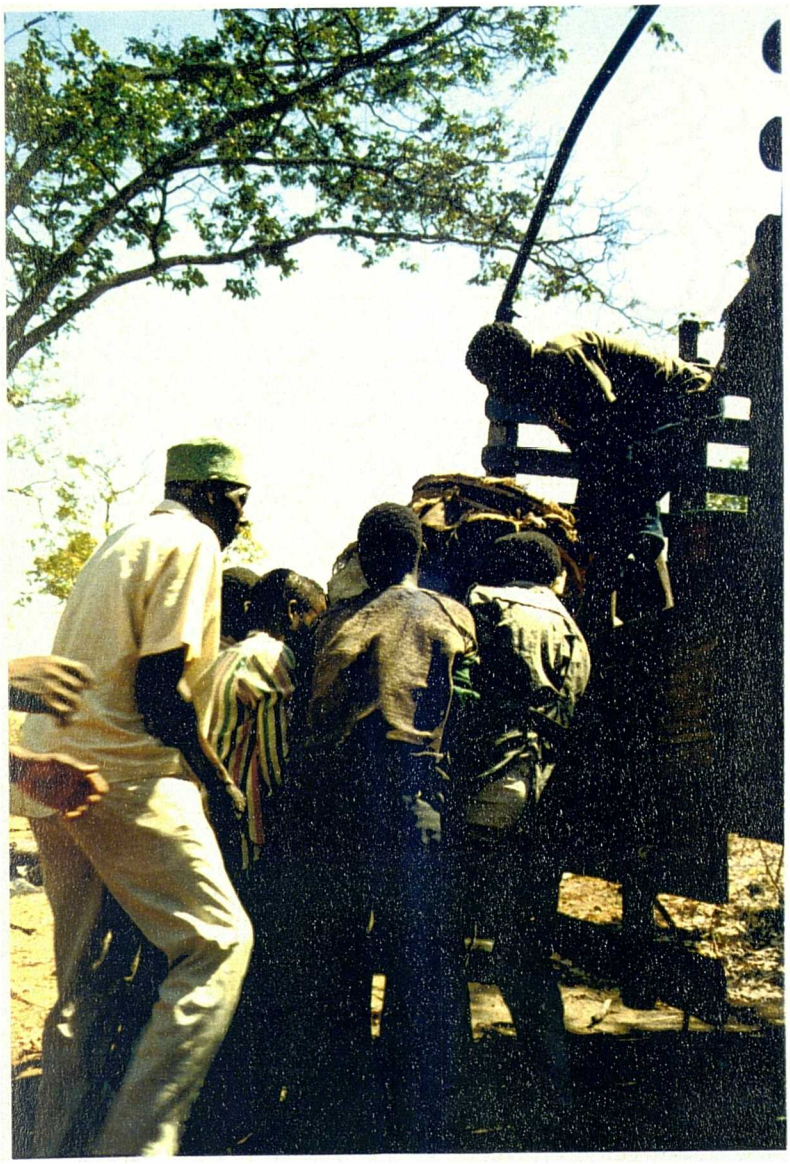


Plate 34



Plates 35 - 38: Men loading honey on to the TBCS lorry after the harvest

Plate 36

Plate 37

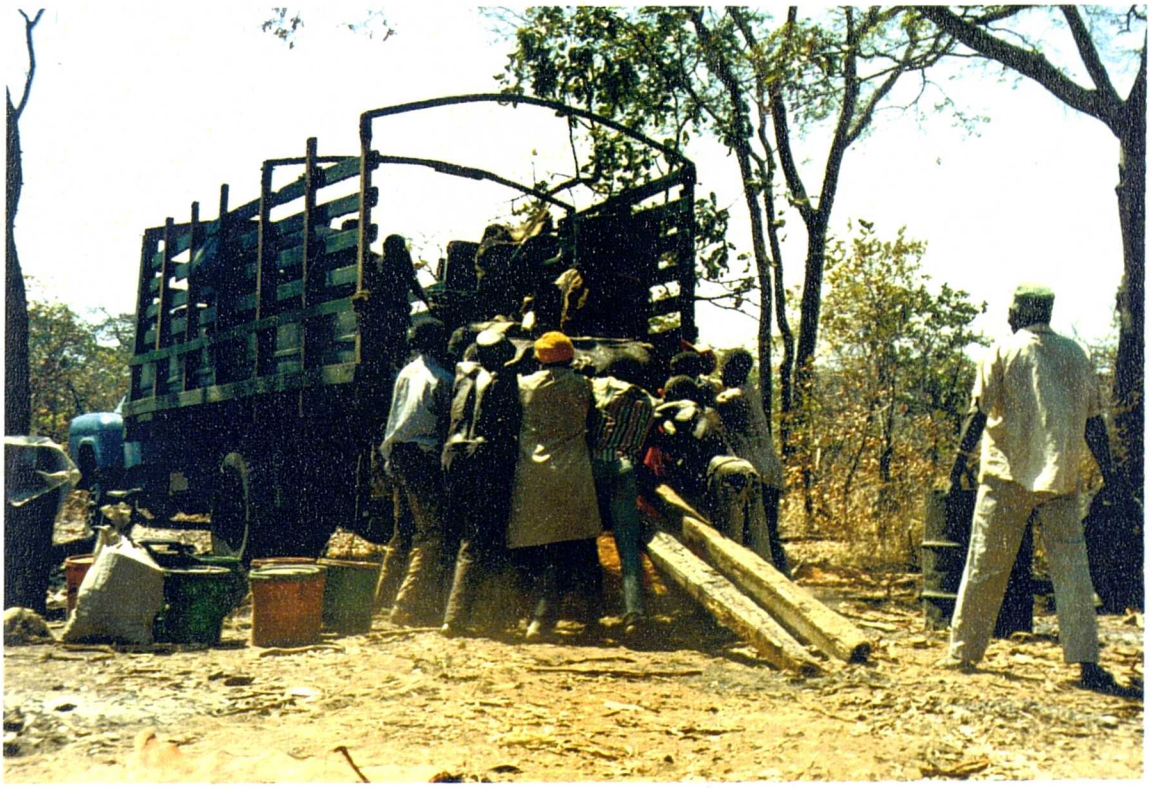


Plate 38

Box 6: Interactions to borrow food, tobacco, or medicine.

On the 24th of June Manyau Faraji (x) and Kulwa Simoni (s) walked to Nsontwa 1 in order to borrow a *debe* (bucket) of *unga* (maize meal) from someone at the camp, in the event Paul Herman lent them some which they gave back when they returned to Usizya. Two days later, on the 26th of June, Joseph and Jonah Kisato (hh) (uu) from Nsontwa 2 asked to borrow a *debe* of *unga* until they made the long walk to Msiri where they had further supplies, Lioba Chalamila lent it to them and on the 1st (jj) (ii) and (gg) walked through the camp on their way to Msiri, and, because I gave them a lift, they were later able to return the maize meal.

It is rarer for people to try to borrow medicine simply because few tablets are carried, but a bicycle or money will be sought if someone is very sick. More commonly, people will ask for tobacco, snuff or newspaper for use as cigarette paper - items many people cannot do without, for example Paul Herman walked to Katala because he required some tobacco.

The capacity of these beekeepers to borrow food or essential items from one another is considered extremely important. It was also common for other beekeepers to arrive in the camp and be offered food, hospitality and support that is highly valued in the tough conditions of the forest where people can get ill and start to go hungry. They argue that this can only take place because they know each other well and know who can be relied on. This support can be strongly contrasted with examples from Igululu Camp where Lioba Chalamila and his group of beekeepers stayed; throughout their time there they were extremely reticent about giving the fishermen any of the honey or maize flour if they were asked for it, saying the fishermen were scrounging off them. My later experience living with the fishermen in this camp (after the beekeepers had left) was that an individual could run out of food and be hungry but others were unlikely to support him. This was also reflected in eating habits, while the beekeepers cooked and ate together as a group, in the fishing camp fishermen and their helpers each cooked and ate their food separately.

Box 6 makes reference to the passage of people between camps to borrow food, tobacco or medicine. The ability these beekeepers have to lean on one another in this way is something that is valued highly, and reveals to us some of the obligations and dependencies which can arise in the forest. Comments made during the course of fieldwork revealed that this group of men felt they could depend on one another because they knew each other outside the forest, at the least a person couldn't run away from his obligations even when personal animosities arise. Also in many cases these men were associated to one another through ties of kinship and affinity, which again were seen as reasons that they could rely on one another. Even so, people would ask for food only when supplies had been exhausted within a camp, and when lent, the borrower would try to return it quickly, for example when a fishmonger arrived and fresh supplies could be acquired.

Box 7: The Passage of information, people and goods by vehicle

Few vehicles pass into the reserve and the ones that do are eagerly anticipated; breakdowns are common and the fishmongers will hardly appear in a bad year like 1993. Between the 4th of June and the 17th of July 1993 the vehicles were the TBCS lorry, my own pickup, Fishmonger lorries, and vehicles belonging to the tourist hunting company, and people in a timber lorry called at Msiri Camp to collect a supply of water. Notable through absence is the presence of the reserve management who did not appear during this period at all. The arrival of the TBCS and fishmongers lorries are anticipated with great expectation on the part of people at the camps, either so they can get transport, sell their produce, or, in the case of the fishmongers buy maize meal or new nets. As a lorry approaches people stop what they are doing and start to guess what type it is, on arrival, if it is the fishmonger lorry, people's permits will be checked by a game scout, and if it is the TBCS vehicle a rapid exchange of information will occur with the driver and passengers as to what is happening at the TBCS and at other camps, for the driver will have travelled to beekeeping camps across the region. In contrast to the localised interactions taking place in (i) - (iii) above, in the case of motor transport the beekeepers are brought into contact with news, goods and assistance from outside the area.

Box 7 concerns the passage of information, people and goods between camps within the reserve and villages and towns outside, this movement is of a slightly different order from those above. News, in particular travels rapidly through the reserve through a combination of being communicated by people on foot, bicycle and lorry.

Noticeable through absence are interactions between beekeepers and the reserve management, or even mention of them in the meetings held between the beekeepers. This was generally the case and reflected the fact that the Management were not active in the reserve (see Chapter 6), however two contexts where mention was made of the management were in relation to the closure of Kwalungu Camp and the need for a permit to be in a specific camp. Both these features on the part of the management serve to undermine the way that people form networks of support and move between different camps to keep bees or honey hunt in order to make their livelihoods.

In this section we have given brief illustrations of practices essential to life in the forest, in association with which forms of organisation are created between different men. These practices are an integral part of daily life in a camp, of productive activities, and of the forms of mutual support which men rely on in an otherwise demanding environment. By focusing on these practices, and the organisation which surrounds them, we start to gain an image of the networks which exist within and between camps.

In concluding we should dwell on how people manage sets of social relations to make their livelihoods, and consider how these relations create social networks with different morphological and interactional characteristics. If we place the beekeeping camp at the heart of this discussion, we can view it as a node of interaction, with each camp acting as locus which brings people who constitute parts of the same as well as different beekeeping networks together. (it must be remembered that walking between camps raises the likelihood of encounters with wild animals or intimidation by game scouts accompanying tourist sports-hunters).

We have separated beekeeper's relationships in the forest into two different domains, the first within a camp, in which the organisation of people is oriented towards daily activities, such as sleeping, cooking, eating, washing, etc., as well as for purposes of honey and wax production, and the second between camps, where people interact with one another to borrow food, medicine or tobacco, to air grievances; or to discuss matters such as the availability of transport and the shortage of water. Through a movement of people on foot, bicycle or lorry, news, information and opinions become circulated. It is notable though, at the same time, that people in different camps do not organise themselves together for purposes of honey production, or in relation to sales of produce, nor do they move between camps to visit one another sociably, as might take place in a village

The networks these interactions generate readily transform themselves, especially between different beekeeping seasons. In particular flexibility affecting the dynamics of camp membership arises from beekeepers' tending to hang their beehives in more than one location, as described in detail in Chapter 8 and Appendix 8. As an example, we can visualise a group of men who keep bees together in two areas, travelling together from one camp to the other to harvest their hives. However, attached to this group of men will be one or two individuals who have beehives at one camp and not the other, and instead hang their hives elsewhere, in effect also contributing to the membership of an entirely different group of beekeepers.

However, one can note that within Ugalla Game Reserve people in a number of camps form long-term relationships with one another, partly because they keep bees together, but, as importantly, because they reside in the same place and are formally organised within the same local branch of the TBCS. People within the five camps at the centre of this study are one such group, up-river and down-river were other camps which housed people with whom the beekeepers were not so familiar, and who they did not turn to for assistance. As a personal anecdote, having also spent time with men who keep bees in different areas of the reserve to the

five camps portrayed in this study (see Chapter 1, methodology), one feature I observed was that individuals would be intimately acquainted with others in neighbouring camps, but their knowledge and information became limited when discussing camps where the people were unrelated and lived in different home areas. This suggests that there are indeed different social networks among beekeepers, based on their work in the reserve, their membership of the TBCS, and the relationships they hold to one another and to others when outside of the area.

CONCLUSION

This chapter has tried to provide an insight into the way beekeepers are organised to exploit forest resources for the commercial production of honey and beeswax. It began by questioning how the practices of men keeping bees involve the management of different sets of social relations in order to make their livelihoods possible. In examining the composition of five seasonal camps, the discussion has highlighted how beekeepers' daily lives, productive activities and inter-personal relationships are an integral part of how they come together to act in the area on an individual and collective basis.

From the material presented in both this and the preceding chapters, we gain a very different perspective of social life than that derived from a view of 'community' groupings based on functional, territorial units or of social action compressed into certain narrow needs or drives which determine the inevitability of resource exploitation. Instead, we gain an impression of the complexity of the individual lives and the collectivities which have grown up around the use of natural resources for livelihood purposes, and of the subtlety of the meanings beekeepers bring to bear on their work.

The TBCS, the association of which most established beekeepers in the study location were members, is a marketing/service co-operative not directly involved in production. Despite this, men use their common membership of the Co-operative as a means to organise themselves in the forest. In addition, as the discussion has elaborated, linked to these co-operative ties there are other social relationships which are brought to bear on beekeeping activities. These activities include the production of honey and beeswax (harvesting, hive-making, honey straining, etc.), daily life within a camp (cooking, eating, sleeping, washing, collecting water and firewood, etc.), and the less regular interactions which take place between people in

different camps (for example to borrow food, medicine, tobacco, to settle disputes, and to discuss matters such as the availability of transport).

In the introduction, reference was made to Vincent's analysis of 'agrarian society as organised flow', in which she identifies three 'axes of movement' which take place within a given spatial area. Ugalla Game Reserve is a space which the state tries to structure through law, policy and management practice in order to protect wildlife. Within this space the beekeeping camp has been identified as an organisational arena of integral importance to the livelihoods of men keeping bees. In effect we have explored how the locality is constituted as a social environment through people's life experiences, knowledge and skills, connections to institutions such as the state and the market, and the social interactions inherent in honey and wax production. The way beekeepers establish relationships to the locality of Ugalla and make connections between different places leads us to argue that the forest should not be viewed in structural opposition to the village domain, rather seasonal beekeeping work exists together with village life as a continuum in the lives of those concerned.

Pursuing Vincent's first axis of movement within a space, people move in and out of the observed place and time; men go to Ugalla Game Reserve at the start of the beekeeping season (May, June), harvest their produce, carry out essential tasks (as described in Appendix 8), and remain until food supplies run short, people fall sick, and they succeed in getting the TBCS lorry to pick them and their produce up (July, August). Later in the year people return for the second honey harvest (October, November). Each of these movements is vested with a particular dynamic, shaped by the nature of the terrain, by the difficulties people encounter obtaining transport and the particular momentum imposed by movement on bicycle or on foot, by the habits of daily life and productive activities, by interactions between men in different camps, and by the information and stories which traverse the area by word of mouth.

In this sense we can view the beekeeping camp as a node of interaction, with each camp acting as a locus which brings people who constitute parts of the same as well as different beekeeping networks together - both inside and outside Ugalla Game Reserve. The networks these interactions generate readily transform themselves, especially between different beekeeping seasons. In particular, flexibility affecting the dynamics of camp membership arises from beekeepers' tending to hang their beehives in more than one location, as described in detail in Chapter 8 and Appendix 8. We can visualise a group of men who keep bees together in two

areas, travelling together from one camp to the other to harvest their hives. However, attached to this group of men will be one or two individuals who have beehives at one camp and not the other, and in addition hang hives elsewhere, in effect contributing also to the membership of an entirely different group of beekeepers and social networks.

Within Ugalla Game Reserve people within a number of camps form long-term relationships with one another, partly because they keep bees together, but as importantly, because they reside in the same place and are formally organised within the same local branch of the TBCS. People within the five camps at the centre of this study comprise one such group, up-river and down-river are other camps which housed people with whom the beekeepers are not so familiar, and whom they do not turn to for assistance. As a personal experience, having also spent time with men who keep bees in other areas of the reserve to that of the five camps portrayed in this study, I observed that individuals would be intimately acquainted with people in neighbouring camps, but their knowledge and information became limited when discussing camps where the people were unrelated and lived in different home areas. This is unsurprising, of course, but it does suggest an overall picture of different overlaying networks or relationships among beekeepers and others who use the reserve, based on their work in the area, their membership of the TBCS, and the relationships they hold to one another and to others when outside of the area.

A notable characteristic of the human composition of a beekeeping camp, is the manner in which certain individuals site their hives in the camp for many successive years - becoming 'established' beekeepers - while the presence of others is only impermanent. This characteristic creates at one and the same time a sense of continuity and a sense of transience, further compounded by the movement of different individuals to and from a camp within a given beekeeping season and year, and amounting to a particular 'organisational flow' in people's activities over time.

The second 'axis of movement' distinguished by Vincent, is that of people's links to the past. Earlier chapters of this thesis revealed how dry season camps in Ugalla Game Reserve have become established over several decades, indeed some since the human population was evacuated in the mid-1920s. Today men, such as Nyamwezi beekeepers and fishermen working in the area, make claims to Ugalla through the purported ethnic identity of being 'Galla', through 'tradition', and in personal terms through their own genealogies and kinship

relations. The attachment people hold to the past, and the way its significance is interwoven with the present underlines the fact that although beekeepers clearly go to the reserve for economic motives, its value cannot simply be captured by saying they need to exploit its natural resources. Instead meaning is given to Ugalla as a locality within the lives and family histories of different individuals, people's livelihoods being bound to these experiences.

This takes us to the manner in which history is linked to the future, for in this chapter we have discussed how the practice of 'inheritance', an eminently historical notion, acts as a way for beekeepers to encompass 'tradition', through their kinship relations and their sense of a skill being passed on within a particular clan. One implication of this history is that it gives beekeepers a means to try to exclude outsiders from the TBCS and from the use of the woodlands of Ugalla.

The last of the 'axis of movement' identified by Vincent, is the links people within the space have with others outside, in this case the ways in which the people who work in Ugalla Game Reserve are connected to others who are not present. Men keeping bees in the reserve rely on others for food provisioning, to obtain labour, to gain support in the TBCS, and to acquire a permit. More generally, their productive activities are closely bound to the livelihoods of those closest to them. The connections men have to people outside the area coexist with and inform their face to face interactions within a camp, extending spatially and temporally to the TBCS, people's households, villages, local markets, government offices, ultimately encompassing the distant networks of exchange involved in the international trade of honey and beeswax.

12

Conclusion

> "Now we see the tourists here, they kill the lions, they skin them really well, they preserve the skin really well and then afterwards they fill it and sew it really well, they do this because there are no lions where they come from, they have only heard lion, lion. Now if they send it there it will teach people 'look this is a lion' and if it stays without being damaged it will remain to give the true picture".

When carrying out ethnographic research in Ugalla Game Reserve, I tried to ascertain from local people what their notions of conservation were. Unsurprisingly, I could not elicit abstract conceptions and viewpoints; rather, people framed their opinions around local situations, characters and events. The above quotation is but one example of the manner in which connections are made between what people see taking place in the reserve and their understanding of wildlife conservation and its meaning in the wider world. In this description we have a representation of game preservation *par excellence*; the lion being hunted, killed, skinned and stuffed, and transported abroad to be preserved for white people to gain the 'true picture' about the nature of wild animals.

Local people typically refer to wildlife conservation, government officers, and regulations using colloquialisms of the colonial term 'game', *game* or *magame*, variously referring to animals, the wildlife office, officials and regulations, *bwana game*, the game officer, and *shamba la bibi*, the Queen's game reserve, in preference to Kiswahili alternatives. Their notions of conservation tend to relate to accounts of when Ugalla became a protected area (1954) and its status upgraded to a game reserve (1965) causing game wardens to start to restrict people's activities, to their experiences of different permit systems and regulations; also, to animals in the area and the importance people once gave to hunting, to the exploits of tourist hunters and, finally, to the many stories and rumours concerning the way in which known government officials profit from illegal timber cutting, hunting or the issue of hunting licenses and beekeeping and fishing permits.

Such representations suggest that local conceptions of conservation arise from the way that people - predominantly adult men - deal with tourists and bureaucrats and are dealt with by

them, from rationalisations of the experience of needing a permit and from how animals are valued over and above local productive activities. In particular, deep-rooted associations exist in their minds between wildlife conservation and the colonial era, as well as to law enforcement by representatives of the post-Independence state. Also, wildlife conservation is clearly equated with sports-hunting by white people and the existence of harsh restrictions on local hunting. In other words, by means of such associations, people are in reality expressing their ideas about the history of wildlife conservation in the locality and their relationships to the state, about the character of their livelihoods, and the way they are 'positioned' in relation to regulations and administrative actions.

As a researcher, when carrying out interviews and collating data, I had to grapple with a conceptual divide that opened between my own understanding of African conservation issues, gained from several years of academic study, and perspectives that emerged from the way those 'on the ground' in Ugalla Game Reserve, the local people, expressed what wildlife conservation means to them. The vast disparities between abstract ideas on conservation and the perspectives of local people, revealed in such an immediate way, need to be realised as an issue if we are to appreciate fully how meaning, value and relevance is attributed to wildlife conservation in Tanzania (and elsewhere, for that matter).

The Research Focus

This thesis has focused on wildlife conservation and people's livelihoods in Tanzania by taking the case of a protected area, Ugalla Game Reserve, in the west of the country. The implications that wildlife management within this protected area hold for local people have been explored by examining the beekeeping and fishing activities that take place in the reserve. This research developed in response to issues raised by recent approaches to wildlife conservation in East Africa which stress the importance of making wildlife and protected areas relevant to the lives of rural people, linking development initiatives to the protection of biodiversity so as to provide local people with socio-economic benefits which will enable them to uphold conservation-related objectives. In Tanzania such approaches are commonly referred to as 'community-based conservation'.

Ugalla Game Reserve is an interesting place to make a study of interrelationships between wildlife conservation, local resource use, and people's livelihoods for a number of reasons: first, according to Tanzanian law it is classified as a 'game reserve' and not a national park, and, therefore, some forms of resource utilisation are permitted within the area. Second, two forms of legitimate 'local resource use', which make significant contributions to the regional economy are institutionalised in the area, beekeeping and fishing. Third, no donor-led project to encourage participatory conservation has taken place in the region; it therefore provides an interesting example for analysing how wildlife conservation and local resource use have become historically entwined, and also for understanding the role the Tanzanian state plays in relation to these local activities. Fourth and lastly, this case is additionally interesting because comparatively few studies have been carried out on wildlife conservation in relation to the people of the miombo woodland areas of southern and western Tanzania.

We should be clear that, although permitted, the beekeeping and fishing activities which take place in Ugalla Game Reserve are not actually legal. This exposes just one of the many quirks of Tanzanian law, policy, and management practice as they pertain to the wildlife sector. As a protected area, Ugalla is categorised as a 'game reserve' in Tanzanian law, and there are restrictions on the number and type of people who can enter the area and the sort of activities they can undertake. No settlement or livestock are permitted, although 'consumptive utilisation' of resources, in the form of tourist sports-hunting is allowed under license, as is 'non-consumptive utilisation' in the form of game-viewing tourism (although very little takes place). Unless special provisions are made by the Director of Wildlife, beekeeping and fishing are prohibited within a game reserve; as no exceptions have been made for Ugalla Game Reserve, they are technically illegal. However, the Wildlife Department recognises that both activities are entrenched in the livelihood practices of the area and therefore the Director deems them legitimate as long as people obtain a permit and abide by the regulations (PAWM, 1994b).

Local People and Wildlife Management in Tanzania

The starting point for this thesis was an impression received when living in Zambia through the 1980s and later while carrying out research on conservation issues in 1990-1. This impression emerged from what appeared to be a vast disparity between the apparently radical nature of the

concepts used in policy and planning documents and the manner that wildlife management and resource exploitation are actually being carried out in different African countries. This made me aware of the need for studies which explore how different groups of people 'relate' to a given protected area and the wildlife management being effected therein, including how they interact with key social actors such as representatives of the state and of the donor community.

Recent ideas that have entered into the field of African wildlife management can be identified by their different labels and catch-phrases: 'living resource conservation' (IUCN, UNEP, WWF, 1980), 'the role of protected areas in sustaining society' (McNeely & Millar, 1984), 'conservation from below' (McNeely & Pitt, 1985) 'sustainable development' (WCED, 1987), 'equitable distribution of costs and benefits' (Lewis et al., 1990), 'a strategy for sustainable living' (IUCN, UNEP, WWF, 1991), 'participation' (Little, 1994), 'community-based conservation' (Western & Wright, 1994a), 'adaptive management' (Wells, 1996), 'collaborative management' (Borrini-Feyerabend, 1996). Much of this coinage has been linked to initiatives challenging conventional approaches to wildlife management within different kinds of protected area, and emphasises that the institution of the state in itself cannot implement conservation programmes effectively.

The present study is related to social science approaches to issues raised by protected area conservation in sub-Saharan Africa, such as Yeager & Millar (1986), Matzke, (1975) Richards (1994, 1996 a/b), Leach, (1994), Fairhead & Leach (1994), Abel & Blaikie, (1986), Marks (1976, 1984), Gibson (1995), Neumann (1992), Moore (1993), Homewood & Rodgers (1991), Århem (1984, 1985). In particular I have critically distanced the study from neo-Malthusian arguments which tend to frame 'the crisis in African wildlife management' in terms of simplistic, linear relationships between a human population, on the one hand, and resource availability, on the other. In that perspective, human social action tends to be reduced to abstract 'mechanisms' or 'pressures', or descriptions of physical phenomena and instrumental rationales. Thus rates of biodiversity loss and demand for natural resources increase alongside a rising human population, with doomsday scenarios linking the pressure of population growth and the poverty trap to the inevitability of the over-exploitation of wildlife resources. In keeping with the concept of sustainable development put forward in the Brundtland Report, only factors such as the increased application of technology are held to be capable of modifying this situation (WCED, 1987).

Typically, this approach conjures up an image of the protected area as a vacant-lot of 'natural resources' surrounded by a poverty-stricken population exerting active pressure on the boundary through resource-use for subsistence needs or entrepreneurial activities. It follows that a protected area's boundary is thus perceived as a clear-cut feature of the landscape, a judicial-administrative delineation marking the place where the need for comprehensive state control begins. When the concept of 'community' is tacked on to this approach, in the stereotypical view, such a community is conceived as being a homogeneous, territorial, group of people who play a functional, regulatory, role in the control of resource use for the common good. With education and suitable incentive schemes, it is envisaged, people would perceive the 'benefits' that conservation holds for them.

In contrast to the above perspective, this present study tries to stress the centrality of human agency, emphasising people's capacity to be aware and to discriminate when using resources. In this respect, the concept of livelihood has emerged as significant in prompting understanding of the nature and dynamics of local resource exploitation in the context of land use devoted to wildlife management, encouraging a full appreciation of how people use, affect and give meaning to their environment.

In preference to questioning to what extent established conservation ideologies, policies, programmes and practices have contributed to creating the 'crisis' facing African wildlife management in protected areas, the general tenor of recent conservation actions has been to search for crisis-stemming solutions, such as 'community-based conservation'. In the Tanzanian case, we have observed that representatives of government departments and of conservation agencies have readily adopted a language appropriate to community-based conservation. However, it is striking that this language - and the foreign aid, planning units and conservation projects to which it is aligned - is associated with ideas that have not necessarily been part of a broader change in the everyday practices of bureaucrats charged with managing protected areas or with overseeing the Tanzanian wildlife estate. The use of such language, unaccompanied by real transformation, has the danger of concealing, even legitimising, practices which serve very different ends to the interests of rural African people whose well-being they are supposed to enhance, or to the goal of preserving biodiversity.

The way that diverse interests may merely be reproduced by new conservation programmes rather than generating radical change, implies that the concept of 'community' at the heart of community-based conservation is likely to remain abstract, regulatory and functionalist (in the anthropological sense of the term). This is especially the case if attention focuses solely on the local level without critical reflection on the broader framework of planning for wildlife management in protected areas. This concept is part of an approach that advocates government decentralisation, devolution to local communities of control over certain wildlife resources (i.e. resources held on communal land), and local participation. A lack of critical assessment, certainly in the public domain, appears to have generated - or further entrenched - a vast disparity between the rhetorical framing of new conservation initiatives, at the regional, national and international levels, and long-established institutions, regulations, and policy implementation practices.

Such policy formulations do not consider how the Tanzanian bureaucracy operates, how restrictions on the state's finances may constrain initiatives, how the state and private sectors are integrated, the lack of capacity for essential research, and the impossibility of integrating local people's needs into national policies - to name but a few limitations. In this context, 'community-based conservation' has the danger of being purely a rhetoric which proliferates in the interactions between state representatives, white experts, university researchers, and the personnel of non-government organisations, amongst others. *Quite paradoxically, as a* specialist language dissociated from the realities of conservation practices, community-based conservation initiatives may run counter to local people's actual knowledge and livelihood practices.

A real challenge to established approaches to wildlife conservation in Africa could have been made by putting forward the view that the modern-day processes of conservation themselves need to be examined, for rural Africans, so-called 'local people', are not solely responsible for the exploitation and degradation of natural resources. Conservation practices adopted in colonial times have been placed under academic scrutiny leading to commentaries that have infiltrated the more policy-oriented and practical spheres of modern conservation planning. It is far rarer, however, to hear or read critical reflections concerning wildlife management practices, institutions and techniques in the post-colonial era, some of which have been perpetuated since colonial times. Nor is the spotlight of criticism readily turned on local bureaucrats and the

operation of government bureaucracies, or on the international agencies and the many experts involved in conservation planning. In addition, importantly there is a lack of critical scrutiny of the centrality accorded the natural sciences in conservation planning. One implication of this is that the 'human dimension' is all too often 'tacked on' to a biological framework of understanding, leading to the promulgation of functionalist, behaviouristic and naïve notions of 'community', 'local people' and 'participation'.

The Social Construction of Conservation

It has been suggested that throughout the history of conservation in Africa, a fundamental issue has been how to locate humankind in relation to wildlife and natural areas. The tensions this generates emerge in conservation ideologies, policy and planning, and management practices. From this perspective, 'community-based conservation' is one manifestation of a long legacy of trying to find solutions minimising destructive human interactions with the 'nature' that environmental managers seek to protect.

The apparent discrepancy between ideas associated with the concept of community-based conservation, and what is taking place 'on the ground' led to the suggestion that we need to deconstruct (i.e. as a conceptual approach, in order to see things more clearly) the different elements which contribute to the makeup of conservation schemes, policies, ideas and management practices in contemporary Tanzania, namely, the institutions which compose the international community, the state, the market, natural science, and a western romanticism which manifests itself in the preservation of 'natural' landscapes and delight in viewing wild animals or hunting them for sport.

If we refer to each of these elements in turn: The international community has been central in framing the parameters of an environmental agenda and in the support of policy and planning initiatives. The state is the main institution which, historically, has held control over wildlife, the management of natural resources being entrenched within the scope of the field in which the Tanzanian bureaucracy operates. Economic rationales underlying recent approaches to conservation utilise the language of the market and have come to dictate how wildlife and protected areas are viewed and valued by policy-makers and planners in Tanzania. The natural sciences provide a knowledge base through which conservation imperatives are formulated,

policy directed, and intervention into people's lives and environments legitimised. Lastly, a western romanticism rooted in the nineteenth century but deliberately inflated and promoted in an era of mass tourism and global media, serves to give a certain value to African 'nature'. These elements come together within a particular configuration of management techniques, bureaucratic practices, values, meanings and operational knowledge. Each of these features serves to frame Tanzania's wildlife estate in terms of property ownership, use rights, management, and wildlife exploitation particular to the country. This state of affairs has developed historically (from the end of the nineteenth century) and continues to be recreated through the input of ideas such as those related to community-based conservation initiatives.

Specialist ways of operating in the conservation sphere are predicated on drawing science (research methodologies, data-collection, knowledge, expert opinions etc.), technology (computer hardware and software, survey equipment, four wheel drive vehicles, etc.), skills (new management techniques, advanced data processing methods, etc.), and financial resources into the country. Typically, this is accompanied by the use of standardised planning techniques (from report formats to field trips and workshops), to be implemented by expatriate staff working alongside Tanzanian counterparts within the civil service. Of these Tanzanian staff, it is hoped that through a process of induction and learning they will absorb ideas and practices appropriate to public office in the wildlife sector. These imported tools of organisation are directed towards improving the efficiency of regional and national institutions, with the goal of accomplishing a *more appropriate means of conserving biodiversity.*

As part of the process of donor aid and support to the wildlife sector in Tanzania a large number of reports, plans, reviews and policy documents are produced. If we take these policy and planning documents as a starting point for understanding wildlife conservation they tells us little of what wildlife conservation really is in the Tanzanian context, being based on indicators of what conservation should be. Furthermore, any deviation from planning models and of management techniques is typically interpreted as constituting the 'failure' of specific policies, programmes or projects, rather than a cause for bringing the assumptions underpinning planning models under scrutiny.

The presence of 'imported' methods of organisation, planning models and management techniques draws our attention to the importance of understanding what wildlife conservation

actually is, and to an examination of how policy is really implemented. The fact that Tanzania constitutes a context where wildlife have been managed in protected areas for at least 100 years suggests that forms of 'local conservation' will have grown up, given shape by the relationships and interactions between Tanzanian civil servants, expatriate experts, local entrepreneurs, and people living in rural areas, amongst others. To understand this 'local conservation' we have tried to observe what is actually taking place, rather than placing an emphasis on the 'failures' raised by comparison between ideal models and complex, unwieldy, and changing reality.

Enclosure of the Region Surrounding the Ugalla River

Focusing on the example of Ugalla Game Reserve, a historical perspective provided us with a basis on which to understand the many social processes that have generated the composition of all that is seemingly 'natural' in the locality, namely, the landscape of its woodland, marshes and rivers devoid of human settlement. The history also helped us to trace how contemporary relationships between different groups of people and institutions like the state have developed, and how they interact to generate the social complexity which exists today in the area. Furthermore, local people weave elements of history into the present, using the epic of colonisation as a point of reference to substantiate claims over their 'traditional' rights to live and work in Ugalla (see for instance Appendix 5).

To unravel the connections between history and conservation, this study has traced how the first European explorers passed through Ugalla from the mid-nineteenth century, carrying with them a thirst for discovery and a need to depict 'reality' in their diaries and reports of epic journeys into darkest Africa. In the process, Ugalla emerged as a romanticised location, a 'hunters paradise' and 'noble expanse of park-land', a place of 'the other' defined from the vantage point of the cities, country estates, Victorian society circles and scientific communities from whence the explorers came and the culture of exploration emanated. Through the process of exploration, Ugalla became mapped according to western and scientific knowledge, values and actions.

These first sketches and folkloric descriptions enticed missionaries, settlers, entrepreneurs and colonisers to the area. The actions of different individuals and communities eventually served to generate a 'reality' where western forms of land-use, religion, economic enterprise, territorial

conquest and administration became the means of incorporating Ugalla into a general and universal process of modernisation. The creation of maps contributed to and reflected the political conquest of the region that occurred in the Nineteenth and early Twentieth centuries, whereby the territorial boundaries of the German Empire, in this case, were extended. The importance of understanding these processes for the analysis of wildlife conservation in the region a century later in that they served to establish layers of practices, information gathering, knowledge and techniques of external intervention which have underpinned more recent interference in the area.

Considerable attention has been devoted in this study to describing the epidemic of human sleeping sickness which passed through Ugalla, and the subsequent British colonial policy of human population resettlement (1925-7). The resettlement programme is of crucial importance to the analysis because it acted as a critical event which dislocated existing local institutions and practices. Resettlement within sleeping sickness concentrations gave the British colonial authorities a leverage through which to control people from the region - as a labour force for example - and enabled older institutions and practices to be substituted for by world religions, formal education, and modern health care. However, there were counter-tendencies to this process, a subtle part of which was the way that people, particularly working men, re-entered Ugalla, trying with some degree of autonomy, to reposition themselves in order to lead a style of life conducive to their own desires and needs.

Public health measures and policies of environmental control, such as tsetse-fly eradication programmes, served to transform the landscape of the region. The relationships between people, animals and the natural environment were changed in ways intended to contribute towards progress. Through the insertion of new elements - medical knowledge, technologies such as microscopy, and standardised bureaucratic practices - old elements such as tsetse flies, people, animals and forest could be rearranged in ways that opened up the field for the conservation of wildlife. The natural environment, including wild animals, developed into an important arena for control and management, and as such became the target of scientific investigation in order to eradicate human and cattle trypanosomiasis, as the objects of sports-hunters desires, and as a nature-to-be-preserved. Because of the critical event of sleeping sickness resettlement, and because of British colonial policies to develop the region, wildlife became an object of particular attention separated from local culture and people, and the focus

of new and powerful knowledge, namely that of bureaucrats and experts. This knowledge had its point of origin in the western industrialised world of the colonisers rather than in the world of those African people living in the colonised territory.

Certain concepts have been used in this thesis as a means to aid understanding of social processes that have taken place in the Ugalla region. One of these concepts is that of 'repositioning', which, as used here, refers to the manner in which people have been able to assemble or reassemble different techniques of production, reinterpret policy demands from the state and international agencies, learn new strategies to enable them to develop produce markets or mount resistance to political bodies attempting to deny them access to Ugalla Game Reserve. Repositioning cannot simply be allocated to the level of individual agency, for it is the outcome of interaction between people and institutions like the Tanzanian State and conservation organisations.

The presence of epidemic levels of sleeping sickness in the 1920s prompted the British colonial authorities to resettle the entire human population from the Ugalla River. The evacuation was compulsory and carried out by force. For many people it was undesired, and the dramatic changes it wrought in their lives acted as a 'critical event' in serving to reposition them in relation to the area. This process placed people in circumstances outside their control; but at one and the same time it opened up the possibility for people to generate new practices, institutions and meanings through which to maintain their ties to Ugalla and make a livelihood in the area.

It can be argued that the concept of 'repositioning' has roots in anthropological work carried out in Africa since the 1950s. Although they have different theoretical implications, studies of the so-called Manchester School deal with the modernisation of traditions, identifying change in behaviour and the way people give meaning to dramatic transformation wrought in their lives by contact with Europeans and occurrences such as labour migration (Mitchell, 1956; Gluckman, 1968). The idea also emerges in the work of Comaroff and Comaroff (1987, 1992), White (1993 a/b), and Ranger (1969, 1975). The concept of 'positioning' itself has been used by Haraway, who has analysed the significance of situated knowledge in contemporary science (1988) and studied the sociology of primate research in Africa (1989). This notion is of contemporary importance in that it contributes to debates on 'de-traditionalization' (Heelas et

al., 1996) and the counter-tendencies of modernity (Comaroff & Comaroff, 1993; Arce & Long, forthcoming 1998).

Use of the concept of repositioning in relation to wildlife conservation in East Africa, could contribute to our understanding of a widespread process in which rural people attempt to (re-) populate or use protected areas. In doing so they redefine their relationships to these areas and are themselves redefined by others. In some cases attachment can take the form of making claims to their rights to use a protected area, or presenting themselves as the guardians of its resources, or being located as illegal agents who seek to plunder those resources. In all these manifestations we find use of the idiom of tradition and the idiom of progress entering into the local debates on wildlife conservation. To understand the process of repositioning becomes important as a device to represent human action in the socially contested reality of, in this example, the protected area.

In the case of Ugalla Game Reserve, a feature central to the process of repositioning has been the exclusion of people and subsequent enclosure of land, first according to public health quarantine measures (after 1927), and then under a successive series of legislative measures which led to the emergence of a game reserve and to the protection of wildlife on its land. This legislation identifies people according to a classification of their economic activities, distinguishing between which activities are permissible and which are to be excluded from the area. In this study we have traced how the categories of 'beekeeper' and 'fisherman' have emerged as accepted forms of 'resource users' in Ugalla Game Reserve, and how the occupations of 'hunter', 'honey hunter', and 'timber cutter' have become defined as illegal in practice there.

Beekeeping and fishing are both economic activities that have been pursued along the Ugalla River throughout the century, although they have undergone substantial transformation in the way they are carried out and the position they occupy in people's lives. Today they provide a significant contribution to many people's livelihoods. An important aspect of this thesis has been to highlight how beekeepers and fishermen are given legitimacy by the Wildlife Department, despite being illegal, and how their presence in the area is necessarily entwined with wildlife conservation.

Another concept of value in assisting the analysis of historical material presented in this thesis has been that of visibility - invisibility (c.f. Turner, 1967; Boserup, 1970; Foucault, 1979; Haraway, 1988; Escobar, 1995). The interactional relationship suggested by the notions of 'visibility' and of 'invisibility', emerged as useful in the attempt to understand the role that science and the establishment of the colonial administration played in the control of apparently natural spaces, through trying to 'order' the relationships between people and environmental elements. In the process, rural people were categorised and respectively rendered 'visible' or 'invisible' according to the manner in which they slotted into administrative pigeon-holes. For example, as both the German and British colonial administrations extended territorial control over the area, the human population was enumerated and people were categorised as 'tax payers', 'sleeping sickness cases', 'natives bearing arms', etc., according to colonial intentions, and to substantiate and quantify the need to make radical changes in the way people lived. Later, after the human population had been evacuated from Ugalla, people re-emerged, becoming 'visible', and ordered into economic categories. At one and the same time, other categories - like farmers, children, and women - were, through non-definition or lack of non-economic categories, rendered invisible.

The interaction between ascribed visibility and invisibility has allowed us to examine in this study how different categories of resource users became manifested in the 'social space' of Ugalla Game Reserve. Classifying people in this way has provided scientific and administrative experts with a powerful tool with which to understand 'reality', identify problems, organise intervention and reposition local people. In effect, the concept is associated with the way people have been categorised and represented through the legitimisation of certain types of activity, but not others. This constitutes part of the local history of the conservation process in Ugalla, but at one and the same time it represents the pressure by local people to build their own livelihood. The way the concept of visibility - invisibility has highlighted features both of the conservation process and of people's attempts to make a livelihood in Ugalla should be emphasised, for there has never been a time in which all forms of local resource use have been clearly banned. This brings about a local complexity obscured in many rhetorical statements on the wrongs of 'conventional' wildlife management in colonial Tanganyika. Although the history of national park conservation in Tanzania may have excluded local people from the conservation process, we should not forget that in other categories of protected area (game reserve, partial game reserve, game controlled area, forest reserve, etc.)

this process has never been black and white, either in law or in the practices of local administrators.

The history of wildlife conservation in the region of Ugalla has been such that different claims to the area and its resources have emerged in association with various interest groups. In this respect, this study provides an interesting case of how local resource users draw on different perspectives of the history of the region in order to gain or maintain access to its resources in a manner conducive to the way they themselves wish to live and work in the reserve.

Interest Groups, their Claims to Resources, and the Management of Ugalla Game Reserve

Analysis of contemporary conservation issues raises the question of how a researcher can examine the complex reality which he or she is confronted with. One way of doing this is to identify 'windows' to enable one to view processes taking place in a context such as Ugalla Game Reserve. Here I opted, first, to describe the interest groups associated with the area, second, to explore how a representative of the state implements conservation policy, and third, to examine how certain interest groups are able to assemble claims over their rights to resources in the reserve.

By elaborating on the interest groups associated with Ugalla Game Reserve, we set the scene to try to understand the multiple and often competing interests which the Wildlife Department has to encompass within any management programme it initiates in the area. Description of each interest group and their styles of operating provides an insight into the complexity and social diversity which exists in association with the exploitation of the Reserve's land and natural resources. The social 'reality' present in a protected area is all too often simplified in analyses of the problems confronting wildlife managers. In particular this is the case when prime importance is given to a profile of the vegetation types constituting wildlife habitats, prioritising the conservation value of different species of fauna and flora, and positioning them within a living ecological system in a way that is used to evaluate the relative worth of a protected area within a national system. Such profiles are typically accompanied by an outline of the human resource use which may be affecting a region or species.

In the case of Ugalla Game Reserve, analysis of the way different interest groups are associated with the area enables us to link a notion of 'social space' to a physical assessment of resources. Without a comprehension of a protected area as a social environment it is hard to understand the enduring attraction a particular area holds for different individuals and groups over and above locations where the same natural resources may be available. Furthermore, although in principle the Tanzanian state owns and manages the resources held in Ugalla Game Reserve (animals, land, trees, water, bees and fish), the complex history of resource use means that different interest groups recognise conflicting and overlapping forms of property ownership and land tenure. To simply state the legal situation as pertains to rights in the reserve would be to ignore the complex rights which are locally identified as valid, whose existence readily serves to undermine management actions if not taken into account.

We can illustrate this with the example of beekeeping. Beekeepers are only formally allowed to use Ugalla Game Reserve if they obtain permission from the state, and if they abide by its regulations. However, it is locally accepted that 'unused' forest, such as that which the state wishes to preserve, is not 'property' (of the state or of individuals). By keeping bees in an area (a camp), a group of people gain the right to that area; this is recognised by other beekeepers and those with whom they interact on a seasonal basis, such as the fishermen. Around a beekeeping camp are beehives which are individual private property, and each is located in a tree which the person has the exclusive right to use so long as he or she continues to hang a beehive in it. There is a long-term dimension to this: for beekeepers, property and use-rights are inherited between generations, meaning the area becomes bound up with a beekeeper's family history and is given meaning which extends beyond an instrumental conception or legal statement of property or rights.

If the Project Manager of Ugalla Game Reserve closes a beekeeping camp, especially if this is without prior warning or negotiation, as occurred between 1991 and 1994, his action upsets people, creating turmoil and directly challenging local rights to the area and its resources. Such a challenge denies recognition of local people's attachment to the reserve and their sense of belonging. In the short-term the Management, supported by national law and the reserve regulations, has the upper-hand, but in the longer term, given a lack of funds on the part of the Wildlife Department, a lack of bureaucratic incentive to take action or, possibly, the

beekeepers' ability to negotiate their position, the group of beekeepers may well re-establish the rights they have continued to claim.

The study of how policies are implemented by a local bureaucrat, the Project Manager of Ugalla Game Reserve, provides an insight into the character of the state as regards environmental planning. In this area the Tanzanian state is weak, a situation which manifests itself in administrative incrementalism, making co-ordination between departments difficult and policies appear contradictory and confused. Given this institutional context, the practices of a local bureaucrat cannot be elucidated solely through explanation of the economic or political structures within which he is situated. Instead one has to be aware of an exercise of 'discretion' which arises on the part of the bureaucrat from their interaction between different interest groups and local representatives of the state (Arce et al., 1994). Two important concepts emerge in this analysis: authority and power.

By focusing on policy implementation, one can identify a particular style of governance in relation to the management of wildlife in Ugalla Game Reserve. It has to be said that the activity of regulating resource exploitation and preserving wildlife in the reserve is undermined by the limited and poor distribution of financial resources, by difficulties in communication and transportation confronting local officials, and by lack of clarity in the administrative responsibility accorded different departments in the natural resources sector. However, one cannot look at these factors and equate them as leading to a singular lack of administration, or incapacity to regulate resource exploitation, because some effective administrative and managerial activities do take place.

In light of this study, the question these factors raise is what type of governance takes place when the above-mentioned constraints are present. It has been argued that a form of administration is generated which has been characterised as 'personalistic; and which has to be understood in the context of the policy and planning processes that exist in Tanzania. This 'personalistic' style of management is extremely flexible, and readily capable of adopting a technocratic language emanating from international agencies and expert environmental planning missions. In the case of the Management of Ugalla Game Reserve, it has been argued that local officials readily adopt the latest planning language, something which is done to reinforce their interests and carry out very practical actions at the local level, and through such actions a local

official such as the individual represented in the text, embodies what constitutes the state for these local people. However, even though 'the state' may be present in this manner and at least to a limited extent, it doesn't mean that resources are really conserved or the goals of environmental planning pursued.

In this study we have presented an example in which the entry of individuals and groups to Ugalla Game Reserve and their access to specific resources was based on discretion exercised by the Project Manager in his interpretation of the Ugalla Game Reserve Management Plan and Tanzanian Wildlife law (the Wildlife Conservation Act of 1974). The research data points to the interpretation that institutional procedures and social practices adopted by bureaucrats when implementing conservation policies are more influential than many of those practices considered rational according to established theoretical models of policy implementation. Additionally, these models suggest that policy will be implemented in a linear fashion, which may seldom be the case.

We would do well to remember how a local bureaucrat acts and carries into practice policies formulated for wildlife management. External commentators appear all too readily to forget that African bureaucrats working at the local level act as the linchpin for wildlife management, certainly in Tanzania. In this study, the notion has been advanced that we have to look at how government officials involved in managing protected areas operate on a daily basis and how these officials build up for themselves a sphere of operation which is very 'personalistic'. We have suggested that the discretion of the bureaucrat is a central property in how civil servants exercise the protocol of public office, while achieving a degree of satisfaction of their own private interests. This characterisation of a Tanzanian civil servant in the Wildlife Sector is part of a more complicated reality in which different interest groups pay attention to the office of the civil servant and respect existing regulations in other areas of their working and personal lives. For example, one can reiterate questions asked in Chapter 6, as to why many beekeepers and fishermen bother to obtain a permit to work in Ugalla Game Reserve (or at least in the situation prevailing during the period of this fieldwork) and why when they see a car they believe to be the Project Manager's, do they run away? All these elements are not normally placed in view in the policy and planning stages of wildlife management, but in view of their ultimate effect or success, is why the fortuitous happenings associated with the implementation of management

issues that take place at the level of policy implementation are so important to our understanding of existing conservation practices in Tanzania, as elsewhere in Africa.

Two assumptions typically underpin planning approaches to the human dimensions of wildlife management in sub-Saharan Africa: the first is that people have needs which, unless regulated, cause them to utilise the maximum amount of resources in the shortest possible period of time, and the second is that these resources are embedded in a fixed natural resource base). The solutions sought to the problems posed by this situation are various, particularly as more flexible alternatives to the national park model (designed to keep wildlife in and people out) are being put forward; but, even so, the protected area concept is still located at the heart of current approaches to wildlife management in Tanzania. In this view, protected areas act as a critical means to give nature (fauna, flora, ecosystems) a chance to maintain and regenerate itself.

A further element integral to wildlife management within Tanzanian protected areas is that of the state being the regulator of local resource utilisation, accepting advice and assistance from the international donor community. This kind of management is a form of 'external intervention', with its 'externality' being composed comprised of scientific and technical knowledge (generated through systematic aerial reconnaissance, remote sensing data, cartography, biological surveys, the collation of databases, local consultation, etc.), brought together within reports, management plans and the output of consultation exercises, and implemented in on-the-spot action (through legislation, licensing, monitoring, etc.). The case of Ugalla Game Reserve is no exception in this regard.

What is interesting, and what this thesis tries to show, is how a design model for wildlife and protected area management becomes something different when implemented; generating practices and behaviour on the part of administrators unforeseen in the model. Even where new and apparently uncomplicated approaches to management are instigated, entrenched bureaucratic practices reappear. An example of this is the manner in which an apparently 'foolproof' computerised database, installed as part of a permit system to control the actions of beekeepers and fishermen using Ugalla Game Reserve, very quickly became assimilated into long-established ways of doing things, rendering it, in effect though not in impression, virtually redundant. Equally likely, is the probability that the old idioms such as that of 'invisibility' will

re-assert themselves among the assumed subjects of the new managerial planning, as a means for them to make their livelihoods without interference from local officials.

We saw in Chapter 6 how the idiom of invisibility was used by beekeepers as a counter-narrative to the managerial model. This imagery of invisibility reverberates with 'traditional' Nyamwezi ideas on forest-based resource use, and is used by the beekeepers to position themselves vis-à-vis tourist sports-hunters, the actions of members of the management, and their claims against other users of the forest. Through narratives concerning invisible poachers, and the events around which they revolve, people make claim to their right to be in the reserve. Thus we can argue that the unintended effect of 'personalistic' management action is to create an arena where different interests reveal themselves and can become antagonistic to the Management.

One of the central features that emerges from periodic conflicts taking place in the reserve, is the issue of legitimisation. Legitimisation is clearly related to the authority of the Project Manager of Ugalla, for his role is to implement the regulations governing the reserve. At the same time, however, because the Project Manager is able to use an extensive element of personal discretion in implementing policy and interpreting regulations, his interpretation of what is legal or illegal is central to his administration. From this case we can gain an idea of how power is distributed at the local level. Analysing the conflicts which emerge around wildlife management and local resource use also gives us insight into how the distribution of power is negotiated.

Empirical data from Ugalla Game Reserve points to the interpretation that representatives of the Wildlife Department are able to influence crucially the nature of wildlife management within a protected area by identifying and exploiting to their personal or sectional advantage possibilities that arise between policy promulgated by the Wildlife Department and negotiations pursued by different interest groups.

This draws our attention to people's capacity to make claims regarding access to resources. In this study, one interest group was concentrated on in examining this topic, namely the fishermen who use the Ugalla River. Claims are dressed as complaints about a situation or conditions that are perceive to be offensive or undesirable, and these complaints are necessary

factors in the formulation of an environmental issue (Hannigan, 1992). The concept of claim-making starts from the notion that human agency confers on people the knowledge and capability to comprehend their social experiences and to solve the multitude of difficulties which confront them on a daily basis (Giddens, 1984). It is a crucial practice, which needs to be taken into account when considering how people use resources within a protected area. It is in the way that meaning is attributed to conservation, and to the reality which confronts people living and working in a protected area, that interaction is generated between the knowledge held (the capacity to understand a situation) and the power (the ability to relate this knowledge to others and use it as a basis of negotiation) to carry something out. This interaction between knowledge and power accords validity to people's ideas concerning their access to resources and the justice this entails. In the case of Ugalla, claim-making can be related to two areas, first, conflict over resources and, second, people's occupation of the space and the sense of belonging conferred by their presence in the reserve.

Claim-making is an important notion in an analysis of conservation issues. However, it cannot be viewed independently of situated practices, local knowledge and livelihood issues. As an element of social practice, it encompasses the local experiences and skills necessary in setting up a legitimate argument between local resource-users and conservationists, it also allows people to put knowledge, authority and power to use in a particular setting. A study of how local people draw together their capacity to understand a situation (knowledge) and their ability to act (power) may provide a basis through which to understand how they may be drawn into participatory conservation programmes so that they become part of the conservation process. For people must have both the capacity and ability to make claims, fora available where their claims will be heard, and, not least, these claims have to be taken seriously by state representatives and other experts engaged in land and natural resource use planning.

To summarise this section, the three windows we have utilised for looking into the everyday life of people using resources in Ugalla Game Reserve, have respectively emphasised the importance of studying social complexity by examining the different interest groups associated with the reserve and their styles of operating; of studying power and authority, looked at through the actions of a local official implementing management policy; and of looking at the claim-making process which people engage in when trying to gain or maintain access to the

area and its resources. In what follows we need to develop these concepts further, drawing on the material presented in the last four chapters of the thesis.

Livelihoods and Local Resource Use: Honey and Wax Production for International Markets

In order to study how a protected area can be the locus for local resource use which contributes towards people's livelihoods, this thesis has taken as its principal enquiry the case of beekeeping in Ugalla Game Reserve. The introductory chapters of the thesis highlighted themes relevant to consideration of development oriented conservation planning. However, the general approach taken throughout the study has been to consider sociological points raised by the conservation of wildlife without entering directly into an analysis of the concept of community-based conservation or its application in the Tanzanian context. The main chapters on beekeeping were no exception, although they focused on three topics relevant to issues raised by community-based conservation; namely, local knowledge and practices, organisational processes associated with the market, and the social relations which form a the foundation for the way beekeepers come together to make a living.

We have already referred to the fact that analysis of resource use by those planning for protected area systems rarely incorporates an understanding of the social life which gives human resource use an intentionality and the meanings people impute to the natural environment. By stressing the relevance of local knowledge and in looking at how this is mobilised in beekeeping practices, we have tried to portray how social action is located within a particular context, generating the social dimension of forest-based production and leading to the creation of particular livelihood styles.

Beekeeping knowledge and skills include the way people give meaning to the media they work with, organising their environments culturally, socially and technically so as to produce honey and beeswax for sale on international commodity markets. This study explored the importance the Tabora Beekeepers Co-operative Society has held for men working in Ugalla, and showed how they draw on experience of previous forms of forest-based organisation to solve contemporary problems and develop the capacity to interact with international markets. How to transport their produce, acquire clean containers, find international markets, obtain a good price

for their produce, and learn new purification techniques are examples of such problems (none of which, it might be observed, are traditional ones); and the question of how the skills beekeepers utilise are related to their life experiences generally was raised. We have explored this topic through the case of one man and through an examination of the organising practices, social relations and inter-individual networks that were constructed between beekeepers in their activities in the forest.

An invaluable asset which allows people to gain access to resources and to work in Ugalla Game Reserve is their local knowledge, which is at the heart of how they organise 'reality' and humanise natural spaces in order to carry out their work. In this study, local knowledge is held to be constituted through the way people ascribe meaning to their experiences. This meaning is rooted in the domain of the familiar, taken for granted, reality in which people live and work. This knowledge may draw on 'tradition', but is likely to be combined with elements of scientific and technological information, and the understanding people gain from living, working and travelling in the many contexts which constitute modern Africa.

This definition of knowledge, it has been argued, has to be distinguished clearly from the notion that the knowledge held by rural Africans in a remote area is exclusively 'traditional' or 'indigenous', or that it exists in a self-contained 'knowledge system'. Local knowledge, as conceptualised in this thesis, and based on observational data, is not specific to a particular 'tribal' group, as authors on environmental studies of indigenous people and wilderness areas sometimes appear to assume. If one follows the definition of local knowledge used in this thesis, it follows that elements of (traditional / indigenous / tribal) knowledge cannot be extrapolated and transformed into a 'resource' to be used at face value and abstractly on the part of conservationists for scientific purposes, as some authors appear to suggest is possible.

The view that knowledge is not attached to a self-contained system based on particular culture or tradition does not contradict the idea that local knowledge is situated, i.e. embodied in the way people interact with one another and with the world around them. Men who keep bees, for example, have a detailed local knowledge of the areas where they work in Ugalla, this includes the know-how to carry out daily habits such as eating, collecting water and sleeping, information on the whereabouts and actions of the Project Manager and reserve Management, an extensive background understanding of the names of trees and their properties; it draws on

information on honey and beeswax acquired from the Tabora Beekeepers Co-operative Society, and is associated with a vast array of experiences accumulated by each individual.

Beekeeping is used as the main case in this thesis through which to understand how conservation planning generated outside Ugalla Game Reserve becomes grounded in the practices and understandings of those using the area. By examining beekeepers' skills and practices, we have observed how local knowledge becomes manifest in people's relationships to the environment. In the case of the individuals at the centre of this study, these relationships encompass their skill in using trees and plants to make beehives, the procedures involved in producing beeswax and honey, and people's ways of operating when in the forest. Through these practices, Ugalla becomes a humanised environment, and cannot simply be depicted and valued in terms of its 'natural resources' or non-human elements.

We have followed Law (1994) in arguing that it is in people's mode of ordering diverse material elements that the character of their agency can be made visible to the researcher. Hence in order to examine beekeepers' relationships to the environment of Ugalla Game Reserve, and what this implies for their mode of livelihood, we looked at how beekeepers site their beehives around a beekeeping camp, how they use the miombo woodland, their narratives concerning the role of beekeeping in forest regeneration, representations of their hive-making traditions, and their knowledge of how a bee colony produces beeswax and honey. Such practices reveal their social relationships, feelings, intentionalities and the rationales which surround the activity.

In exploring how men keep bees in Ugalla Game Reserve, we became aware that resource use is not simply an instrumental process. Although for those working in the field of anthropology this statement may be self-evident, a key tenet of recent 'people-oriented' approaches to conservation has been the argument that one form of resource use or way of generating an income can readily be replaced by another. In the process of working in an area such as Ugalla Game Reserve, people imbue that environment with a social dimension that is very much part of the production process, expression of their cultural beliefs about nature, of their historical experiences, and of individuals' relationships to particular social institutions. Each of these features is co-ordinated through a peculiar way of using the resource which cannot readily be

replaced, especially if the experts engaged in policy and plan formulation know little of the particular realities which, on a daily basis, local people are confronted with.

The second topic relates to the role of markets in shaping local organisation in Ugalla Game Reserve. In the thesis two products were selected as examples - honey and beeswax - to study the knowledge, skills, and social interactions generated in the production and distribution of forest products. To do this, the historical development of these products in Ugalla was traced back to the Nineteenth Century in order to explore the ways they entered into commoditised and non-commoditised relations of exchange, and, in particular, how an international demand grew up for them. This led to the exploration of the significance of the Tabora Beekeepers Co-operative Society (TBCS) as an association which developed to enable local men to organise their forest-based production for the supply of the international market for honey.

Those conservationists who promote development oriented conservation schemes recognise the organisational power and development potential of the market. However, the market they wish to introduce is a regulated market, controlled by the state with support from the international community. The perceived need for regulation arises because the attribution of value is seen to derive from, on the one hand, retaining stocks of natural resources ('sustainable natural capital'), whilst, on the other, controlling the tendencies of the 'free' market, where more value may be reaped from the exploitation of resources rather than from their retention. One practical way in which support has been given to a regulated market, is a call in favour of local people receiving sufficient 'benefits' from the conservation of wildlife in order for the management of natural resources to be more effective. By this argument, the choice between resource destruction or resource conservation is a question of where value lies. In this context the market becomes a device to regulate people's behaviour in relation to wildlife resources.

A critical issue is that the notion of incentive schemes or of compensation takes no account of the fact that people's livelihoods are not simply a question of where value lies; the way people make a living is not simply a matter of transparent rational choice leading to one option being replaceable by another of equal or greater market value. Furthermore, the idea of 'benefits', as a way of trying to incorporate local people's needs into the market for wildlife products, carries with it the implication of enrolment into planning initiatives and a consequent loss of autonomy.

People weigh up and exploit a variety of alternatives according to the constraints they are confronted with and the possibilities open to them at a given time. Their choices are shaped by their needs and desires, by the task of meeting obligations and of finding security, identity and status. The social interactions entailed in making a livelihood bring a multiplicity of values to bear on particular goods and relationships, enabling people to pursue different ends in life; these ends may not be the same as those established as desirable by powerful outsiders or even by power-holders within a locality. Moreover, a number of distinct networks of production, consumption and exchange are likely to exist around any given natural resource and the market for wildlife, for example, will not permit a flexible value-setting capable of regulating its complicated pattern of supply and demand.

However, the many difficulties these schemes have confronted in bringing together for the benefit of local people such factors as management, ownership, tenure rights and the equitable distribution of costs and benefits, has led to the suggestion that the market must be taken seriously by those engaged in development-oriented conservation planning. In the view of the market put forward in Chapter 9 in relation to the distribution of honey and beeswax, it is seen as an institution that is not simply concerned with value - where one thing can readily be replaced by another - but also embedded in rather than differentiated from the organisational processes which enable men to work in the reserve.

Considering these organising processes, it has been argued that the establishment of the TBCS was supported by local men because they could draw so-called 'tradition', their local identity, and previous experiences of the market into their dealings with the White Fathers and government experts. In this respect, local experiences of forest-based production and also of resettlement into sleeping sickness concentrations accompanied by the entrapments of modernisation, provided a local stimulant to action. These experiences coloured the new organisation, not as providing a blueprint but as a way of visualising future outcomes and possible benefits. In effect it enabled producers to bring into their encounters and relationships with the White Fathers and beekeeping experts existing cultural categories, experiences and organising practices. We should be clear though that this did not mean a simple evolution from one form of forest-based organisation - such as the Nyamwezi secret societies - to the other. Rather, the relationships men formed in the TBCS reverberated with older modes of operating

while the TBCS provided a modern institution more appropriate to the conditions men were confronted with.

The organisation of the TBCS seems extremely important in relation to how beekeepers fit into the market today, but the question was raised as to why, particularly at its inception, it has been so relevant? In answer to this it was found that, in part, it appears to relate to a phenomena associated with co-operative success world-wide, namely that the Management of the TBCS never tried to transform the honey and wax production process itself, or to interfere in the activities of beekeepers when in the forest. Furthermore, the TBCS provided men with inputs, transport and a market on terms highly favourable to them; even enabling beekeepers to be linked favourably to international honey and beeswax markets. In addition it has been described how the TBCS was able to provide its members with a buffer against the state, notably on the occasions when the Game/Wildlife Department has tried to remove beekeepers from Ugalla Game Reserve.

After observing the significance of the market in the organisation of beekeeping, the study focused on the case of one man in order to understand how he organises his livelihood from beekeeping and, at the same time, acts as a beekeepers' representative for the TBCS. The case of this individual epitomises how the social relationships between men keeping bees generates organising practices and inter-individual networks which are part of how the market and the production of commodities are manifest in people's lives. From this case the study led into a detailed analysis of the social composition of 5 beekeeping camps in the reserve.

Chapter 11 built upon the preceding discussion to examine the relationships that enter into making a livelihood in Ugalla Game Reserve. In the context of the protected area, we observed how clearly the state tries to structure space through wildlife law and policy, and how people try to circumvent this state control, creating localities in which they can work together and generate some form of collective organisation that enables them to interact with institutions like the state and the market. It was then shown that this situation is facilitated by the weakness of the state in regulating the resource use and actions of people in the area. Through the case of beekeeping, we have highlighted the social complexity that underpins the dynamics of resource exploitation in the reserve which wildlife law and management practice must engage with to be effective.

By examining relationships between beekeepers at five seasonal camps in Ugalla Game Reserve, the discussion attempted to show how daily life and productive activities in the reserve lay the foundation of the social networks that have grown up around the exploitation of forest resources. Through the interaction and co-ordination of factors such as kinship relations, common village residence, and collective organisation through the beekeepers' co-operative, meaning is given to locality, which, in the case of beekeeping, was identified as centred on the dry season forest camp, which emerged, in the context of Ugalla Game Reserve, as a significant social institution.

In this study, two important aspects of community-based conservation approaches have been highlighted, both supporting the idea that local people should be drawn in a participatory fashion into decision-making involving conservation planning, and that development-related conservation initiatives should operate through local institutions, for which the concept of 'community' is located in a key position. Notions of participation and of community involve models of human society and of social action. Both concepts have been drawn from development planning in the broader sense, but conservation approaches place emphasis on consideration of how people - living in aggregate units, communities, groups, societies, tribes, etc. - act on the physical/natural environment. The illustrations given through a presentation of the fieldwork material sought to provide an insight into some of the social relationships engendered in working in Ugalla Game Reserve and into the complexity of the social action which constitutes people's livelihoods. Chapter 11 began by questioning the manner in which how the practices of men keeping bees involve the mobilisation of different sets of social relations in order to make that livelihood possible. In examining the composition of five seasonal camps, the discussion highlighted how beekeepers' daily lives, productive activities and inter-personal relationships are an integral part of how they come together to act in the area on an individual and collective basis.

From the material presented, we gain a very different perspective of social life than that derived from a view of 'community' groupings based on functional, territorial units or of social action envisaged as compressed into certain narrow needs or drives which determine the inevitability of resource exploitation; we see the complexity of the individual lives and the collectivities which have grown up around the use of natural resources for livelihood purposes, and the subtlety of the meanings beekeepers bring to bear on their work.

Final Remarks

Taking the case of Ugalla Game Reserve in western Tanzania, this study has moved from consideration of the institutions responsible for the construction of environmental policies in Tanzania to an examination of how policy is implemented, to touch and be accommodated by those people actually making their livelihoods at the local level. By framing the study in this way, we have tried to highlight how complex the process of local resource utilisation really is - a complexity that does not readily lend itself to the interests of planners or to those wishing to promote the cause of conservation often, unintentionally, at the expense of others' well-being.

The heart of the argument presented in this thesis is, first, that many working in the East African conservation sphere do not take into account the manner in which human social action plays an integral role in creating what constitutes 'the natural environment'; and, second, that there is a tendency to analyse a locality in ways that are associated with specialist fields of understanding, so that, from this perspective, the 'nature' which is being protected, exists as it does because it has been constructed by scientists with a western eye. Third, that we have to look at the practices of people not only to know what is taking place in an area but also so that we can understand the nature of their participation in the processes affecting their lives. In sum, it can be said that the environment is embedded in people's thought and lives, and therefore cannot be differentiated as 'nature', to lead to environmental management as a separate field of action applied to a reality independent of human agency.

Appendix 1

Protected Areas in Tanzania[1]

Categories of Protected Area

1. **National Parks**: declared by an Act of Parliament, following the approval of their proposed gazettement by the district and regional authorities, and by the Ministry. National parks are managed by the parastatal organisation, TANAPA, which has a Director-General, who is responsible to the Minister of Tourism, Natural Resources and Environment through a Board of Trustees. No settlement or livestock is allowed in national parks, both flora and fauna are totally protected, and only non-consumptive utilisation is allowed in the form of game viewing tourism. There are 12 national parks in Tanzania.

2. **Game Reserves**: are declared by the President, following the approval of their proposed gazettement by the district and regional authorities, and by the Ministry. Game reserves that are classed as 'National Projects' are managed by the Government Department of Wildlife, of which the Director of Wildlife is responsible to the Minister of Tourism, Natural Resources and Environment. The game reserves that are not classed as National Projects are managed by the regional authorities. No settlement or livestock is allowed in game reserves, both the fauna and flora are protected, but both consumptive utilisation, in the form of hunting, and non-consumptive utilisation are allowed. Traditional use of non-wildlife resources through fishing (though as a vertebrate, fish are defined as wildlife) and beekeeping, also takes place in certain Game Reserves. There are 23 game reserves in Tanzania.

3. **Ngorongoro Conservation Area**: was declared through an Act of Parliament. NCA is managed as a parastatal organisation, the Ngorongoro Conservation Area Authority (NCAA) which was established by an amendment to the Ngorongoro Conservation Area Ordinance, and has a Conservator who is answerable to the Minister for Tourism, Natural Resources and Environment through the Board of Directors. Flora and fauna are totally protected in NCA, but the area is managed for multiple land-use that aims to integrate the conservation of its varied natural values with the interests of the resident Maasai pastoralists and their livestock. Under its Ordinance, and with Ministerial approval, the Conservator can make legally binding orders and rules to control and regulate all activities within NCA, including the lives of the resident pastoralists. The main use of wildlife in NCA is through non-consumptive game-viewing. Most consumptive uses of the resources of NCA are not practised, including hunting, live capture or fishing; or the collection of natural products other than through livestock grazing. Cultivation has not been allowed officially since 1975. However, subsistence farming was recently allowed by the Government on political grounds, and as a temporary measure until suitable areas for cultivation by NCA residents could be located outside the NCA.

4. **Game Controlled Areas**: are declared by the Minister, and are created and controlled by the Director of Wildlife under the Wildlife Conservation Act. Hunting, live capture, fishing and the use of weapons are regulated by law in GCAs but there have been no regulations on other forms of resource use, including human settlement. Given that many remaining GCAs are settled by rural communities, many different forms of wildlife utilisation have been carried out in GCAs. GCAs with good wildlife populations have been generally allocated for tourist hunting, but resident hunting, game viewing, cropping, live capture and problem animal control has also taken place within certain GCAs. Rural communities living among wildlife in GCAs have received little direct benefit from the various legal forms of wildlife utilisation carried out in their areas. Accordingly, there has been much illegal and unsustainable use of wildlife within GCAs. The are 44 game controlled areas in Tanzania however they are in the process of being de-gazetted to make way for a new category of protected areas, 'Wildlife Management Areas'.

5. **Partial Game Reserves**: can be declared by the Director of Wildlife, under the provisions of the Wildlife Conservation Act. Under legislation, partial game reserves can be declared for any area and for any animal or class of animal, which can then be referred to as protected animals. A large number of partial game reserves were declared under the Fauna Conservation Ordinance, but following its repeal, no partial game reserves were carried through to the Wildlife Conservation Act. These areas are to be renamed Nature Reserves.

6. **Forest Reserves**: are declared by the Minister, and are created and controlled under the Forest Ordinance. Forest Reserves are basically of two types which are defined at the time of gazettement, namely productive forest reserves for the cutting of timber and production of forest produce, and protective forest reserves for the protection of forests and important water catchments. Forest reserves do not allow for any permanent human settlement nor any agriculture nor development of tracks. Livestock grazing is allowed under license. Where forest reserves overlap with national parks, and the NCA, no cutting of timber or extraction of natural products is allowed under the respective legislation for the wildlife protected areas, so effective responsibility for managing forest produce in these areas passes to the wildlife sector. Where forest reserves overlap with game reserves, it is required that any cutting of vegetation shall only be undertaken on the joint authority of the Directors of Wildlife and Forestry, so effective responsibility for managing forest produce in these areas is vested jointly with the wildlife and forestry sectors. Where forest reserves overlap with GCAs, the wildlife sector has no responsibility for managing forest produce, which remains entirely with the Forestry Department. There are 570 forest reserves in Tanzania.

7. **Nature Reserves**: are an unofficial form of PA that is not supported by any current sectoral legislation. Two are known to be in existence in Tanzania. The Shume-Magamba forest reserve in the West Usambaras, has a Nature Reserve at its core to ensure its strict protection, but this designation is a management option. The Luyisenga Nature Reserve is a private sector initiative that has been declared a nature reserve by Brooke Bond Tanzania in one of its tea estates at Mufindi in the Western Udzungwa mountains. Partial Game Reserves are to be renamed Nature Reserves.

8. **Marine Reserves**: can be declared by the Minister. These protected areas are under the jurisdiction of the Fisheries Division. Regulations governing the use of these reserves do not permit any form of commercial exploitation of fish resources, or of any occupancy. Therefore, if these regulations were enforced, marine reserves should receive absolute protection (similar to a national park). There are 8 marine reserves in Tanzania (2 of which have been incorporated into Mafia Island MP).

9. **Marine Parks**: these protected areas were brought in by an act of parliament in 1995. Marine parks permit both zones of use and of protection, and management under a Board of Trustees. The concept of Mafia Island Marine Park has been accepted by the islanders and regional authorities, and incorporates two former marine reserves.

10. **Wildlife Management Areas:** these protected areas were formulated in the Wildlife Division Policy for Wildlife Conservation and Utilisation in 1995. A Wildlife Management Area is a unit of communal land in which people have use rights over the wildlife and natural resources, which they wish to manage in a responsible fashion as the primary form of land use and from which they are allowed to retain a significant proportion of revenue. Each area has exclusive zones for the management of wildlife and other natural resources.

11. **Open Areas**: wildlife that is not within a protected area is protected under the Wildlife Conservation Act. No person is allowed to kill any non-domestic animal, bird or reptile under normal circumstance, unless a valid hunting permit is held issued by the Director of Wildlife. Resident hunting predominates in these areas, although tourist hunting, live capture and cropping also takes place.

Appendix 1

Existing Protected Areas

National Parks:

Serengeti
Lake Manyara
Mikumi
Arusha
Rubondo Island
Katavi
Gombe Stream
Udzungwa
Ruaha
Tarangire
Kilimanjaro
Mahale Mountains

Ngorongoro Conservation Area

Game Reserves:

Selous
Mkomazi
Rungwa
Mount Meru
Kilimanjaro
Biharamulo
Maswa
Ugalla
Saadani
Uwanda
Burigi
Ibanda
Umba
Rumanyika
Moyowosi
Kizigo
Kigosi
Saa Nane
Grumeti
Ikorongo
Kiuereshi
Muhesi
Pande Forest

Game Controlled Areas:

Burunge
Chabala Marsh
Gombe
Handeni
Igombe Dam
Kalimawe
Kihurumira Pool
Kilombero
Kitwai
Kongwa
Lake Daramatai
Lake Kwela
Lake Manka
Lake Natron
Lihogosa
Loliondo
Lolkisale
Longido
Luganzo
Lukwati
Lunda Mkwambi
Makao
Masasi River
Mesarani Dam
Mkungunero
Mlele
Msima
Mto-wa-Mbu
Muhewesi
Mwadui Diamond Mines
Mwambesi
Nchwa Nkima
Ngeju Njira Dam
Nyonga
Rau Forest
Rukwa
Rungwa River
Ruvu Maasai
Ruvu Same
Sanya Lelatema
Simanjiro
Ugunda
Umba River
Utengele Swamps

[1] Source: WSRTF, 1995.

Appendix 2

Demographic Information & The Location Of Refugee Settlements

Demography

National population censuses were held in 1988, 1978 and 1967. The 1988 census recorded Tabora Region as having a population of 1,036,293 people with an increase of 2.4%, slightly lower than the national average of 2.8%. In Rukwa Region the total population was 694,974 with an increase higher than the national average, at 4.3%, which can at least in part be explained by the presence of large numbers of refugees who were housed in the region during the 1980s.

In the southern districts of Tabora Region, Tabora and Urambo Districts, which abut onto Ugalla GR, 53% of the total land area is devoted to forest reserves in which settlement is prohibited (Mitchell, et al., 1980). Villages and towns adjacent to transport facilities, particularly the railway, are the sites of greatest population expansion. The most recent study of population distribution and land use in this part of the region suggests that the forest reserves and wards immediately adjacent to Ugalla Game Reserve are the areas most capable of absorbing the expanding populations because they can be opened up as agricultural land (Wheeler, et al., 1989). One suspects, however, that lack of transport infrastructure and health care facilities in these wards may curtail a southwards expansion towards Ugalla Game Reserve. Less information is available for Rukwa Region; Mpanda District is largely forest reserve, however the massive Katumba Refugee Complex houses thousands of Hutu refugees from Burundi.

In relation to settlement in wards around Ugalla Game Reserve, Figure 13.1, it can be seen that Chabutwa, Sikonge and Tutuo wards have settlement concentrations of between 5-20,000 people.[1] In terms of population increase between 1978 and 1988 Sikonge grew at 2.8%, Chabutwa at 1.6% and Tutuo at 7.2%. A tobacco development scheme, coupled with the presence of Pangale Refugee settlement, help account for the high rate of population increase in Tutuo ward. In Uyumbu and Vumulia wards, Urambo District, settlements are concentrated in the northern sections nearest to transport facilities and social services. The wards have a low rate of population increase, at 1.4% and 0.8% respectively, while that of the adjacent Kaliua ward is higher, at 3.3%.

Moving down to the west of Ugalla GR into Siganga ward several villages are located along the railway line. Siganga ward, which borders the north west corner of the reserve has a very high rate of population growth, at 7.2% per annum between 1978 and 1988. My own observations suggest that there is a high seasonal mobility of people along the railway line to take part in food provisioning for the train and forest occupations. Entering into Rukwa Region, the population growth rate in Ugalla ward is 1.3% but in Inyonga ward it is higher at 3.0%.

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[1] In Tabora Region, ward boundaries do not extend over the boundaries of forest reserves, whereas in Rukwa Region they do. Given that many forest reserves in Rukwa Region should be uninhabited, one implication is that this influences data on population density. The reason for this is not clear but likely to have arisen in the process of demarcating Rukwa as a separate region in the early 1970s.

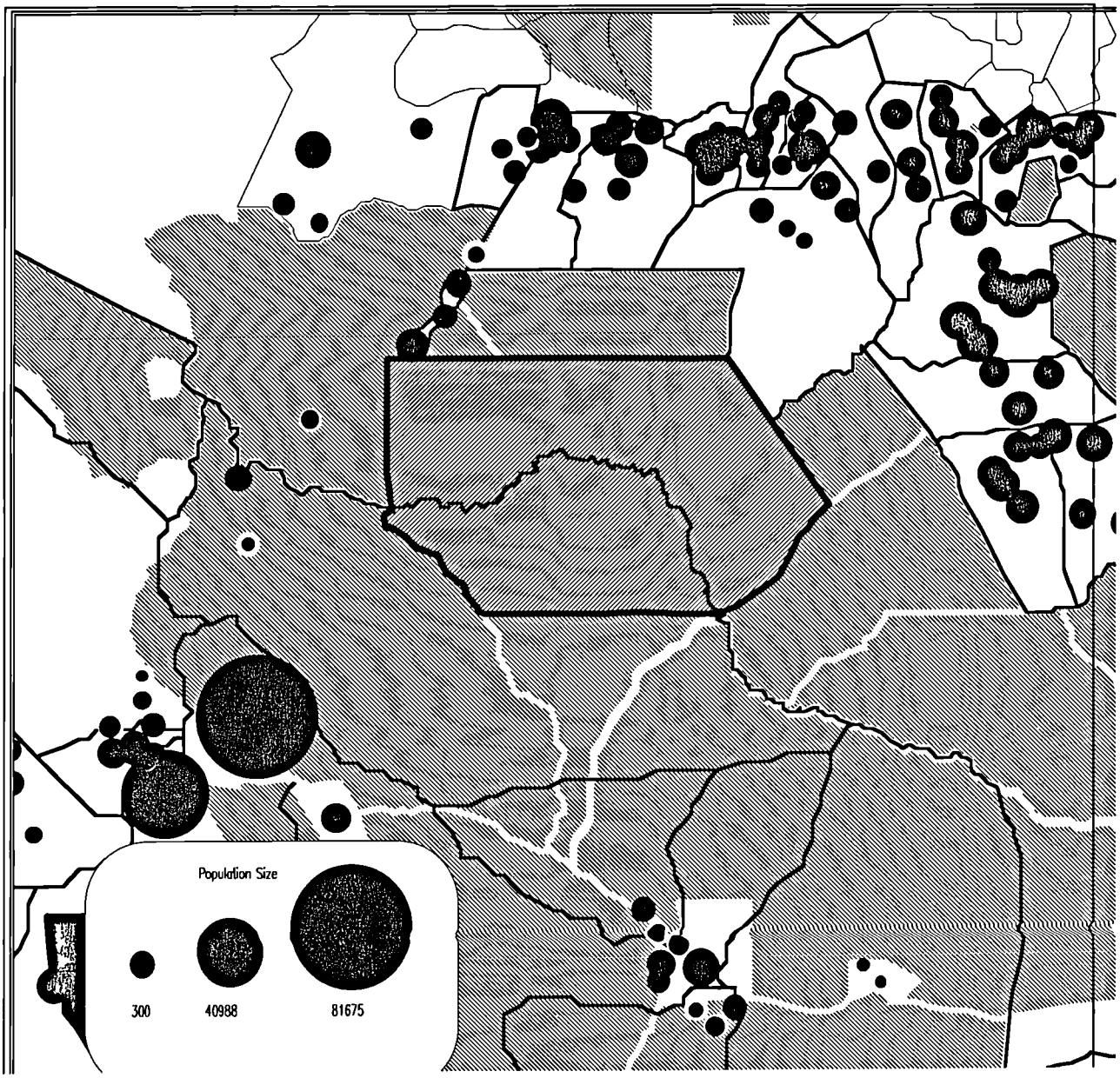

Figure 13.1 Settlement patterns around Ugalla Game Reserve[2]

[2] Source: Lamprey (1994), unpublished digital computer map data.

Refugee Settlements

Ugalla Game Reserve is located between five refugee camps: Ulyankulu, Pangale, Kigwa, Mishamo and Katumba, as depicted in Figure 13.2. The number and origins of people in these different refugee camps changes due to such factors as people fleeing from fresh outbreaks of violence, and repatriation programmes.

Pangale Refugee camp was established in the 1960s for Malawian and Zairean refugees, although in 1972-5 it expanded to act as a 'transit' camp for Hutu refugees from Burundi. In 1979 Pangale was disbanded, some of the inhabitants moved to Kigwa refugee camp, while the administration of Pangale refugees who didn't want to move was 'integrated' into the local administrative structure. Kigwa refugee camp itself was established in 1972 to cater for Ugandan refugees and later became mixed, with people from Malawi, Burundi, Zaire, South Africa, Kenya and Mozambique. Ulyankulu, Mishamo and Katumba refugee camps are considered to be some of the largest refugee settlements in the world. Built in the 1970s to house Hutu refugees fleeing the violence in Burundi, they cover massive areas of land and have held populations of 60,000 people (1000 km^2), 35,000 people (2,050 km^2), and 60,000 people (1,000 km^2) respectively.

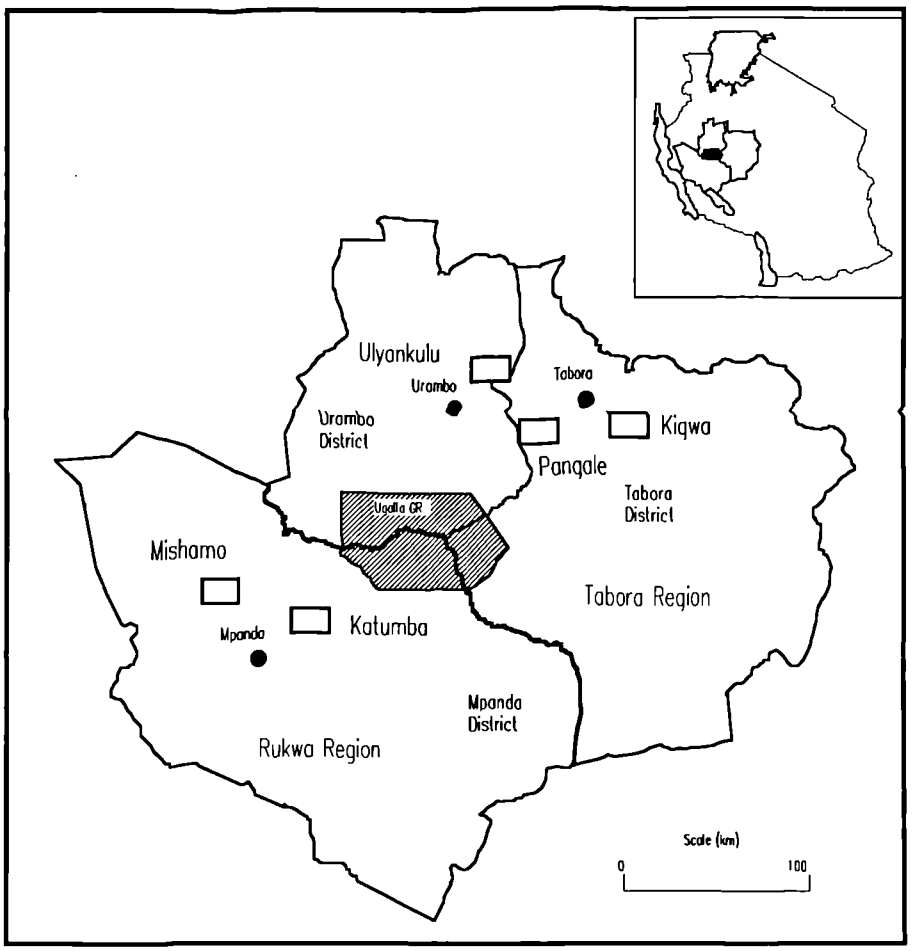

Figure 13.2 Refugee settlements neighbouring Ugalla Game Reserve[3]

Although the camps vary in character and organisation there are certain common features: they have a tripartite structure of authority, funding is from the United Nations High Commission for Refugees, administration is by the Ministry of Home Affairs, and the organisation and

[3] Source: base-map Lamprey (1994) unpublished digital computer map data.

disbursement of funds is in the hands of the Christian Council for Tanzania (or Tanzanian Christian Refugee Service). Each camp is presided over by a Tanzanian settlement commandant, directly representing the Minister of Home Affairs, heading a hierarchy of control and organised into Tanzanian *Ujamaa* villages, which provide the basic structure of governance. International organisations such as the YMCA, the World Food Programme and Oxfam assist with targeted aid projects.

Appendix 3

Community Wildlife Management Projects and Initiatives in Tanzania (1985 - 1993)[1]

Project	Date	Project Initiator	Funding & Support	Project Aims	Area of Operation
TANAPA Community Conservation Service	1988	Tanzania National Parks (parastatal under the arm of the Ministry of Natural Resources, Environment and Tourism)	AWF, FZS, ODA, private sector, TANAPA funds generated through tourism.	Extension work through local government structures. Typical intervention takes the flexible form of visiting a village regularly, opening up lines of communication and addressing outstanding issues. The Support for Community Initiated Projects Programme is introduced to share benefits with the village. An educational element accompanies initiatives but is distinct because positive publicity can detract from problem solving measures.	Communities living in the vicinity of national parks
A Community Development Department (CDD) attached to the Ngorongoro Conservation Area Authority.	1990	Ngorongoro Conservation Area Authority (parastatal under the are of the Ministry of Natural Resources, Environment and Tourism).	NCAA	The CDD has different sections whose remit encompasses: Livestock development, health services, resident liaisons, income generating projects, education, establishment of communication channels to enhance the participation of residents in conservation efforts, food security.	Resident communities living within the Ngorongoro Conservation Area Authority.
The Serengeti Regional Conservation Strategy Initiatives around the Serengeti National Park	1985 1989	Serengeti Authorities/ TANAPA/ NORAD	Department of Wildlife, IUCN, NORAD	To draw local communities into conservation through the institution of buffer zones, Village Wildlife Committees, Village Scouts and the return of benefits to these villages.	Villages within the Serengeti Ecosystem, initially focusing on Ngorongoro District.
Ruaha Ecosystem Wildlife Management Project	1992	TANAPA/ Ruaha National Park/ Wildlife Department/District Community Development Office/British ODA	British ODA	To prepare a comprehensive management plan for Ruaha National Park. To direct benefits from wildlife to the surrounding communities.	Phase 1 - 16 villages in Idodi and Pawaga Divisions to east of RNP

[1] Sources: IUCN, 1986; Baldus, 1991; PAWM, 1995b; Krishke et al., 1995; Simons & Nicolasen, 1995; Hartley, 1995; Bergin, 1995; TGTS, 1992; Robin Hurt Safaris, 1995.

The Selous Community Based Conservation Scheme	1987	Wildlife Department and GTZ	Since 1987: bilateral aid from GTZ, SGR 50% retention fee from income generated for the WD through tourism, AWF, FZS.	Community-based conservation as part of a larger project to rehabilitate the SGR. Surrounding buffer zones are used for community wildlife utilisation. This includes: self-help projects, village natural resources Committees, village game scouts, financial assistance in drawing up village title deeds, designated wildlife areas and quotas for sustainable wildlife utilisation, a training programme.	33 villages in three districts: Morogoro, Songea, Tunduru (88,000 people).
Mkomazi Outreach Programme	1993	The Wildlife Department and Dutch aid.	The Wildlife Department/The George Adamson Trust/Dutch Government Aid.	The Mkomazi Outreach Programme is a small initiative run by Dutch community development workers. It takes a target-group oriented approach working with women and pastoralists in villages bordering MGR. It works through existing organisations and aims to support environment and development efforts through training, equipment, education, assistance.	Villages surrounding MGR: Pangoro & Ndea (Mwanga District), Kisiwani & Gonja (Same District), Mnazi, Lelwa, Umba & Kalalani (Lushoto District).
East Usambaras Agricultural Development and Environmental Conservation Project	1987	IUCN	IUCN, EC, Tanga Regional Authority	To improve local farming systems and land management through, for example, the promotion of cash crops, contour-pegging in fields, stall feeding of livestock. To promote effective forest management and utilisation. Income generating schemes, such as fish farming. Improving local roads.	Communities in the East Usambaras.
Mafia Island Marine Reserve	1992	WWF/Wildlife Department	Details not known.		
Cullman Rewards & Benefits Scheme	1990	Tanzania Game Tracker Safaris (private hunting outfitter)		Rewards for conviction of poachers and handing in snares. Village anti-poaching programmes; assist Wildlife Department; discourage illegal & wasteful use of wildlife; benefit communities - money, food, employment, meat quotas, community projects; encourage communities to understand and manage wildlife sustainably. The schemes operate where the company has hunting blocks or interests.	Village (District): Usevya, Nyonga (Mpanda), Uvinza (Kigoma), Mbuga (Mahenge), Makau (Maswa), Embash/Ledekinya, Burko/ Essimingor (Monduli), Kambi Katoto (Rungwa). Vehicles donated to: Project Manager of Ugalla Game Reserve, the Director of TANAPA, District Game Officer of Monduli, the Cullman Wildlife Project Manager, Project Co-ordinator. Employment: local trackers and gunbearers.
Cullman Wildlife Scheme	1992	Robin Hurt Safaris (private hunting outfitter)		As above.	As above.
Dorobo Tours & Safaris Projects	1990	Dorobo Tours & Safaris (private tourist company)		Annual payments & visitor nights fees to village governments in return for exclusive control of tourist activities.	Two projects around Tarangire and Serengeti National Parks (one and three villages respectfully). The Projects operate where the company conducts safaris.
Oliver's Camp Community Based Conservation Initiative	1992	Oliver's Camp (private tourist company)		Mending & maintaining bore-hole + water pump, improvements to school, purchase of maize, travelling expenses for District Council.	Lolkisale Game Controlled Area (next to Tarangire NP) and two nearby villages - Emboreet and Loboir Serret. The schemes operate where the company conducts safaris.

Appendix 4

Sleeping Sickness Settlements For Evacuees From the Ugalla River Area[1]

Kalula

The headquarters of Sultan Meta of Ugunda. This was a village of two square miles with an estimated population of 250 people[2] at the end of 1924. During the dry season of 1925 the area was expanded to six square miles using requisitioned labour to the total of 1,250 men supervised by Mr Buckley the Administrative Officer for Tabora sub-District.[3] Approximately 320 people were resettled here. A further half of a square mile was added in 1926 and 30 more people resettled. The people moved into Kalula predominantly came from the eastern portion of Ugalla.

Morogoro

One and a half square miles were cleared in a previously uninhabited area of land on the border of open country in order to establish Morogoro settlement in the Sultanate of Ngulu in 1925. Again Mr Buckley supervised the procedures, having recruited 300-400 men to assist and build houses at Government expense. 271 people were moved here from Isimbira, a settlement on the river in the eastern portion of Ugalla. A further half mile was cleared in 1926 by which time the settlement had a population of 280 people. The Native Treasury supplied seed to evacuees.

Kakola

An area on the border of 'open country', was cleared for the purpose of the sleeping sickness removals. Mr Stiebel, another Administrative Officer supervised the 3000 local inhabitants who were requisitioned as labour for nearly a month to clear land for the settlement. Swynnerton, the Director of Game Preservation visited this settlement to evaluate progress. In 1925, 1,350 people were resettled in an area of eight square miles, which was extended to nine square miles in 1926 when a further 50 people were resettled making a total of 1,400 inhabitants. According to the descriptions of my informants, in 1925 the Ugalla chiefdoms north of the river were moved together and settled in a specific portion of Kakola. (There were in total eight minor Galla chiefdoms north of the river before the move.) In 1926 the people from the south-west portion of the Ugalla river were moved, including Ukalala (a Galla chiefdom of Ukonongo) and Ugombe (in the area of Silongwe). According to the contemporary histories of my informants, the 'important chiefs' decided to go to Kakola. According a record in the Tabora District Book, enormous difficulty was experienced in trying to accommodate the 'numerous petty chiefs' from the south of Ugalla, the chiefs included Chiefs Kallangula, Yongolo, Malembeka, Abatila, and Kalembeli. Additional evacuees from Usenga and Ufipa were resettled here in 1927 although the numbers were not specified.

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[1] TNA.Mss.1733/20 (105); 1733/4 (52); 1733/9 (69); Tabora District Book, microfilm held in Rhodes House, Oxford; Fairbairn, 1944, 1948; Maclean, 1926, 1927, 1928, 1929, 1930. For an impression of a similar evacuation that took place in 1937-8 see Moffett (1939-40), the originals of which are held with the Bagshawe Papers in Rhodes House, Oxford.

[2] It is unclear from these archives whether 'people' in fact refers to tax-payers (adult men), although it appears that these are estimates of the numbers of actual people. The medical officers, Maclean and Fairbairn used a calculation apparently common to administrators in the Western Province during this period, namely 1 taxpayer = 3.3 people. Nor is it clear how the number of people was calculated.

[3] TNA.Mss.11771

Nyonga (Inyonga)

Nyonga settlement was established in 1925-26 in an original area of nine square miles. Approximately 2,310 people were moved into the area, some families being resettled from the very south of Ugalla but, again, the details are unavailable.

Ilunde

Ilunde was characterised as a 'natural settlement' which was enlarged during 1925-26 to cover six and a half square miles. Approximately 1155 people occupied the area by 1926. They came mainly from Ukonongo (south of Ugalla), but possibly a few were from Ugalla.

Uruwira

This settlement was cleared in 1926. After people were resettled it covered a total of ten square miles and included 2,850 initial inhabitants, some from the south of Ugalla.

Kaliuwa

An area of land three and a quarter square miles was cleared in 1926 but the 891 evacuees were not moved until 1927. These people came from Ukumbi to the north of the Ugalla River, though some families from Ufipa and Usenga (far south in Rukwa Region) were also moved. A further half mile was cleared in 1926 by which time the settlement had a population of 280 people. Mr Buckley again supervised this operation having recruited 300-400 hundred local people to build houses at Government expense. Native treasuries supplied seed to evacuees, it is unclear whether this was a general policy which was also applied to other settlements.

Ipoka, Ipole and Milala[4]

In addition to the creation of new concentrations, the small scale expansion of old settlements took place in Tabora sub-District, including Ipoka, Ipole, and Milala, all in 1926. Further expansions were planned near Morogoro, and at Ipole and Kinga in 1927.

[4] There were also settlements created under the authority of Maclean and Hatchell during this period in Ufipa, they included Rungwa and Manga Usevya (1925-27), covering fifteen and eleven square miles respectively, with populations of approximately 4,950 and 1,782 people, and also a camp called Mamba although no details are known.

Appendix 8

Beekeeping Techniques used by Members of the Tabora Beekeepers Co-operative Society

Chapter 8 is a discussion on knowledge and practices associated with beekeeping in Ugalla Game Reserve. This Appendix is intended to augment information provided in the chapter by elaborating on beekeeping tasks carried out during a season by men who are associated with the Tabora Beekeepers Co-operative Society Ltd. (TBCS).

The following information is based on observations made between June and December 1993 when staying with a group of men who kept their beehives at two camps in the reserve, Kwalungu and Nsontwa 1. In the first harvesting season, between June and July, the people present at these camps were: Lioba Chalamila, the camp leader, Stephen Lioba, Paul Herman, Mzee Ali, Kaombwe Mwamba. Their assistants were Mateo Lioba, James Stanley, Zachari Mwamba, Charles Leroy and Mashaka Kagogo. Comparative information was gained from a number of other beekeeping camps and by discussions with individuals, for details of which see Methodology, Chapter 1.[1]

Aside from providing a description of the methods used to produce honey and beeswax, this Appendix mentions some of the techniques promoted through beekeeping extension work and ideas emanating from the TBCS. A key point of reference for the introduction of new techniques dates from late 1950s when the TBCS was established alongside the Tanganyika Territory Beekeeping Section in Tabora Town. This might appear to be a long time ago in terms of the influence of ideas on present-day beekeeping practices until one remembers that this period marked the start of the production of honey for the export market, and the Ugalla River was considered a 'focal point' for extension work through the TBCS (Ntenga, n.d. a/b/c/d, 1984; Smith, n.d. 1950, 1955, 1957a, 1975b, 1958a, 1960, 1994). It was, therefore, a time when techniques of production and the processing of produce underwent many changes in keeping with the needs of the export market. Elderly men involved in the TBCS at that time are no longer alive, but many of today's established beekeepers are men drawn into the Co-operative at its commencement, and they, in particular, have played a role in adopting and promoting ideas and practices they deem of value to producing honey and beeswax for different markets.

In terms of production techniques promoted by the Co-operative, those associated with the quality of honey and wax have been adopted most unambiguously (as examples, separating honey comb with pollen or the brood in it, straining honey without heating it or adding water, cleaning wax without boiling or using additives). If the quality of produce appears poor it will not be bought by the TBCS or other buyers. New techniques that were least effective were those related to different methods of production, based on modifying bee-beehives (as examples, using a queen excluder and the use of top-bar or wicker beehives), forms of bee-management attempting to increase a beekeeper's productivity by domesticating bees so that they would stay within the beehive (as examples, by leaving the brood-comb or by more intensive management); also methods promoted to try to encourage beekeepers to reduce their use of forest resources (as examples, debarking many beehives from one tree with the use of a ladder or the use of log rather than bark hives).

Even those techniques that have been most clearly taken up by beekeepers have been adapted in a multitude of ways. These adaptations relate to people's knowledge of how different materials can be used, how available or accessible these materials are, and what people hold to be suitable methods according to their ideas of the constitution of work, their needs, the nature of bees, ideas of time, what is an appropriate method of production for different markets, etc. To take one example, honey cropping with the use of full protective clothing - a hat, face cover, overalls, gloves and boots was promoted in the 1950s and 1960s. Today one meets beekeepers who make a type of overall with a hood and elaborate visor made from wire mesh, but they rarely wear gloves or boots. Each of these features draws on ideas promoted by extension workers and but is appropriate to local harvesting practices; a hat and mosquito-net type covering would be too fragile to climb trees with; a person is in danger of falling if he wears boots, and cutting honey comb from a hive while wearing gloves is simply too messy. In effect the suit has been taken apart and reassembled in keeping with local ideas and necessities. Through a host of such practices, one becomes aware not only of the way that people incorporate new ideas into their own beekeeping techniques, but also how things become adapted according to local ideas about bees, beekeeping and the forest, and also the extensive use that can made of forest resources and locally available materials (see Tables 13.3-7, Appendix 7) to foreign imports; even most of a beekeeper's tools are made locally (see Table 13.7). In short, production for an export market has not meant that beekeepers have simply aped the methods of outside experts.

THE BEEKEEPING SEASON

The beekeeping season begins in May when the main honey crop is ready, after the rains have ended and agricultural crops have been harvested. At this time, beekeepers travel to the forest in groups, relying on the TBCS lorry, or going by foot, bicycle or train. It continues until July or August when people decide to go home, being tired with few remaining food supplies, and the TBCS lorry is available to collect their honey. Many beekeepers return to the forest for a shorter period of time in October and November for the second honey crop.

The first honey season is referred to as the *luhehe* and the second as the *nemba*.[2] In each season, the beekeeping activities that are carried out can be divided into a number of separate tasks: assessment of the honey crop, cropping, honey straining, wax preparation, bark rope making, beehive making, hanging new beehives and re-hanging harvested beehives. Some tasks are shared by members of a beekeeping camp, notably honey cropping which has to be carried out rapidly before the bees start to consume the honey, while other tasks can be performed by the individual beekeeper and his assistants.

Kwalungu and Nsontwa 1 Camps are around five hours walk apart. In June 1993, the beekeepers first went to Kwalungu, harvesting and carrying out a range of tasks; they then walked to Nsontwa 1 and repeated the same activities, with a few people returning to the first camp to prepare the wax and re-hang their bee-beehives. In October they went to Kwalungu, but it was impossible for them to go to Nsontwa 1 because there was no drinking water. Table 13.8 gives an indication of the length and timing of activities carried out between June 3rd and July 17th, 1993, covering the duration of the period spent in the forest by this group of beekeepers.[3] Comparable tasks were performed in October and November. It is a rough guide because it does not break down each activity according to how many people, or by whom the activity is being carried out, but examples are given in the text (see also Table 11.10 in Chapter 11). The information provided in the table will be discussed as each task is turned to.

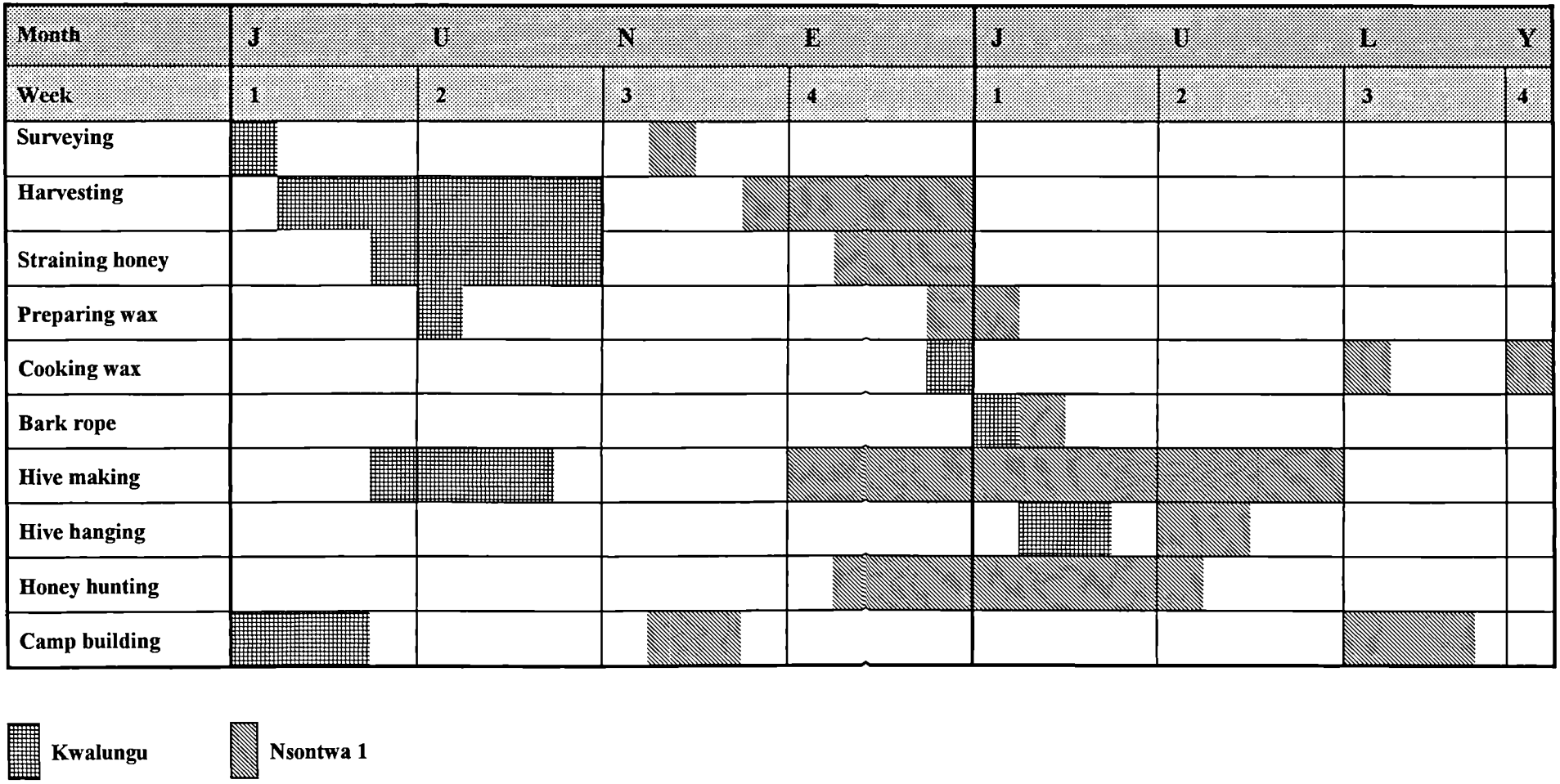

Table 13.8 Duration of beekeeping activities between June 3rd and July 17th 1993 at Nsontwa 1 and Kwalungu Camps

Assessing the Honey Crop - Kutazama Mizinga

When beekeepers arrive in Ugalla in May - June and October - November they spend a few days repairing their camp, walking around assessing how good their honey crop will be and, if needed, making new handles for tools. On the 3rd of June, after arriving in the forest, Lioba Chalamila, Stephen Lioba, Kaombwe Mwamba, Paul Herman and Mzee Ali spent two days taking walks - usually accompanying one another or going with their assistants - to different locations around the camp to get an idea of how good or bad the harvest would be or whether the honey was 'ripe'.

Harvesting the Produce - Kupakua Asali

There are two honey cropping seasons in central western Tanzania: the main season starts in late May and extends into July and the second, subsidiary, season begins after the first rains in October and goes on into November. People say that it is essential to go to the forest for the first honey crop 'if you are a true beekeeper you cannot stay away even when the year is very bad [for honey]'. Once the dry season sets in, the bee colony will start to consume the honey they have produced and it therefore becomes essential for the honey to be harvested as rapidly as possible. In October, a person may prefer to prepare his farm or be engaged in other work. Also the honey of the secondary crop tends to have a high water content and, although it is locally acceptable, it is considered by the TBCS to be of poor quality for international sales. In the case of beehives near a village, harvesting times are more flexible with some honey being acquired during the rainy season.

Box 1 contains a description of a day spent cropping beehives at Kwalungu Camp; reference is made to the inspection and cropping of several bee-beehives because one hive is never harvested in isolation but as part of a day's activities. Their techniques comprised an understanding of produce quality appropriate to an international market: the honey is only harvested when it is ripe, the honey comb kept in relatively clean TBCS plastic buckets (although bark trays can be used), and comb containing pollen is removed. Each of these features has been encouraged over the years by the TBCS. Extension messages have tried to get beekeepers to leave the brood comb in the beehive when they harvest to ensure that the colony will remain. Lioba Chalamila said he does not do this because he hangs his beehives in the wrong way (i.e. vertically from a tree so harvesting is out of situ) and added that another colony of bees would enter the beehive the following year - so why bother. Also, he and his assistants like to eat the brood comb, being extremely careful to retain the chewed wax for

processing. After harvesting, the beehive is left on the ground until the harvest is completed.

Box 1: Honey Cropping

[9th of June 1993]...Stephen Lioba, one of the established beekeepers at Kwalungu Camp went to harvest his beehives accompanied by his apprentices: Peter John a distant relation and paid employee, Zachari and Kaombwe Mwamba his brother's sons, and his son Stephen Lioba.

After walking for half an hour, they reached a log beehive that had been harvested the previous year which Stephen Lioba decided to leave until the following year. On reaching another log beehive, Peter John climbed the tree and lifted the beehive off the branch, estimating it was half full, Stephen Lioba decided to leave it for the October harvest. After crossing an open expanse of grassland they passed by a log beehive harvested in 1992 close to one cropped in 1991. As they approached, someone called *hodi* to tell the bees they had arrived "may I come in?" - an enquiry called before entering a person's house which they often used when approaching a beehive. Stephen Lioba stood beneath the beehive and decided it was full and worth harvesting. (From the ground a beekeeper can tell whether the beehive is worth harvesting because it does not sway in the wind, or may have slipped to expose a light line where the rope was tied, there may be dark staining on the outside of the wood or around the entrances, signs of bee activity, and the bees appear heavy and sluggish.).

The young men dispersed to gather pieces of wood and collected long grass to use as a torch. A small fire was lit beneath the beehive (which was suspended 5.5 meters above the ground). They sat and waited in the shade; smoke has the effect of making bees consume honey and having indulged they are less aggressive. 10 minutes later John tied the harvesting rope to his waist as he climbed the tree. Kaombwe and Zachari pulled on hooded tops with wire gauze inserted into the face-pieces and bound their trouser bottoms with rope leaving their arms, legs and feet bare. All the while Stephen Lioba, who owned the beehives, was over-seeing and making comments on what they should do. John tied the rope to the hooked beehive stick and lifted the beehive off the branch while, down on the ground, Zachari held the rope and lowered the beehive over the fire, until just before touching down, Kaombwe moved it aside onto the bare ground and Zachari put the fire out. As this was done, Stephen lit the grass torch and ran it along the bottom of the beehive to make the bees afraid and stay inside. At this point Stephen, Lioba and Peter ran and hid so they wouldn't get stung.

Kaombwe quickly cut off the bark rope with his knife and opened the beehive up. A smoking branch was put near the entrance of the beehive. Kaombwe then cut each comb of honey out with a large harvesting knife and passed it to his helper, Zachari, who brushed the bees off with a piece of branch. As he did this the comb was examined, ripe honey-comb being placed in the bucket, comb with pollen grains put aside because it spoils the quality of the wax, and brood-comb placed on the lid of the bucket. Harvesting is a tough job, which looks deceptively easy. As the men harvested the bees crawled over them, stinging their hands and feet although the two men did not flinch. As soon as they finished they moved away, leaving the beehive on the ground. As the beehive was opened the first reaction of most of the colony was to mass around the queen and fly with her up to the branch, other bees were killed, and without a beehive those remaining would have swarmed.

In the shade away from the bees the comb was pounded in a bucket using a thick stick. The comb with bee-brood was dipped in honey and eaten in large quantities. They proceeded to harvest another two beehives, passing two beehives harvested in October 1992, and tested but left two beehives harvested in 1991. This trip took 7 hours from 7.00am to 2.00pm, although the time varies considerably according to how far the beehives are from the camp.

Plate 39: Lowering a beehive from a tree in preparation to harvest

Plate 40: Harvesting a beehive

Plate 41: Cutting honey comb from a beehive

Plate 42: Brushing bees off the honey comb and checking for pollen grains and unripe honey

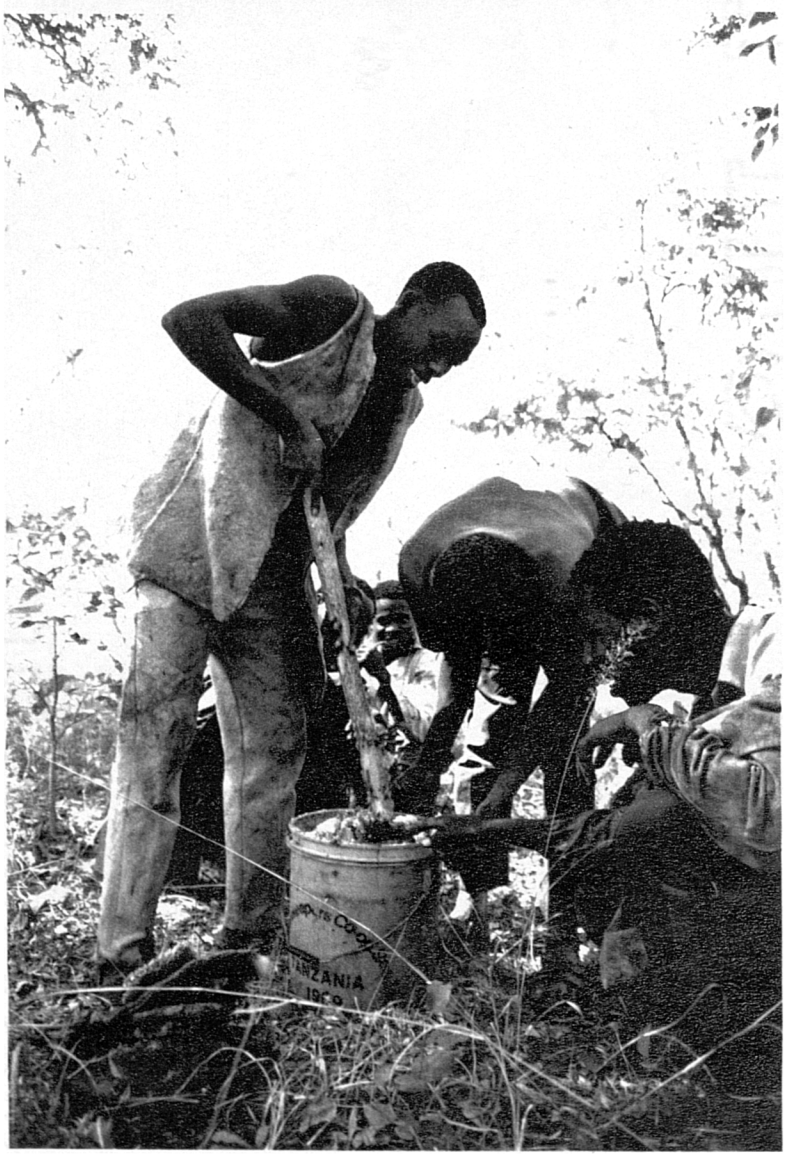

Plate 43: Crushing honey comb in a TBCS bucket

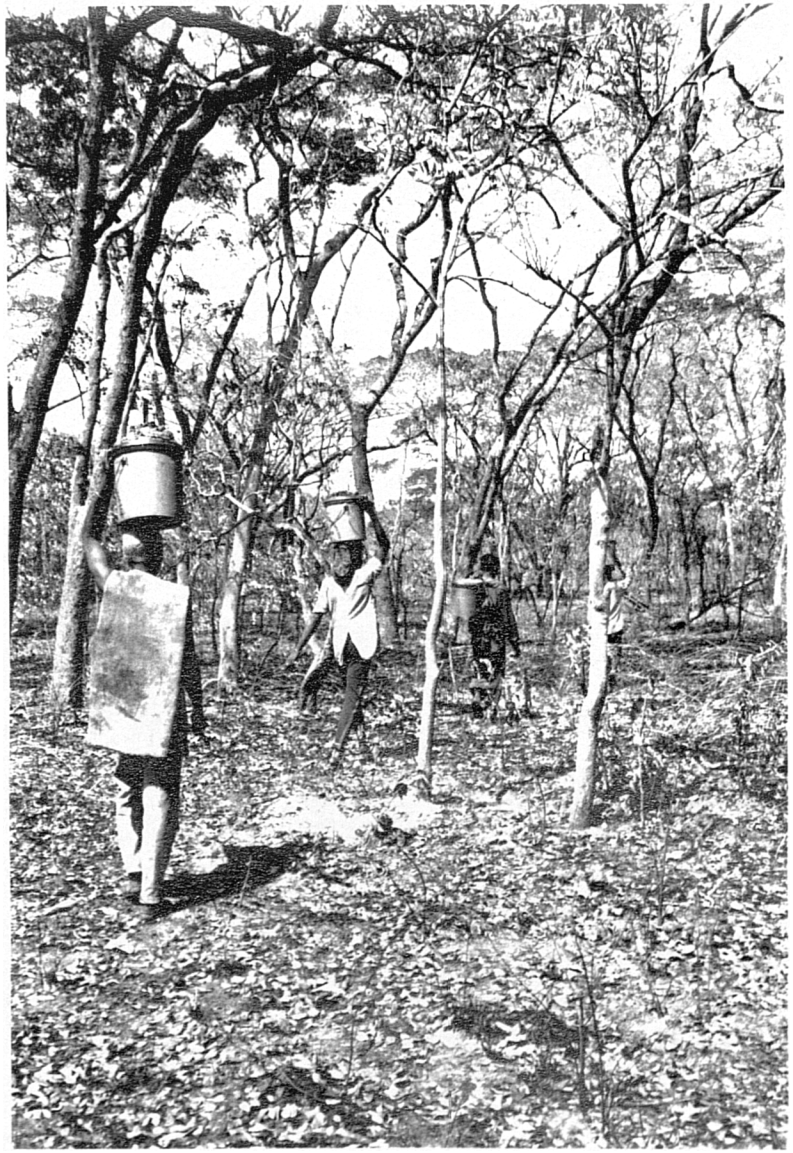

Plate 44: Carrying buckets full of crushed comb and laden with pieces of chewed wax back to camp

Table 13.8 reveals that honey cropping took place at Kwalungu Camp in the first and second weeks of June, and at Nsontwa 1 in the fourth week of June. In both cases, having arrived at the camps and seen that the honey was 'ripe' the beekeepers were eager to harvest the crop as soon as possible because it was apparent that the bees had begun to consume their honey. The harvesting period is extremely intensive. This particular year was very poor for the honey crop, when it is better harvesting is extended over a much longer period of time. Taking place in tandem with harvesting, is the process of straining the honey - at both camps this group of beekeepers were constrained to start this process because they needed the buckets that were storing the crushed honey comb for further harvesting. The initial stages of wax preparation also take place during this time, as it is removed from the top of the strained honey. Table 13.8 shows also that some bee-beehives were being made as the honey was being cropped and strained. This construction was being carried out entirely by one man, Mashaka Kagogo, employed by Lioba Chalamila as a labourer specifically for this task. This is a common practice, and such labourers are not expected to assist with the harvest. After Lioba Chalamila and the other beekeepers in the camp had carried out the tasks associated with honey cropping, they too started making beehives.

Not all types of beehive are cropped as described in Box 1, above; log beehives placed horizontally in a tree are harvested in situ. The lid of the beehive is designed to be larger than the base so that it can be lifted off without breaking the honey comb in two. The ripe honey comb can be taken out and the dry comb and brood comb left, as described in Box 2, although only a core of beekeepers closely associated with the start of the TBCS appear to do this. Box 2 is a brief description of a man named George Abraham harvesting such a beehive in July 1994, and Plates 45 and 46 were taken in the process.

Box 2: Cropping a Horizontally-Placed Log Beehive

[10th July 1994]...George climbed the tree wearing good protective clothing, with a rope around his waist and attached to a bucket on the ground. He did not light a fire underneath the tree or carry a torch of smouldering grass. After reaching the beehive, he pulled the bucket up which contained a harvesting knife and some bark rope. He cut the bark rope holding the two halves of the beehive together and lifted the lid off. The ripe honey comb was cut out, but he left the brood-comb and some dry comb. His assistant, Rhamadhani, stood on the ground and held the end of the rope attached to the bucket, anchoring it as it became heavy. Once the honey comb was extracted, George fitted the bark back in place and tied it with fresh bark rope.

Plates 45 - 46: A man harvests a log hive while his helper holds a rope attached to a bucket of honey

Plate 46

Horizontal beehives, and the harvesting techniques associated with them, were promoted in the early years of the TBCS as a more productive method of beekeeping which was less destructive for the bee colony and for forest resources, as the beehive could last for many years. Beekeepers living in Uyumbu Ward, with camps in the northern portion of the reserve, tend to make these beehives.[4] They were encouraged to do so both by a core of beekeepers who started the TBCS and by extension workers who lived in Isongwa Village. The beekeepers who adopted and these methods and whose families and acquaintances continue to use them were those most active in establishing the Tabora Beekeepers Co-operative; people who benefited well from it and could acquire additional inputs, such as protective clothing, which are needed to harvest large horizontal log beehives.

Straining the Honey - Kuchuja Asali

Crushed honey comb is kept in buckets in a shady place around the living shelter of the camp. After a few buckets of honey-comb have been harvested and as the supply of empty buckets diminishes, the honey needs to be cleaned. The produce of different people is never mixed together, and straining is carried out separately by each beekeeper and his assistants. The strained honey is tipped into a closed drum or kept in buckets.[5] The produce of beekeepers such as those working at Kwalungu and Nsontwa 1 camps is later filtered at the TBCS honey plant.

Box 3: Straining the Honey

[5th June 1993]...Paul Herman made a cylindrical shaped *Iswizilo* from *muwa* (*Julbernadia globiflora*) bark. The other beekeepers in the camp also made these strainers or improvised out of four gallon tins. In shape the *Iswizilo* was cylindrical, about a meter high, slightly smaller in diameter than a metal drum (280kg), and carefully 'sewn' up the side with bark string. It was put over the top of a drum on a number of sticks to hold it up, and across these was placed a layer of grass.[6] About 5 buckets (28kg each) of crushed honey-comb was tipped into the top and the mixture left in the sun to strain through the grass. The beekeepers who worked at Kwalungu calculate that it takes 3 days to strain five buckets of honey. To keep bees from consuming the honey, they would wake before sunrise (when the bees are still inactive) and tie the sheets they used for sleeping over the bark strainer and top of the drum to prevent bees from entering, in the evening the sheet is taken off again. This use of sheets to protect straining honey is a common sight at camps through the forest. The dry crushed wax and dirt that remained in the top of each strainer is taken off at dawn or after dusk, and carefully put aside to be purified into wax.

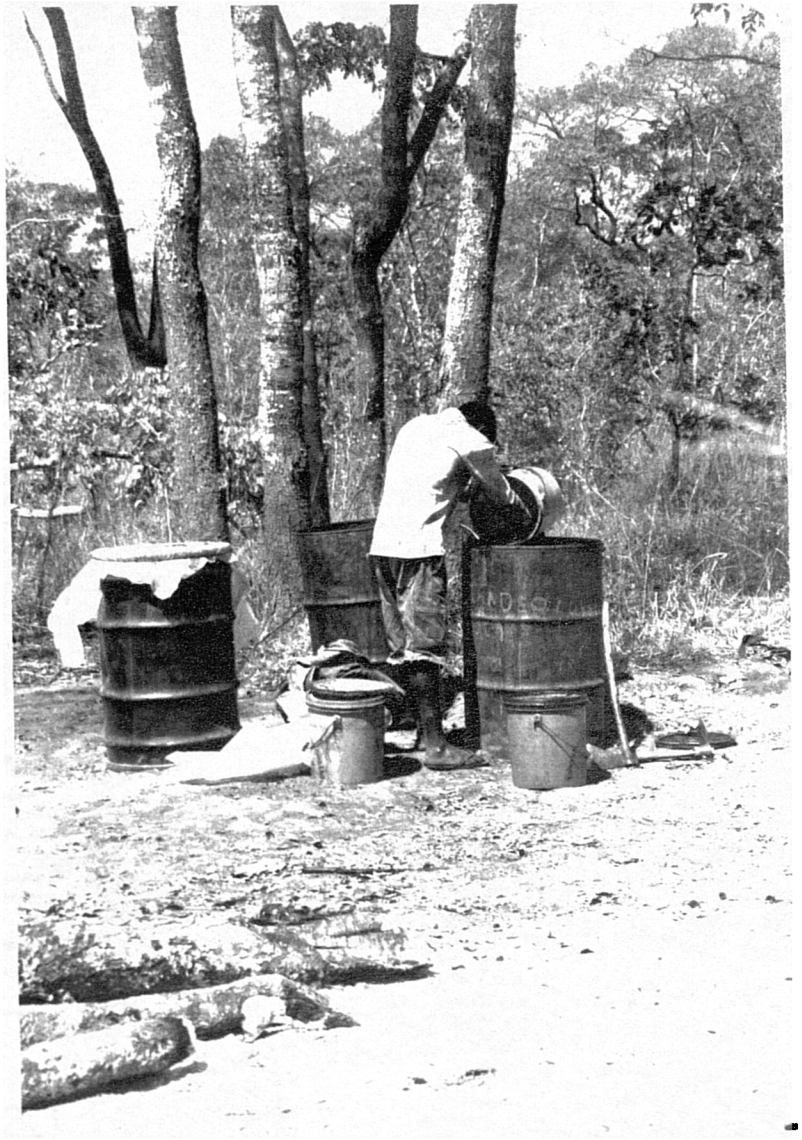

Plate 47: A man tips honey comb into a drum to be strained

Plate 48: A bark honey filter and honey in the process of being strained

Box 3 describes how beekeepers at Kwalungu and Nsontwa 1 strain honey into drums by using the warmth of the sun to make it more liquid and pass through the strainer quickly. This method of straining appears 'basic' but it does help preserve the quality of the honey for international markets.[7] These straining techniques were first encouraged along the Ugalla River to beekeepers at the TBCS in the 1960s by the colonial Beekeeping Section. The Beekeeping Section also tried to introduce the use of honey presses, hydrometers and comparator sets to measure gravity and colour respectively - none of these items were a success (Ntenga, n.d., a: 2). Several broken honey presses are still lodged at one camp, according to the present Manager of the TBCS said they were not popular because only small quantities of honey could be processed, whereas these men need a method capable of rapidly straining many buckets of honey at one go.

I carried a simple honey hydrometer and comparator set when in the reserve, and showed them to beekeepers at Msiri, Kwalungu, Nsontwa 1 & 2, Sengawane, and several other camps along the river. They were interested, arguing that they needed to be given them through a foreign aid donation, but in fact their method of testing relies on taste and sweeping a finger into the honey, then watching its consistency as it falls. The colour, viscosity and taste of honey does vary in different places and at different times of year but many beekeepers only saw viscosity - as an indicator of water content and cleaning method - as important to its quality, although others had been told by the Manager of the TBCS that people in Europe prefer 'light' honey.

Apparently, before the TBCS encouraged a 'gentle' straining technique, it was common practice to boil the honey comb and allow the wax to harden on the surface. A similar method is used today to clean honey for local consumption in porridge or for beer-making. For example, at Nsontwa 1 camp, one man, Charles Leroy, strained the honey he was taking home to his family by adding a small quantity of water, heating it gently in a tin container over a fire and rapidly scooping the wax and debris off with his hand. Sometimes this heated mixture is poured into a strainer made from a tin *debe* (4 gallons), it strains rapidly because water has been added. This method of cleaning the honey is widespread for honey beer, forming a honey known locally as *sikasi* , which has a different consistency to raw honey (*siki* is the Arab word for vinegar and Nineteenth Century European travellers record Arabs in Tabora using honey for this purpose, see Burton, 1959, 1960). Although people fully appreciate the quality needed for the sale of produce on international markets, by adding water they can gain larger quantities for sale locally or to those who cannot assess its quality, and they do not hold heated honey to be of necessarily poorer quality. Some brewers I spoke to said they would do this anyway, so it reduces their workload. It is particularly for international markets that heating and additives are held to 'spoil' the properties of honey.

Preparing the Wax - Kupika Nta

After honey has been strained, a crumbly mixture of dry comb, dirt, and chitin is pulled from the top of the strainer. Once this is done, an hour or so is spent preparing the wax, squeezing it into fist-sized balls which can be easily kept until a day can be put aside to set the wax in moulds, either in the forest or back in the person's village. This process is described in Box 4 and its duration is indicated in Table 13.8.

Box 4: Cleaning Wax

[8th June 1993]...in the early evening, Zachari and Kaombwe removed the wax remnants from Kaombwe's honey strainer and put it into a container made from a drum cut in half. They heated the mixture in water over a fire (at a temperature just above blood heat). Remaining traces of honey dissolved into the water, and as the wax softened they scooped it up and squeezed it between the palms of their hands. Each ball was placed into a bucket of cold water as they worked and, after they had finished, the wax balls were placed onto a tray made of bark. As the season progressed piles of fist sized wax balls accumulated around the camp. Like honey, wax is individual property and prepared and kept separately by each person, although they may have help from a friend or employee in preparing it.

To Cook Wax - Kupika Nta

After the honey harvest has finished, and when beekeepers are sure that a lorry will not arrive to pick them up, they 'cook' the balls of wax that have been put to one side. Each person's wax is prepared separately and, as it is a process that takes several hours, a day or evening is spent carrying out this task, or it is delegated as the specialised job of a labourer. Table 13.8 depicts when this task was carried out in relation to other activities taking place at Kwalungu and Nsontwa 1 camps.

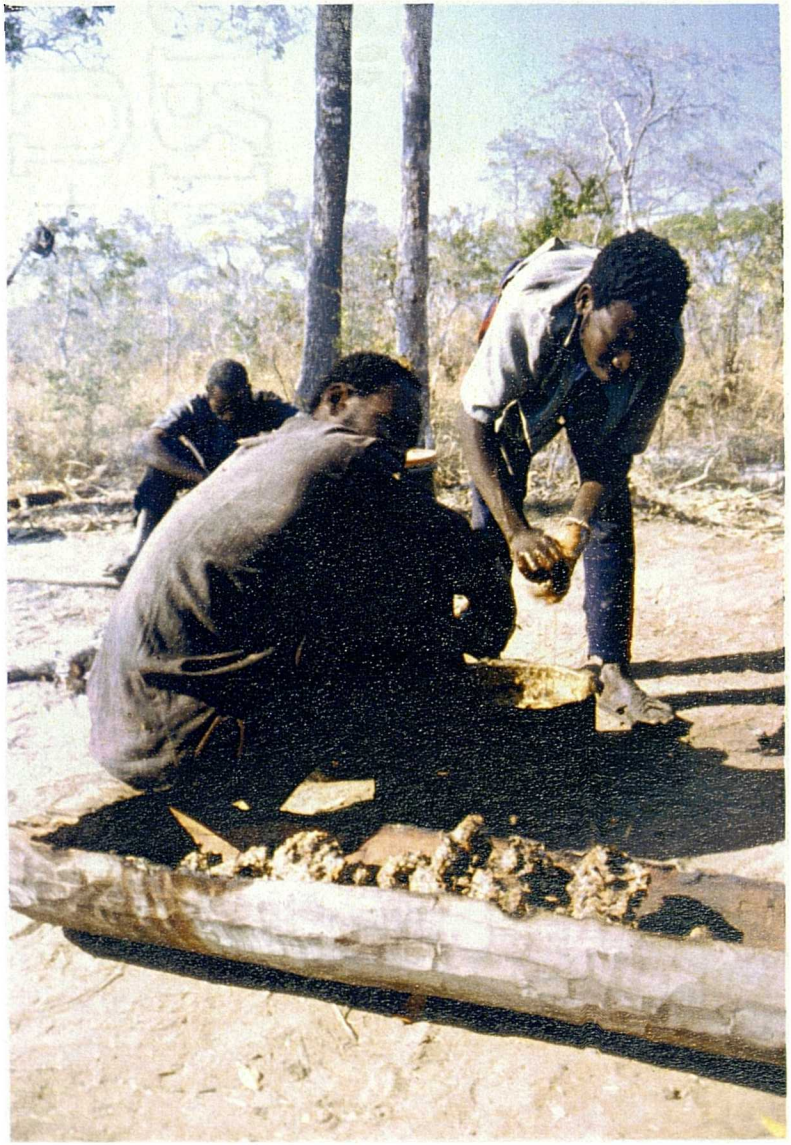

Plate 49: Dry honeycomb being squeezed into balls ready for processing into wax

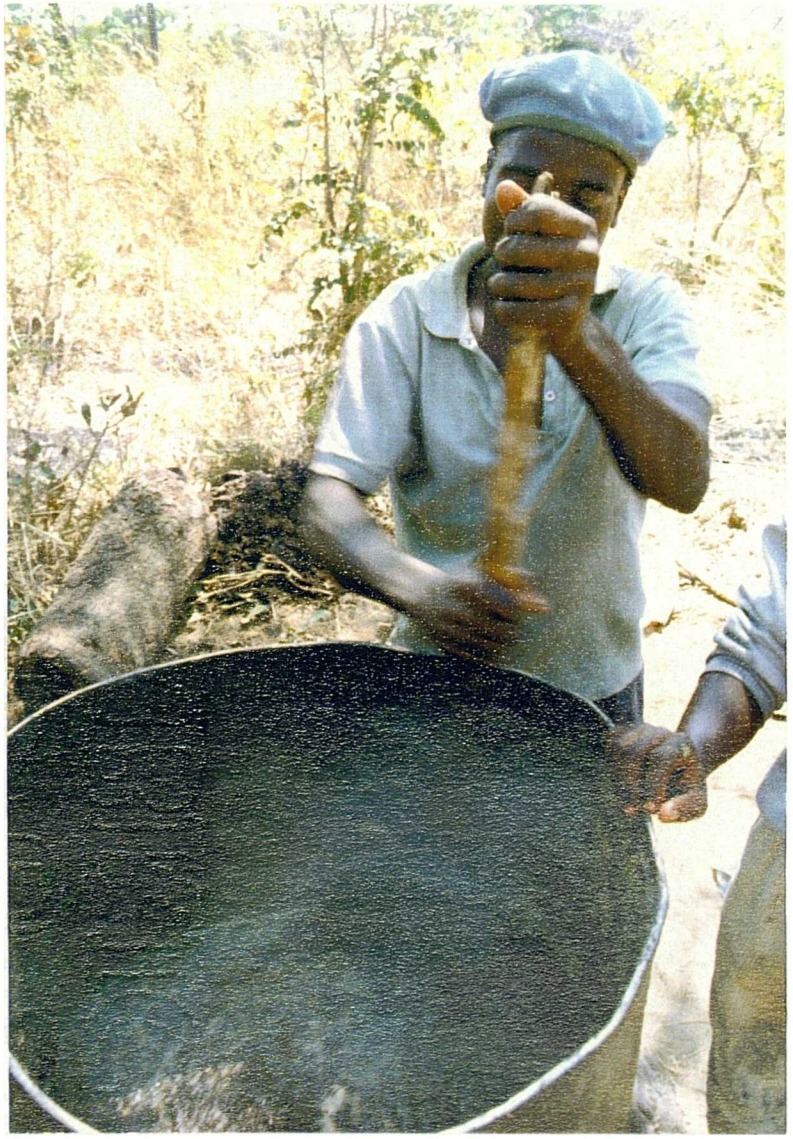

Plate 50: Honeycomb being 'cooked' in hot water ready for straining

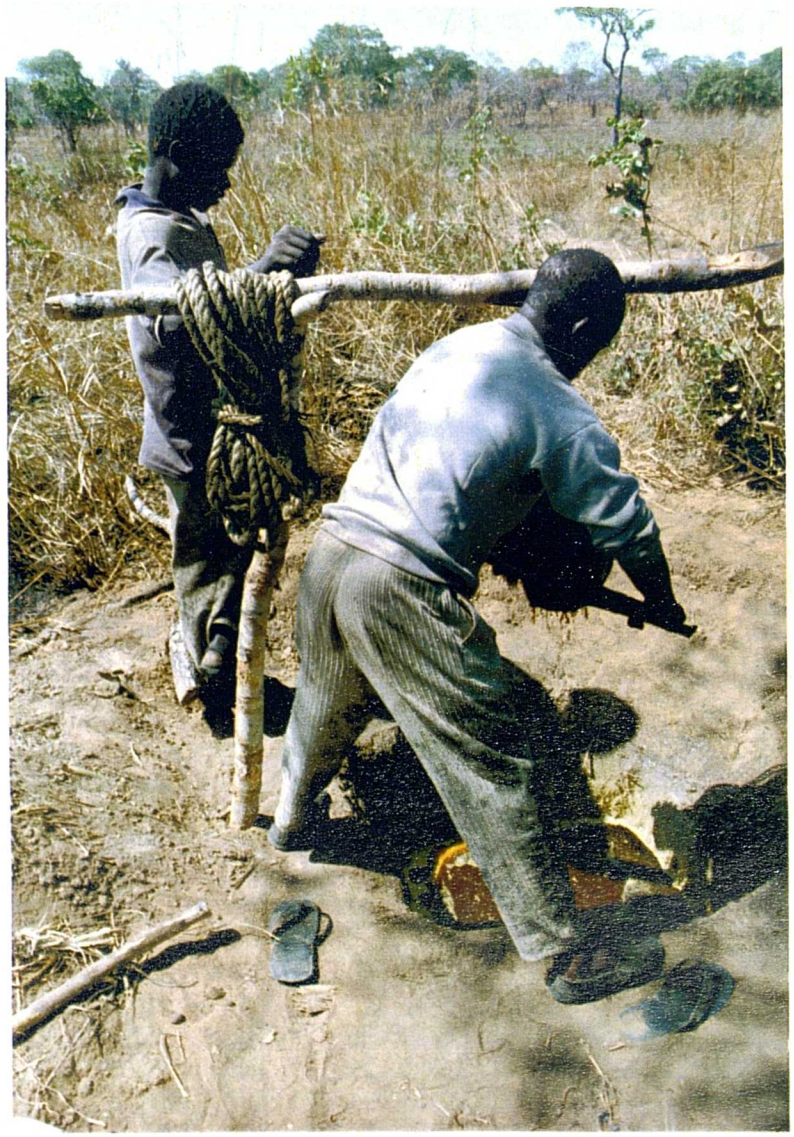

Plate 51: A boiling mixture of water and wax being squeezed through a fertiliser sack to remove the debris

Plate 52: A cake of beeswax ready for sale

Box 5: 'Cooking' & Setting Wax in a Mould

[27th June 1993]...Kaombwe and Mateo Stephen walked to Kwalungu from Nsontwa 1 in order to cook the wax of Lioba Chalamila and of Kaombwe himself. To do this they dug a shallow basin-sized hole in the ground, and erected two forked poles on either side, placing a horizontal pole (about 1.5 meters in height) over the top. In the middle of the pole they tied half of an old fertiliser sack onto a short piece of rope - this was to strain the boiling mixture through.[8]

A fire was built to one side of the structure, over which they placed a drum and half filled it with water and balls of raw wax. The mixture was then heated vigorously and stirred by Mateo. When they considered the mixture 'ready', Mateo tipped a small portion into the strainer and Kaombwe quickly tied it up and then drew two hand-held pieces of wood firmly together down either side of the sack. This task had to be carried out very carefully; it is very common for people to get severely burned on their hands and arms during this process. As the liquid strained out of the sack it ran into the shallow hole, while residues of dirt left in the sack were thrown on a pile to one side. At the end of the process, they were left with a layer of set wax, the water having drained into the ground. After this had cooled they scraped it up, placing it on a clean piece of bark, the straining process was then repeated except that the wax was gently melted and strained into a bucket, after it had set they removed it and gave it to Lioba Chalamila who put it with his belongings inside the sleeping shelter.

The process of 'cooking' the wax described in Box 5 is carried out in beekeeping camps throughout Ugalla Game Reserve. In the 1950s, F.G. Smith, the first Colonial Beeswax Officer in Tanganyika Territory (see Chapter 9), was appointed to upgrade the standard of beeswax being exported from the Territory. Consequently he and his assistants put time and effort into promoting new methods, trying to impress on beekeepers not to boil the wax, not to adulterate it, and to strain it into a clean container, and at the TBCS beekeepers were only allowed to sell wax of the highest standard. If one contrast this with practices today, in general the method of cleaning wax of impurities has improved enormously, for beekeepers cannot sell it unless it is clean, although if poor quality cannot be observed by traders they will readily sell it in this state.

The colour of wax produced in Ugalla Game Reserve varies. Light colours are of higher international value, but beekeepers say that old, brown, comb is heavier than fresh comb (unsubstantiated by local experts) and, as wax is sold by weight not colour, they prefer it to be 'heavy'. A variety of adulterants can be added to beeswax, including stones, pieces of squash, stingless beeswax, paraffin wax and maize flour. Large quantities of wax are sold to merchants in local towns; when buying, these men examine the produce, cutting it into pieces to check for stones and impurities, scrape it, and burn a piece, if adulterated the flame is different.

Bark Rope-Making - Kuchuna Kamba

After beekeepers have finished cropping their honey they will spend 1-5 days re-hanging their harvested hives and repairing old ones. Beehives are hung using rope made from the bark of a tree. In both June - July and October -November 1993, the beekeepers at Kwalungu and Nsontwa 1 camps spent a couple of days making sufficient bark rope to hang their beehives (see Table 13.8). Everyone in the camps carried out this task at the same time, although they went off in pairs or threes to do this. Once the rope has been made it was left hanging from bushes around the camp shelter until needed, then put into water to re-soften it. This process is described in Box 6, it did not take place until all had finished harvesting their bee-beehives, when they were preparing to spend time re-hanging them. Table 13.8 depicts rope being made at Nsontwa 1, but not Kwalungu Camp, because they had made enough rope to re-hang bee-beehives at both camps.

The most common species of tree used for rope-making is *Muwa* (*Julbernadia globiflora*), although *Mgela* (*Brachystegia microphylla*) and *Miombo* (*Brachystegia boehmii*) are alternatives. However both of the latter species are weak, and miombo is said to be difficult to debark in the dry season and 'sweet', attracting insects which gnaw the bark and cause the hive to fall. Fishermen often tie their beehives with pieces of old net, and beekeepers report the use of wire, nails and wild sizal (*makanya*) to hold beehives in place. In discussions with me, TBCS members regularly promoted their need to be given wire to use on their beehives instead of rope. This implied that they had been donated it in the past or at least had heard of its use, and they saw it as a means to reduce their workload - arguing also that it would reduce deforestation - but rarely in practice did I observe the use of wire to hang beehives and never in Ugalla Game Reserve.

Box 6: Bark Rope-Making

1st of July 1993...Mateo, James and Peter went to make bark rope at Ipalankwangu camp...After walking for an hour they reached a site where they knew they would find suitable *Julbernadia globiflora* trees for rope making. The bark of trees with an estimated circumference of 76-107cm were examined for suitability.

After two trees had been cut down (76cm and 90cm in circumference diameter breast height), debarking proceeded as follows: Mateo measured seven lengths of his axe handle along a fallen tree trunk and started to chop it through at this point. Afterwards he cut into the bark in a straight line along the length of the trunk. The bark was hit with the blunt end of the axe to loosen it from the inner wood, then Mateo wedged his axe under the bark, pulling it off in one piece with his hands, drawing his knife under the places where it wouldn't give. He gradually rolled the trunk over, repeating the process until it was completely denuded and he was left with three wide strips of bark.

Each time Mateo cut a strip he lay it on the ground, tidying the edges with his knife. With the inside of the bark uppermost, he inserted the knife into the centre and pulled the rough bark away from the smooth inner layer. Care was taken to do this evenly so that the quality of the smooth bark wasn't spoilt or split. The smooth bark was taken up and yet another thin layer peeled off and discarded. The rest of the bark is left to decay on the cut tree. They pointed out that there was only a certain point up to which the bark was straight and not knotted, the rest, they said, was useless.

By this time the bark was reduced to a long strip 10-12.5 cm wide, seven axe handles long (approximately 7 x 35cm), and about 0.5 of a centimetre thick. This is split down the middle to make approximately 5-6 cm wide strips, each the length required to hang a beehive, 2.5m. The rationale for making the bark rope about 2.5 metres long is that two strips of rope are calculated to be the quantity and length of rope needed to hang a beehive. From one tree, Mateo made 24 strips of rope, enough to hang 11 or 12 beehives. The other tree he had cut down was slightly larger and made 32 strips of bark, enough, they calculated, to hang 15-16 bee-beehives. When he had finished making the rope from both trees he coiled it tightly and carried back to camp with the fresh bark quickly turning from pale to dark red or black. One regularly sees these coils of rope hung up around beekeeping camps.

Hive Hanging - Kutundika Mizinga

After the bark rope has been prepared, the beekeepers return to re-hang harvested beehives. These beehives are cleaned of debris, and a torch of burning grass is used to scorch the inside. When in the forest each person looks out for the nests of stingless bees, *ipula* (*Trigona sp.*). A small ball of this wax is collected and used to smear the inside of the beehive, making it aromatic and attractive to bees. Once this is done the beehive is sealed with fresh rope and the beehive hanging stick (*kontoro*), 100 - 150 cm in length, tied to it. Horizontal log beehives are tied to the tree using bark rope or wire.

Plate 53: A tree (Julbernadia globiflora) being debarked to make bark rope

Plate 54: The outer layer of bark being peeled away to leave the smooth inner layer

When hanging a bee-beehive, one person climbs the tree with a rope and draws the beehive up, replacing it in its old location. With a new beehive, an appropriate tree is sought and the same process carried out. At Kwalungu Camp the beekeepers calculated that the rope of log beehives requires changing every 3 years if the beehive hasn't been harvested, although they do not always do this. They estimated also that it was possible to re-hang 20 bee-beehives a day although again in practice this varies considerably.

Hive-Making - Kuchonga Mizinga/ Kutengeneza Mizinga

People who keep bees in Ugalla GR may make beehives themselves or may employ a labourer to make the beehives for them. For members of the co-operative payments are established by the TBCS: in 1993 a log beehive cost T.Shs. 300 (75p), although prices may vary in other parts of the region and bark beehives are much cheaper. The beekeeper also has to support the labourer with food when he is in the forest. Therefore a person's capacity to make new beehives, whether for himself or by employing labourers, depends on the resources he can muster: money, food, good-health and time. Boxes 7, 8 and 9 describe this processes for both log and bark beehives.

Box 7: Constructing A 'Sewn' Bark Hive

[28th October 1993]...Lioba Chalamila, helped by his assistant Peter John, demonstrated to me how to make a 'sewn' bark beehive, although he now favours log beehives. Strong, flexible bark is needed to make a bark beehive. Lioba Chalamila looked for a suitable tree with a circumference corresponding to the size of the intended beehive. Once found, he tested the tree for suitability by cutting a flap into its base. He folded the flap back: if it was of poor quality a strained fibrous texture would have appeared; as it was good, the inside remained smooth and flexible. He tested with his finger to see if the bark was slippery and could easily be pulled away, ('the tree it agrees'). Three trees were tested before a suitable one was located. Once he found an appropriate tree, a cut was made around the circumference at the height his axe could be comfortably swung, another cut was made at its base, and a vertical cut joined the top and bottom circles together.

To take the bark from the tree, he hit up and down with the blunt head of his axe to loosen it and slipped the axe up and down one of the vertical cuts to draw the bark away from the trunk, then he and Peter John grasped the bark and pulled it away as they circled around the trunk. Once the bark was away from the tree, the outer rough layer was scraped off, and when finished the bark was laid on the ground. It was then flattened against the ground and cut into two pieces of uneven size, the largest being rolled to form a cylinder. For this type of beehive the bark is used 'inside out' because the roughly scraped outside-layer easily allows rain-water to enter; in contrast the inside surface is smooth, enabling water to run-off easily. Lioba Chalamila tidied the ends of the cylinder with a cut-throat razor. He made some bark string from a young Julbernadia globiflora sapling, each strip being half a centimetre in width. One end of the bark string was knotted and the other made into a point and using a tool like a large bradawl to make holes approximately two inches apart through the adjoining edges of the cylinder and he then threaded the bark string along its length and back in parallel lines.

After he completed the cylinder, he cut two circles from the second piece of bark to use for the ends of the beehive. To 'sew' the end wooden splints are used to hold it in place and holes made for threading the string. After having the ends fixed in place, the beehive was carried back to the camp to dry out. When dry, three holes were placed in one end to provide an entrance for the bees and a beehive-hanging stick (*kontoro*) was tied to the beehive with more bark rope made from *Julbernadia globiflora*. This 'sewn' bark beehive took approximately two hours to finish, minus the beehive hanging stick and hanging rope. It measured 61cm in length and 117 cm in circumference.

Beekeepers who are members of the TBCS cite an average beehive increase to their total hive numbers of 20 (log) bee-beehives each per annum. This is the ideal target held by co-operatives members, but it does not accord with the variability that one finds in the number of beehives different men manage to make or acquire per annum. To take an example from Kasontwa A camp in June-July 1993: Lioba Chalamila, a well established beekeeper paid a labourer to make 26 log beehives in June 1993, during which time he supported the young man with food. This he could do because he has a large farm and gains income also from his crop of honey and wax. Another beekeeper, Mzee Ali is an old man in his seventies, he is too poor to employ anyone to make beehives but he managed to make 2 log beehives for himself in 1993, but was prevented from making any more because he fell and cut his leg badly.

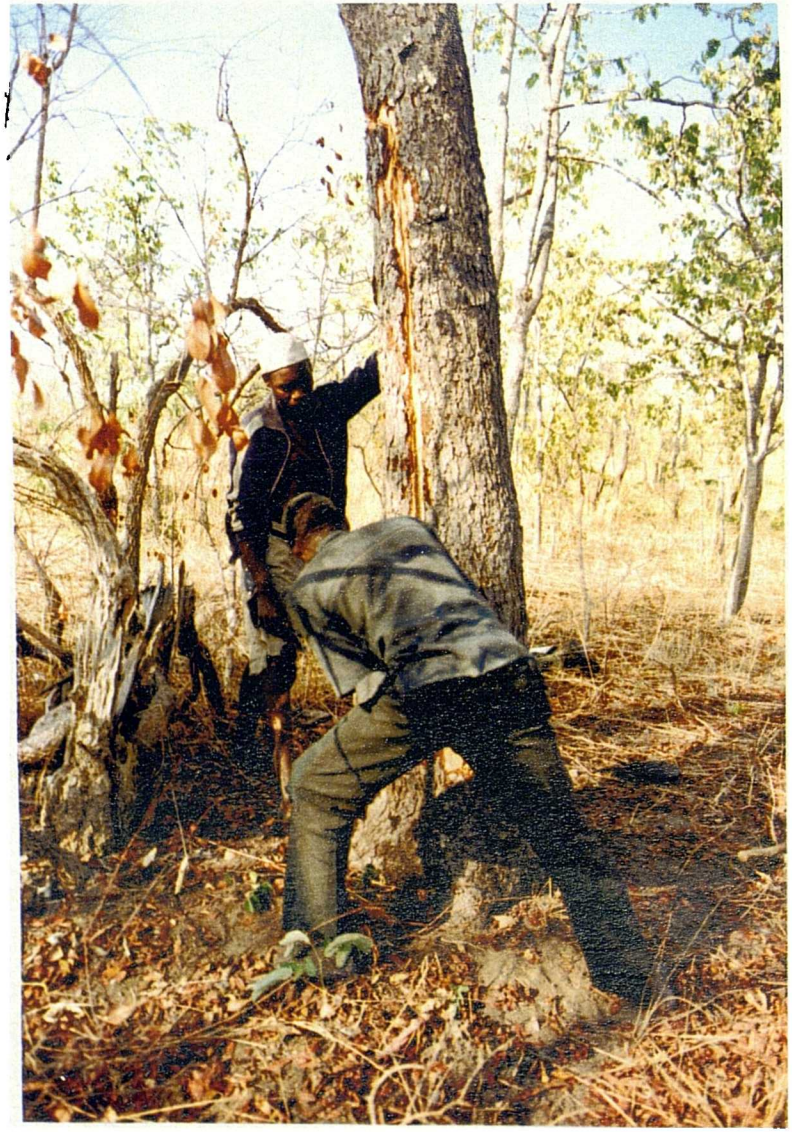

Plate 55: Debarking a tree (Julbernadia globiflora) to make a beehive

Plates 56 - 57: Construction of a 'sewn' bark hive

Plate 57

Plate 58: The completed beehive, and the axe, knife and awl used in its construction

The brother in law of Lioba Chalamila paid someone to assist him in the harvest but could not afford to pay him to make beehives, he managed to make five beehives (check) himself before he had to leave the forest with the other beekeepers. These examples give some impression of the context one has to take into account when considering how many beehives a beekeeper can increase by per annum.

Box 8: Carving a 'Pegged' Bark Beehive

[21st July 1993]...Michel Peter and Haji Ali, two beekeepers from a neighbouring camp to Kwalungu demonstrated how to make a pegged bark beehive. They selected a *Muwa* (*Julbernadia globiflora*) tree and debarked it as for a 'sewn' bark beehive. However, in contrast, the rough outer bark was left on to form the outer layer of the beehive. Four 'splints' (30cm in length) were cut into shape from durable wood. An adze and knife were used to make four two inch holes down each side where the cylinders come together. The splints were then hit into one side and out the other with the blunt head of the axe. The bark was then held together in a cylinder and reinforced by hitting each side of the cut until they overlapped. The ends of the cylinder were tidied up with a knife.

Once the cylinder was made, the beehive ends had to be attached. These are circular in shape with a protruding 'tab' (or 2 'tabs') used to hit the end off quickly when harvesting the beehive. The beehive ends were prepared beforehand from dry-wood, of which a variety of species can be used. The pre-prepared beehive end had to be reduced to an exact fit by chipping away at it with an adze. Before the ends were hit into place with the blunt end of the axe, notches were made in the bark to accommodate the 'tabs'. In some parts of the region grass coils are used as ends.

All that remained was for bark rope to be tied around the beehive and a hive hanging stick (*kontoro*) made to suspend it from the branch of a tree. The beehive was hung so that the joint of the cylinder rested on the underside in order to protect the contents from the entry of rain water. A 'pegged' bark beehive takes about one and a half hours to make and lasts longer than a 'sewn' bark beehive.

Appendix 7, Table 13.4 lists the different types of wood which can be used for beehive making.[9] For bark beehives *Julbernadia globiflora* is most widely used because the bark is light, durable and can be debarked from the tree in the dry-season. An alternative is *Brachystegia boehmii* but it is weak, therefore the bee-beehive will not last long and it gets eaten by insects. *Brachystegia speciformis* can also be used but the bark is very heavy, it is also best debarked during the rains - when the beekeepers are absent from the forest. If *Julbernadia globiflora* is scarce then beehives can be made from *Brachystegia microphylla* but it is a weak bark.

Plates 59 - 60: Construction of 'pegged' bark hives

Plate 60

Box 9: Carving a Log Beehive
(Suspended Upright or Placed Horizontally in the Tree)

[27th October 1993]...Paul Herman felled trunk of a tree such as *Pterocarpus angolensis* is cut to produce a cylinder roughly corresponding to the size of a beehive. Once this is done a vertical cut is made along the length of the beehive and two iron wedges are placed in the cut, part of a sapling or handy piece of wood is used as a hammer to hit the wedges into the trunk and bisect it in half.

Once the section of trunk is split in two, each half needs to be hollowed out. The inside of each half is divided into three manageable portions and each are hollowed out and then the dividing bridges cut away to leave a rough cylinder with its ends still in place. This stage may take four or five hours, typically broken by rests to smoke a cigarette.

Having hollowed out both halves of the cylinder beekeeper proceeds to chip away layers of the wood with an adze. The beehive needs to be as thin and as light as possible (2-6 cm thick). When the beehive is satisfactorily finished, the inside is singed with a torch of burning grass to remove the smell of newly cut wood and each half is smeared with melted wax from the stingless bee (*Upula, Trigona sp.*) to add a sweet aroma attractive to the bees. The process of singing the wood and smearing wax on it is said to get rid of the smell of newly cut wood and add a strong, sweet aroma which is said to attract bees to the beehive. The two halves of the beehive are then bound together with bark rope and a beehive hanging stick tied to its centre (if it is to be suspended upright).

A log beehive takes 6-7 hours to make if the beekeeper has already located the wood, debarked a tree for rope and found the wax of sting-less bees to use as bait. Log beehives that are hung in the tree tend to be larger than those which are hung from the branches and therefore take proportionately longer to construct. Beekeepers typically characterise the length of time it takes to make a log beehive as 'one day but two if you are an old man'.

In the case of log beehive making, beekeepers in Ugalla GR prefer to use *Pterocarpus angolensis* because it is easy to carve but durable. Beehives can be made from *Terminalia sericea* but it is very tough to carve and if the beehive falls from the tree it will shatter, it will however last longer than *Pterocarpus angolensis, Albizia antunesiana* is also quite good because it is easy to cut. Beehives made from *Brachystegia bussei, Euphorbia bilocularis, Borassus aethiopium, Vitex spp.*, and a tree known locally as *Mbonga* have all been observed in Ugalla Game Reserve but *Pterocarpus angolensis* is preferred.

In relation to the durability of different types of beehive, as summarised in Figure 13.9, beekeepers say that 'sewn' bark beehives made from the bark of *Julbernadia globiflora* have a life-span of 1-3 years, although I have observed beehives which were still in use after 8 years. Pegged bark beehives from the bark of *Julbernadia globiflora* are said to have a life-span of 5-6 years although again they may last for considerably longer.[10] Log beehives made from *Pterocarpus angolensis* can be extremely durable, especially when placed horizontally in the tree, with a life-span of around 20 years although beekeepers typically recall the continued use of a beehive made by someone who died 40 or 50 years ago and its continued use, I do not know if this is true. People point out that obviously for a beehive to last a long time it has to be made and maintained well.

Plates 61 - 62: A log hive being made by a beekeeper's assistant

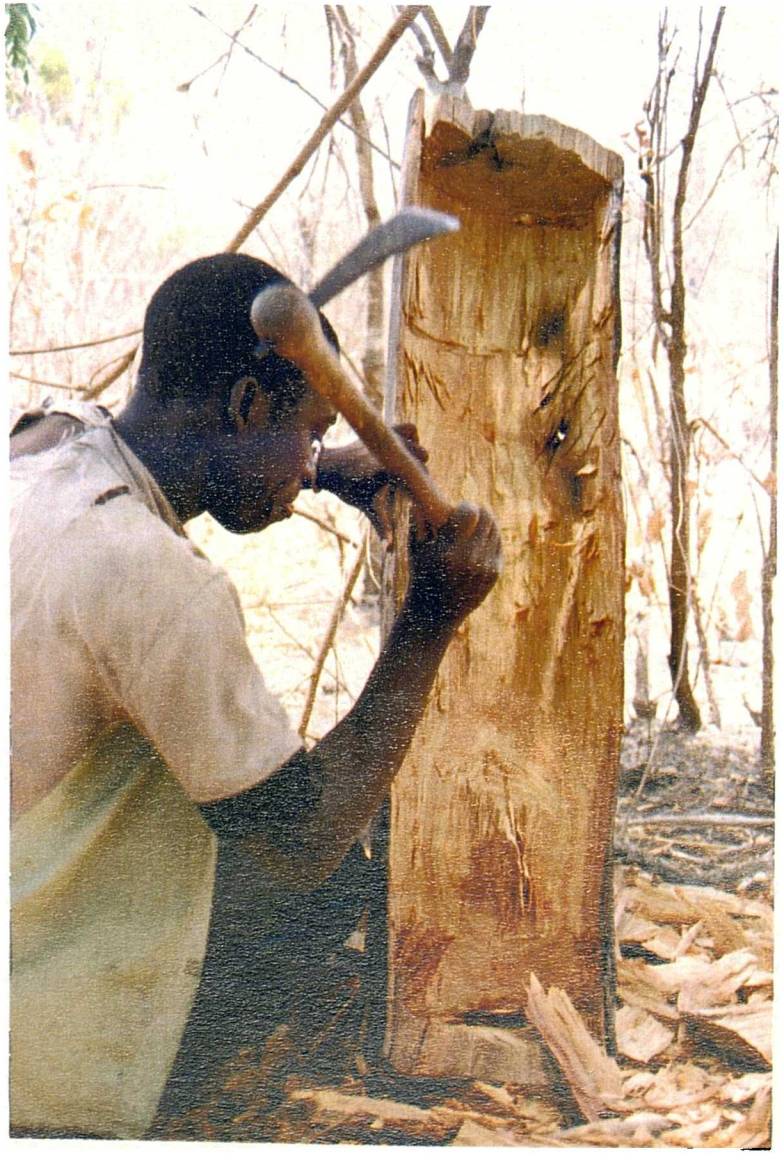

Plate 62

Beehive type	Estimated life-span
'Sewn' bark beehive	1 - 3 years
'Pegged' bark beehive	3 - 8 years
Log beehive (hung vertically)	10 - 15 years
Log beehive (placed horizontally)	20 years

Table 13.9 Life-spans of different types of beehive

Boxes 7 -9 contain descriptions of how bark and log beehives are made, the accounts are largely self-explanatory but some points can be made. In the case of bark beehives, 1 - 3 beehives are made per tree. Beekeepers limit the bark they take of a trunk because they find it difficult to debark a cylinder from a tree when it is on the ground, also they do not like to use a make-shift ladder because of the danger of accidents.[11] This form of debarking completely kills the tree although this is not seen as a problem - or as wasteful - because, beekeepers explain, fresh bark can easily be found and new trees continue to grow.

Log beehives that are placed horizontally in the tree (*mizinga ya kulazwa*) are made in exactly the same manner as log hives that are hung vertically, but they tend split into two uneven halves so that one can easily be lifted off from the other without destroying the honey comb when harvesting (bees build their comb from the top of the beehive downwards whatever way it is hung). These beehives can also be larger than vertically suspended log beehives because they are tied in the fork of a tree where the branch is at its strongest. The critical difference between the two types of log beehives is in harvesting techniques.

It would appear that horizontally laid log beehives may have been introduced to people in Isongwa in the 1960's when the TBCS was flourishing and three extension workers were based in the village. Today, it is claimed that these beehives are a 'tradition' of people in the area. The making of log beehives in general has increased in popularity for TBCS members within the reserve, it is argued that they last a long time. For example, Lioba Chalamila and his father used to make sewn bark beehives but since someone showed Lioba Chalamila how to make log beehives he has adopted this technique in preference to others and his apprentices also make log beehives.

A log beehive is carved from the dry timber of a species such as *Pterocarpus angolensis*. In the case of a substantial tree, two or three beehives may be made per trunk. In order to obtain dry timber - and to flout rules of the game reserve which say that green timber cannot be used to make beehives - a person may search for a tree that has fallen down use the off-cuts of wood from logging operations, or cut a tree in one year in order to use it in the next.

Beehive Numbers

The number of beehives a person owns at each camp is highly variable (see Tables 11.2 - 114 for examples). I am often asked how many beehives does a beekeeper own in this area, and its a question that is difficult to answer because it can vary so much. Here it is helpful to consider beekeeping in the context of a man's lifecycle. If a person starts to learn to keep bees when young they will do this by assisting someone else. Gradually they will begin to make their own beehives if they have the time, money and inclination. Often one finds that once a man marries he will start to commit himself to beekeeping seriously and begin to build up the number of beehives that he has. Men say that they want to have an occupation that will set their sons up in life.

Alternatively a person may learn to keep bees when they are very young, then take up employment until they are in their 50s and then decide to retire into bees. In both cases, the amount of money and resources a person can accrue through working will be reflected in beekeeping. If someone is very poor in life he is unlikely to be able to possess a large number of beehives, whereas someone else with a large farm and children in employment in the city may build up a large number of beehives. The most successful beekeepers whom I talked to had anything from 800 to 1000 beehives, and I occasionally heard stories of people who had managed to gain 1500 to 2000 beehives although this is extremely rare. Anyway it was astutely pointed out to me on many occasions that it is not the number of beehives that a man possesses that makes for successful beekeeping, but rather the amount of honey and wax that he manages to produce, and this rests on maintaining and managing beehives well, not the total numbers a person possesses. Moreover, a large number of bark hives can be acquired very rapidly whereas log hives take longer to make and are more expensive, however over a long period of time these log hives will be far more durable.

Strategies in Response to Honey Fluctuations

It has been suggested that beekeeping in Ugalla GR and the surrounding region is form of livelihood which can be of high risk to the beekeeper. Levels of production fluctuate enormously: bees may not colonise a beehive and Apis mellifera adansonii readily vacate the beehive in search of food, water or better shelter. Beekeepers have a number of strategies to deal with this situation; as explained above, one way of dealing with risk is to place beehives in different locations, either around a camp or at two or three camps in different parts of the region.

In this context, where beekeeper's place a beehive in a tree and do not tamper with the colony, the art of beekeeping rests in the ability of the beekeeper to make, situate and maintain a suitable environment that will entice the bees to stay and flourish. The knowledge and understanding that enters into putting a bee-beehive in the right location its extremely subtle and depends on a

person's intimate acquaintance with a particular locality. If a beehive continues to attract bees year after year it will remain in its original situ, if not it will be moved. Some well respected beekeeping members of the TBCS maintain that the bees have particular flight 'paths' (*njia ya nyuki*) which a very good beekeeper will know of.

Another aspect of the skill of beekeeping is knowing when to harvest a beehive and when to leave it. A well established beekeeper will try to have many beehives, and only a percentage will be harvested in a given year.[12] One beehive is never harvested twice in one year, and from observations made at Ipalankwangu Camp in 1993 it would appear that bee-beehives are harvested at intervals of every other year or longer. During the period of fieldwork I stayed at Ipalankwangu camp both when the camp leader, and 'key' beekeeper, was there and when he was absent, one thing that was striking was the degree of harvesting restraint he would urge upon the other more junior beekeepers (his apprentices).

Here one can see that in order to leave a bee-beehive without cropping it, the better it is to have more bee-beehives and this is linked both to an individuals character and also to the resources that he can put into beekeeping. This in turn depends on how successful a beekeeper is in other aspects of life, and what responsibilities he has to bear.

As a final point, in interviews with beekeeper-members of the TBCS who were respected for their beekeeping skills, they would stress that a good beekeeper is a man who can produce a lot of honey and beeswax and do this each year despite the vast fluctuations in features such as rainfall which affect the quantity of honey that bees produced. And ultimately, they would say, high productivity rests not on the number of beehives a person owns but upon how well he maintains the beehives and where he sites them - making sure they are well made, kept clean after harvesting, sited well, and the rope is renewed after harvesting.

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[1] This Appendix should be cross referenced with the methodology section in Chapter 1, and with Chapters 8, 9, 10, and 11.

[2] In Kinyamwezi, the year is characterised by four main divisions, *luhehe* the cold period in June and July, *ilungele* the hot season between August and November, *nemba* the early rainy season between November and January, and *kabenbo* the period of maize pollination between February and March. The primary and secondary honey crops are characterised according to the seasons when they occur, *luhehe* and *nemba*.

[3] This information is based on observations made in my field diary. Detailed observations were also made in November - December, 1993, at Kwalungu Camp and July 1994 at Sengawane Camp. 1993 was a very poor

year for the honey crop in this area, if the harvest is good the time spent on different tasks would vary a lot and it is likely they would have stayed in the forest for longer.

[4] Measurements I made indicate they can be up to 2 meters in length and between 75 cm and 120 cm in diameter.

[5] If drums or buckets are unavailable, containers will be made of bark, although it is considered an old fashioned and less efficient alternative. These containers resemble trays the size of a drum sliced through the middle from the top down, the sides being turned up to hold the comb. A shallow pit is dug in the ground, the bark container is placed into this and the honey comb tipped in. A sheet or pieces of bark are placed over the hole and secured with stones to protect the honey from bees and dirt. This method was apparently common practice in Ugalla Game Reserve before tin or plastic buckets and drums became available through the TBCS. (Similar containers are described by European travellers through the area in the nineteenth century; James, 1872; Cameron, 1875; Moloney, 1916; Fonck, 1910).

[6] A common alternative is to bind a piece of flexible stick into a circular shape just smaller than the circumference of a drum and weave a mesh of bark rope across it. This is fitted about two thirds of the way down a drum and held by bark rope that is pegged to the ground. On top of the bark mesh are placed layers of long grass.

[7] For example, the quality of honey is reduced when Hydroxymethylfurforal (HMF) levels are high. Also the type of Western consumer who buys Tanzanian forest honey as 'table honey' is likely to place a high value on the preservation of its enzymatic properties which can be easily destroyed. HMF is a naturally occurring substance which honey is converted into through the action of enzymes when heated or stored in warm temperatures. The European Union has strict regulations about the acceptable HMF level in imported honey. Given the difficulties of transporting honey in Tanzania (for instance it is often left sitting in the docks for a long period of time) and the average general temperature, obtaining an acceptable HMF level is highly capricious.

[8] The strainer may also be made of palm in which case it is known as a *kitala*, the same as that used for straining beer, but people commonly use a fertiliser or sugar sack.

[9] Near villages one also sees hives constructed of make-shift materials such as tins or boxes covered in grass but these materials are not available in the forest.

[10] Many people say that 'pegged' bark hives are very recent, both inside the reserve and outside, although trying to determine where they came from is difficult to determine. Nineteenth century accounts by Europeans in Ugalla and in Unyamwezi describe bark and log beehives, therefore it seems unlikely that one type of beehive is older in the area than another. In Speke (1978 (1863)) there is a drawing of a 'sewn' bark beehive based on observations made in 1859 that appears exactly the same as those one would find today, Burton describes log hives along the trade route stretching from the cost to Unyamwezi and Reichard describes a log hive from Ugunda bordering the Ugalla River based on a stay there in between 1881-3 (1890: 241).

[11] Extension workers in the 1950s and 1960s tried to encourage beekeepers in Ugalla GR to use ladders in order to be more economical on bark.

[12] I recorded detailed observations on the number of hives cropped, as well as beekeepers' harvesting decision-making in 1993, however this information is virtually meaningless because it cannot be compared to data over a number of years.

Appendix 9

The Production and Sale of Honey & Beeswax by One Group of Beekeepers in 1993

I wish to consider in detail how a group of beekeepers used, exchanged or sold the produce they obtained in 1993. The group was composed of an average of eleven men spanning in age from 21 to 70, five of whom were considered beekeepers in their own right and the others their assistants, although all but one person possess at least a few beehives.[1] Three of these people were TBCS shareholders and one was the Chairman of a local branch of the TBCS. Despite the fact that there was only three TBCS members in the camp, all obtained Co-operative transport to go to the reserve, used its honey containers and sold a percentage of their produce to the TBCS.

If the annual produce for each individual is aggregated total annual productivity for this group was 1,764 kilograms of honey (excluding the amount consumed at the camp) and 94.9 kilograms of wax.[2] Table 9.1 shows how much of the total produce went to destination:

		percentage of total
Honey:	gifts	2
	TBCS	56
	honey beer brewers	20.5
	independent buyers from outside the region	10
	home consumption	1
	honey-beer sold by the beekeeper's family	3
	payments for harvesting labour	6
	spoilage	1.5
Wax:	TBCS	27.6
	sales to local Asian or Arab traders	72.4

Table 13.10 Destinations honey and beeswax by a group of beekeepers in 1993

From this table eight alternative destinations for produce emerge, a high percentage is sold but some is consumed or given as gifts, particularly when this facilitates work in the forest. In order to explore the decision-making that is behind this division of produce we can draw on examples from four different men whose produce is included in these figures.

The period following the agricultural and honey harvests is anticipated as the time when the main annual cash expenditures are made; whether for food, material goods, health care, or debts and other expenses. Late payments made for produce reflects a widespread problem for Tanzanian co-operatives. Many cannot obtain sufficient working capital to pay members on the spot. In the case of the TBCS, certainly at the time of research, producers could be flexible because there were other market opportunities. Although in the above examples the honey sold outside the TBCS was all for a high price, this was deceptive because often, at other times, a low price would be accepted in order that the person can gain cash instantly instead of waiting for the TBCS to pay up its credit.

These illustrations reveal that consumption, exchange and sales of honey and beeswax are part of people's livelihood strategies and are used to achieve various ends. For Lioba Chalamila,

beekeeping and the income from his produce help him to live relatively comfortably and to fulfil political ends via his role in the TBCS. For his son, Mateo Lioba, beekeeping or honey hunting is a family 'tradition', something he does not want to do but a viable means of generating cash for different enterprises. Paul Herman uses the income he gains to support himself, but also tries to acquire status goods and sees it as a means to progress in life. In contrast, for Ali Mbilila, beekeeping is one of the few means to acquire an income that prevents his dependants from sinking into extreme poverty.

Box 1: Production and Sales by Lioba Chalamila

Lioba Chalamila has kept bees since 1961, and in 1993 he was the chairman of a local branch of the TBCS. Being a well established and successful beekeeper he now possess 686 beehives which he places at two different camps in Ugalla Game Reserve.

In 1993 Lioba Chalamila obtained 20.5 buckets of honey and 36.5 kilograms of wax in total. He considered this to be an extremely poor harvest because of the lack of rain. For example, two years previously he obtained seven drums (70 buckets) of honey from these camps. From the produce he procured, Lioba Chalamila sold 17 buckets of honey to the TBCS for T.Shs.85,000. A further three buckets of honey were used to pay his two helpers, to one he paid one bucket and to the other two, amounts commensurate with their assistance. As the two young men wished him to sell this produce for them he added it to the amount which he sent to the TBCS. He employed another young man to make 26 hives and paid the standard rate of T.Shs.300 per log hive, receiving T.Shs.7,800 in total which Lioba Chalamila paid him a month later from the sales of produce to the TBCS. The last .5 of a bucket of honey Lioba Chalamila gave to me as a present when I was leaving the camp to return home.

Relative to the other beekeepers in the camp Lioba Chalamila sold a high percentage of his produce to the Co-operative; according to the TBCS regulations all produce minus two buckets of honey for home consumption should be sold to it. As an ambitious TBCS branch chairman, Lioba Chalamila needs to demonstrate to others that he sells to the Co-operative because it is part of his role to ensure they do the same. If the opportunity to sell elsewhere had arisen it is likely that he would have taken it. This public face was also maintained over the sale of wax, for he carefully concealed the fact that only half his wax went to the TBCS and the remainder to an Asian shopkeeper in Tabora town. The wax sold to the TBCS was 14.5 kilograms for T.Shs. 9,425, and I estimate that for the remaining 22 kilograms he received T.Shs.16,800.

The sale of wax to a trader in Tabora provided money to help his wife who had malaria, while the TBCS payment was made a month later. Lioba and his wife live alone and they did not have an immediate need to spend the money on food having obtained an adequate harvest, so they bought some fertiliser and small household items like cooking oil, salt, and snuff and saved the remainder to pay for labour in the following agricultural season. Because the honey crop he obtained was so small he had to cut back on more major expenditure, such as the sheets of corrugated iron he was saving up for.

It starts to become apparent that even today honey and wax are key constituents of a number of distinct and separate networks of production and consumption stretching from the local to international levels. These networks are inter-connected only at the local level in western Tanzania, though even certain networks may coexist without being associated, which implies that there is a local complexity that is obscured by a single focus on the export market for the main portion of the produce. Following harvesting, each individual's honey and beeswax are sub-divided several times, in keeping with people's priorities and within the constraints of the precarious market opportunities that are open to them.

Box 2: Production and Sales by Mateo Lioba

Lioba Chalamila's youngest son, Mateo Lioba, is in his mid-20's and, being unmarried, he lives with his older brother and returns home to help farm his parents land. For Mateo beekeeping represents a family tradition that he was being pressurised to take up by his father but tries to resist. He only has 8 beehives in total and when in the forest in 1993 he channelled his energy into giving unpaid assistance to his father and spent his time honey hunting.

In July, Mateo Lioba obtained 1.5 buckets of honey and 4 kilograms of wax through honey hunting and in November a further 1 bucket and 3 kilograms of wax. After returning to the village in July he sold his wax for T.shs.4800 to an Asian shopkeeper in Tabora. The honey was made into honey beer that he sold by the cup to the young men who would congregate around his house to play cards and listen to music. From this he gained a profit which he estimated to be T.Shs.18,000 which he spent on food and a new pair of trousers.

In October, Mateo again went honey hunting and from the produce he managed to obtain I sold a bucket of honey to a European professional hunter for the very high price of T.Shs.7000. Mateo then used some of this money to buy T.Shs.5200 worth of fish at the river which he then sold this to people in the village and made an estimated profit of T.Shs.5000. He also sold the 3 kilograms of wax to an Asian shopkeeper for T.Shs.3600. All this money was gained from honey hunting rather than beekeeping, so we can see that this activity can be quite lucrative, but he was only able to go to the forest to honey hunt because I gave him a lift and his father supported him with food. When I asked him why he did not spend his time making beehives for the following year, he said that immediate income was far more important.

In the forest, honey is eaten, shared, or offered as gifts. In a context where people rapidly fall short of food and need to rely on the assistance of others the consumption and gift value of honey is far higher than it is in the village. The consumption of honey comb with the bee brood in it is also seen to be a part of a beekeeper's perquisites. Once beekeepers return home, maize and other items obtained through honey sales are more important for consumption, indeed during 1993, women and children from the thirteen beekeeping households above didn't taste any honey.

The strained honey is transported back to the village in drums and buckets on the TBCS truck (or on bicycles), while the wax will have been cleaned and set and is retained as the personal property of each beekeeper. On arrival at the cleaning plant produce not intended for TBCS sales is rapidly removed with the aid of family members, and the beekeeper obtains a receipt for the honey that remains. Wax may be sold to the Co-operative at a later date if desired but most is taken into town, and local markets for honey are also sought.

Box 3: Production and Sales by Ali Mbilila

Ali Mbilila is the cousin of Lioba Chalamila, he is in his late seventies, and turning both blind and senile. As a young man he had been brought up in the forest but for most of his life he worked at the Mpanda mines and only turned to beekeeping in the 1980s. He is not a member of the TBCS and being poor, with few assets and no immediate family to assist he has only 80 beehives.

In June 1993 Ali Mbilila obtained 2 buckets of honey from his beehives and 3 kilograms of beeswax. On return to the village both buckets of honey were sold to the TBCS for a total of T.Shs. 10,000, because his agricultural harvest had been extremely poor when the money came through it immediately went on food to help feed the grandchildren who live with him and his wife. While in the forest, Ali Mbilila fell over and cut his leg badly against an axe, and on return to the village his family sold the 3 kilograms of wax for the low price of T.Shs. 3000 in order to get medicine for his leg. In October he went to the forest but returned empty-handed because there was nothing to harvest in his beehives.

For Ali Mbilila and his family, who are poor even by village standards, the income generated from beekeeping is essential in order to provide food. When I questioned him why they did not eat the honey itself he said that money was more valuable because you could "buy maize, Mama, there is nothing else". This reflects a widespread perception that it is more valuable to prevent any honey from being eaten rather than to sell it, although often small quantities are taken out and the displaced measure topped up with water.

The period following the agricultural and honey harvests is anticipated as the time when the main annual cash expenditures are made; whether for food, material goods, health care, or debts and other expenses. Late payments made for produce reflects a widespread problem for Tanzanian co-operatives. Many cannot obtain sufficient working capital to pay members on the spot. In the case of the TBCS, certainly at the time of research, producers could be flexible because there were other market opportunities. Although in the above examples the honey sold outside the TBCS was all for a high price, this was deceptive because often, at other times, a low price would be accepted in order that the person can gain cash instantly instead of waiting for the TBCS to pay up its credit.

A vital question, when considering the importance of the fair trade export market for beekeepers, concerns where the Co-operative fits into the strategies of the beekeeper members who work in Ugalla Game Reserve? According to the discussion so far the Co-operative is obviously one option for sales. Beekeepers typically characterise the proportion of produce sold to the TBCS as being *nusu-nusu* (half-half), in keeping with their membership obligation on the one hand, and, on the other with their need for money together with the wider opportunities (or lack of) which are open at the time.

With an opening up of the Tanzanian economy since the early 1980s, increased entrepreneurial activity has meant that alternative markets for produce have grown up, or certainly existing ones extended. I would argue that the quantity of produce which a beekeeper sells to the TBCS depends, firstly, on what the TBCS in practice offers him in return for his membership share above other market options. Second, the role the person performs in the Co-operative and the value he places on the status this may confer. Third, critically, on how actively a beekeeper is pressurised to sell his produce to the Co-operative by the leadership of his local branch, together with his ability and room to manoeuvre on negotiating this. If given the chance beekeepers will happily take the benefits the TBCS offers (transport, containers, and a guaranteed market) without actively fulfilling their side of the obligation, to sell the major quantity of their produce to the Co-operative.

Box 4: Production and Sales by Paul Herman

Paul Herman is Lioba Chalamila's wife's half brother, in other words his *shemeji*. He started to keep bees in 1984, and by 1993 had 156 beehives and was a TBCS member.

In July Paul obtained 9.5 buckets of honey and 11 kilograms of wax, while in November he produced 1.5 buckets of honey and 3 kilograms of wax. An additional 5 litres of honey were given to the Tanzanian staff of a hunting company which operates in the reserve in return for their assistance in carrying a drum for him in their pickup.

On return to the village, he sold 5 buckets of honey and 3.5 kilograms of wax to the TBCS for T.Shs.25,000 and T.Shs.2275 respectively, and he paid his beekeeping assistant 1 bucket for help with the harvest. Because the TBCS did not pay him until a month after they returned from the forest and he needed money, Paul Herman tried to find other outlets for the rest of his produce. He managed to do this by selling 8.5 kilograms of wax to an Asian shopkeeper in Tabora town for T.Shs.9000, and selling 1 bucket of honey for T.Shs.5000 to an instructor at the Tabora Beekeeping Training institute. The price the instructor paid was low but he accepted it because he needed the cash, and also in bargaining she manipulated the fact that she was a friend of mine. (Being enterprising, she later bottled the honey in half litre gin bottles and sold it to civil servants from Dar Es Salaam and Arusha for the high price T.Shs.500 per bottle).

Paul Herman also withheld 2 buckets of honey until September when (being a bad year) the price was high, at which point he sold it to beer brewers in Tabora for T.shs.14,000. In November he obtained a further 1.5 buckets of honey, one of which he sold to brewers for T.Shs. 7,500 the other half he still had when interviewed at the beginning of December. The 3 kilograms of wax he obtained at this time were sold to an Asian shopkeeper in Tabora town for T.shs.3,750.

Paul Herman used the money he obtained from beekeeping to buy items he needed at home and because his wife has left him he sent money to his parents who take care of his young son and daughter. Even so he views beekeeping as a means to buy the things he wants, for example the year before he bought a bicycle and in 1993 he bought a radio. He explained that every year he tries to buy things like a mattress, and he wants some tin for the roof. I asked him why he doesn't have a savings account and he replied that it is better to buy desirable goods which last a long time with prices that keep increasing and if there is a problem he can sell these things. If the opportunity arises Paul and his friends will also go into Tabora to watch a football match or go dancing. His assistant Charlie characterised this as money well spent "football is a must, when there is a match I am there", one should point out that this view was not shared by Charlie's wife who was at the time heavily pregnant and worried about how they would support the new child. Beekeeping enables Paul Herman and his friends to improve their lives in important ways, which means that if they can they will buy material goods or entertain themselves.

In the past the TBCS is said to have held a certain monopoly over sales, but this is no longer the case. I have distinguished between local village buyers - principally women who brew honey beer for sale (sometimes in bulk) - and independent Tanzanian entrepreneurs who take it to make beer in the town, sell small quantities, or transport it to Arusha or Mwanza where the price may be three or four times as high. Many of these buyers appear to be civil servants who have access to transport and village areas through their line of work. Asian and Arab traders have not as yet entered into the honey business on a significant scale because it requires processing, is difficult to transport, and the quality rapidly deteriorates in quality with heat.

Independent market opportunities do, however, vary a lot according to location, and in particular, whether there is access to transport. In camps in the far north west corner of Ugalla Game Reserve near the Mpanda railway line, the number of TBCS members is few; and even by members little produce is sold to the Co-operative because local entrepreneurs arrive on the train to buy honey in bulk. It is also sold at stations along the line in half-litre gin bottles, the contents usually of poor quality, the honey having been mixed with water.

Price is highly variable according to whether there is a glut or dearth of honey. In this respect it was generally acknowledged that the price set by the TBCS served to maintain an average price outside the Co-operative. This is good for beekeepers, but rises in the price have a negative effect for the many brewers, mainly women, who depend on this activity as a source of income and usually have to buy the honey. The influence of the TBCS price on independent market prices in this area must be carefully taken into account in considerations of a fair price for honey.

There is a substantial local market for honey because for women (and a few men) honey provides income generating opportunities when brewed into *wanzuki* (honey beer). In an area where there are many constraints on the work women perform, beer brewing is a vital source of income for women, particularly for those in female headed households. Although my information is limited, it appears that by virtue of the fact that beekeepers do not generally reside in these households, the women must pay to obtain the honey. Indeed it was surprisingly rare to find honey made directly into beer by women within the household of the beekeeper who had produced it.

A key point, however, is that regional markets cannot accommodate the large quantities of honey that may be produced by a good beekeeper. This is particularly the case when the year is good and there is a rapid glut of honey in rural areas. The importance of the TBCS or independent regional/national markets for serious producers becomes obvious in this context. Honey will readily be sold to independent buyers where possible although, in this area, it was a question of rare opportunity; for example, in the cases above I played incidentally a key role in facilitating most of the independent sales. Because the TBCS ensures members, and even non-members, a market, the Co-operative becomes crucial to beekeepers in good years when their is a glut of honey. The empirical material used here is limited in this regard, in particular because it is the result of data gathering in two consecutively poor years - 1993 and 1994 in the south of Tabora Region.

Wax is less versatile than honey. Discounting the minuscule quantities used as a sealant, it is solely intended for the export market. Along the transport routes in this region there are trading posts where Asians and Arabs are occupied in the retail, timber, and transport trades. It is at these places that beeswax is sold, with beekeepers either trading individually or where village entrepreneurs may buy up quantities of beeswax for a small profit. Some Asians send trucks to the beekeeping camps in order to obtain large quantities of wax.

From 1985/86 some implications of changing national economic policies were felt in the TBCS. Following price deregulation, liberalisation of beeswax exports, and the termination of the marketing corporation, GAPEX, the Asian and Arab communities of Tabora started to act as middlemen (a role they had held in the past for the TBCS) for DSM Asian private companies exporting beeswax. They significantly, and increasingly, raised the price given to producers. For example, in 1985/86 the Tabora Regional Co-operative Union was offering T.Shs.30 per kilo compared to approximately T.Shs.120 per kilo from private entrepreneurs (Tabora Regional Beekeeping Office, unpublished figures). The price continued to escalate and in 1993 the TBCS offered T.Shs.650 per kilo against the Asian's T.Shs.1100-1250 per kilo. Directly attributable to this market is the dramatic decline in the quantities of beeswax sold to the TBCS, from 146 tonnes in 1980/1 to 2.5 tonnes in 1991/2. In 1994 the beekeepers elected to attempt to regain control of the beeswax market by raising the price and offering immediate cash (TBCS AGM minutes, 1994). How successful this will be remains to be seen.

The high price paid by Asian and Arab retailers for beeswax is interesting, given that these traders themselves are middlemen. An underlying reason appears to be that beeswax is a part, albeit minor, of the expanding trade in natural resources (non-traditional exports) that is taking place in Tanzania at present (Chachage, 1993). Dar Es Salaam beeswax is a noted world commodity. In the case of beeswax from Tabora this links to an expanding trade in the export of natural resources, in association with the importation of consumer goods which, according to popular discourse, is a niche market dominated by the ethnic minority Asians. Beeswax is also said, by members of the Asian community in Tabora, to be a good item for smuggling goods inside

(minerals or drugs).[3] From the beekeepers' point of view the Asians/Arabs provide a relatively good market although, as the beekeepers themselves recognise, in the long-term it may have detrimental consequences both for individuals and for the TBCS because the Asians do not give wider support to producers.

[1] These beekeepers were the people working at Kwalungu and Nsontwa 1 Camps, see Table 11.2 and Chapters 10 and 11.

[2] The amount of produce is representative of production in a year considered to be extremely poor by the beekeepers concerned.

[3]Slim evidence of the connection between beeswax and drugs comes from a Radio Humberside report of 5.9.94. Heroin, reported to have come from India via Dar Es Salaam, was found encased in beeswax on the east coast of Britain.

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Glossary
(Kiswahili, Kinyamwezi & German)[1]

balozi (kis.)	leader of a 10-cell village unit
bibi (kis.)	a term of respect to women, grandmother
bezirke (ger.)	district (German East Africa, pre World War 1)
boma (kis.)	government offices, also place for cattle (fort or stockade)
Chama Cha Mapinduzi (kis.)	party of the revolution, the ruling party of Tanzania
dawa (kis.)	medicine
debe (kis.)	bucket, tin can (4 gallons)
-dogo (kis.)	little
fundi (kis.)	a person skilled in an art, craft or profession (from *funda*, to instruct, esp. household or tribal instruction)
gunguli (kin./kis.)	basic unit of territorial administration (German) *honga (kis.)* tribute paid to a chief for safe passage (historical term)
jumbe (kis.)	administrative term for headman, used in German East Africa
kanga (kis.)	a cloth worn by women
kibangwa (=sing. Vibangwa=pl. ,kin.)	sacred regalia (for a Nyamwezi chief)
khambi (kis.)	a seasonal forest camp (possibly the colloquial pronunciation of nineteenth century English, 'camp')
kinga (kis.)	screen against, ward off, obstruct
kiongozi wetu (kis.)	our leader
kitende (kis.)	from the verb *tenda*, to do, act, practice *kitongoji (=sing.*
vitongoji=pl. kis.)	hamlet, small village
majangiri (kis.)	poachers
mbuga (kis.)	swamp type land found extensively in Ugalla GR
mganga (kis.)	traditional healer
miombo (kis.)	woodland composed of a high percentage of *Julbernadia globiflora* and *Brachystegia sp.*
mradi (kis.)	intention, plan, used to refer to a personal project
msitu ya asili (=sing. misitu = pl. kis.)	natural/traditional forest
mtemi (kin.)	chief
Muchappe (kis.)	a witch finding movement
mwarabu (kis.)	an Arab
mwenye khambi (kis.)	camp leader
mzungu (kis.)	a European
mzee (=sing. wazee = pl., kis.)	an old person, an elder
ngara (kin.)	historical term used to refer to feather head-dresses worn by men during warfare or travel
ngoma (kis.)	drum, dance, music
nusu	half
nyama (kis.)	meat
Operation Uhai (kis.)	Operation Life (1989/90 crackdown on poaching)
Operation Vijijini (kis.)	Villagisation (1970s)
pori (kis.)	wilderness
ruga-ruga (kis.)	young professional soldiers who held allegiance to a war-leader (Nineteenth Century)
Schutztruppe (ger.)	protectorate troops (German East Africa)
shamba (kis.)	farm, plot of cultivated land, plantation
Shamba la Bibi (kis.)	colonial term referring to a game reserve

shemeji (kis.)	a relation by marriage, usually of the first degree, i.e. wife's or husband's brother or sister, brother-in-law, sister-in-law, a particular friend of the husband
Sungu-Sungu (kis.)	village vigilante groups which emerged during the 1980s
tambiko (kis.)	offering made to propitiate the sprits
uchawi (kis.)	witchcraft
ugali (kis.)	stiff maize porridge
ujamaa (kis.)	African socialism as promulgated by Nyerere after Tanzanian Independence
ulaya (kis.)	Europe
unga (kis.)	maize flour
upori (ipori) (kis. /kin.)	wilderness (uninhabited miombo woodland)
ushirika (kis.)	sharing, co-operation, term used politically
Waidmannsheil (ger.)	lit. 'good luck with hunting' (the name of a hunting camp near the Ugalla River in the 1880s)
ward (eng.)	administrative unit - village, ward, division, district, region

Fishing Terms

kambale (kis.)	fish, *Clarius sp.*
kamongo (kis.)	fish, *Mossambicus protopterus aethiopicus*
kasia (kis.)	oar
kokoro (kis.)	beach seine fishing net
kukuru (kis.)	fish, *Citharmus sp.*
matate (pl./ kis.)	reeds
mtumbwi (=sing. Mitumbwi=pl../ kis.)	canoe
ndala (kin.)	historical term, pole used for carrying fish on shoulders
ndondamongo (kis.)	fish, *Morrmy Kathilina*
ngege (kis.)	fish, *Tilapia sp.*
ningu (kis.)	fish, *Schil BC (mystus?)*
nkuga (kis.)	fish, *Claras sp.*
nyavu (kis.)	a net, used specifically to refer to a gill net

Beekeeping Terms

asali (kis.)	honey from *Apis mellifera adansonii* (Arabic origin)
asali baridi (kis.)	honey from the stingless bee (*Trigona sp.*)
bagua (kis.)	honey hunt (local Kiswahili)
chana (kis.)	pollen
gando/gundi (kis.)	propolis
gomo la nyuki (kin.)	propolis
hodi (kis.)	used to call out to the bees on approaching a beehive, also the term used when approaching someone's house
ilungele (kin.)	hot season in between honey harvests (August-October)
ikembeko (kin.)	bark
iswizilo (kin.)	cylindrical honey strainer made of bark
kamba la magame (kis.)	bark rope
kangaala /kangara (kin.)	beer made in Ugalla from honey, sorghum, and fermented bullrush millet
kabembo (kin.)	the season when maize is pollinated (February - March)
kasegu /kasolo (kis./kin.)	honey guide (*Indicator indicator*)
katala (kin./kis.)	woven palm to strain melted beeswax or beer

kibaale (kin.)	wooden hive-end for a 'pegged' bark hive
kindalo (kin.)	bark hive-end for a 'sewn' bark hive
korongetwa (kin.)	type of small beetle that lives in a beehive
kontoro (kin.)	sturdy hooked stick to hang a beehive from a branch of a tree
korongetwa (kin.)	large beetle that lives in a beehive
kubangua asali (kis.)	honey hunt
kuchonga (kis.)	to carve a wooden beehive
kuchuja asali (kis.)	to strain honey
kuchuna kamba (kis.)	to make bark rope, local Kiswahili
kufuga nyuki (kis.)	to keep bees
kukong'onga (kin.)	to honey hunt
kupakua asali (kis.)	to crop honey (lit. to apply, spread on, smear)
kupika nta (kis.)	to 'cook' beeswax (part of the cleaning process)
kutazama mizinga (kis.)	to survey the beehives at the start of the season
kutengeneza nta (kis.)	to clean beeswax, lit to 'make' standard Kiswahili
kutundika mizinga (kis.)	to hang a beehive
kuvuna asali (kis)	to harvest honey, standard Kiswahili
luhehe (kin.)	primary honey flow (also refers to the season when this takes place (May - July)
makapi (kis.)	honey comb (lit. chaff or husks)
malika (kis.)	queen bee, standard Kiswahili
masega (kis.)	honey comb
mbaguaji (kis.)	person who honey hunts
mbusi (kin.)	honey
mfaulme (kis.)	queen bee, local Kiswahili (lit. 'king')
mkong'onga (kin.)	person who honey hunts
moshi (kis.)	smoke, historical term for a spirit distilled from honey
mpakuaji (kis.)	beekeeper, local Kiswahili
mpunje (kin.)	stingless bee, sweat fly (*meliponidae*)
mtemi/ itemia la nzuki (kin.)	queen
mzinga (pl. mizinga) (kis.)	cylindrical shape, used to refer to beehive (also log, cannon, etc.)
mzinga ya kulazwa (kis.)	horizontally placed log beehive
mzinga ya kushona (kis.)	horizontally hung sewn bark beehive
mzinga ya mambo (kis.)	horizontally hung pegged bark beehive
mzinga ya magogo (kis.)	log beehive (horizontal and vertical)
mzinga ya magome (kis.)	bark beehive
nemba (kin.)	secondary honey flow, also refers to the season when this takes place (November - January)
n'genye (kin.)	worker bee
nyambingwe (kin.)	drone
nkawa (kin.)	bark tray used to carry honey comb in the forest
nta ya Upula (kis.)	wax of the stingless bee (*Trigona sp.*)
nyegere (kis.)	honey badger, ratel (*mellivora capensis sagulata*)
nzuki (kin.)	honey bee (*Apis mellifera adansoni*)
nyuki (kis.)	honey bee (*Apis mellifera adansoni*)
nyuki kawaida (kis.)	worker bee (lit. 'normal bee')
sakasi	second grade honey (with water)
sanduku la kisasa (kis.)	modern beehive, standard Kiswahili
siki (kis.)	honey vinegar (Arab historical term [Burton, 1859])
sinda (kis.)	pollen
sukari za asali (kis.)	honey sugar (Arab historical term [Burton, 1859])
takila (kin.)	large beetle that lives in a beehive
wansinda (kin.)	honey flowers, pollen

wanzuki (kin.)	honey beer (in Tabora introduced by Catholic priests)
uki (kin.)	honey (Bantu origin)
unga (kis.)	lit. flour, but used here to refer to pollen
upula [Ipula](kin.)	stingless bee (*Trigona togensis*)

[1] The Kinyamwezi terms listed here were given to me by men who keep bees and fish in Ugalla Game Reserve, possibly other terms are used elsewhere in the region. Sometimes 'l' sounds the same as and is used inter-changeably with 'r' in both Kiswahili and Kinyamwezi, here terms were written down phonetically.

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Game Preservation Ordinance of 1938
Wildlife Ordinance of 1940
Forestry Ordinance of 1957 and Cap. 389 of 1958
National Parks Ordinance Cap. 253 of 1948 and Cap. 412 of 1959
Ngorongoro Conservation Area Ordinance Cap. 412 of 1959
Fauna Conservation Ordinance of 1951, and as amended in 1957
Fisheries Ordinance of 1970
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letter from the Acting Director of Veterinary Services to the Game Warden, Tenguru, 5.1.53, Letter from D.K. Thomas, the Game Ranger for Tabora Range to the Game Warden Arusha, 30.1.53;
Letter from the Provincial Commissioner, Western Province to the Game Warden, Arusha, 19.3.53,
Letter from G.H. Swynnerton, Game Warden, Arusha to the Provincial Commissioner, Tabora 2.4.53,
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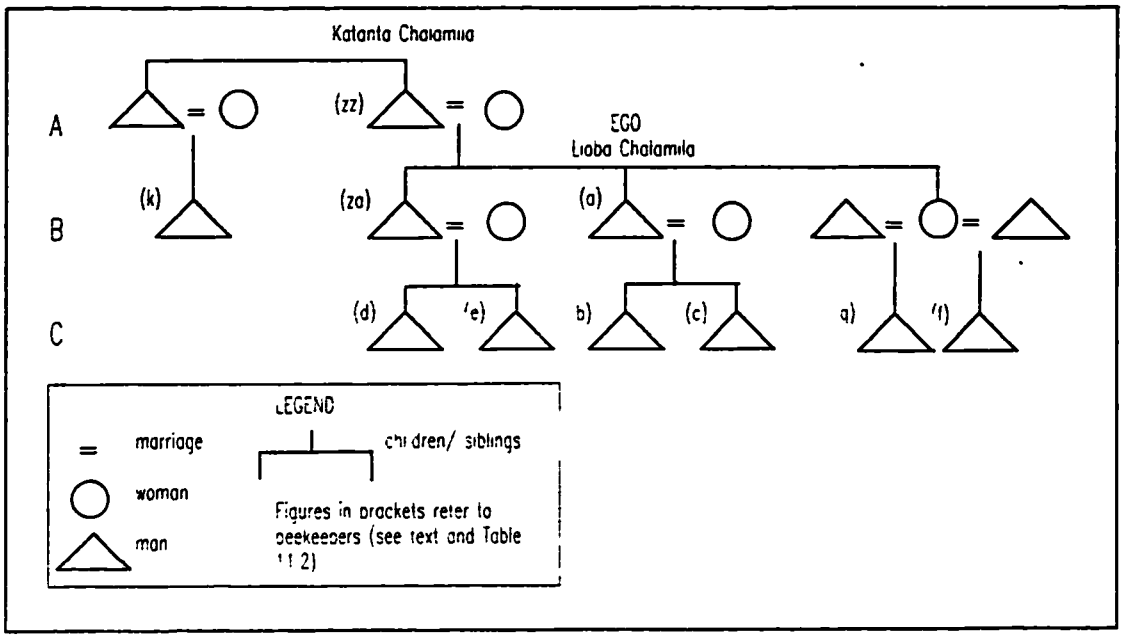
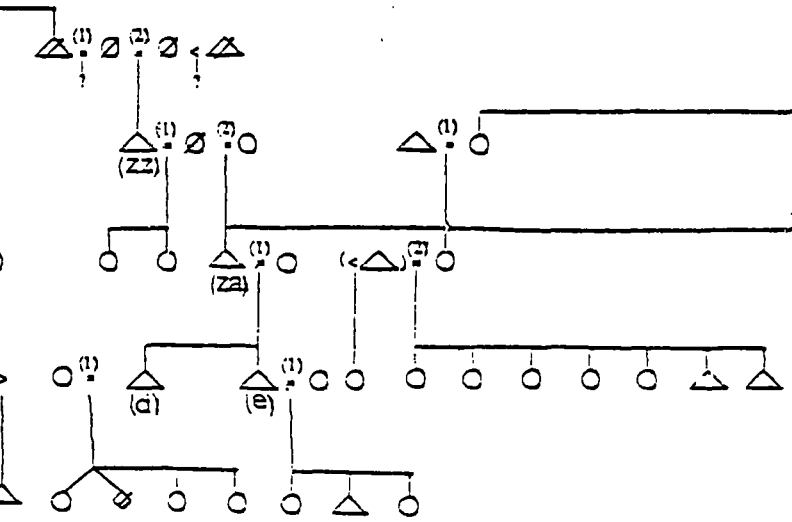
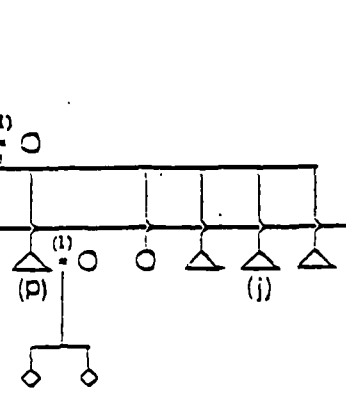


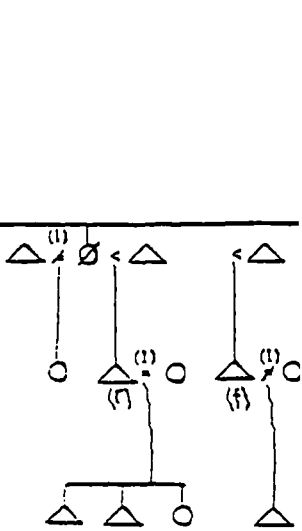
Figure 11.6 Truncated genealogy of Lioba Chalamila's male relatives who work at Kwalungu and Nsontwa 1 Camps



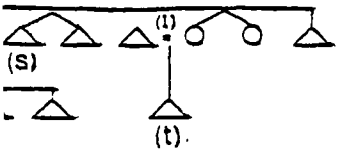
The family of Mwamba Chalamila (za)



The family of Peter John (j) and Thomas John (p)



The family of James Stan and Prince Athenas (r)



KEY

= male = female = sex unknown = twins

deceased

? further kinship relations deliberately concealed from researcher

= marriage (including numbers of marriages on male side in brackets above. Diagram does not distinguish between pricewealth and non-pricewealth marriage)

(△) previous husband

siblings (in birth order from left to right)

= children born in marriage

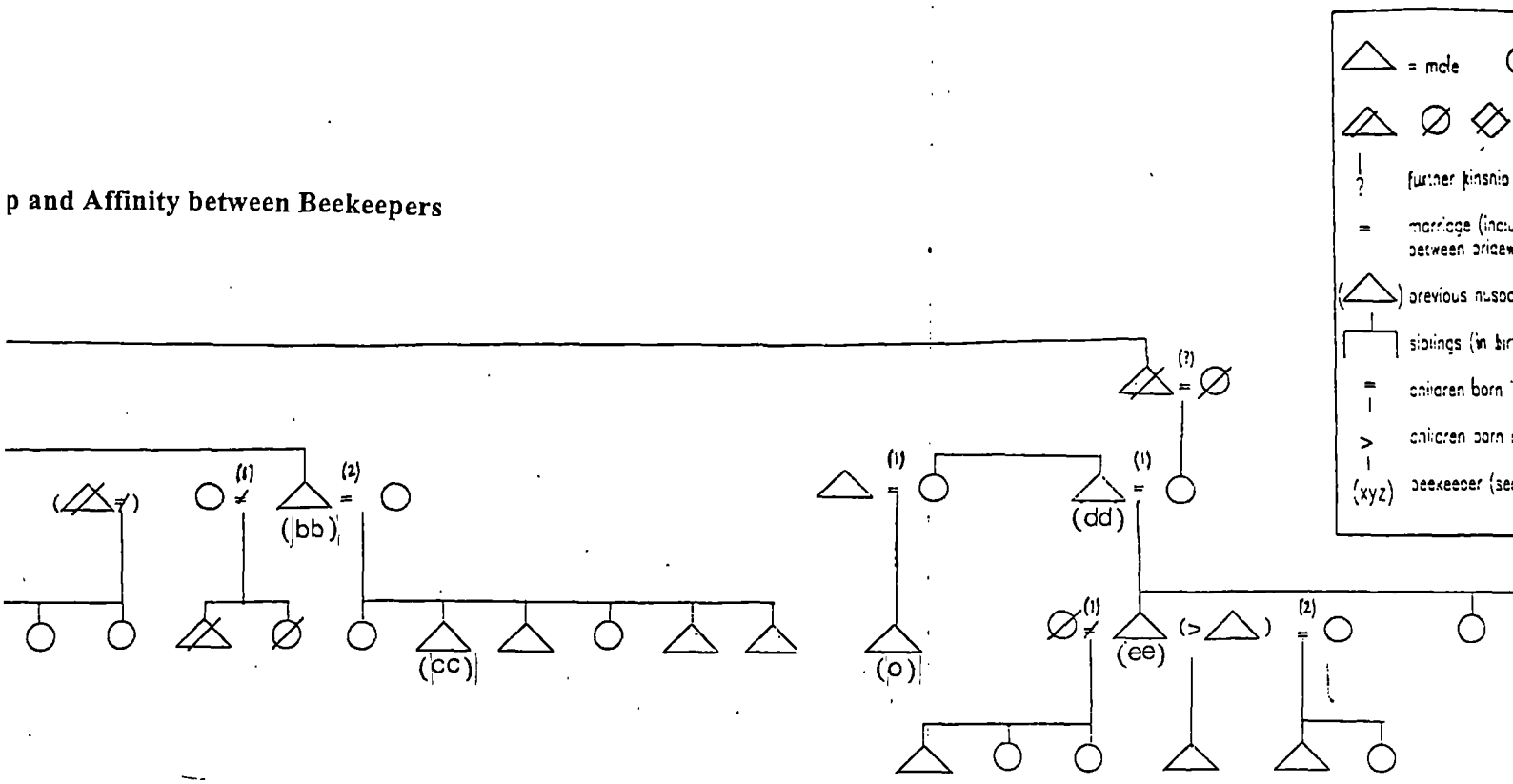
> children born out of marriage

(xyz) beekeeper (see Tables 11.2 - 11.4)

ıtions of Kinship and Affinity between ıontwa 1 Camps

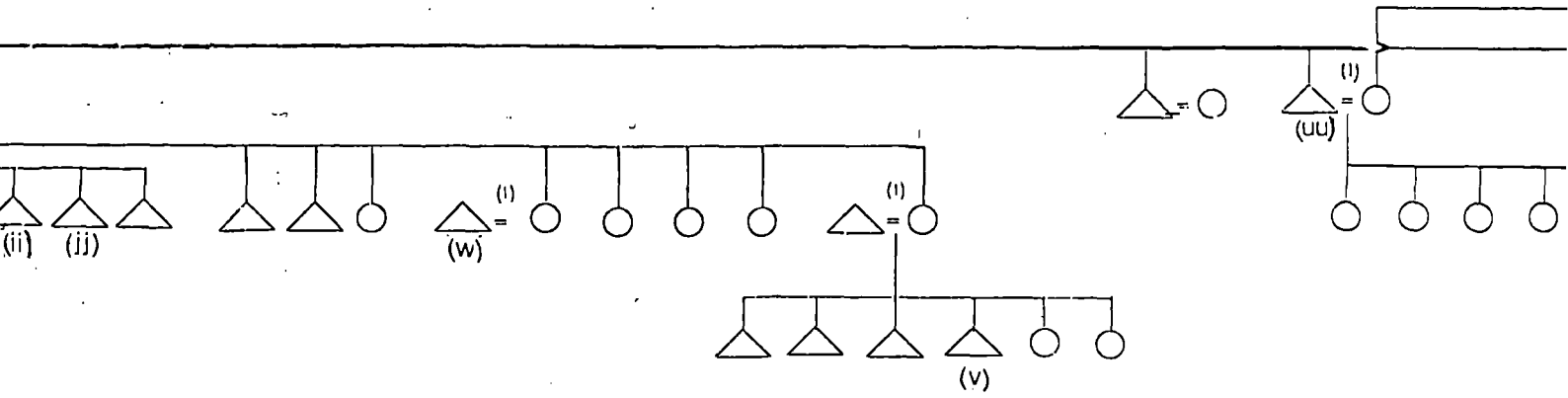
This diagram seeks to represent the relationships between different male beekeepers – the families of non-beekeeping kin.

p and Affinity between Beekeepers

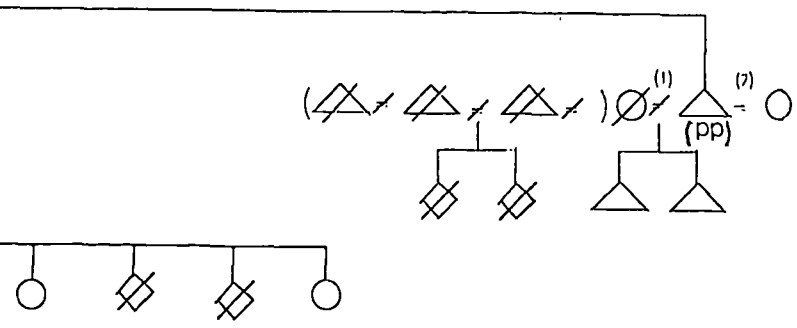


nily of James Ngoma (P6, PH and P1 also kept bees with (66) until they moved to another camp in 1993).

The family of Caini Yongolo



The family of Jonah Kisato

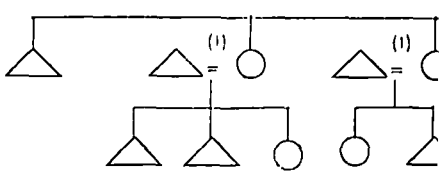


Generations

B

C

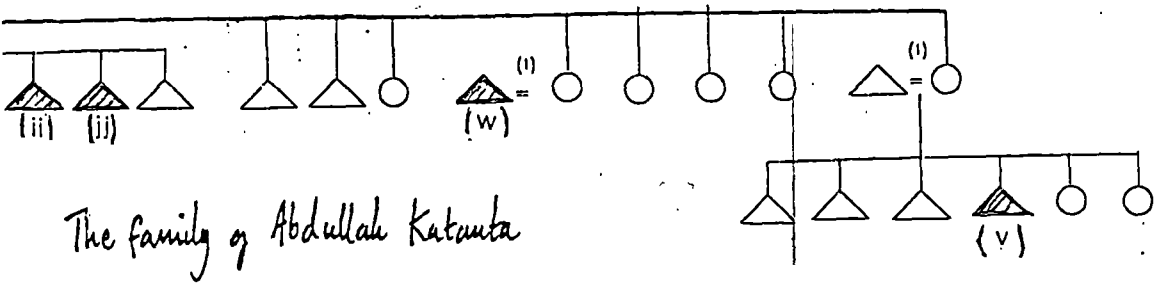
D



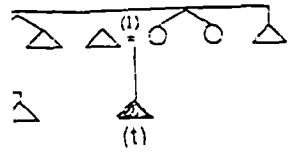
he family of Mshuk Kasimba

f Kinship and Affinity between

Maryan Farji



The family of Abdullah Katanta



family of Kulwa Simoni