An institutional development policy framework for growth in the non-hydrocarbon sectors of Oman: A systems approach

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ABSTRACT

Collective action involving public and private actors (e.g. public institutions, foreign and domestic investors) faces difficulties even in developed economies, let alone in economies that are still developing their institutions. Especially for the latter this lack of collective action in bringing public and private actors together in order to enhance policy making processes for viable and better policymaking performance is paramount. Oman is one such economy which, like many other economies endowed with natural-resources, is trying to grow its non-hydrocarbon (non-oil-gas) sectors. Although there is a growing literature concerning the use of systems approaches in enhancing public and private sector governance there is a gap concerning the availability of such approaches in their simultaneous policymaking process; especially in developing economies and Oman in particular.

Accordingly, the aim and objectives for this thesis were laid down to develop a methodological framework, based on a systems approach (viz. the viable system model -VSM) that could aid policymaking processes in Oman, respective institutional developments (ID), and ultimately growth in the non-hydrocarbon sectors. Developing in particular the kind of institutions required to foster collective action between the relevant public institution representatives (PIRs), foreign, and domestic investors.

To investigate the above empirically 30 face-to-face interviews were held with foreign and domestic investors; whereas two focus groups were held with a 14 government institutional representatives. Their results are used to demonstrate the operation of the aforementioned methodological framework.

This thesis is thus making an original and substantial contribution to the body of knowledge concerned with ID, collective public-private action, through the successful use of VSM. Filling thus the aforementioned gap identified in the literature, within the Omani context.

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CHAPTER ONE

INTRODUCTION

1.1 Research Background

This research uses a systems approach to improve the design of organisational structures at the national level that can better facilitate interactions between the public and the private sector at both strategic and tactical levels in order to stimulate economic growth. The research draws on Stafford Beer's pioneering work on the application of cybernetic principles to collaborative practice in economic sectors to support GDP growth. Beer's theory of organisational viability (1972, 1981), the Viable System Model (VSM) (Appendix 1.1), has been used both with individual firms and nations.

The literature shows that even if there are multiple disciplines that can contribute to support the design of collaboration structures, (e.g. as required to harmonise national policymaking in an international investment context), there is not an integrated, holistic framework to support the analysis or design of the required collaboration structures and other institutional mechanisms to deal with the complexity of interactions between the public and private sectors, which would contribute to improved socioeconomic development of the country.

Therefore, this research will develop an integrative, systemic framework, using the VSM to support policy decisions and monitoring of the interaction between private and public sector in the context of local and foreign investment in an emerging economy. Such a framework must be able to include and represent the viewpoints of the multiplicity of actors and stakeholders involved in policy decisions about foreign and domestic investment, deal with the complexity of their interactions, manage effectively the knowledge required to support policy decisions and provide a robust context for collaborative policymaking in the public sector.

Preliminary research showed that the main weakness in public policymaking is that it does not create spaces and mechanisms for properly understanding the problems, challenges and difficulties of the private sector. Addressing this weakness is the main purpose of this thesis.

Foreign Direct Investment (FDI)[1] plays an important role in a country's economic growth. In the context of this research, when developing foreign policies, decision should always be informed by the investor's knowledge of how to improve their socioeconomic environment.

With these issues in consideration, the focus of this research will be on improving public and private sector collaboration so to develop collective knowledge, experience and action in support of the policymaking processes. This specific topic is part of a broader literature of public institutional development, and it will give particular relevance to find ways of improving existing structures, communication, control and leadership mechanisms (Olson, 1971; Beer 1981; North, 1990; Bevan et al., 2004; Sabatier, 2007 and others).

1.2 The Literature Gap

The VSM has been used both with nations and firms. With nations; it inspired the design of the Cybersyn project that was ambitiously implemented by President Allende in Chile in 1971-1973 to regulate the whole economy of that country (Beer, 1981. 2nd part). Beer and a large team modelled the Chilean economy and developed a real time performance management system, pioneering cybernetic practice in public policy and economic development. More recently, Angela Espinosa applied VSM projects in Colombia to create an eco-regional approach to sustainable development in the Colombian national environment system the so called SINA, (Jackson, 2003).

VSM also used with Firms; more recent systems shows that there have been many other studies around the world, where the VSM has been applied to corporate and business firm's performance, (e,g, Espejo and Harnden, 1989; Britton and McCallion 1989; Holmberg 1989; Espejo and Reyes 2011; Leonard, 1989, and others) (further cybernetics literature will be explained in literature review chapter).

So while the VSM has been applied to national government and to corporate and business firms' performance. There are few studies where the VSM has been used to support policy in the public and the private sectors simultaneously. This is a major gap in the systems literature. There is a somewhat corresponding gap in traditional

[1] Foreign Direct Investment (FDI): is defined by the Oxford dictionary of economics as the acquisition by residents of a country of real assets abroad. This may be done by remitting money abroad to be spent on acquiring land, construction buildings, mines, or machinery, or buying existing foreign businesses, (Black et al., 2009 p.176).

institutional development literature, concerning public policymaking and institutional development (ID) to facilitate collaboration between the public and the private sector organisations and institutions.

Both gaps promoted the development of this thesis: it aims to make an original contribution in the field of ID, regarding the necessary and sufficient conditions for enhancing sector-specific collaboration, using investment policy formulation in economic growth at strategic and tactical levels, in the context of a developing economy. This is to be tested in the context of Oman in particular.

1.3 Aim, Objectives and Key Research Questions

1.3.1 The Research Aim and Objectives

This research aims to help stimulate growth in the non-hydrocarbon sector (e.g. manufacturing, agriculture) of Oman by formulating a policy framework to guide the requisite ID for investment; and to explore the application of a systems approach to support the accomplishment of this aim. The aim is to gain further insights into the process of implementing better ID for investment; and develop a methodological framework to provide suggestions for improving the design of more useful structures at strategic and tactical levels for investment in Oman. The pursuit of this aim was structured along the following objectives:

A. To critically review the literature on:

1) The growth dynamics of the non-hydrocarbon sectors in Oman.

2) The role of foreign and domestic investors in economic growth.

3) Institutional development and the evolution of cooperation and collaboration.

4) The use of systems approaches in policy frameworks and to support institutional development in the public sector.

B. To establish:

1) The growth dynamics in the non-hydrocarbon sectors of Oman and to single out any underperforming sectors.

2) The domestic and foreign investors' perceptions of the institutional environment (concerning the aforementioned sectors).
3) The institutional representatives' opinions about the public-private interactions in the aforementioned sectors.
4) If any systems approach could aid the development of the aforementioned framework.

C. Synthesise any systems approaches established under B4.

D. Develop a coherent framework capable of supporting policy making on the basis of C.

E. Demonstrate the use of the developed policy framework (under D) through the use of primary data collected from actual domestic and foreign investors and institutional representatives in the aforementioned underperforming sectors.

F. Draw the implications of E for practice (domestic and foreign investors), policy (institutional representatives), and research.

G. Make recommendations (on the basis of E) for institutional development.

1.3.2 Key Research Questions

The issues described in this thesis tend to cross institutional and organisational boundaries (inter-organisational) and to impact on the respective human resources (knowledge). This means, in turn, that besides the usual technological factors (e.g. ICT systems) organisational complexity has also become a critical success factor of ID. Taking into account these perspectives, this research attempt to develop a coherent policymaking processes for the public sector, properly supported by private sector knowledge and experience which this research develop may help ID.

Key Research Questions (KRQs) are as follows:

Main Question; what kind of policy framework(s) could help institutional developments that foster the growth of the non-hydrocarbon sectors of Oman?

Supplementary question; are there any systems approaches that could aid the formulation of the aforementioned policy framework (s)?

1.4 The Purpose of the Study and Methodology Path

The purpose and the aim of this study is to develop a holistic framework to improve the organisational and technological context where investors operate, aiming in this way to contribute to improve the performance of strategic economic sectors and public policymaking process. The institutions and organisations of the public sector are the main pillars of the research, and will be considered from different perspectives such as political, economic and social.

In terms of institutional and organizational development, this thesis will gain from new institutional economics (NIE) and institutional theories concepts, (Williamson 1985; North 1990), and Institutionalism (Selznick, 1949); systemic and organisational cybernetics approach (Beer, 1981) are also significant pillars of this study. Such framework is to be designed with the aid of the ideas of the collaboration governance (Wood & Gray, 1991; Ansell & Gash, 2008) and theories of the policy process (Sabatier, 2007) as well. It is expected that combined insights from these theories will open new paths towards ID, ones that encourage organisational intelligence, learning and change, by providing common ground for public and private sectors collaboration, where the public services provision meets more clearly the private sectors interests. The research also covers Knowledge Management (KM) to provide support of both human knowledge and Knowledge Management Systems (KMS), (Polanyi, 1958; Churchman 1971; Mitroff & Linstone 1993; Laudon & Laudon 1996; Courtney 2001).

The VSM is used to map the complexity of the institutional network responsible for investment policymaking, within the aforementioned KRQs. Inspiring and supporting the researcher's assessment of desirable actions to improve ID through policy refinement.

1.5 Introducing the Research Context

The research context is elaborated in chapter two, with Oman selected as an example of a (GCC)[2] country. Oman is a developing economy following a strategic plan for growth in its non-hydrocarbon sectors (diversification of the economy). The public and private sectors therefore, are the pivotal concerns in this study, with an emphasis on the public

[2] GCC: Gulf Cooperation Council, (Kingdom of Saudi Arabia, Oman, United Arab Emirates, Qatar, Kingdom of Bahrain and Kuwait) Economic Agreement signed in 1981, and became in force in 1983.

sector's institutions and organisations deciding on investment issues and impact of their decisions on economic growth and income resource diversity.

1.6 Researcher's Position

The researcher is a part-time PhD student. Also has a senior employee in the Omani government for the last ten years one of the two undersecretaries at the Ministry of commerce and industry for financial, administration and regional affairs in Oman. During his MBA on socioeconomic decision-making on the national economy in the Sultanate of Oman (Al-Maimani, 2000) he used Total Systems Intervention TSI (Flood and Jackson, 1991) for information systems impact on socioeconomic decision-making (National economy of Sultanate of Oman). All this previous piece of research originally motivated and oriented the direction of this thesis, and even enabled the drawing of particularly rich pictures of the research context.

However, the possibility of being biased is recognised because of the nature of exploratory action and qualitative research through case study strategy, where the researcher's involvement is acknowledged during data collection. Therefore, effort has been made to develop a recurrent reflective practice throughout the research as Brewer (2000) recommended. This has been implemented by keeping some professional distance while building relationships incorporating both detachment and involvement, and also by using data and methodological triangulation, reducing thus the potential for bias.

1.7 Structure of the Thesis

Having introduced the significance of the study, as well as highlighting (in summary) the theoretical background for the research and researcher, this chapter provides the foundation for the following chapters, and highlights along with the research aim and objectives, the KRQs and original contribution elucidated. Thus, the introduction chapter highlights the main argument of the research; which is about the policymaking processes, that needs to be studied in public-private collaboration mechanisms and examines its influence on ID in order to participate in achieving the required strategic growth vision. A section in this chapter is devoted to identifying the gap in the reviewed literature.

Chapter two; is about the research context, and provides an overview of the socioeconomic environment of the Sultanate of Oman with special reference to its history, land, demography, geography and geology that have an affect on commercial trade and thus economic significance. It also highlights leadership and policymaking in the history of Oman with special emphasis in its more recent development from 1970s onwards, in the context of ID.

Chapter three; presents a literature review of the research topics, coding and synthesising the literature mainly on organisations, institutions through social and economic and political perspectives (e.g. institutional economics) and (old and new institutionalism from which the concept of co-optation is to be leveraged), also collaboration and coordination, policy and decision making process, power in the public sector along with private sector leadership. This chapter also develops and discus the conceptual framework of this research, which is need to be designed to enable a more understanding of the public policymaking within the ID arena. Systems as main support pillar which its literature extensively reviewed along with the Cybernetics, Systems and Complexity theories. Knowledge and knowledge management systems and FDI determinants and policies economic growth are underlined.

In chapter four the philosophical aspects, of this research are discussed, outlining the research methodology, approach, strategy and design; it offers an extensive comparison of a number of philosophical paradigms, from which the selected paradigms are highlighted; it also describes the data collection and field work along with the research method, tools and techniques that will be employed. A section of this chapter will be devoted to the construction of the suggested systemic methodological framework inspired in Checkland's learning cycle (Checkland 1981) (Appendix 1.2): it will be applied throughout the thesis beginning with the expression of the problem situation discussing the application and ending with the proposals for change and conclusions. This chapter also will be built upon the literature review and describes pre data collection and gathering methods; it will show the sampling, coding and themes, emphasising the characteristics of the interviewees and the composition of the Focus Groups (FGs). Finally, the researcher describes the application of the suggested methodological framework which is a multi-staged approach - the systemic policy process structure (SPPS) - involving three phases; phase one (2 stages to identifying the situation considered problematical and to express it in terms of a rich picture), phase two (2 stages to unfolding the complexity and embedding VSM), phase three (3 stages

to identifying changes and design collaborative public policymaking processes and to suggest the action to improve the problem situation).

Chapter five and six presents suggested systemic public policy framework structure (SPPS); chapter five presents phases one of SPPS implement and describes the data gathering methods expressing the problem situation; chapter six is devoted to describing phase two of SPPS: it involves modelling of the real world organisational network and the identification of the key problems to manage complexity at different levels of recursive organisation. Phase three of SPPS; aims to brief the discussion and findings from the research analysis on phase one. It explains the change (findings) and action (recommendations). It will elucidate the suggested ID change as the final step of this framework implementation in preparation for final recommendations and conclusion.

Chapter seven finally; presents the conclusions, insights, and the contributions to knowledge, and the summary of assessment. The internal validity and external validity will be examined, it also will summaries findings and analysis, it describes the ID diagnosis and achievement of research aim, objectives and questions and the identification of actions to change policymaking process, and it also pinpoints the limitations of the research and some future research directions proposed. There will be a reflection on research implications to finally conclude the thesis.

CHAPTER TWO

THE RESEARCH CONTEXT: AN OVERVIEW OF SOCIOECONOMIC ENVIRONMENT OF THE SULTANATE OF OMAN

2.1 Introduction

The aim of this chapter is to provide the research context through an overview of the socioeconomic environment in the Sultanate of Oman (Oman hereafter), including a summary of the political leadership, management, public administration, past and present public institutional development and evolution, commencing with the country profile. This includes; trade history, geographical and geological nature to demonstrate the wealth of the natural resources such as hydrocarbon resources (oil and natural gas), and non-hydrocarbon natural resources such as fish, agriculture and minerals. More emphasis is devoted to the importance of the non-hydrocarbon economic sectors; including the technological changes occurring alongside the latest institutional development (ID) occurred in Oman, which has an impact on public-private sector collaboration, as this is one of the main concerns of this study.

2.2 The Country Profile

Oman occupies a vital strategic geographical location (Fig. 2.1) that - through the millennia- has always been a major influence on its political and strategic options and development. It spreads over an area of 309,500 square kilo-meters. The country lies on the 'Tropic of Cancer', a hot and arid region occupying the extreme south-eastern corner of the Arabian Peninsula (*Al-Jazeera*[1] *Al-Arabia*) including Yemen. Oman extends from latitude16.40 to 26.20 degrees north and from longitude 51.50 to 59.40 degrees east. Oman shares borders with the Republic of Yemen to the South-west, the Kingdom of Saudi Arabia (KSA) to the West and the United Arab Emirates (UAE) to the North (OME[2], 2006). A summary of Oman's modern political history is presented Oman has a number of Governorates; see the details about Oman in Appendix 2.1.

[1] Throughout this thesis the Non-English words will appear in *Italic*, but when a pronoun and a local name is known internationally it will appears in the normal text.
[2] The Ministry of National Economy in Oman is termed by the researcher as OME.

Figure 2.1: Map of the Sultanate of Oman.
Source: MI, (2013).[3]

Institutions and organisations throughout the 300 years modern history of Oman underwent a gradual evolvement; one of the earliest institutional developments and institutional transformation can be dated from 1744, during the *Imam*[4] Ahmed *bin*[5] Said

[3] Ministry of Information-Oman site: www.omanet.om. (Accessed on 16th March 2013).
[4] The *Imam* used to be a religious ruler; assumed full or partial spiritual, political and military authority, as dictated by prevailing circumstances, and act as highest authority in all religious matters, which is also responsible for all civil affairs such as the collection of taxes within his domain, and commanded the army in time of war. This title not used any more (see Appendix 2.1).
[5] *bin* is an Arabic word means 'son of'.

(founder of *al*[6] Busaid dynasty) who established training institutions for skills, customs management, administrative leadership, finance, accounting, and internal security, and also training on formulating agreements with the naval forces and trade companies (Al-Farsi, 2010). The institutional evolution continued with his grandson Sultan Said *bin Sultan*[7] who is known in European literature as the 'Great Said'. His reign witnessed further significant institutional development. Aforementioned Appendix 2.1 provides a glance of past institutional development and ruling dynasties.

Prior to the commercial export of oil, Sultan Said *bin* Taimoor (father of the present Sultan) (ruled 1932-1970), inherited a debt-ridden state along with the throne, kept his country as closed off and inaccessible as possible, and maintained his aloofness. He left Oman with three elementary schools and three small health clinics. During his reign there was no institutional development that is worthy of reporting here. Peterson (2005), considered him as an archetype of the neo-traditional ruler, a prime example amongst neo-traditional leaders in the Arabian Peninsula who were fighting a losing battle and unable to cope with the wide scope and deep-seated nature of emerging challenges to their legitimacy. This was the growing pressures upon the state to allow socioeconomic change and even to promote it through systematic development (Hawley, 2012: pp. 4-5).

His son His Majesty Sultan Qaboos[8] (the present Sultan), came into the power, on 23rd July 1970 after his father's abdication, His educational background was in the United Kingdom: he graduated from The Royal Military Academy (Sandhurst) and made a complete break with the past of his father. The year 1970 is seen as pivotal in the eyes of Omanis, as the accession of the new Sultan marked the point at which the modernisation of the country began. Since he came into power, the pace of socioeconomic development continued to quicken and society grew more complex and heterogeneous; the Sultan has steered the country through the difficult early years towards an era of unity, peace and prosperity (Peterson, 2005; Hawley, 2012). Peterson (2005) considered him as Post-traditional and Modernising Sultan. who soon embarked on the development of institutions and organisations and formed the first Cabinet 'Council of Ministers (CM)', which announced on 15th August 1970 the formation of

[6] "*al"* in Arabic means "The" it can be written as '*Al' or 'El'* .

[7] To differentiate Sultan as a title (means ruler, Monarch or king) and *Sultan* as a given Arabic name (which means powerful, influential or strong) for the purpose of this study, *Sultan* as a given name appears in *Italic* throughout the thesis.

[8] He is addressed and titled as 'His Majesty the Sultan of Oman', and militarily as 'His Majesty the Supreme Commander of the Sultan Armed Force'.

the first four Ministerial Portfolios; Education, Health, Justices, and Interior. The Sultan appointed his uncle 'Tariq[9]' as the Prime Minister, but he lasted only a year in office before he resigned and there has never been another prime minster. The Sultan himself exercises the power and legislations of the CM.

Research on the topic of organisational leadership in Oman, along with its Middle East neighbours, is scarce, (Common, 2011). The *al Busaid* dynasty is ruled Oman since 1744. Oman laid the foundations of institutional management, through the continuous development of public administration, military and economic methods into the state structure forming a number of central new positions in the government. They have implemented new methods of state administration and established new positions such as tax collectors, fleet leaders, judges, and *Walis* (district governors).

2.2.1 Demographic and Socioeconomic Indicators

Oman's population has grown and the latest figures from the National Centre for Statistics and Information (NCSI) states that the population in Oman rose from 2.7 million in 2010, to 4 million in December 2013 (see Appendix 2.1); due to the increase in expatriates (Fig. 2.2). This figure also illustrates how the population soared during 2013 to almost four million in total. The latest report from the NCSI, (2015) stated that 76% of Omanis are under 35, and 20% are between 35 and 64 years old, and only 4% are over 65. This shows the significance of the manpower issue in the next sections.

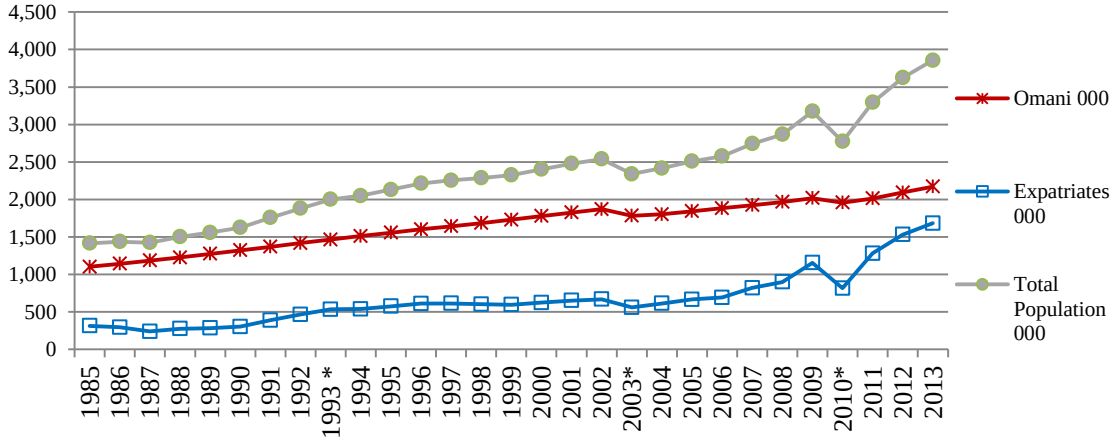


Figure 2.2: Oman population 1985-2013.
Note: * indicates a census year.
Source: NCSI (2014).

[9] The royal family in Oman titled as 'His Highness'

The official language in Oman is Arabic; it is written in different ancient calligraphic arts and spoken with different accents in different regions of Oman and other Arab countries. Oman is a unique in the Arabian arena for the languages spoken by some of its inhabitants instead of or in addition to Arabic. The main instances are; *Kumzary* in Musandam in North which is in origin a mix of words from Arabic, Persian, Indian, and Portuguese and other European (English) language and dialects. Its history extends for around 1400 years[10].

In some different regions of Oman specifically Muscat and its suburbs - some other unwritten language are spoken such as *Zanzibari or Swahili* (originally the language of Zanzibar) and *Blushi* (originally the language of Baluchistan) alongside other minority spoken and written languages. In the Southern regions there are some other ancient languages such as *Jabbali* or *Shahri*, *Mahri*, *Harsusi* and *Batahiri* dialects and the language of Socotra. None of these languages are written.

There is widespread use of the English language in both economic and education sectors. For example, most of the fieldwork with investors and public institution policymakers was conducted in English; the interviews with the investors (foreign and domestic) and with the public policymakers was all in English although the semi-structured questions and structured questionnaire documents for data gathering were translated into Arabic for domestic investors for a deeper understanding of the expressions used in the questionnaires, these are referred to in chapter 4 appendices.

Socioeconomic indicators include Health and Education institutions which are the top priority of the government. Oman higher education institutions have adopted an electronic system since 2006 known as the Higher Education Admission Centre (HEAC) (MI-Oman, 2012), which organises admission to the universities. The Ministry of Higher Education also oversees seven academic chairs called 'Sultan Qaboos Chairs'. There are currently a total of sixteen academic chairs in various globally recognised universities. These Chairs vary in terms of specialties and objectives, some are focused on Arab and Islamic studies, while others relate to modern science and technology, and others focus on international relations, humanities and social sciences. Sultan Qaboos University (SQU) which was inaugurated in 1986, where the number of students has now reached to 15,521. The number of private education institutions in Oman's

[10] According to a reportage from Oman TV (2014).

governorates stands at 19 colleges and 7 universities with 47,465 male and female students (MI-Oman, 2014).

Oman Gross national Income (GNI) per capita increased from USD 5,147 in 1980, to USD 6,900 in 1996 to USD 19,440 in 2013; the gradual improvement can be explained by the following figures. Fig. 2.3 illustrates the gradual improvement of GNI, from 1980 to 2013.

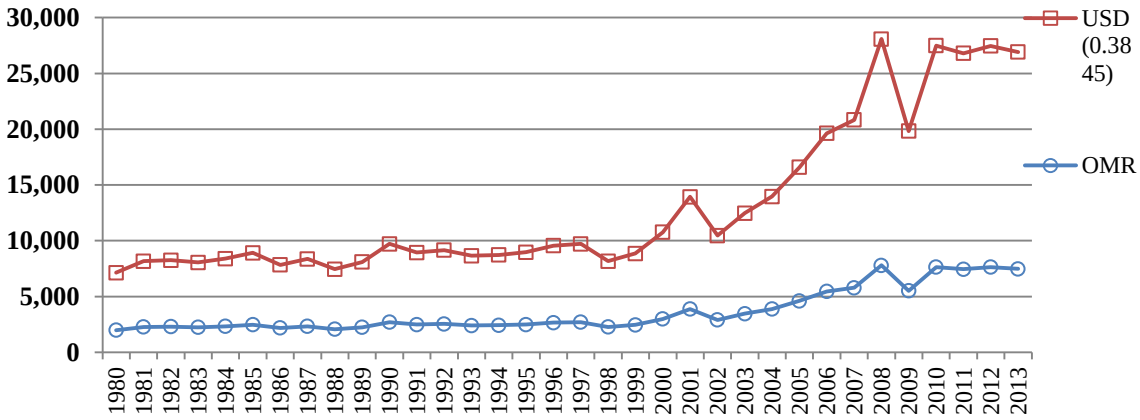


Figure 2.3: Oman Gross National Income (GNI) per Capita in OMR and USD. 1980-2013. Source: NCSI (2013; 2014).

GNI per capita trends in other GCC countries compared with Oman, during (2001-2012) is illustrated in Figure 2.4. It was noticed that the World Bank data lakes the GNI per capita before 2001, and there is a slight differences when it compared with Oman National Centre for Statistics and Information (NCSI) figures during the same period.

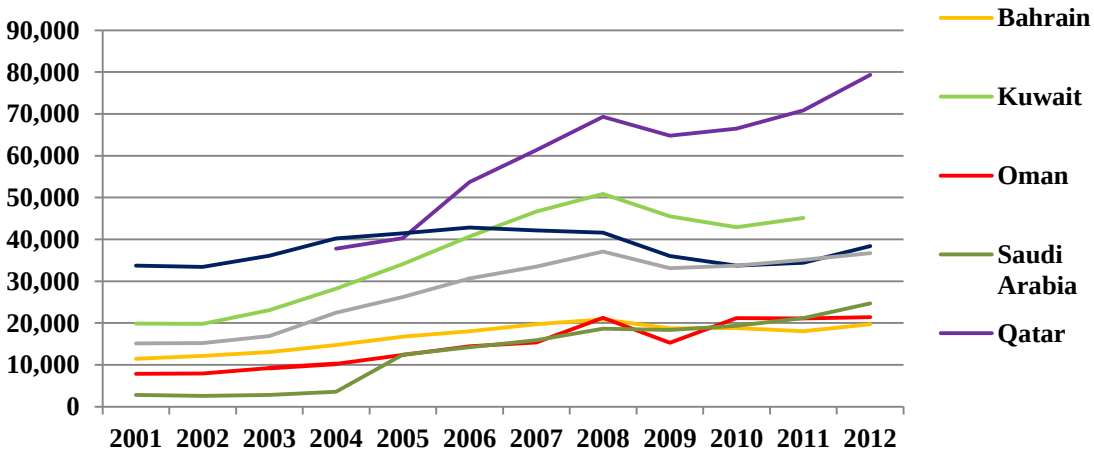


Figure 2.4: GNI per Capita, in GCC. 2001-2012 (USD).
Sources: World Bank (2013); NCSI (2013).

The year 1996 became another historical turning point where two important events occurred in Oman's life; the adoption of 'Vision 2020', (i.e. the 25 years strategic plan), and the issuance of the 'State Basic Law'.

2.2.2 Oman's System of Government: State of Institutions

Sultan Qaboos, the present sultan, rules by decree and politically he reigns by royal fiat (orders) and instructions; laws and decrees are issued under his hand, and all the treaties, agreements and engagements must be approved by him. They are dated from their issuance or from their publication date in the Official Gazette[11]. The deputy prime minister of the CM presides over weekly meetings of the CM where the main socioeconomic policies and decisions are studied, discussed, and made.

Sunday, the 9th of February 1975, was a particular day in Oman's socioeconomic development; on this day the Sultan presided over the first meeting of the newly established 'Development Council', which made a decision defining 'the objectives and policy of socioeconomic development in Oman' stating a number of social and economic principles, about Oman economy during the period from July 1970 to July 1980 (MCI[12]-Oman, 1980, pp. 33-35).

The decision was tantamount to an economic development charter, embraced five basic principles. Three of which pertained to the strategy of economic development and two related to social development. These principles which are still valid today are as follows (see the decisions on these principles in Appendix 2.1):

1) Oil Resources are a property of all Omani Generations and Not of the present one alone, which means: Oil is a 'deplete-able' natural asset; therefore, it is not only for the present generation;

2) The diversification of National Income sources is the guarantee for the economic future of Oman;

3) The private sector is the backbone of a national economy, which is 'Devoid of Monopoly';

4) The goal of Social Development is bringing up an Omani citizen capable of undertaking economic and productive activities;

5) Investment should be distributed in a way that leads to the elimination of variations in living standards throughout the Sultanate.

(MCI, 1980)

[11] Issued by the Ministry of legal affairs, Oman.
[12] The Ministry of Commerce and Industry, Oman

The fundamental aims of the Sultan has always been the building of a 'State of Institutions'; The foundations were laid for a modern state and ensured that the country has kept pace with modern science, at the same time preserving Oman's identity and ethos. Accordingly the basic state and organisational structure of the state began at that time. Oman exercised the gradual shift to democratic practice that led to the separation of the Judicial, Legislative, and Executive authorities through a royal decree in March 2012 (see Appendix 2.2).

The State Basic Law promulgated on 6th November 1996 comprised 81 articles laying down a legal framework of reference governing the functions of the different authorities and separating their powers. This law affords safeguards to guarantee the freedom, dignity and rights of the individual. It sets out Oman's system of government and the guiding principles behind the state's policies and also details public rights and duties. It contains specific principles covering the Sultan, the CM and judicial matters. Oman exercises religious tolerance internally and internationally. The topic of alliance of civilisations and dialogue between religions comes at the forefront of Oman's interests based on its belief of the importance of peace and coexistence between the countries of the world to provide the development and advancement to its people (UN Alliance of civilizations Group of Friends initiative[13]).

2.3 Strategic Vision (Oman 2020)

Oman's Government has drawn a long term visionary plan (Oman 2020). The targeted figures are shown in Appendix 2.3 as the basis for the diversification of its economy, to shift from depending on the hydrocarbon sector to the non-hydrocarbon sectors. The vision targets contained in five years plans were set forth as follows:

"The vision endeavour to ensure the stability of the average growth of Gross National Income (GNI) per capita, and adoption of sustainable financial policies, …and increasing government income specifically from the non-hydrocarbon sectors and working on increasing the economic growth rates of diversification activity and increasing its contribution in the Gross Domestic Products (GDP). Target is to develop the non-hydrocarbon sectors exports of products and service through increasing its volume and improve the level of quality and institutional development through; increasing the private sector contribution to the GDP, and the savings, encouraging the foreign and domestic investment, providing the investment climate and expanding the private sector role and activities" (OME-Oman, 1995).

[13] Oman National Plan for the Alliance of Civilizations (2011-2014).

Oman's economic vision is based on a strategy of economic balance and sustainable growth. Within this strategic plan, the Oman Government intends to increase the share of the non-hydrocarbon sectors to reach up to 81% of GDP, in return, the hydrocarbon sector needs to be minimised and descend to 19% of GDP (Oil 9% and Gas 10%) by 2020. (The achievement of the strategic targets is further discussed in section 2.7).

The non-hydrocarbon sectors are described in Table 2.1a below, for each of the five sectors that need institutional enhancement. According to the 2020 vision, the hydrocarbon sectors' share of GDP needed to descend to 11.4% by 2010, but actually contributed 32.2% of GDP on that year, and on average (1996-2010) contributed 43.6% of GDP. This is a large difference – it soared up to 32.2% instead of descending to 11.4%. This certainly was at the expense of the non-hydrocarbon sectors: their relative share remained roughly the same although their actual economic activity increased dramatically. This table also clearly shows the variances between the sectors' contribution on average from 1996 to 2010 (see Appendix 2.4: 1a and 1b) compared to the 60% of target.

Economic Activity	1996 % (1)	2020 % (2)	Change % (2-1) (3)	Av. Contribution 1996-2010 (4)	60% of 2020 ([2] x 60%] (5)	Variances % (4-5)
Total Hydrocarbon Activities	35.0	19.0	-16	43.6	11.4	32.2
Total Non-hydrocarbon activities	58.1	78.1	20.0	57.9	46.9	11.0
Agriculture & Fishing	04.1	05.1	1.0	2.0	3.1	-1.1
Mining and Quarrying	00.6	02.0	1.4	0.3	1.2	-0.9
Building and Construction	03.2	10.0	6.8	4.0	6.0	-2.0
Manufacturing	05.4	15.0	9.6	8.1	9.0	-0.9
Trade and Tourism	22.2	26.3	3.8	15.3	15.8	-0.5

Table 2.1a: Vision 2020 performance relative share to the GDP %
Note: throughout of this research each colour shown in this table is allocated for each sector.
Source: NCSI (2010); (2014).

Although tourism and trade sector shown below 22.2% of 1996 figure, but in terms of value in current OMR 1,044.8 in 1996, it soared during the data collection period (2010) to OMR 2,918.4 and then in 2013 it reached to 3,435.6 which mean that it achieved 55% in average from 1996-2013. The following table explain that all other four sectors

in term of the value has achieved that targeted growth in 2010 and 2013 (more details can be seen there in Appendix 2.4).

	1996	2010	%	2013	%	Average (1996-2013)	%	2020 %
Total Hydrocarbon Activities	1,803.50	10,388.40	17.4	15,205.80	11.9	6,639.3	27.2	19.0
Total Non-hydrocarbon activities	3,193.80	12,633.70	25.3	17,198.30	18.6	8,010.8	39.9	78.1
Agriculture & Fishing	162	311.7	52.0	371.2	43.6	227.8	71.1	05.1
Mining and Quarrying	14.1	91.7	15.4	114.7	12.3	46.6	30.2	02.0
Building and Construction	129.3	1,313.70	9.8	1,897.00	6.8	671.8	19.2	10.0
Manufacturing	2,26.5	2,385.20	9.5	3,138.80	7.2	1,401.2	16.2	15.0
Tourism and Trade	1,044.8	2,819.4	37.1	3,435.6	30.4	1,898.6	55.0	26.3

Table 2.1b: Non-hydrocarbon sectors value growth from 1996 to 2010 and 2013.
Note: % means percentage different from 1996 figures (values).
Source: NCSI (2014).

The major challenges facing Oman's economy in the attempt to achieve economic balance and sustainable growth are; firstly, the need to develop and upgrade the effectiveness of current policies, the importance of which has increased due to the global changes witnessed during the 1980s, secondly the emergence of a new international order centred around economic, commercial and technological competition based on market liberalisation and mechanisms and thirdly the elevation of the private sector role.

Therefore, the vision challenges are:

1. The dependence of the national economy on hydrocarbon source, which is affected by external economic and political factors. Increasing the non-hydrocarbon sector's share of GDP. Developing non-hydrocarbon revenues through adoption of a gradually reduced reliance on hydrocarbon sector revenues.
2. The development of the private sector which can be realised through developing policies and mechanisms for the achievement of investment goals.
3. The lack of certain laws and systems for the provision of a suitable environment for the growth of the private sectors role, also the poor production efficiency in government systems and inefficient utilisation of the common pool resources

(CPRs). Upgrading data, information and knowledge bases in government organisations and designing a sound policy regarding the approach to acquiring and developing information technology in Oman.

4. Upgrading and modernising current laws and regulations such as; The Commercial Company Law; Foreign Investment Law; Labour Law; (due to international business requirements).

As GDP is one of the main topics of this study which seeks more growth though the institutional development - three aspects of it will be further discussed: a) its sectorial composition, b) its annual growth rates, and c) its annual growth nominal values.

A) The GDP composition (in current price) from 1991 to 2013 shows the relative share of hydrocarbon and non-hydrocarbon sectors[14] (see Appendix 2.4: 1a). It is illustrated in Fig. 2.5a (below) and it is noticeable that mining and quarrying sector hardly registers as it is in the 0.2 - 0.4 range (in light grey colour). It should be noticed also that the five non-hydrocarbon sectors account for 70 - 80% of the GDP in non-hydrocarbon sectors while it appears as if the figure is missing some 20-30% of the GDP which is accounted for by other sectors such as transport and communication, electricity and water and other non-hydrocarbon sectors that are not focused in this study.

[14] In this research the Non-hydrocarbon sectors category was done in accordance with the Oman strategic vision 1996-2020, albeit one could argue that each one has a number of standalone economic sectors.

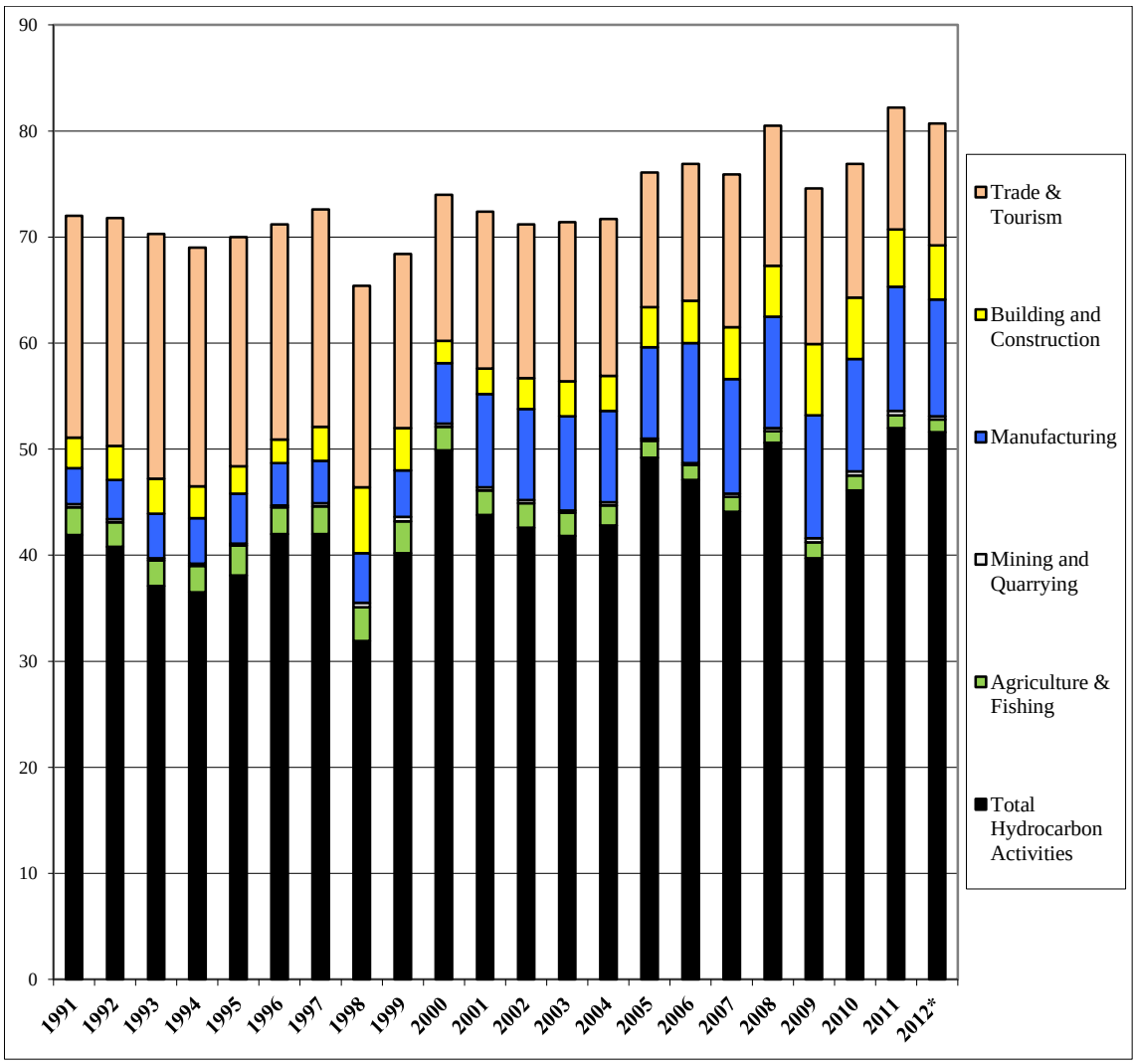


Figure 2.5a: GDP by Economic Activity at Current Price –Relative Share (%). (1991 -2013).
Notes: *denotes Provisional.
Sources: NCSI (2013).

B) GDP yearly growth values (see Appendix 2.4: 2a) which are depicted in the following Fig. (2.5b).

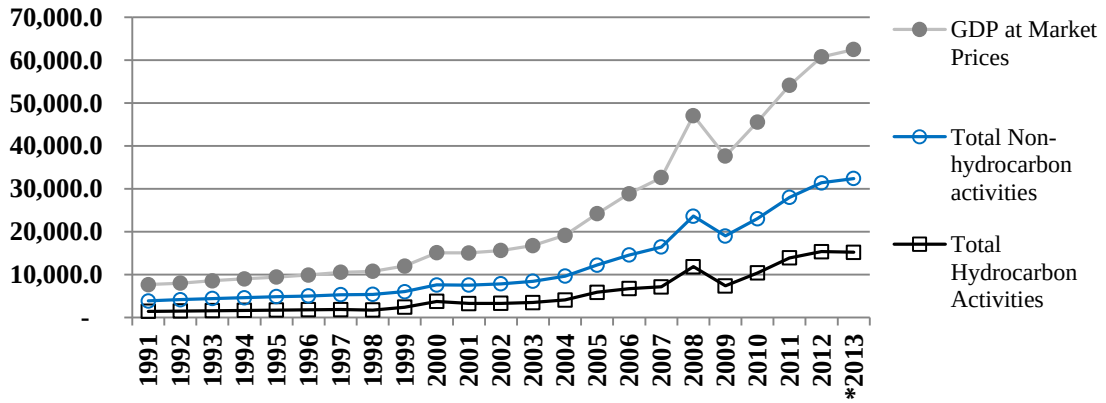


Figure 2.5b: GDP Hydrocarbon and Non-hydrocarbon Sectors Growth Value (OMR) 1991-2013.
Source: NCSI (2010, 2013, 2014).

The peak in 2008 as shown in Fig. 2.5b is attributable (the largest part of it) to the performance of the oil sector activities which contributed 28.3% in total GDP growth due to the immense jump in oil price from 65.15 USD per barrel in 2007 to 101.05 USD in 2008, (i.e. by 55.1%) It was explained by the rising oil demand in countries like China and India in the middle of the financial crisis of 2007-2008, which led to an increase in the value of the oil activities by 65.0%. During the same period, the non-hydrocarbon activities also recorded a significant growth (27.2 % at current price). Most non-hydrocarbon activities have witnessed varying positive growth rate in 2008 ranging between 4% - 64% compared with 2007. The highest percentage was achieved by the mining and quarrying sector, followed by building and construction, wholesale and retail trade, manufacturing, transport, storage and communications, and hotels and restaurants etc. This peak could be seen in the values of the following table (2.2):

Activity	**2007**	**2008**	**2009**
Hydrocarbon	7,139.00	11,844.20	7,383.50
Non-hydrocarbon	9,288.50	11,793.00	11,628.50
GDP at Market Prices	16,181.80	23,418.10	18,605.30

Table 2.2: Hydrocarbon and non-hydrocarbon share to the GDP value (OMR) (2007-2009). Source: NCSI (2010) (more details in Appendix 2.4).

Therefore, these positive circumstance weakened the repercussions of the world financial crises happened during 2008, its repercussions affected the GDP growth of 2009 where this declining position can be noticed in fig. 2.5b and 2.5c.

C) The GDP yearly growth rate (%) in market price (Appendix 2.4: 2b); this also can be illustrated through the following Fig. 2.5c to notice the different trends of both hydrocarbon and non-hydrocarbon yearly growth rates from 1991 to 2013.

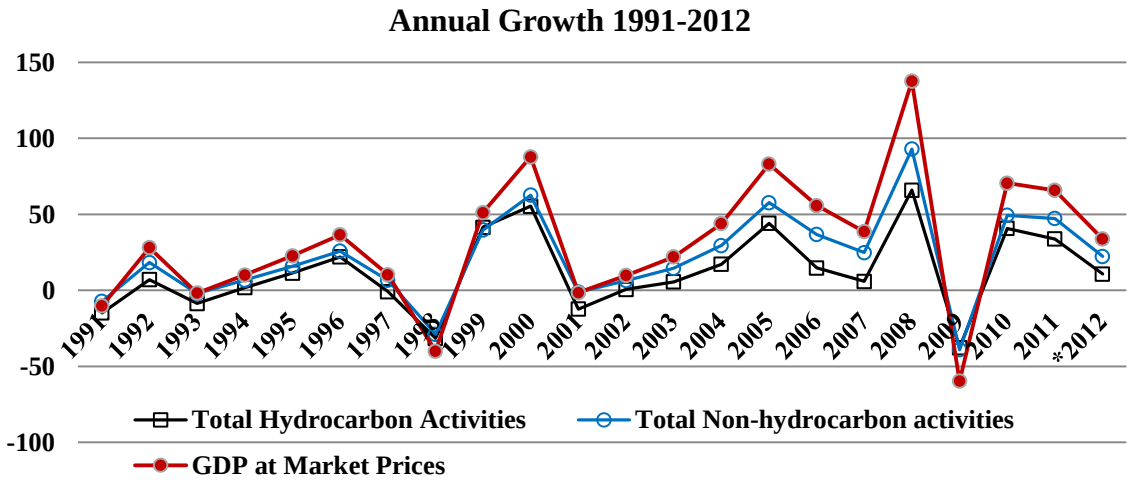


Figure 2.5c: GDP Non-hydrocarbon sector annual growth rate (%) 1991-2012.
Source: NCSI, 2000/2013.

From the above figure it is obvious that the recession and crises happened during 1998, Asian financial crises in 1997 (Great Recession) followed by great Russian financial crisis in 1998) where sharp decline occurred but soon recovered. The development of the infrastructure has progressed through five years of development plans that began with the (first five year plan 1976 -1980) before the vision years. Oman adopted the philosophy of a free-market economy with the private sector, because of the small size of the domestic market. Oman encouraged export-led growth. A foreign exchange of payment systems decision was taken that to peg the currency of Oman, the Omani *Rial* (OMR) to the US Dollar (OMR 1.000 equal to USD 2.58 or OMR 0.3845 [385 *baisa*s], after the major slump in oil prices witnessed in 1986 resulted in an 11.3% devaluation of the OMR (Al-Oufi, 1999), although the world oil prices have made considerable recovery since then. This pegging and equality have remained to the present day.

2.4 Investment Environment

2.4.1 Investment Environment in GCC

The Figure below demonstrates the comparison of GCC countries GDP annual growth rate for over five continuous normal years (with no recession or financial crisis years) from 2002-2006 as an example of the GDP comparison. (see Appendix 2.4: 7a for data).

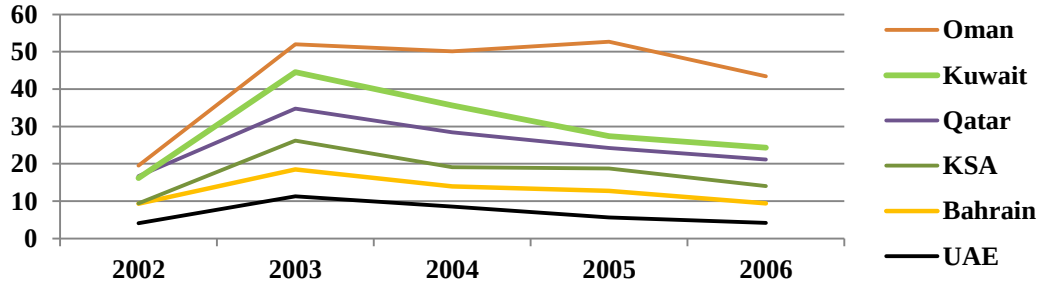


Figure 2.6: GCC country's GDP Annual Growth Rate (%) (2002-2006).
Source: IMF, World Economic Outlook (2013) and NCSI –Oman, 2009.

The history of FDIs[15] in the GCC commenced during the1970s, due to the lack of local experience especially in production, distribution, transportation and marketing of oil. This led to the emergence of joint ventures (JVs) between foreign and domestic investors. Due to the emergence of unequal partnerships and profit distributions between foreign and domestic investors, this caused in the long term "discrimination" in the policies against domestic investors to achieve the development. Foreign investors started to participate in Oman projects (within GCC projects) because of increases in Gulf Countries revenues, incentives, the availability of raw materials, low labour costs and the desire to exploit raw materials, such as fish, fertilisers, ammonia, petrochemicals, metallic and non-metallic minerals before 1980s. Oman is one of those countries which the investment environment was convergent to other GCC countries.

The six GCC members signed the Unified Economic Agreement in 1981 the objective of which was regional cooperation in all economic, social and cultural affairs including trade, industry and investment. The UAE also provided free movement of capital and labour. The GCC member states formed a free-trade area in 1983, which continued to operate until the end of 2002 when it was converted into a Customs Union on the 1st January 2003.

Oman is a member of the Pan-Arab Free Trade Area (PAFTA) which was established in 1998. The membership includes Egypt, GCC, Iraq, Jordan, Lebanon, Libya, Morocco, the Palestinian Authority, Tunisia, and Yemen. The Free Trade Agreement (FTA) was intended to become fully operational over a transitional period of ten years. However, this was brought forward by two years and the PAFTA became full-fledged from the beginning of 2005 when all tariffs in goods on trade between PAFTA members were

[15] To differentiate Foreign Direct Investment (FDI) and Foreign Direct Investors an 's' will be added to the FDI abbreviation similarly for Domestic investment (DI) an 's' will be added to denote domestic investors (DIs)

removed. They are also in the process of liberalising their trade in services (MCI-Oman, 2013).

Oman also joined the World Trade Organisation (WTO) as a member on the 9th November 2000 following the completion of the accession process under Article XII of the Marrakesh Agreement establishing the WTO. Oman also has a FTA with the United States of America (USA), which came into force on 1st January 2009. Bahrain is the other GCC country that has a FTA with the USA. This resulted in almost 100 % of trade in goods between the two countries becoming duty free. There are only a few products on which tariffs remain and these will be phased out within ten years from the date that the FTA entered into force. Oman through the GCC has also concluded FTA with Singapore as well as with the European Free Trade Association (EFTA). Oman is also a member of Indian Ocean Rim Association, FTA negotiation with other trade partners such as the European Union (EU), Australia, India, Japan, Korea, New Zealand, and Pakistan, Turkey have not yet been concluded (ibid).

The United Nations Conference and Trade and Development (UNCTAD, 2012), world investment report (2012), announced that Global FDI flows increased by 16% in 2011 to reach USD 1.5 trillion, thus surpassing the pre-global economic and financial crisis level, which prevailed during the period (2005-2007) for the first time, despite the continued impact of the global economic and financial crisis and the sovereign debt problem. However, the flows remain 23% lower than the peak of 2007. This report stated also that FDI flows directed to developed economies increased by 21% in 2011 to reach USD 748 billion, while in developing economies they increased by 11% to reach USD 684 billion. FDI also rose in emerging economies approaching 25% to reach USD 92 billion. FDI directed to developing and emerging economies represent 45% and 6% of total global FDI respectively. FDI flows directed to Western Asia dropped in 2011 for the third year to reach USD 49 billion. Flows entering GCC states continued to suffer from the cancellation of large scale investment projects, especially in the construction sector due to the scarcity of project financing in the region in the aftermath of the global financial crisis in addition to the impact of the turmoil in the region during 2011 (ibid).

UNCTAD presents the GCC countries FDI growth from 1970 to 2012. A comparison of annual FDI growth from 1991 to 2012 is illustrated in the following graph (Fig. 2.7) from which it can be seen that it declined during the years 1993 and 1998 and 1999 in

most of GCC countries. FDI in GCC countries in terms of value is illustrated in Appendix 2.4: 7b, the following figure depict the comparison between other GCC countries and Oman. Different countries get more in nominal terms; e.g. KSA and UAE and that the crisis and so-called Arab Spring put a dent in 2008-2010 periods for some countries, but then carried on growing.

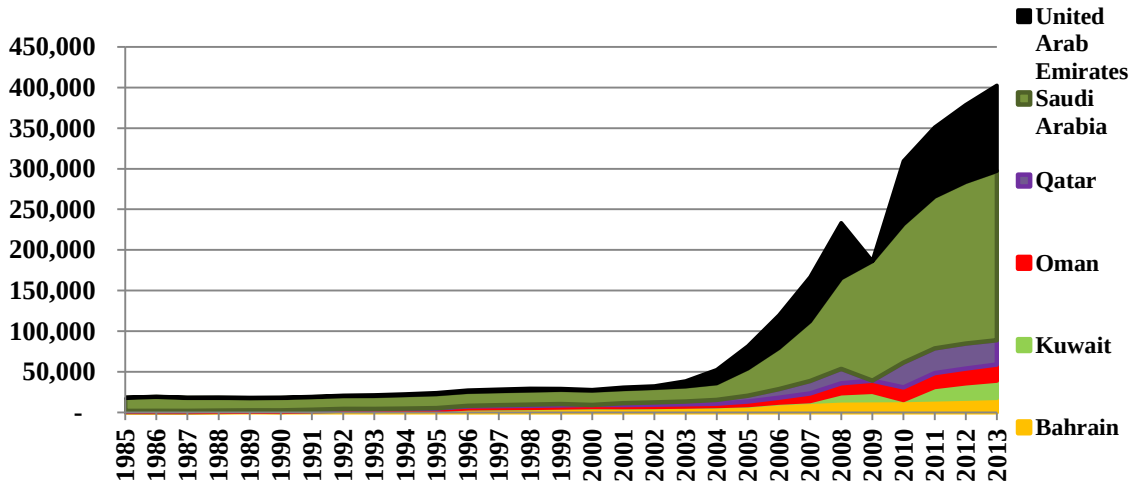


Figure 2.7: FDI in the GCC Countries 1985- 2013. (in million USD).
Source: UNCTAD, 2014.

The drop in FDI flows to the Middle East and North Africa (MENA) region over the past three to four years stems in part from the outcome of the recent global economic crisis (World Bank, 2012). According to the United Nations Conference on Trade and Development (UNCTAD, 2011), total FDI inflows (2011) in the region declined by more than 35%, from USD 66 billion to less than USD 43 billion (UNCTAD, 2012). According to the Gulf Investment Corporation, (GIC, 2011), FDI inflows started declining in GCC countries except Qatar from 2009 onwards. In Qatar, decline started during the year 2010. The declining trend continues in all countries except in UAE where the FDI inflow increased in 2011. The declining trend continues from the peak of USD 3,332 billion in 2007 to USD 0.788 billion in 2011. Reasons for the continued decline could be the global financial crisis and Arab Spring related uncertainties. Fig. 2.8 show the this latest decline comparing other GCC countries with Oman's investment that declined from USD 3,332; 2,952; 1,508; 1,142; 788 million respectively from (2007 to 2011).

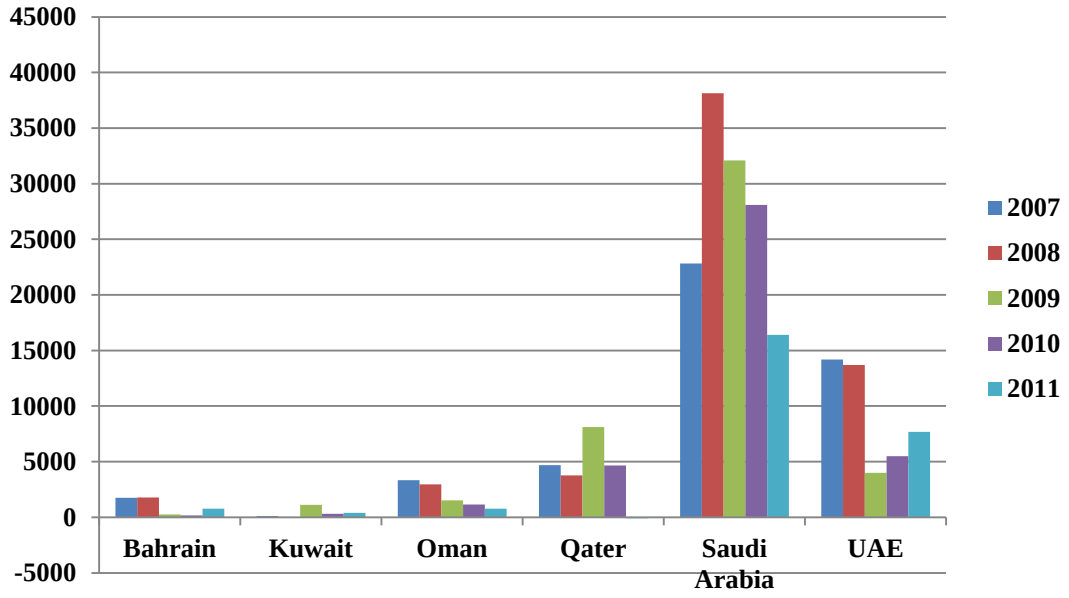


Figure 2.8: Foreign Direct Investment in GCC countries - INFLOW (USD million). Source: NCSI (2013).

The absence of an active and capable private sector, during the first 20 years (1970-1990) of development, meant that the government had to shoulder the biggest burden, which explains the large share of public consumption and investment. GCC states had economic characteristics (during the 1970s), which can be summarised as follows;

These projects depend essentially on oil and gas to generate the energy for the production lines, and that pricing policy is depending on the raw material local price, which differs from the international price index. It was for the benefit of foreign investors (when they form JVs with DI). It also seems that foreign investors usually handle the operation and production management and almost all parts of the work as per the parent companies. Decision-making in general - on the other hand - used to be under the control of foreign investors partners.

GCC industrial investment *per se* in Oman during (2010/2011) is still modest; totalling OMR 318 million (equivalents to USD 820.4 million) in 63 non-hydrocarbon sector projects (MCI-Oman, 2012)[16].

2.4.2 Investment Environment in Oman

Government institutions and the (rules which emanate from them) are of significance in the investment environment. In line with Oman's efforts to attract foreign investments that would create new employment opportunities, introduce technology and expertise in

[16] A study prepared by directorate general of industry in Ministry of Commerce and Industry, in 2012.

various fields, and contribute to the expansion and diversification of the production base according to approved policies, both OME and MCI have worked to provide the legal framework necessary for the encouragement of foreign investments.

Oman also signed the agreements of 'Avoidance of Double Taxation and promotion (DTTs) and reciprocal of investments agreements' that helped investors. The literature shows the importance of treaties (bilateral/multi-lateral) for foreign investment (BITs) which facilitates trade and investments as well as developing countries policies and institutional development. The literature also describes the debate concerning the strengths and the weaknesses of these treaties (Sauvant and Sachs 2009; Moran, 2011). Grosse and Trevino demonstrated that institutions matter in an FDI context in the transitional economies of central and Eastern Europe (CEE) they employed the new institutional economics (NIE) as a theoretical foundation and applied related concepts in an examination of FDI activity that may respond to institutional development. Oman has also realised the importance of treaties in FDI policy and the quality of institutional development. This has been achieved by concluding BITs with a number of Arab and Foreign countries on the promotion and reciprocal protection of investments. Oman has signed BITs with[17]: Algeria (2000), Austria (2001), Brunei (1993), Belarus (2004), Bulgaria (2007) Belgium-Luxembourg economic union (2008), China (1995), Croatia (2004) , Egypt (1998), Italy (1993), India (1997), Iran (2001), Jordon (2007), France (1994), Finland (1997), Germany (1979; 2007), Lebanon (2006), Morocco (2001), Netherlands (1987; 2009), Pakistan (1997), Sweden (1995), Sudan (1999), South Korea (2003), Switzerland (2004), Syria (2005), Tunisia (1991), Turkey (2007), Tanzania (2012) , UK (1995), Ukraine (2002) Uzbekistan (2009), Vietnam (2011), and Yemen (1998). The FTA with the USA is in force since 2009. The GCC-Singapore FTA: the enforcement is from 1st January 2015. The BITs are highlighted because they are one on of the economic and institutional determinants of investment for which investor and policymaker opinions about their importance will be sought.

It is also noteworthy that the MCI office in WTO in Geneva plays an essential role in the international business activities of Oman, with international organisations and other international agglomerations (Economic groups). It seeks dialogue on behalf of the government in different subjects and issues, and in defining the government status in different international issues, wherever Oman is a member or observer and to follow up

[17] In alphabetic then chronological order.

international meetings (e.g. G20, BRICS[18]). It also plays a consultancy role to provide and update the investors with important issues and organise workshops, seminars, conferences and presentations on a range of relevant topics.

Under the FTA, US investors are expected to be attracted towards investing in Oman, particularly in the areas of priority in Oman's industrial strategy, the mega industrial projects and the knowledge-based industries. Moreover the FTA enabled Oman to benefit from the capabilities of the United States in various economic and technological fields (MCI, 2010). Over more than two decades, business activities and foreign investments increased steadily in large part due to the achievements of the development strategy. However, the world financial crisis in 2008 triggered a slowdown of investments and development worldwide, impacting the economic growth of the whole Gulf region, the so-called the 'Arab Spring' also negatively affected FDI in the Middle East region although prospects may be more positive in the medium term, assuming a return on political stability.

Foreign investment law is a tool to monitor and control foreign investors. The Oman investment law may need to be modernised in all key areas to contribute to a competitive investment environment in Oman. Foreign investment law also needs to be compatible with the Strategic foreign investment vision at national level, to encourage trade openness and to provide adequate investment protection at the international level.

In the case of Oman, the term 'domestic investor' must be defined because investors from GCC member states, although technically foreign, are treated like domestic investors with no discrimination in economic fields[19], but for the purpose of this study the domestic investors are those registered as national companies and establishment under Omani Commercial Registration. The investment threshold is RO 150,000 (USD 387,000) to foreign investors; the usual ownership percentage for foreign investors is 49% but can rise to 70%. The CM can grant exemptions for the limitations up to 100%. The *Omanisation*[20] requirement applies to all investors, foreign and domestic according

[18] BRICS: Brazil, Russia, India, China and South Africa.

[19] GCC Economic Agreement signed in Muscat (31st December 2001) allows the GCC citizens to be treated the same the country's own citizen, and the mechanisms are activated by the supreme Council of GCC (held in its 31st meeting in Abu Dhabi 6-7.12.2010) which allowed GCC firms to have subsidiaries in all GCC countries.

[20] *Omanisation* is a national employment programme that has been in operation since 1988, aimed at replacing expatriates with trained Omani personnel. For example in industrial economic activities at least 35% of a company's workforce is required to be the Omani nationals.

to the labour law, while the Minister of Manpower decision determines the ratio of Omani citizen to foreign citizens by sector and activity.

Comparing Omanis with non-Omanis during 2010 to 2012 it can be noticed that there were 175,000 employees in private sector and the expatriates are more than one million. This can give a clue that the *Omanisation* programme is required as an obligation.. It also suggests that the private sector is reluctant to hire Omnis and had it not been for the *Omanisation* programmes perhaps not even these 175,000 Omanis would have been employed. In appendix 2.4: 4b of the latest key socioeconomic indicators it is obvious that the number of Omanis as private sector employees (Omani) was declining from 2010 to 2013, (178,000; 175,000; 172,000 respectively; as per the royal instructions to both public and private sector to accommodate 6,000 unemployed Omani by 2013 this made the figure raises up to 181,860. The *Omanisation* programme can be seen significant when we realise that 76% Omanis are below the age of 35, as previously mentioned in this chapter. During 1980s private sector was reluctant to hire Omanis and had it not been for the Omanisation programme (Private sector need to hire at least 35% of its total employees) perhaps not even these 175 thousand Omanis would have been employed.

The following Fig. 2.9a illustrates Omanis in private sector compared with public civil services employees after the recent employment in both sectors (as per the royal instructions).

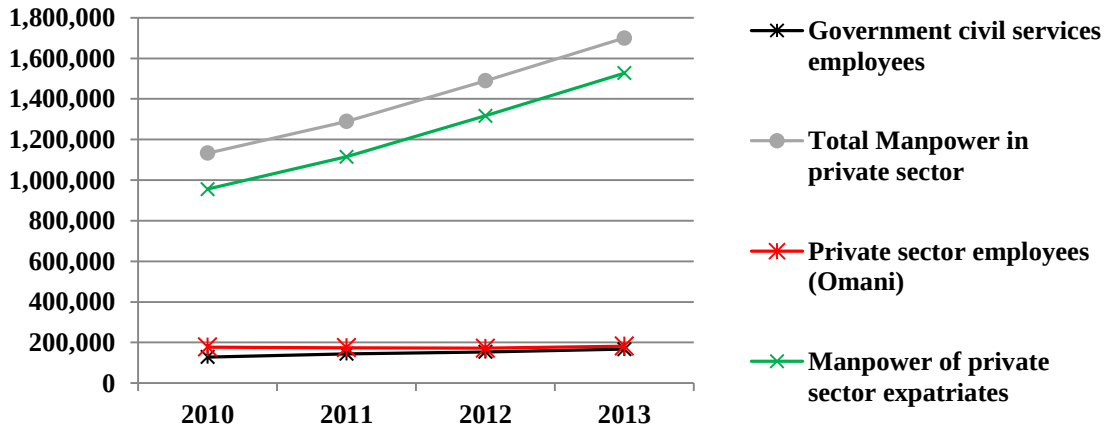


Figure 2.9a: A comparison Omani employment in public and private sector (2010-2013). Source: NCSI (2014).

Omnis and the expatriates in private sector in the recent years (2010-2013) are exceeding in any case 20% of total manpower of the private sector which do not tally with 35% of Omani employment the gap is clearly illustrated in Fig. 2.8a, also the

figure below (2.9b) show Omani manpower compared to the expatriates is declining in recent years from 18% to below 15% (2010-2013), and also the number of Omanis compared to the total of private sector's manpower which is also declining from above 15% to around 10% only.

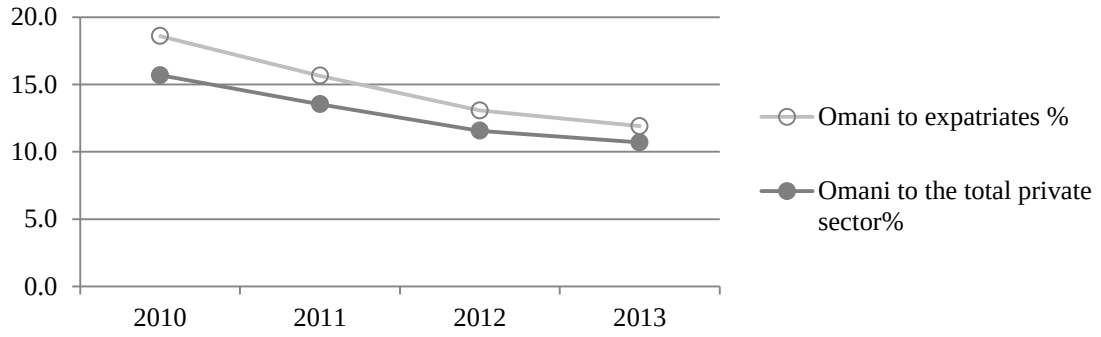


Figure 2.9b: Omani vs. Expatriates' in private sector & Omani vs. Total private sector employment percentage (2010-2013).
Source: NCSI (2014).

Investment is structured so that the total investment is expected to increase by 34% in 2020. If attained this should lead to the achievement of the policies aiming at the development of the private sector role in Oman's economy. Private investments will then be the primary engine of sustainable economic growth. The approved policies will lead to an increase in the GDP growth rate throughout the vision years. The interaction between different sizes of enterprises such as Multi-National Enterprises (MNEs), Large Scale Enterprises (LSEs), and Small and Medium Enterprises (SMEs) became an important issue, as well as their collaboration through FDI and DI Joint Ventures (JV's). Oman continued to promote and support SMEs with many initiatives to maintain their competitiveness via deploying a number of development programmes to enhance DI and to encourage local entrepreneurship. These initiatives are also contributing to employment levels. Recently, through a royal decree a special public authority for SMEs development was established (in 2013), with objectives of training and providing logistic support to SMEs. The government also formed in 2013 a special funding organisation called 'The *Rafd*[21] Fund' to empower the Omani youth and entrepreneurs to form their own projects and initiatives with coordination with the public authority of SME's development and the Oman Development Bank (ODB) (a state-owned bank), with financial support up to OMR 1,000,000.

[21] An Arabic word meaning 'Supplement'

Doing business in Oman is evaluated during the period (2008-2015) During this period, except for resolving insolvency, there is a significant improvement in most of the competitiveness ranking for doing business in Oman until 2013. After 2013 there is a decline in Oman overall rank. These indicate the need for further institutional developments. Table 2.3 below summarises the factors relating to ease of doing business.

Ranks / Indicator	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Ease of doing business	57	65	57	57	49	47	60	66
Complexity and cost of regulatory processes								
Starting a Business	120	62	66	76	68	73	117	123
Dealing with Construction Permits	130	130	66	70	64	59	50	49
*Getting Electricity	-	-	-	61	61	54	72	79
Registering Property	16	20	20	21	21	18	16	19
Paying	7	8	8	8	9	10	9	10
Trading across borders	109	123	101	88	47	49	58	60
Strength of legal institutions								
Getting Credit	116	127	125	128	98	83	111	116
Protecting Investors	84	92	92	93	97	100	118	122
Enforcing contracts	110	106	104	104	107	107	130	130
Resolving Insolvency	62	66	67	72	76	77	107	112

Table 2.3: Oman Competitiveness: 2008-2015 (Oman).
Note: *This topic was introduced from 2011 onwards.
Source: World Bank Group (2015)

The recent competitiveness[22] report showed that Oman's ranking is 33rd in the 'Global Competitiveness Index' (2013-2014) world economic forum among 148 countries - the details can be seen in Appendix 2.5. However, there are significant problematic factors mentioned in the report (summarised in Fig. 2.10) that impede the acceleration of business activity.

It shows that most problems are those related to "the institutions" such as restrictive labour regulations, an inadequately educated workforce, the poor work ethic in the national labour force and inefficient government bureaucracy, although the latter factor is lower than the former factors 28.0, 21.8, 17.5, 7.4 per cent respectively and "policy instability" gained 2.8 degree out of hundred, (which means there is a need for more institutional development), it was found that by 2020 there were some sectors that did not achieved their targets. These sectors are mostly related to common pool resources

[22] Conference held in Oman (December 2013)

(CPRs), while in manufacturing (with industrial activity figures) and services (T&T) did well. The problematic institutional factors are illustrated as follows:

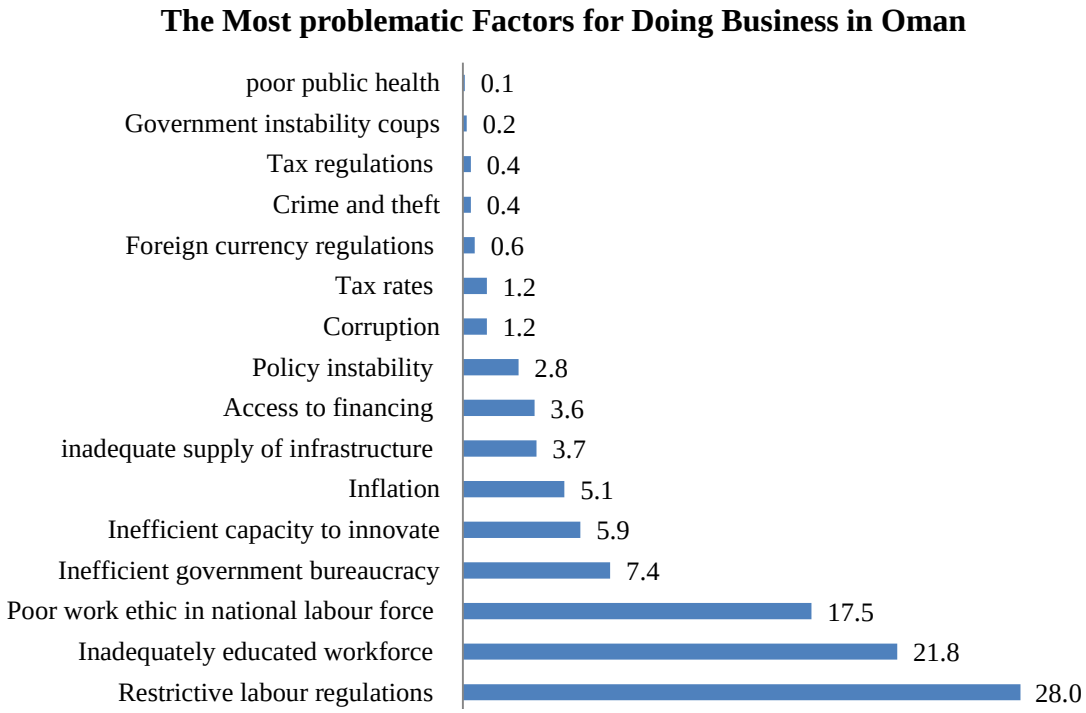


Figure 2.10: The most Problematic Factors for doing business in Oman.
Source: Global Competitiveness Index (2013).

There are three top countries for investments in Oman; UK, USA, and UAE (Table 2.4).

% by Country	2005	2006	2007	2008	2009*
United Kingdom	33.8	29.5	24	28.4	33.4
United States of America	7.2	13	17.8	19.7	19.6
United Arab Emirates	13.5	16.1	18.7	18.4	14.7
India	7	5.4	4.6	4.2	3.4
Qatar	4.1	3.9	3.3	3.9	3.3
Kuwait	3.6	5	4.4	4.5	2.1
Kingdom of Bahrain	0.9	1.1	1.9	1.8	2.1
Mauritius	0	0.2	0	0.9	2.1
Netherlands	2.1	2.4	2.8	1.9	1.7
Others	28	23.4	22.4	16.3	16.1
Total	100	100	100	100	100

Table 2.4: Relative share (%) of FDI in Oman by Country of Origin (2005-2009).
Source: OME (2010, p. 31).

Oman's fiscal and economic policies are designed to give the private sector a greater role in economic development, encouraging domestic and foreign investment, and boosting the private sector's capability and provide a favourable investment climate for the private sector comprising: a secure investment environment, modern, unambiguous

and transparent laws and legislation, a raft of financial, procedural and tax incentives, a securities market that is transparent and subject to proper monitoring legislation, tax rates that are among the lowest in the world, a monetary system free from restrictions or impediments that limit the investor's freedom of choice, a modern infrastructure (e.g. communications, roads, ports) and financial and technical support for SMEs.

The National Centre for Statistics & Information (June 2013) reported that FDI and Foreign investment (FI) in Oman compared with GDP that can be illustrated in the following figure (Fig. 2.11).

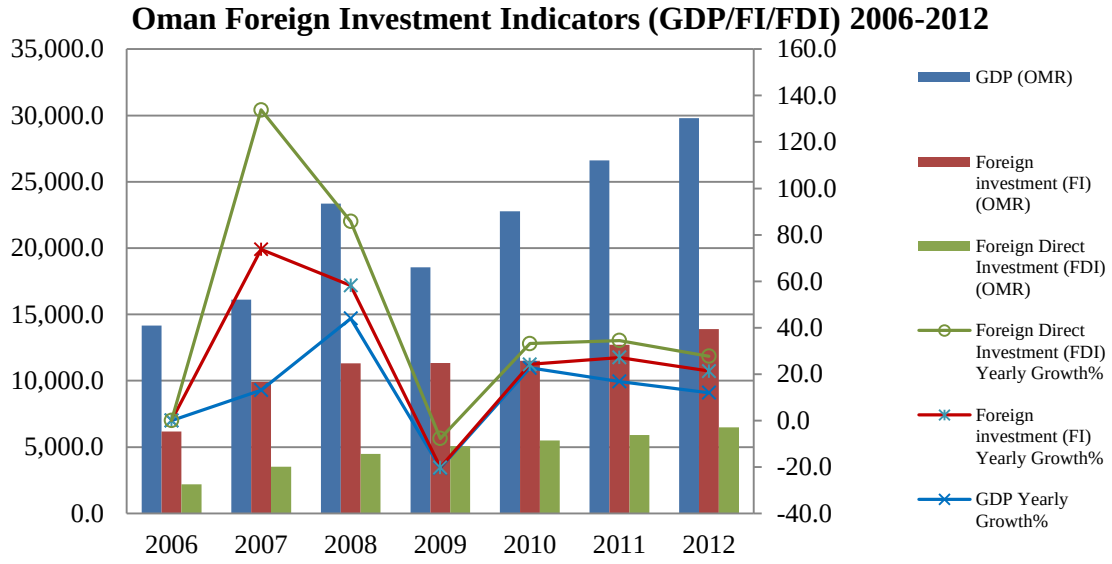


Figure: 2.11: Oman Foreign Investment (FI) compared with GDP 2006-2012.
Source: NCSI (2014).

In terms of the number of employees and wages and salaries in FDI in Oman can be noticed grown in the following two figures (Fig.2.12a and Fig. 2.12b)

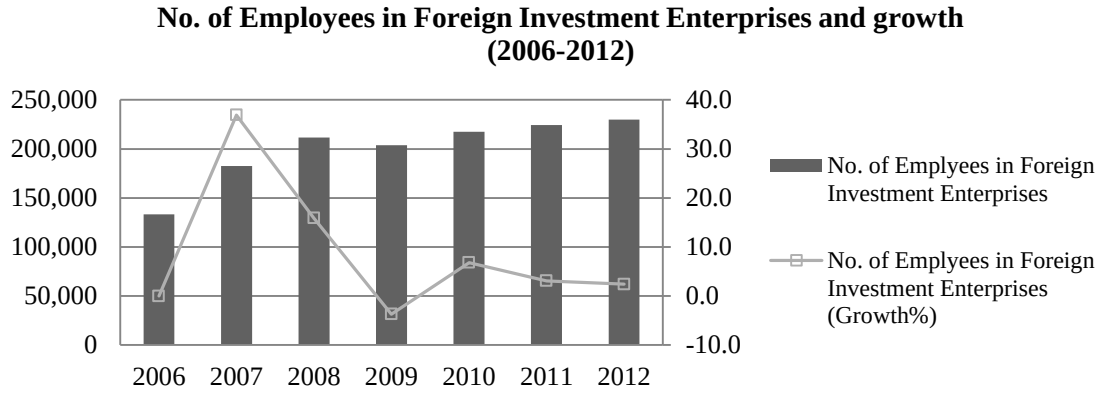


Figure 2.12a: Number of Employees in FDI and its yearly movement % (2006- 2012).
Source: NCSI (2014).

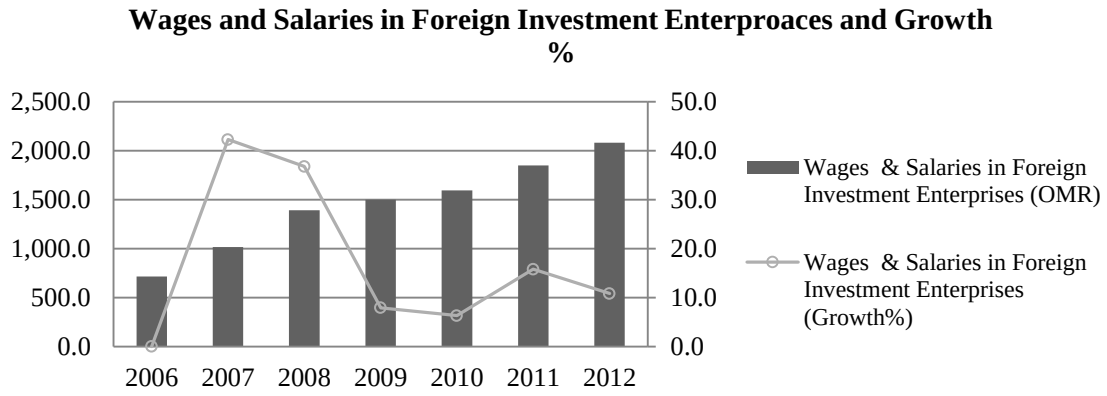


Figure 2.12b: Wages and Salaries in FDI and its yearly movement %.
Source: NCSI (2014).

It is noteworthy that Oman outward investment includes investments by Omani companies and non-Omani companies resident in Oman and their investments outside Oman, where foreign Omani investment registered an increase at the end of 2011 of 36.5% to reach OMR 5.5 billion compared to OMR 4.0 billion at the end of 2010. It can be seen that foreign investment from Oman increased during 2011 by OMR 1.5 billion compared to the 2010 level. These investments represented around 43.1% of inward investment during 2011. The rise of Omani investment abroad in 2011 was attributed to the rise of financial derivatives by OMR 9.7 million (Fig. 2.13).

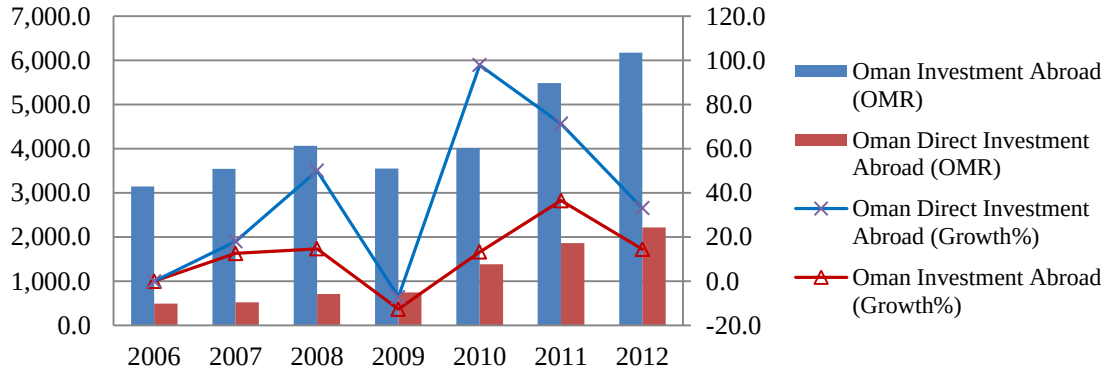


Figure 2.13: Oman Investment Abroad and Growth 2006-2012.
Source NCSI (2014).

The chamber's Board of Directors usually establishes internal committees[23] to look after the sectors and subsector needs, but it maintains less interaction with other government policymaking processes. Although the policies are made in public sector in Oman toward investment with informed and sound decision-making, the policies in public

[23]OCCI internal committees are; Services, Real estate, Insurance, Industry, Investment and Exhibitions Promotion, Small and Medium Enterprises (SMEs), Transportation, Tourism, Economy, Food security, Human resources, and finally the businesswoman forum.

sector are structured in vertical hierarchy. The Ministry of Commerce and Industry (MCI) is responsible for the formulation and implementation of Oman's trade policy in coordination with other ministries. The private sector provides inputs to trade policy formulation through the Oman Chamber and Commerce and Industry (OCCI) but this is done on an *ad hoc* basis. The leadership accepts and allows input to a certain degree, the participation of investors in government policymaking process is permitted, but it is minimal. The objectives of the trade policies of Oman are to maximise development of Oman's economy with a view to ensuring prosperity, raising living standards and providing increased employment opportunities to Omanis. The trade policies thus aim at expansion of trade by removing and reducing barriers to imports and exports, and by securing greater market access for Oman products and services.

2.5 The Hydrocarbon Sector in Oman

In 1920 oil exploration began, and continued until 1964 when the Petroleum Development-Oman (PDO) Company was established, with the first commercial export of oil from Oman witnessed in 1967. Since then oil has been the mainstay of the economy, especially for the state, which now depends on oil revenue. This led to economic dependence on the state as the engine of growth in addition to its more traditional role as the provider of public goods. It also produces social dependence on the state as an employer and provider of social welfare programmes, arbiter of propriety and acceptability, and definer of cultural, social and political values relying on religion and other normative values (see Socioeconomic Principles 1975, stated earlier in this chapter).

2.5.1 Crude Oil and Gas

Although it is painful to the economy when the oil price decreases, the low oil prices may help in meeting 2020 key performance indicators (KPIs) of vision 2020. During the fourth quarter of 1998 Omani crude oil was sold at USD 9.0 a barrel, well below the USD 18, which would have been a comfortable price for the Omani economy (at that time) (Al-Oufi, 1999). The annual average price of Omani crude oil in 1998 was 12 USD/BBL - the lowest average registered in Oman Oil history so far- Fig. 2.14 shows the oil production and prices in Oman from 1980-2012, both oil production and oil

prices trends can be looked at in the comparison with the trends of GNI per capita which go in approximately the same direction:

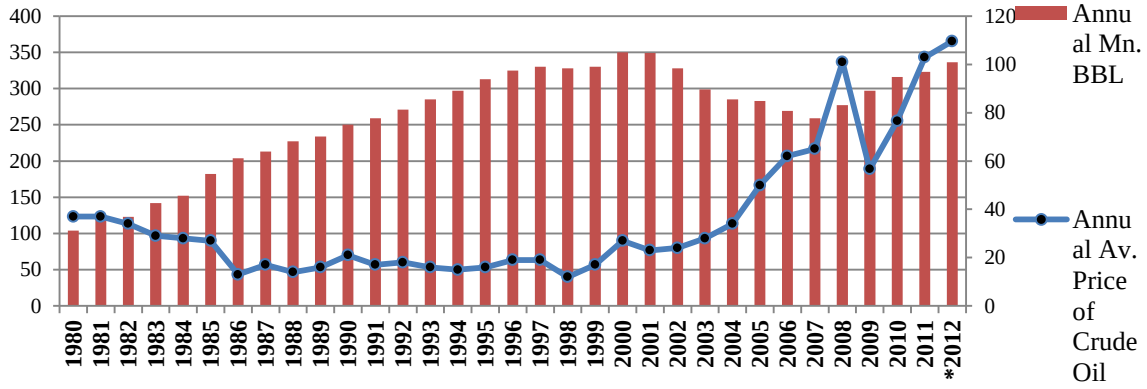


Figure 2.14: Oman Oil Production and Annual Average Price of Crude Oil 1980-2012. Source NCSI (2013).

The figure 2.15 depicts that during the oil price declined and continued to maintain its low level price during the 1980s and 1990s, the oil production gradually increased to reach its highest level. This explains that Oman has maintained its five years plans achievement steadily. It is also noticeable that even the oil price increased during 2000 onwards, Oman has reduced its production until the peak of 2007-2008, which was explained earlier.

The comfortable price presently (2013) is USD 105 to Oman economy: the recent Oman oil production is around 918,000 bpd (barrels per day), with an actual price of around USD 110. In terms of revenue, Oman and Bahrain are the smaller oil producers when compared with other GCC countries, and although the hydrocarbon sector made a positive contribution to growth of 5% in 2012, the main driver was the non-hydrocarbon sector, which grew by an estimated 7%.

There are two refineries in Oman producing oil derivatives, with other refineries under construction. Muscat *Mina al Fahal* Refinery production includes; Crude Oil, Condensate MTBE Gasoline (premium/Regular), D.P Kerosene (aeroplanes) , Gas, Oil, Butane, Long Residue Sulphur, *Isomerate*. While Sohar refinery produces the same (excluding Butane) in addition to LPG fuel Oil Naphtha and Propylene. The following figure (Fig. 2.15) explains the crude oil export distribution by countries.

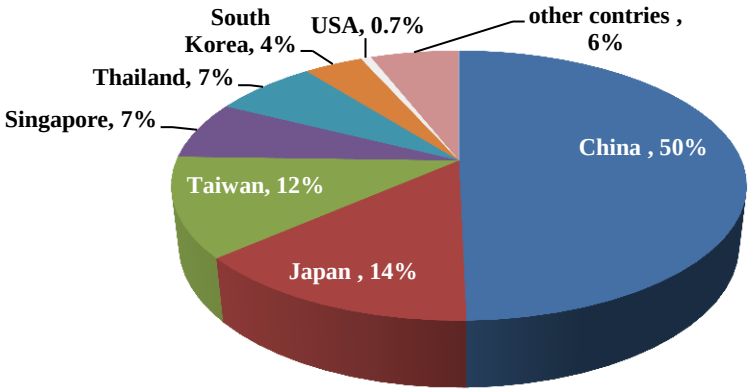


Figure 2.15 Oman Crude Oil Exports destination distribution in 2012.
Source: NCSI (2013).

Oil and gas production and export trends and gas sub-products uses are shown in Appendix 2.4: 9 &10 (oil and gas indicators 1980-2012). The production of natural gas has increasingly become one of the main contributors to the GDP of Oman in recent years. The two primary sources of gas: 'associated gas' reserves and 'non-associated gas' reserves. Associated gas is produced as a by-product of the production of crude oil, which pays for the field development costs. It is generally regarded as an undesirable by-product, which is either re-injected, flared, or vented. It is found with deposits of petroleum, (associated petroleum gas [APG]), also referred to as 'wet gas' Approximate APG composition are; mostly Methane (volume fraction 81% and weight fraction 60%), Ethane, Propane, Butane Pentane Nitrogen and Carbon dioxide (MOG, 2014).

Non-associated gas is found in reservoirs that contain gas but no oil. Coming from reservoirs that are not connected with any known source of liquid petroleum it also referred to as 'dry gas'. The yearly growth of gas in Oman can be seen in Fig. 2.16.

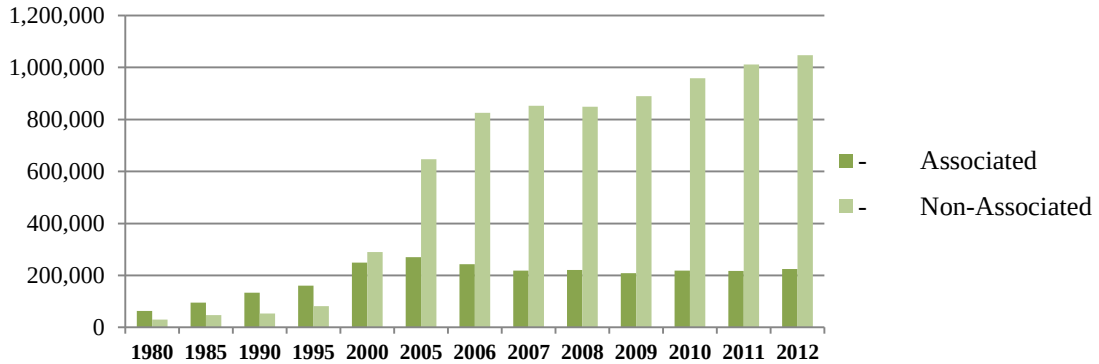


Figure: 2.16: Natural Gas Production (MNSCF) (2006-2013).
Source NCSI (2013).

2.5.2 *Rentier* States

The prosperity literature in general leads us to include John Locke's work from the 1690s which illustrated how man acquires property through personal labour[24]. *Rentier* systems, decline to include this Lockean notion of 'work' into the equation of property acquisition. Rather, citizens rely on their respective governments to allocate income (for example, those accrued from oil revenues) in the form of food subsidies, employment opportunities, healthcare, and all the basic necessities of living. In the classic economic theory, rent was defined as the surplus leftover after all the production costs had been met, and was paid to the owner of the land as a compensation for its use. As rent is nature's reward for ownership of resources, and it exists in all economies in varying degrees, the concept of *rentierism* is simply defined as the percentage of rents in government revenues, in the case of this research, hydrocarbon revenues.

Rentier is an old French word (*rente*), first introduced circa 1847, and was defined as a person who lives on income from property or security or 'a person whose money comes from investments and who therefore does not have to work' (Black, et al., 2009). The term 'The *Rentier* State' coined by Mahdavy (1970) who used it to describe a state which derives a substantial proportion of its revenues from the rent of domestic resources to foreign clients. A number of Arab countries have been described as *rentier* states.

Beblawi (1987) furthermore argued that *rentier* is more a social function than an economic category; he emphasised the social function of the *rentier* rather than the legal status of private ownership that is usually involved with suggestions of dissatisfaction. Beblawi (1987) also declared that certain characteristics should be kept in mind in view of the diffusion of a *rentier* state. First, there is no such thing as a pure *rentier* economy; each and every economy has some elements of rent. A *rentier* economy should be defined as one where rent factors dominate. He admits that this is a matter of judgment. Second, a *rentier* economy is an economy which relies on substantial external rents (see also Mahdavy, 1970, p. 428).

The emergence of the new oil states in the 1970s and their promotion to the forefront of world trade and finance resuscitated the concept of *rentier* economies. Beblawi (1987) observed that the impact of the oil phenomenon on the role of the state and on economic

[24] Locke's 'Second Treatise on Government': The persons own themselves and therefore their own labour when a person works that labour enters into the object, thus, the object becomes the property of that person. The labour of his body and his work. This supports of individual property rights as natural rights.

behaviour in general has been thoughtful in the Arab world during the seventies as to justify special treatment. The concept of a *rentier* state is chosen for lack of better concepts to characterise the prominence of the oil economies in the Arab region.

Not only Arab states but also a number of oil producing countries are categorised as *rentier* states. Luciani (1990, p. 72) defined a *rentier* state as a country whose government typically receives at least 40% of its revenue in the form of rent, and in political science a *rentier* state is a state which derives all, or a substantial portion, of its national revenues from the rent of indigenous resources to external clients. a) both sectors' contribution to the total state revenue (value and percentage to the total) (1980-2012). Throughout this period the non-hydrocarbon revenues has never acceded 24% of the total revenue, so according to this figure (Fig. 2.17a), it is approximately 75% (see Appendix 2.4).

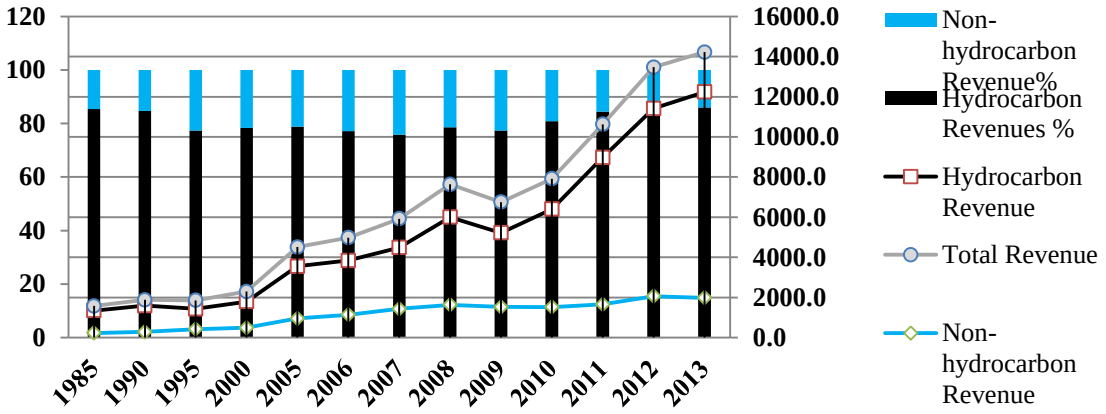


Figure 2.17a: Hydrocarbon and Non-hydrocarbon Sectors contribution to Oman revenue 1985-2013.
Source: NCSI (2013, 2014).

In Oman case, Peterson (2005, p.9) argued that Oman is not completely a *rentier* state, but would not be a self-sustaining economy in the absence of oil. The following graph, compare between the hydrocarbon sector and non-hydrocarbon sector's in terms of both sectors' share to the Oman's GDP (percentage) and, both sectors' sahre to the total revenue (value and percentage to the total). Both sectors shares to the Oman's GDP. From the statistics of the various sectors' contribution to GDP can be analysed in the following figure, (this contribution is explained in Fig. 2.17b).

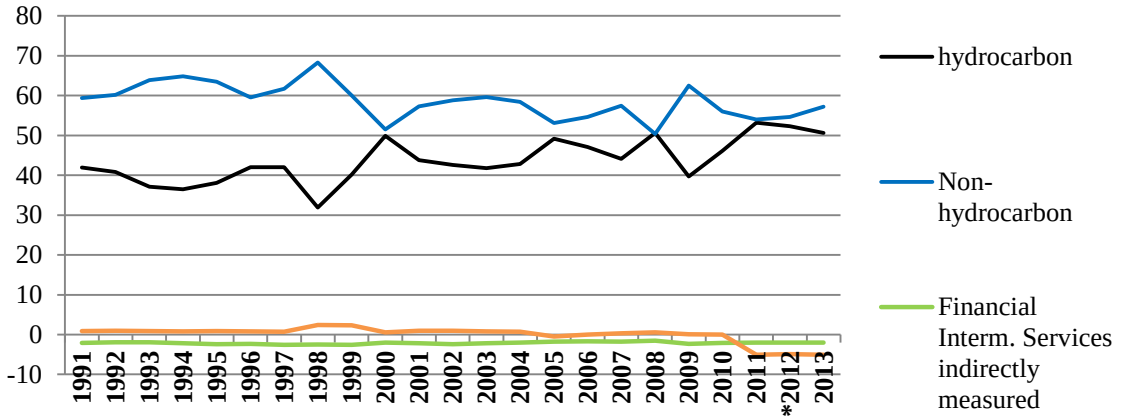


Figure 2.17b: Hydrocarbon and Non-hydrocarbon Sectors contribution to the GDP at Current Prices – Relative Share (%) 1991-2013.
Source: NCSI (2013, 2014)

The main point however for *rentier* states is not the percentage of revenues from rent but the fact is that they do not tax the citizen. As a result the rent demands satisfactions of needs are disassociated; similarly a *rentier* state doesn't require a strong non-hydrocarbon sector which also becomes disassociated. These are the two things needed to be addressed for example by the Sultan by holding travelling camps in every governorate that may be able to satisfy the citizen needs directly, However, this is done on a piecemeal fashion rather than as an improvement of the framework conditions that would allow all citizens to satisfy their needs. Thus if taxes were introduced the state would increase its revenues and at the same time forced into satisfying the needs of all taxpayers. Mutatis mutandis for the non-hydrocarbon private sector as taxes are low and supply of support services, finance, equipment, cheap utility costs, and etc. are in abundance. Thus at present the budget is more like an expenditure programme. This is not the case in states with small rents (e.g. developed economies).

2.6 The Non-hydrocarbon Sectors in Oman

Delving into Oman's vision 2020 figures, it can be seen that there are five sectors that are required to make a large contribution (almost double the contribution in the GDP at beginning of the vision (1996)) by the year 2020, while others (such as the transportation sector) are required only to maintain the contribution of the year 1996.

In the Middle East North Africa (MENA) region, employment from tourism is; 10% of employment in Bahrain, Egypt, Jordan, Morocco, Syria, Tunisia and the UAE and 5% of national GDP (above world average); in a few cases, it nears 10%, but while globally tourist arrivals began to rebound year (2011) (+4.6%), MENA arrivals declined 8% due

to political tensions (Syria -41%, Egypt and Tunisia -30%, Lebanon -24%. Jordan -13%- exceptions; Saudi Arabia +60%), in 2012 some signs of recovery (+29% in Egypt and +48% in Tunisia during the first five months in 2012) (World Bank Group, 2012).

Sector's legal entities are distributed as per the following table (Table 2.5):

No. of firms per sector / Legal Entity	Tourism	Trade	Manufacturing	Agriculture & fishing	Minerals	Building & construction
Limited Partnership (subject to forging investment)	0	27	1	0	0	8
Joint Stock	28	419	178	18	3	34
Limited Partnership	55	629	211	21	5	262
Limited Liability	961	17,281	2,192	304	100	3,456
Limited Liability (subject to foreign investment	233	5,858	696	57	29	1,739
Closed Joint Stock	41	313	80	34	10	113
Sole Ownership	367	4,713	18	123	19	1,153
Joint Stock (subject to forging investment)	3	43	1114	0	0	26
Closed Joint Stock (subject to forging investment)	1	27	20	0	0	9
General Partnership	52	990	182	42	11	316
Total Tourism firms (Including inactive co.)	1,741	30,300	4,692	599	177	7,116

Table 2.5: Relative share (%) of FDI in Oman by Country of Origin (2005-2009).
Source: MCI (2014).

2.6.1: Tourism

In Oman Tourism is a relatively new industry. Tourism and Trade used to be part of Ministry of commerce and industry before the separation that is why trade and tourism are considered as one category in Vision 2020 before their separation. The contribution of the tourism and trade sectors was jointly planned to move from 22.2% in 1996 to 26.0% in year 2020. In 2010, both sectors contribution to GDP was 17.4%, while expected to achieve only 15.6%, including 2.2% for tourism. Both are widely acknowledged to have the potential to play a vital socioeconomic role in the country, and a number of competent stakeholders are committed to developing that potential.

The five years plan proposes investment of OMR 105 million for tourism development as the tourism sector is seen as a major source of employment and revenue. There are various tourism attractions, within demand and supply aspects, including; country

landscapes such as, plains, mountains, sands, deserts, seas, and oceans, monsoon weather (June –August) in the southern part, and features of history/urban, and wildlife in bother the land and sea. There is strong competition for such market segments through MENA and Oman is not currently being promoted to the same extent or as effectively as many competitors destinations (Al-Masroori, 2006). This means that more efforts should be devoted to the tourism sector. The overall goal of tourism development in Oman is to contribute to the socioeconomic well-being of Oman and its people through the sustainable development and promotion of tourism activities, whilst protecting the rich cultural, historical, archaeological, and natural resources of Oman. Tourism activity attracts 1.3 million tourists yearly, 85% are GCC, Asian and European nationals. The recent inauguration of the Opera House[25] is expected to increase numbers of cultural tourists, and this should be complemented by the GCC railway project[26] that is expected to complete by the beginning of the next five year plan. this attracts companies, manufactured, human resources and capital to the region encouraging the business in most of the sectors including tourism and trade. Omani's Government has initiated most of its infrastructure tourism projects through its arm known as the Oman Tourism Development Company (100%) which is owned by the government. Within Oman sustainable tourism objectives (as per vision 2020) include the following according to the Ministry of Tourism annual report (MT, 2012).

1) Achievement of public/private sector cooperation and common strategy.
2) Promote the development of existing and new sustainable products.
3) Creating employment and added value on a sustainable basis.
4) Management and accessibility of natural and cultural heritage assets.
5) Strengthen and diversify local culture and authenticity.
6) Control depletion of resources and pollution management.
7) Dissemination of "destination Oman" philosophy and brand.
8) Capacity building and human resource development.

2.6.2 Trade

The major trading partners of Oman are the United Kingdom, Japan, UAE, South Korea, China, EU, and Thailand. Beside GCC states, Oman has business trade relations

[25] Royal Opera House Muscat (inaugurated in 2011).
[26] Oman's 2,135 –km long national railway network expected to be completed by 2018 by investing over USD 200 billion in over 40,000 km of rail across the GCC. It is double track non-electrified designed to serve freight and passenger traffic.

with over 140 countries. Oman's trade balance moved significantly from OMR 1.02 billion in 1996, to 21.68 billion, in 2010[27] China and Japan are at the top of the list as they are largest importers of Oman crude oil. Since 2011 UAE is the larger importer of Oman non-hydrocarbon products and India has retained its position as the second largest destination for Omani non-hydrocarbon exports. The Central Bank of Oman (CBO)'s annual report mentioned that non-oil exports from Omani soared 27.7% to reach a value of OMR 413.1 million in 2011 comparing with OMR 323.4 million in 2010. The Fig. 2.18 presents the destinations and relative importance of Oman non-hydrocarbon products exports:

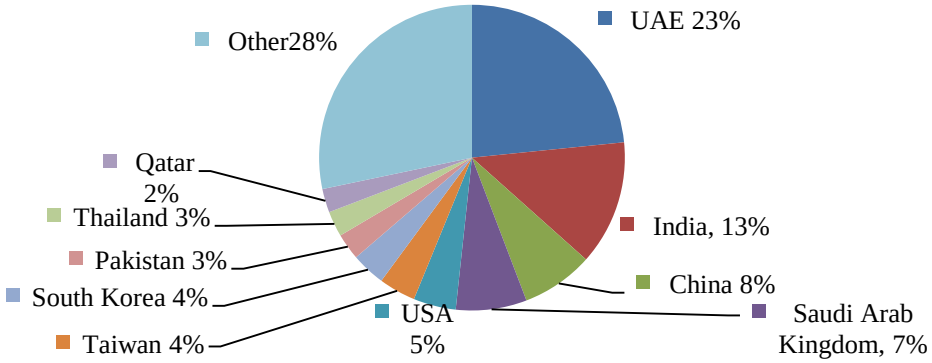


Figure 2.18: Relative Importance Exports of Oman Non-hydrocarbon products, 2011. Source MCI, (2012).

The following figure (Fig. 2.19) illustrates Oman's foreign trade and the trade exchange and trade balance, during the strategic vision years the details are in Appendix 2.4: 6.

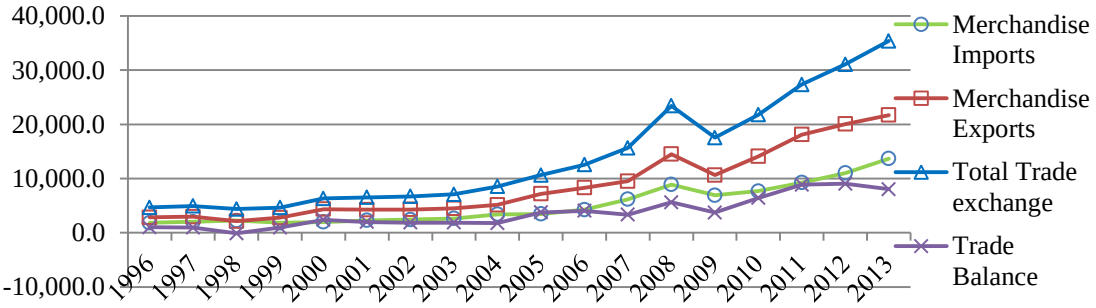


Figure 2.19: Oman Imports and Exports, 1996-2013.

Source: NCSI 2010; 2011; 2012.

[27] The Oman trade during 2010 was 21.8% with GCC; 82% with UAE 11% with Qatar 3% with Bahrain, 2% with Saudi Arabia and 2% with Kuwait.

The comparison between Oman merchandise imports and exports can be seen in the following figure; exports include Oil and Gas (Fig. 2.19). The following figures show the progress of the merchandise exports since the beginning of the strategic vision (1996) and 2013 as shown in the following Fig. 2.20.

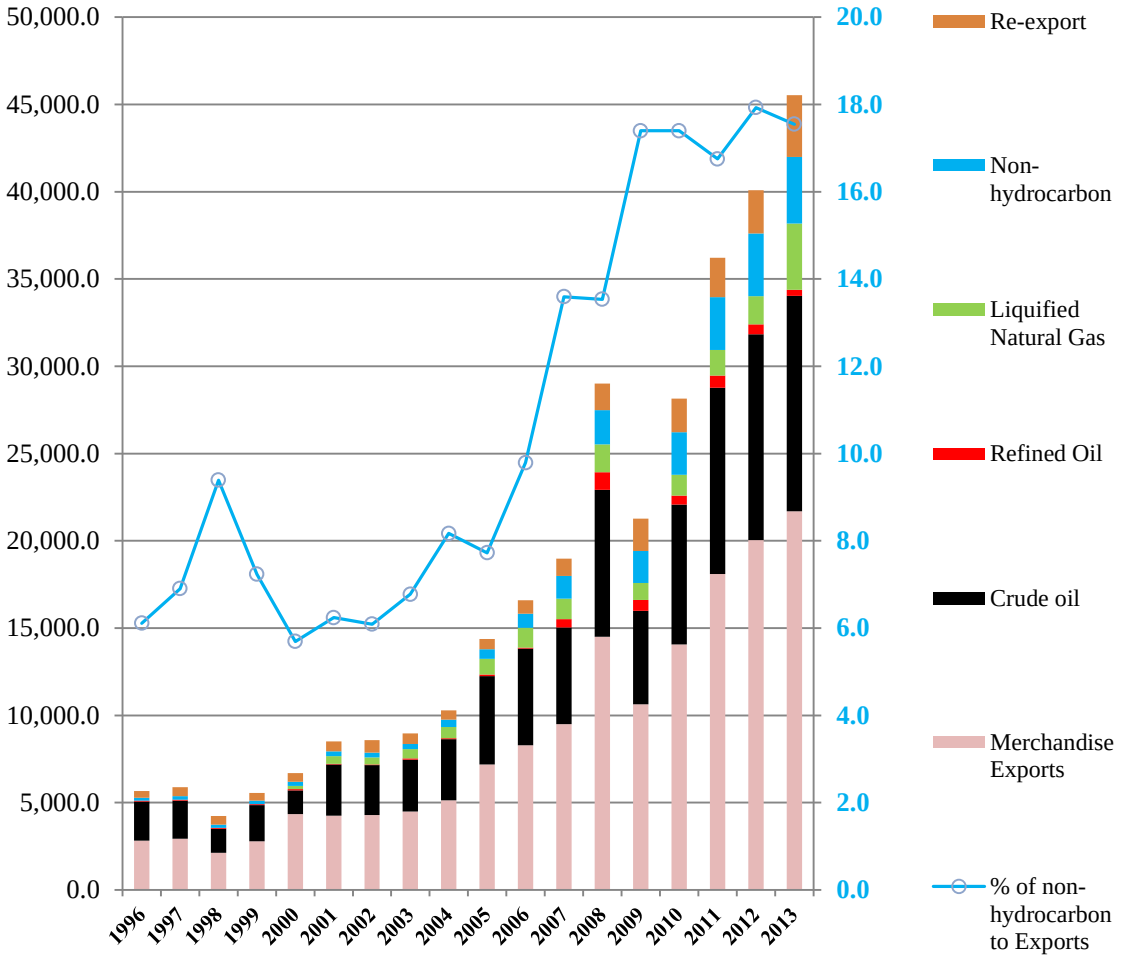


Figure 2.20: Oman Exports including oil and gas (1996 & 2013) (Million OMR).
Source: NCSI (2014).

2.6.3 Manufacturing

The contribution of the manufacturing sector to the GDP of the GCC countries, are illustrated during the 2002 to 2012 period in Fig. 2.21. The average manufacturing contribution is around 10%: the highest contribution is registered in Bahrain (around 15%) and the lowest in Kuwait (5%). The details can be seen in Appendix 2.4: 7c.

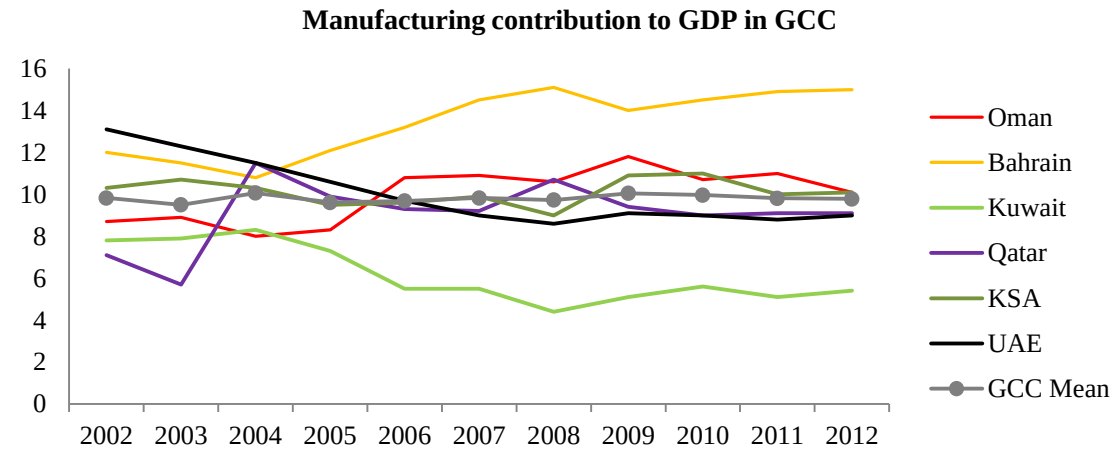


Figure 2.21: GCC Countries Manufacturing Contribution to the GDP (%) 2002-2012. Source: MCI (2013).

The Omani manufacturing sector needs to achieve 15% of the GDP by 2020, In order to build infrastructure to attract FDI, efforts are being made to build and establish free zones and industrial localisation areas, in: Sohar (North), Salalah, (South) Duqm (East) and Mazyounah (West). The Public Establishment for Industrial Estates (PEIE) is an arm of (MCI) which provides the necessary services to encourage investors to invest in both industrial estates and free zones; there are industrial estates in a number of Oman governorates. The strategic manufacture plan established these Large Scale Enterprises (LSEs) which play the central and basic role in inviting foreign investment to utilise the natural wealth of the country. The total area of the eight Industrial Estates in 2012 was 73 million square metre attracting USD 10 billion through 1200 investors.

In terms of industrial incentives, the investors in Oman are provided:

- Tax holiday (exemption of income tax and profit tax) for industrial enterprises for the first five years, which may be extended for a further five years.
- Vocational training for the national manpower and other training programmes.
- Customs duty exemption for raw materials imports, and machineries, equipment, spare parts, manufactured materials during the set up period.
- Special encouragement programmes for SMEs (funding and training).
- Soft loan through the Oman Development Bank (ODB).
- Export promotion and export studies with export credit guarantee.
- The right of national product preference for government procurements.
- Encouragement for promotional campaigns for national product.

- The winning factories “His majesty’s cup award” for the best five factories as per the competing criteria; production *Omanisation* presentations, value added, net profits.
- Taking the necessary action for antidumping and against the unfair competitiveness amongst GCC.

Oman used to protect its national industries against unfair competition, like dumping or export support, and supported the national emerging industries where production cost is high, and recompensed for the technological gap between advanced and developing economies. After becoming a member in the World Trade Organisation (WTO), these actions are no longer acceptable, except through imposition of fees for anti-dumping, and fees to compensate against subsidising and precautionary action to deal with the high and unjustified cost of imports from foreign countries.

2.6.4 Agriculture

The World Bank Group states that MENA is the most food dependent region in the world, importing approximately 50% of regional food. It highlights the important intraregional differences. Some countries have important national agribusiness sectors (e.g. 5% of the GDP in Lebanon and 25% GDP in Syria).

Agriculture and Fishing remain very significant elements in Oman’s social and economic life, and are still a private source of income for a large number of citizens who continue to produce most of the country’s food needs. Fishing and agriculture have always been traditional Omani livelihoods and the major sources of food and employment for the people of Oman. It dominated the Omani economy with around 80% of the population depending on these two sectors before the start of oil extraction (Al-Oufi 1999).

The agriculture sector historically flourished on a large scale over many centuries and was one of the Omani people’s main occupations (Hawley, 2012), despite facing some challenges such as “water scarcity”. The comparison between the first year (1996) of the vision 2020 and 2010 shows that, there is little difference in Omani agricultural production (1.18) million tonnes and (1.20) million tonnes respectively, nor the extent of the green cultivated area, which are almost the same (173,000 *feddan*[28] in 1996 and 175,000 *feddan* in year 2010).

[28] *Feddan* is an ancient Arabic measures which is equal to 1.038 acres/0.42 hectares or 4,200 m^2

The agricultural sector consumes more water than any other sector in Oman, it utilises 78% of total water resources (MRMW 2011). During recent years, Oman witnessed a significant transformation in water utilisation; increases in the industrial, commercial, municipal and tourist spheres resulted in more than triple the previous water consumption. Around two thirds of the consumed water in these sectors comes from groundwater. Accordingly, the government planned a program for rationalisation of water usage (ibid).

Oman has over 175,000 *feddans* of agricultural land and agricultural exports are around 22.7 % of the country's non-hydrocarbon exports. Date palms are the main crop source, both in numbers and distribution. There are eight million date palm trees; there are also limes, coconuts, mangoes, bananas and vegetables as main crops in Oman. The Ministry of agriculture and fisheries (MAF) yearly activities cover the subsidies provided to Omani farmers including; spray machines, fruit seeds and seeding distribution to the farmers, creating a number of extension fields set up in private farms (farmer guidance and tutorial fields), greenhouses, irrigation systems, honey bee hives, large plough (tractors), honey extractors, sugar cane juicer and dates packing units. The activity also covers research projects in; vegetables, greenhouses, horticulture, field crops, food industry genetic resources, insects, plant pathology toxic residues, soil and water, and biological control research, besides laboratory activity of specimens received by the soil and water and toxicology lab from public and private sectors.

Dates are a product of all governorates in Oman: according to the 2009 statistics that total production was around 260,000 ton per year, and production in each governorate from which only 6,308 ton (valued OMR 2 million) is exported as most of it is consumed locally. The dates palm trees are treated against the *Dobas* Bug by aerial spray yearly. The Sultan has also issued instructions to grow and extra one million date palm trees, which is progressing at the moment.

Within the agricultural activity there is livestock production, which needs to be improved and FDIs are invited by the government to establish joint venture companies with domestic investors. To promote livestock production, MAF also provides vaccination against a number of diseases, and provides artificial insemination services to farmers' animals and birds. Livestock products include; Red and White (poultry) meat, dairy, vegetable-oil, fresh milk, and eggs. There are a number of agricultural areas that open the possibility of setting up research projects in crops and animal farms as

well as in veterinary labs and medicine. The expected contribution of agriculture and fisheries to the GDP in vision 2020 expected to reach 5.1%.

2.6.5 Fishing

Oman's spectacular coastline stretches 3,165 kilo-metres, includes the meeting point of three seas and extends from the south-eastern extremity on the Arabian Sea and the entrance to the Indian Ocean, up to Musandam in the north, passing along the Sea of Oman up to the Gulf where it overlooks the strategic Strait of Hormuz. The seas are a significant marine source that is distinguished for its biological diversity. The fisheries sector provides substantial employment opportunities for coastal inhabitants in addition to a tangible contribution to GDP, although it has not yet achieved the target figure (in terms of GDP) set in the aforementioned Vision document. In terms of food security in Oman fish play a major role, and as noted by Jenkinson (1987) cited in Al-Oufi, (1999), fish consumption per capita in Oman is high compared with other nations in the Arab region: according to FAO[29] statistics, per capita consumption in Oman was about 20.3kg, in 1997. This figure rose gradually to 31.0K in 2004 and came down to the normal 20.2 Kg in 2013; after deducting 16% of these figures as wastage according to FAO criteria), (NCSI, 2004).

Although 1075 fish species are available in 2014 (MAF, 2014), only five types are consumed in Oman (see Table 2.4). The number of fishermen was 42,553 in 2010, and the number of subsidy beneficiaries from Government subsidies program in 2010 was 2,772 fishermen amounting to OMR 2,985 million. The government has allocated more than OMR 100 million in the 8th five year plan 2010-2015 to develop the sector and a number of steps are being taken including setting up fishermen jetties and training fishermen in the use of modern technology so that the sector can contribute more to the GDP and meet its target in the strategic vision for 2020[30].

In terms of institutions, the coastal fisheries of Oman are a vital part of the livelihoods of large sections of the population in the country. Overexploitation of fish resources can be explained by the rapid change in the institutional setting in Oman. The result of the new fisheries management institutions has been a need for more coordination of policies between the various governmental agencies involved with fisheries management. It has

[29] Food and Agriculture Organisation (UN - year book 1998).
[30] Based on the interview of the undersecretary of Ministry of Agriculture and Fisheries.

been suggested that small changes in institutions could change the incentive structure facing individual fishermen, thus giving support to the proposal to reverse previous government policies (nationalisation of the coastal fish resources) by making a radical shift towards fishermen-based fisheries management, thus giving the local communities more responsibilities to manage their fish resources. In terms of the future vision of this sector (Al-Oufi, 1999), it was recommended by Al-Oufi (1999) to establish special district committees of fishermen (Fisheries Management Council) in each coastal town, suggesting that the Omani government can process crucial information on coastal fisheries and inform the fishermen of external effects they may produce.

Fish sources in Oman either included artisanal, coastal, industrial and aquaculture[31]. Total production in 2011 was around 158,722 tonnes (Commercial and traditional fishing) yielding a value of OMR 123 million, an increase of 5% from 1996. The details are shown in Table 2.6.

	Type	**Quantity (mt. ton)**		**Value 2011**
		1996	**2011**	**(OMR)**
1	Large *pelagies*	40,200	41,992	41,726,000
2	Small *pelagies*	33,300	51,223	17,149,000
3	*Demersal*	25,450	47,171	33,017,000
4	Sharks and Rays	6,350	7,803	6,971,000
5	Crustaceans	2,740	8,937	23,377,000
6	Other		1,596	1,251,000
Total	Total	108,040	158,722	123,491,000

Table 2.6: Fish Quantity comparison year 1996 vs. 2011 and value in 2011 per fish type. Source: MAF (2012).

Fish exports are as follows: 76% to GCC, 10% to other Arab countries, 8% to Asian countries, 1% to EU, and 5% to other countries. The exports as per the highest export percentage during 2011 are as follows:

- Sardine : 26% (production of 24,696 ton value of OMR 6,363,000)
- Ribbonfish: (7%) (exports of 26,942 ton value of OMR 2,855,000)
- Indian Mackerel: (7%) (exports of 6,499 ton value of OMR 2,741,000)

The situation at the moment shows the potential of the fishing industry through commercial fishing involving Trawlers complementing the traditional fishermen to invest in this industry. There is also potential for Aquaculture which commenced during 2003 with the production of 352 tonnes of food (agriculture livestock and fisheries)

[31] Also known as fish farming.

manufacturing. There are a number of commodities available to attract investors for food processing and manufacturing. Aquiculture and fish canning are another promising field that FDI can invest in. It also seen from statistics that 75% of total fishing is traditional fishing while other 25% are commercial fishing where investors can joint hand with fishermen and domestic companies to form JVs. It was recorded that Oman has benefitted from the FTA[32] with the USA, for example, 29% of its food industry products have been exported to USA.

2.6.6 Minerals

Oman has a contrasting landscape characterised by the plain overlooking the Oman Sea and the Arabian Sea with an area of about 3% of the total landmass. The mountain ranges occupy about 15% (82% are plains, sands, hills, *wadis* and thousand miles of coastline including miles of sandy beach) of the total area consisting two deeply dissected narrow mountainous areas; one in the north of the country (*al Hajar* Mountain range), and the other in the south (Dhofar Mountains range) (see Appendix 2.1).

For centuries Sohar has been one of the most important seaports and the area with copper mines and trade centred largely on copper (Fig. 2.22) (Hawley 2012).

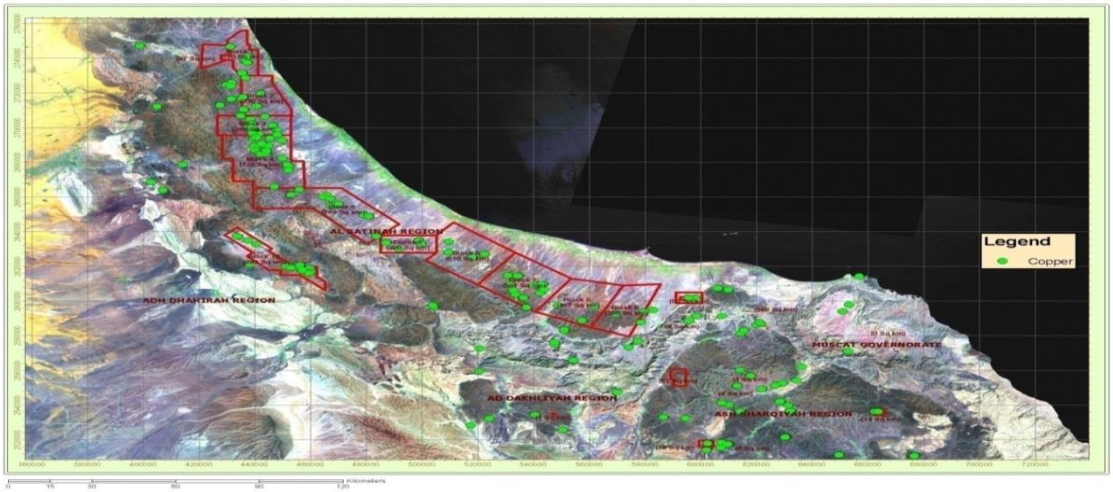


Figure 2.22: Copper in the Batinah Mountains, Oman. Source: Oman mining symposium (2013).

The mineral resources sector plays an important part in economic diversification. The mining law permits twenty five-year mining concessions to be granted, renewable for a similar period, and ends when raw materials in the concession area have been

[32] Free Trade Agreement signed between Oman and United States of America (2007).

exhausted. According to Qidwai (2004)[33], Geology expert in MCI-Oman, there are many industrial rocks and minerals in Oman such as;

The natural wealth of Oman's geological mineral resources can be divided into two types (MCI report 2012);

1. *Metalliferous* ores (metallic ore minerals), such as; Copper used in manufacturing cables, Chromium (used in cast steel).

   Less important *metalliferous* ores include; Lead; Zinc; Manganese (used in structural iron, steel) Manganese; a) Mining and processing to upgrade manganese ore, b) Production of various manganese chemicals and; Iron ore such as laterite (mixed with Nickel and Cobalt and used in cement and steel manufacturing); Platinum; Palladium and rhodium; Nickel; Uranium.
2. Non-metallic minerals include Barite (Sulphate), Salt, Coal, Fluorspar, *Celestite*, Kaolin, and Phosphate rock, Industrial minerals, include Asbestos and Gypsum, and Ornamental stones.

   In fact, there are only a few rocks and minerals, which are required in many industrial applications such as Limestone, Dolomite, Gypsum, Silica sand Quartzite, Salt, Kaolin, and various other clays such as ball clay, *Attapulgite*. Fortunately Oman bestowed with all of them.

Mineral production indicators in Fig. 2.23 depict the main mineral (copper, gold, and silver) quantities during the period from 2000 to 2012 (details are in Appendix 2.4: 5a).

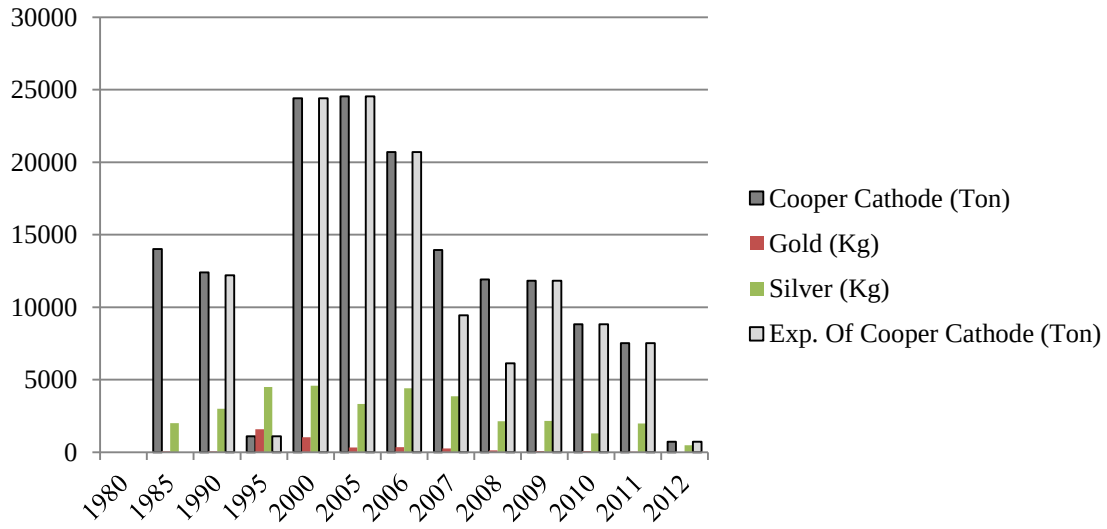


Figure 2.23: Main Oman Mineral Products (Copper, Gold and Silver).
Sources: NCIS (2013).

[33] Geology expert in MCI-Oman.

2.6.7 Building and Construction

The building and construction sector is related closely with the mining and quarrying industry and other sectors. It contributed 3.2% to GDP in 1996, the strategic vision for this sector is ambitious, it is expected to soar up to 10% of GDP by 2020. There is a need for a wide investment as the sector's targeted share is not achieved as of 2010.

The number of plots granted as per the type of use (total till end of 2012) in all eleven Governorates registered as follows (Table 2.7):

Type of use	Plots granted by type of use till end of 2012
Residential	581, 045
Commercial	20, 230
Commercial/Residential	14,430
Residential/Agriculture	81
Industrial	12,984
Agricultural	8,698 (limited to the water scarcity)
*Government	3,620
Total	641,088

Table 2.7: The plots by type of use till 2012.
Note: *Includes; Mosque, School, hospitals and other uses.
Source: NCSI (2012/2013).

The following Fig. 2.24 illustrates the number of building permits classified by the governorates from 2009 -2012 which shows the difference and growth of the building permits issued by Ministry of Housing. There are some governorates the permit issuance is very low either because the areas that are suitable for building and construction are limited due to mountains (such as the governorate of Musandam) or unsuitable for the purposes listed in Table 2.7 (above).

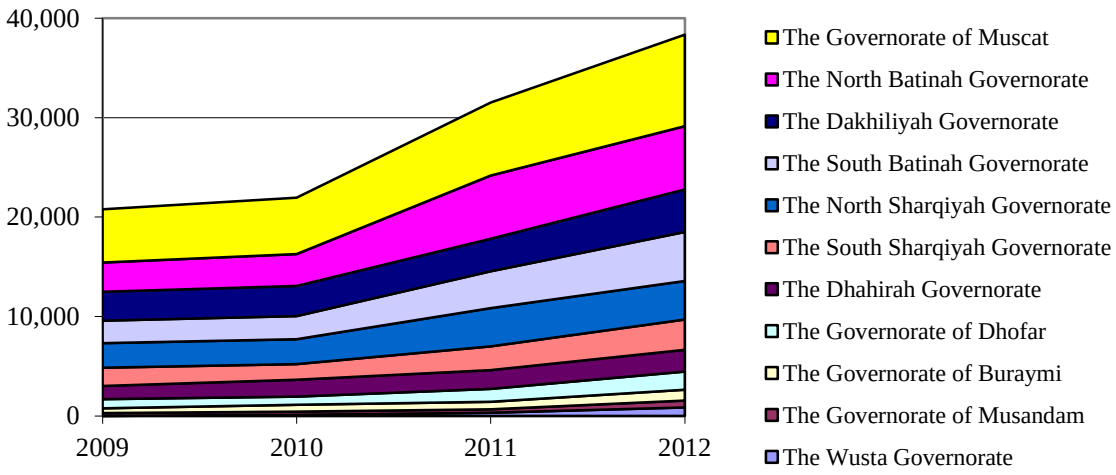


Figure: 2.24: Building Permitted per Governorate from 2009 to 2012.
Source: NCSI (2010, 2013).

2.7 A comparison between hydrocarbon and non-hydrocarbon targets

As aforementioned in previous sections of this chapter that Oman's economic vision is based on a strategy of economic balance and sustainable growth. Oman Government intends to increase the contribution of the non-hydrocarbon sectors to reach up to 81% of GDP, in return, the hydrocarbon sector needs to be minimised and descend to 19% of GDP (Oil 9% and Gas 10%) by 2020. However, the reality is that by 2010 the hydrocarbon contribution to GDP had actually soared to 45.8 % of the GDP instead of descending. This was at the expense of the non-hydrocarbon sector's relative contribution. Although these sectors achieved yearly improvement and some non-hydrocarbon sectors achieved their targets by 2010, others didn't,

The total non-hydrocarbon sector raised its contribution from 47.9 to 57.9 making an improvement of 11%. However, this level of the achievement is not enough to meet the target figure for 2010. It is also noticeable from the above table that the non-hydrocarbon activities made a large improvement in 'services activities' (a positive difference of 16%) but maximising the non-hydrocarbon sectors' share and increasing its contribution up to 81% of GDP by 2020 still involves significant improvement: there is a long way to go to reach this target. As the evidence that will be reported in chapter five and six will suggest meeting the following targets:

a) Human support to structure a public policymaking process by encouraging trust and collaboration among economic sectors, and by advancing through experience and knowledge sharing with the private sector.

b) Technological and ICT support by building a platform of interaction between private and public sector ultimately to gain institutional development for 'joined-up working'.

2.8 Government e-services

To overcome local authorities' challenges resulting from the uncertainty and complexity of their operating environment, governments have adopted different solutions such as e-government. This approach engages both private sector and citizen in the decision-making process which according to (Devas and Delay, 2006) can positively impact organisational performance via improved accountability and transparency. Information and Communication Technology (ICT) presents a plethora of possible opportunities to governments; such technologies are expected to enable public sector organisations to become more efficient by automating their customer-facing electronic government (e-government services); and by enabling the focus of public sector policymakers to shift away from being international and managerial to involving external relationships with business partners (Ho, 2002; Moon, 2002; Deakins et al., 2010).

Through the pilot research, it was found that there is a lack of inter-organisational electronic web-based services, which caused by a silo mentality in most decision making and services delivery processes with investors. This happen even if there are several e. government projects in Oman (see Espinosa and Al-Maimani, 2010), aiming to provide commercial registration through a single window (One Stop Shop). There is still fragmentation in government license issuance for investors; for example the private sectors generally only communicate with the government through the Oman Chamber of Commerce and Industry[34] (OCCI).

Technology change in Oman and its effects on economic growth can be understood through the government initiatives that are described in Espinosa and Al-Maimani, (2010). This led to the release of a number of services obtainable online, but there are a

[34]Oman Chamber of Commerce (OCCI) consists of 22 members from whom 12 members are elected and 10 are appointed by a Royal decree, amongst them is the Chairman. On 6th April 2013, the royal instruction has been given through Minister of Commerce and Industry that all members with the Chairman will be fully elected, effective from November 2013.

number of services are still not obtainable online. Third stage of online services is under preparation, and is expected to go live in mid-2015 as per the agreement signed in 2013.

2.9 Political Leadership

The cultural and institutional dominance of political leadership extends to organisational behaviour, and countries such as Oman are important in challenging universal conceptions of organisational behaviour. The responses to these challenges during Oman's development the last 40 years have been swift and outstanding (Common, 2011).

The political situation of Oman is therefore, of great importance interpreting and understanding organisational development. Islamic democracy and consultancy (*A'Shura*) began to be practiced in order to build a state of institutions and law, in parallel with the gradual establishment during the 1990s of bicameral council "council of Oman (CO)" which constitutes of two pillars, State council (state representative) [*Majlis* (council) *Ad'Dalla* (the state)] and people representatives [*Majlis* (council) *A'Shura* (the Consultation)] - The *Shura* council or the consultation council (people representatives) with an equal seats with State council members who are appointed by the Sultan of those are distinguished Omani citizens with knowledge, qualifications and expertise in a wide range of fields, who include former ministers and undersecretaries and those of equivalent rank, as well as former ambassadors, former senior judges, retired senior officers, dignitaries and eminent personalities from the worlds of science, literature, culture, business and academia, in addition to people who have given distinguished services to the nation and any others Sultan sees fit to appoint, while The *A'Shura* council are representative of each of the 61 districts *Wilayat(s*) elected by the people of Oman (districts with below 30,000 people elects one representative and with 30,000 and above elects two representatives). At present its seventh term (2011-2015) the Consultation Council and the State Council each equally consists of 84 members (any increase in the number of the Consultation Council representatives offset an equal increase in the State Council members).

Amongst the State Council there are 15 Omani women. Each term lasts for four years (renewable). This led to the gradual separation of the judicial, legislative, and executive authorities. The *Shari'ah* (Islamic law) remains as the source of legislation. To some degree, the leaderships accepts and allows the participation of the private sector in policymaking and there is a need to implement better mechanisms between government

and business (or corporate level of thinking) that this study attempts to suggest and formulate with new strategic proposal.

The Arab world like other countries tries building citizen-centric and innovation-driven government where, creating new public value and effectively meet citizen's needs, coinciding with the demands of the Arab Spring (the revolutionary wave of demonstrations, turmoil and protests that began in Tunisia, and spread to Egypt, Libya, Yemen and Syria during (2011-2012). In Oman this period resulted in swift action by the Sultan, yielding a new institutional development in Oman commencing in 2011 like the:

- The abolition of the Ministry of National Economy (OME)[35] and the establishment of the replacement Supreme Council for Planning (SCP), chaired by the Sultan with the Minister of Commerce and Industry as vice president.

- Replacing a number of Minsters by a number of the *Shura* Council members and other technocrats. The state basic law was amended by a Royal Decree in 2011 article 6 to be read as follows:

  ''The Royal Family council should determine the successor to the throne within three days of the throne falling vacant. If the Royal Family Council does not agree on the choice of the successor to the throne, the Defence Council together with the chairman of The State Council (Majlis A'Dawlah), and The Consultation Council (Majlis A'Shura), which both constitutes, The council of Oman (CO) (Majlis Oman) and Supreme Court and two of its oldest deputies, shall confirm the appointment of the person designated by his Majesty, in his letter (will) to the Royal Family Council".

- The decree also assigns to the Head of State the function of establishing and regulating the units of the State Administrative Apparatus and cancellation thereof, but it also considered the changes in one article (article 42), and assigns to the council of ministers (article 44) to discuss development plans prepared by competent authorities. After these are reviewed by *Majlis* Oman, they are submitted to the Sultan for approval, and follow up to ensure their implementation.

- The vast majority of the amendments have given additional power to *Majlis* Oman -The Council of Oman (CO) - through article 58 is being amended adding (bis[36] 1

[35] The Ministry of National Economy was abolished in 2011. This was in response of His Majesty the Sultan to the citizens' claim, who has demanded for the accountability to the negligence of its duty in poor planning which lead to high unemployment and price inflation (e.g. sharp rise in food prices).

to bis 44).This led to the separation of the Judicial, Legislative, and Executive authorities through a royal decree in March 2012 (see Appendix 2.2).

- This royal decree contained amendments merging the Ministry of Agriculture and the Ministry of Fisheries into one Ministry (Ministry of Agriculture and Fisheries) and also established a National Centre for Statistics and Information NCSI and abolished of the Supreme Council for Town Planning and transferred its powers to the Ministry of Housing.

- The Public Authority for Investment Promotion and Export Development (PAIPED) was affiliated with the Ministry of Foreign Affairs (became part of the MFA structure). This PAIPAD, which used to be known as the Oman Centre for Investment Promotion and Export Development (OCIPED) under the affiliation of the Ministry of Commerce and Industry (MCI) will independently issue the necessary bylaws and decisions to implement the previsions.

- A number of public authorities have been established such as the Civil Aviation separated from the Ministry of Transport and Communication (MTC) and another for manpower register separating it from the Ministry of Manpower (MMP) and those public authorities affiliated to the Council of Ministers (CM), and also for Civil Defence, separated from the Oman Royal Police. A public authority has been set up for the development of Small and Medium Enterprise (SMEs) through a royal decree; it is affiliated with the MCI.

2.10 The Traditional Approach to the Policymaking Process

The policy decisions are made as per the hierarchy illustrated in (Fig. 2.25).

[36] bis is repeater to the article of the previously issued decree.

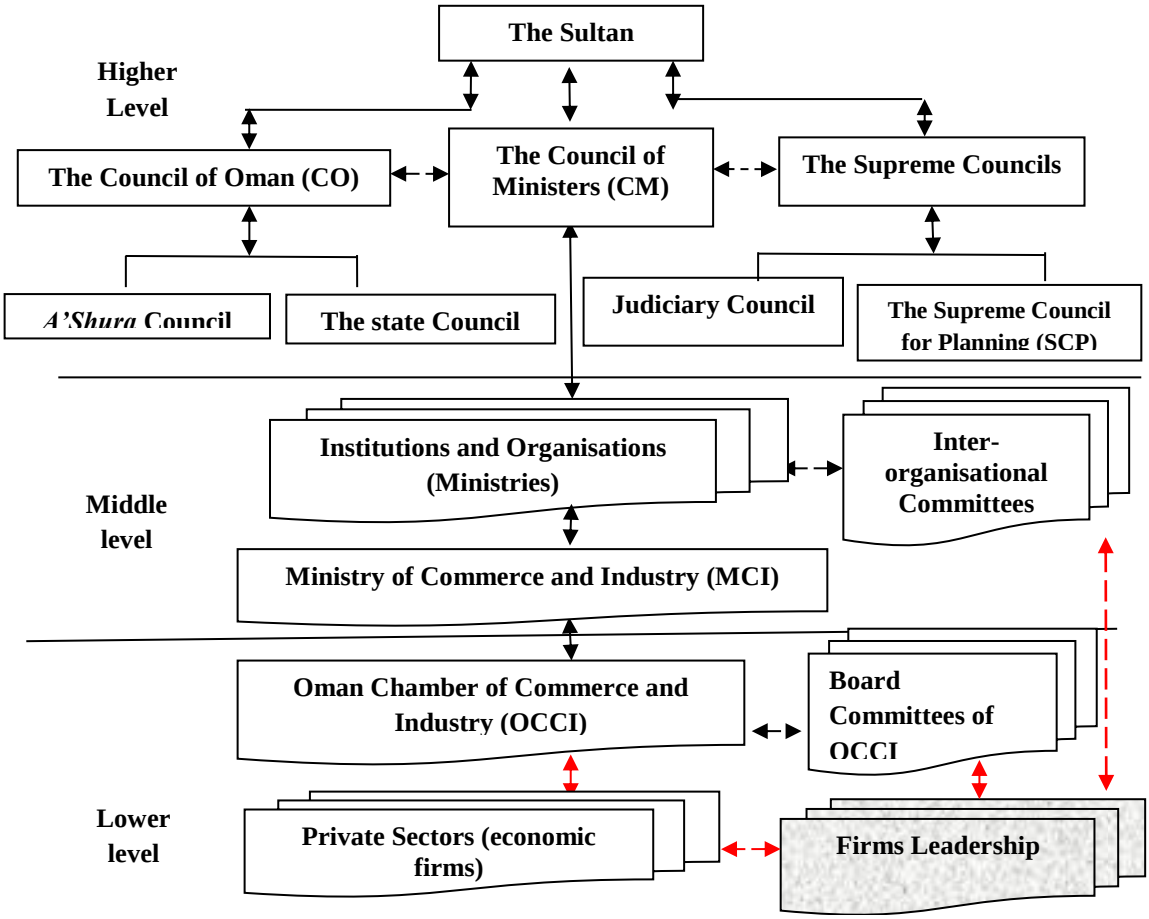


Figure 2.25: The Traditional Policymaking Processes Hierarchy of Oman.

The CM which derives its authority and power from the Sultan makes the main policy decisions. It consults and asks "The bicameral Council of Oman (CO)" (the State Council and the Consultation [*A'Shura*] Council) before the issuance of the laws and regulations which are then approved by the Sultan. The CM also uses its economic arms "the supreme councils and committees" before the issuance of the law and regulations such as The Supreme Council of Planning (SCP). The Ministry of Commerce and Industry (MCI) oversees a number of sectors within its core business remit such as; Commerce (Trade), Industry (Manufacturing), and Minerals (Mining and Quarrying). MCI deals with policy matters in terms of the legislation and supervises its implementation; MCI consults with the economic sectors -individuals and groups - when it becomes necessary but not in a regular basis. The Oman Chamber of Commerce and Industry (OCCI) acts on behalf of the private sector as a whole (both hydrocarbon and non-hydrocarbon sectors), when discussing business matters with the government institutions. The top-down approach in the Omani government context shows a limited

and weak collaborative environment between public and private sectors in policymaking. This research attempts to suggest improvements in the interests of viable development and sustainability.

2.11 Conclusion

In this chapter, an overview of the socioeconomic environment of Oman has been provided in order to delineate the context for this research. Related historical and geographical information has been provided. The five non-hydrocarbon sectors identified as significant for GDP growth in the Oman vision 2020 and their opportunities for potential investment attraction were overviewed. Along with relevant policies, decision-making processes and service delivery procedures that are being implemented to address the problems of attracting and serving investors to these sectors. This chapter also explained that the economic policymaking process begins with the CM, that derives its authority and power from the Sultan of Oman and consults the Council of Oman (CO) before a royal decrees is issued. The above pave the way to identify the main patterns in the key economic, institutional, and policy issues that appear to be of particular concern to domestic and foreign direct investors alike. As further pursued in the next chapter where the literature relevant to this research will be reviewed.

CHAPTER THREE
LITERATURE REVIEW

3.1 Introduction

The purpose of this chapter is to present a literature review of the theoretical and empirical background to the research topics, as it was introduced in chapter one this research will adopt a Complex Systems Approach (CSA) due to the complexity inherent within the institutional and organisational development (OID); it will involve taking a holistic view of the research problem, by paying attention to previous systemic research on organisational learning and change, for collaborative working within the context of institutional development.

The main aim of the research is to help improve economic growth in the non-hydrocarbon sectors of Oman, by formulating a policy framework to guide the requisite institutional developments. In order to gain further insights into the process of implementing better institutional development, this research develops a methodological framework to provide suggestions for improving the design of more useful structures at tactical and strategic levels to encourage investment in Oman.

3.2 Conceptual Framework

The conceptual framework for a study consists of the theories relevant to the phenomena of the study that inform and influence the research. Maxwell and Loomis (1996) cited in Tashakkori and Teddlie (2003 p. 245 and p.704) pointed out that a conceptual framework is usually the basis for reframing the research questions and for formulating hypotheses or making informal tentative predictions about the possible outcome of the study. It summarises the theories and beliefs about the phenomena studied that will guide or inform the research and may be drawn from the literature, personal experience, preliminary studies, or a variety of other sources. (ibid).

This section therefore, develops a conceptual framework to reframe the research's aim, objectives and questions described in chapter one and assist to achieve deeper understanding of issues such as the design of mechanisms to enhance collaboration in policy and to support the process in public strategic socioeconomic decision making such as foreign investments policies and regulations. It will summarise a holistic way of viewing communication issues and organisations interacting in a collaborative manner.

It introduces the researcher's views on OID within a complex environment, the need for creating more collaborative networking in the policymaking arena, and the criteria to improve the control and communication structure between the key stakeholders.

As argued earlier, there has been little previous work from a systemic perspective, on ID regarding policymaking processes in complex environments concerning public and private collaboration. Most of the studies that have dealt with this issue, exhibit a rather reductionist[1] paradigm for the design and implementation of solutions. This research argues that by adopting a Complex System Approach (CSA) supported by (holistic) systems theory a more useful understanding will emerge based on a deeper knowledge of how the system deals with the complexity of its environment. The conceptual framework is designed to illustrate different disciplines that incorporate and overlap in the institutional development arena. The following diagram created as part of this research to summarise the conceptual framework (Fig. 3.1), describes the approaches, theories tools and concepts that have been selected from a combination of literature topics and which includes human and technological support. The description of the conceptual framework considers each of these areas in turn, and looks closely at the theoretical ideas that will inform the methodological framework.

Maxwell and Loomis (1996) cited in Tashakkori and Teddlie (2003 p. 245 and p.704) pointed out that a mismatch between the conceptual framework and the research questions or methods used can create serious problems for the research. This matching is introduced in Appendix 3.1, along with outlining of the rationale through literature.

[1] 'Reductionism' is the term which denotes any intellectual strategy for reducing apparently diverse phenomena to some primary or basic explanatory principle, Scott and Marshall, 2005 (Oxford dictionary of sociology p. 553). It is also an attempt to provide a complete explanation of a phenomenon in terms of events or processes occurring at a lower or more basic level. Such as: psychological phenomenon may be reduced to neurophysiological processes, Colman, 2006 (Oxford dictionary of psychology p. 642).

Figure 3.1: Conceptual Framework

3.3 Organisations and Institutions through Economic and Political Perspectives

The arguments concerning organisations and institutions arose mostly in the 1940s and continued until the emergence of the 'new' or 'neo' institutional approaches in the 1970s. Organisational and institutional thought from two periods have shaped the theoretical literature: first the late nineteenth to the mid twentieth century in sociology, economic and political science and second, in modern times, involving original ideas from a number of disciplines. Both terms "institution" and "organisation" have an impact on socioeconomic progress throughout history which has been driven by commerce and business organisations, and the environment has become increasingly complex, dynamic, and technologically sophisticated (Bennet and Bennet, 2001).

The terms (institution and organisation) are used interchangeably; some institutions are also organisations, and some organisations, though not all are institutions. It is necessary to delineate the kinds of institutions and organisations relevant to this study, and highlight the dynamics of their relationships. The treatment of institutions is not very systematic in Uphoff and Buck's (2006) view (see Table 3.1); instead, they exemplified the institutions and organisations showing the overlap of categories:

Institutions that are not organisations	Institutions that are also organisations	Organisations that are not institutions
Marriage	The family, in general	A specific family
The law	The Supreme Court	A firm of lawyers
Higher education	Oxford University	A tutoring service
Religion	The Catholic Church	A local congregation
Taxation	Govt. Revenue bureau	A tax advice office
Private enterprise	General Motors	An auto workshop
Collective bargaining	United Auto Workers	A union local
Democratic elections	Board of Elections	Ad hoc poll observers

Table 3.1: Examples of Institutions and Organisations. Source: Uphoff and Buck (2006 p.40).

Scott (2008) wrote that Schmöller (1900) defined institutions as an asset of formal and informal rules. He also explained that Veblen (1919) defined institutions as "settled habits of thought common to the generality of man". He also stated that Commons (1924, p. 7) named social institutions as "rules of conduct". Commons (1970) also illustrates how institutional rules were necessary to define the limits within which individuals and firms could pursue their objectives. North (1981)[2] also advocates Schmöller's definition that institutions are a set of rules, but he added; compliance procedures, moral and ethical behavioural norms designed to constrain the behaviour individuals in the interests of maximising the wealth or utility of principals. Political institutions respond to and create their environments in order to contribute to the well-being of citizens and to their needs. Political outcomes are a function of three factors that are treated as exogenous to the political system; a) the distribution of preferences (interests), b) the distribution of resources (power) and c) constraints imposed on the rules of the game (constitutions) (March and Olson, 1989).

The rational choice, or positive theory theorists (including: Moe 1990b; Shepsle, and Weingast 1995) viewed institutions as "governance or rule systems". The 'governance' and 'rule' is highlighted as follows:

[2] Douglass North, is an Economist, He is a co-recipients the Nobel Prize in 1993 in Economic Science.

1) Governance definition can be quoting from Borrás, and Tsagdis, (2008, p. 21):

"Governance is a form of collective coordination that is unfolded in an interactive and context-oriented way by public and private actors in the territory. As Jessop (2003, P. 2) put it, "Governance refers here to the reflective self-oriented way by actors involved in complex relations of reciprocal interdependence; this elf-organisation is based on continuing dialogue and resource-sharing to develop mutually beneficial joint projects and to manage the contradictions and dilemmas inevitably involved in such situations. As such, governance can be distinguished from the ''invisible hand' of uncoordinated market exchange based on the formally national pursuit of self-interest by isolated market agents; and with the 'iron first ; (perhaps in 'velvet glove') of centralised, top-down imperative coordination in pursuit of substantive goals established from above[3]*"*

2) Ostrom[4] (1980) differentiates between "law" and "rule" and has described rules as artefacts that are subject to human intervention and change. Ostrom (2005) used the term "rules" differently from game theorists, who consider, linguistic prescriptions as well as physical and behavioural laws to be 'the rules of the game' (Ostrom, 1986). Ostrom (2005) emphasised that theoretically "rules" can be changed, while physical and behavioural laws cannot, and should not be equated with formal laws, which may become rules when participants understand a law, at least tacitly, and are held accountable for breaking it. Enforcement is necessary for a law to become a rule. Ostrom (2005) also mentioned an analogy to explain rules: when driving to work every day one follows rules which were themselves crafted by officials acting within the collective-choice rules used to structure their deliberations and decisions. She defines institutions as:

"*prescriptions that humans use to organise all forms of repetitive and structured interactions including those with markets, firms, sports leagues, churches, families, neighbourhoods, private associations, and government at all scales*".

Within organisations and Institutions through economic and political perspectives, Moe (1990b) argued that political decisions are distinctive in that they are basically about the implementation of public authority, which involve access to unique "coercive powers". The rational choice theorists are more likely to stress the micro-foundations of institutions, i.e. how institutions are devised to solve collective action problems experienced by individuals. In contrast, historical institutionalists are more likely to stress a macro perspective, tracing the evolution of an institutional form and how it has an effect on individual preferences and behaviour (ibid).

[3] Throughout this study the Quotations will appears in *Italic* with a single space.

[4] Within the references in this thesis there is reference to; **Vincent** Ostrom whose speciality in Political Science, who has a particular study of Fragmentation theory, rational theory, Federalism, polycentrism, born in 25th September, 1919 died in 29th June 2012. References also include **Elinor** Ostrom (his wife) who was a professor in Political Science and a winner of the Nobel Memorial Prize (2009) in Economic science, born in 7th August, 1933 died in 12th June, 2012.

Moving from the new institutionalism in economics and public choice to other related theories, the new institutionalism in regime theory (regime is defined by Krasner (1983, p.2) as 'sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations') and organisation theory, give the term "institution" a different meaning.

March and Simon (1958) discussed the specifications of the "human organism" in terms of capacity, speed, permanence, and time and money cost, and also considered the "departmentalisation theory", in its contemporary form by Gulick (Gulick and Urwick, 1937), to have a short name for this line of development: they label it "Administrative Management Theory". Considering organisations and behaviour issues, Simon[5] (1945, 1997) developed his theory of administrative/organisational behaviour to counteract and correct conventional economic theories that assumed individual rationality, linking the limits of individual cognitive capacity with the features of organisational structure. He described how organisational structures work to simplify and support decision-making by individuals in organisations, in order to achieve higher levels of consistent, albeit limitedly rational, behaviour that would not have otherwise been possible.

There are particular aspects of human behaviour in organisations that need to be borne in mind; like the theories of motivation (content theories) such as Maslow's hierarchy of needs (Maslow 1943; 1987), and process theories by Vroom (1964) and mixed approaches such as McGregor's (1960) theory (X and Y). McGregor's hypothesis is that managers tended to have one of two world-views about attitudes to work. Theory X mangers believe that employees are primarily motivated to work for money, and will do as little work as they can get away with, short of risking losing pay or position (these managers often look on theory Y managers as naïve idealists). Theory Y managers in contrast believe most people are self-motivated, want to do a good job well because work satisfies a wide set of needs beyond mere financial reward (these managers tend to look on theory X managers as either ignorant or retarded in some way).

3.3.1 The Old Institutional Economics Theory

The Old Institutional Economics Theory usually refers to the writing of Veblen, who introduced old institutional economics 'Neoclassical Economic Theory' and also refers

[5] Herbert A. Simon is a professor in psychology and computer science, awarded the Nobel Prize in Economics in 1978.

to the writing of Commons whose work was the most important from the standpoint of New Institutional Economics (NIE) perspective because his work, meets NIE's direction (elaborated in the next section), had particular significance for the development of modern institutionalism. The contribution of the old institutional economists is mostly attributed to their criticism of the previous economists of 'Orthodox Economics' such as Adam Smith, J. S. Mill, and Alfred Marshall. Their proposals include:

a) A focus on collective rather than individual action.
b) A preference for an 'evolutionary' rather than mechanistic approach to the economy.
c) An emphasis on empirical observation over deductive reasoning; but their contributions to institutionalists was little known to most contemporary economists (Klein, 1999).

Neoclassical economic theory has not changed significantly since then. Old institutional economics tries to mitigate the gap that left little room for intuitional arrangements; culture, social norms, and many other factors that can shape behaviour which are found in neoclassical economic theory. Although there have been many developments in the history of institutional economics (such as the methodology of Commons 1931, vs. Veblen, 1898), five propositions have stood the test of time:

1) Institutions are a vital component of any economy and the major task for economics should be to study institutions and the process of institutional change.
2) Intuitionalism is not defined in terms of any policy proposals.
3) Institutional Economics draws on many different fields of study such as psychology, sociology and anthropology to develop a better analysis of human behaviour.
4) The economy is an open ended system subject to evolutionary change, embedded with complex elements such as social, cultural, political power, and other variables.
5) Institutional economics doesn't take the individual as given. Instead, individuals are shaped by institutional and cultural arrangements. This fifth point is the vital string that ties everything together in old institutional economics. The literature shows that institutionalism is distinguished from both mainstream economics and

the NIE as it does not assume a given individual, with given purposes or preference functions.

3.3.2 The New Institutional Economics

Coase's (1984) the father of the NIE wrote about the old Institutional economics theorists:

"…*without a theory they had nothing to pass on except a mass of descriptive material waiting for a theory, or a fire*" (p. 230).

Klein (1999) and Furubotn and Richter, (2005: p. 34) declared that the term New Institutional Economics (NIE) was coined by Williamson (1975, p. 1). NIE began to develop as a self-conscious movement in the 1970s. North (1981) acknowledged that institutions provide the framework within which human beings interact and create the cooperative and competitive relationships which constitute a society and more specifically an economic order. Institutions are in effect the filter between individuals and the human capital (stock) and the output of goods and services and the distribution of income (p. 201). Later, North (1990) defined institutions from "political and economic point of view":

"Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction" (p. 3).

Thus, he affirmed; a) institutions as the 'rules of a game' (the purpose of the rules is to define the way that the game is played) and; b) the organisations as 'players' of the game (groups of individuals who work toward a common goal or objective and have common interests) differentiating objectives of the rules from the players; the objective of the players within the set of rules is to win the game by skill, strategy, and coordination, having said that. Schotter (1981) argued that, "Institutions" are not rules of the game but rather the alternative equilibrium standards of behaviour or conventions of behaviour that evolved and developed from a given game described by its rules. This definition is essential to this research because the intention is to benefit from collaboration and interaction between public and private sector perspectives involved in governing the public sectors policymaking process and differentiates between formal and informal institutions.

North (1990, p. 4) explains that formal institutions are any form of constraint that human beings devise to shape human interaction that include both what individuals are

prohibited from doing and the activities (with conditions) they are permitted to undertake. Thus a formal institution is the framework within which human interact; a) Institutions are analogous to the rules of the game in a competitive team support they consist of formal written rules, or b) as conventions and codes of behaviour (informal institutions); or they may simply evolve over time (governmental rules and regulations and continuous development) such as common law, unwritten codes of conduct, principles and codes of behaviour that underlie and additional formal rules such as not deliberately injuring a player on the opposing team. As this analogy would imply rules and informal codes are sometimes violated and punishment is enacted.

NIE pays special consideration to the importance of private solutions to resolve disputes, in contrast to the older tradition of legal centralism. Several studies have investigated whether informal trade arrangements, which are not legally enforceable, may also be motivated by the desire to make exchange more efficient. Palay (1984; 1985) for example claims that informal agreements would emerge involving combined ownership, to encourage and to protect relationship specific investments. These informal agreements provide procedures for unusual circumstances. There are other studies such as in the fishery sector by Acheson (1985) which show that informal relationships and agreements between fishermen were reinforced by considerations of reputation and inter dependencies arising from sharing scarce resources, such as market information.

Within the NIE, North (1990) wrote his own theory of institutional change referring to the way institutional frameworks are created, modified, or even ruined over time, combining institutions with human behaviour:

"My theory of institutions is constructed from a theory of human behaviour combined with a theory of the costs of transacting. When we combine them we can understand why institutions exist and what role they play in the functioning of societies. If we add a theory of production we can then analyse the role of institutions in the performance of economies..." "...The costliness of information is the key to the costs of transacting which consist of the costs of measuring the valuable attributes of what is being exchanged and the costs of protecting rights and policing and enforcing agreements", (p. 27).

Like its older counterpart, NIE are interested in the social, economic and political institutions that govern everybody life. The NIE is an interdisciplinary enterprise combining economics, law, organisation theory, political science and sociology as well as the anthropology to understand institutions of social, political and commercial life.

Transaction costs[6], property rights, and contractual relations constitute basic elements of the literature of the NIE. As people have 'Bounded Rationality[7]', it is clear that they must incur 'transaction costs' because of their human limitations, their restricted knowledge, and their tendency to make errors, real world decision makers will always function inefficiently, relative to the hypothetical decision makers of neoclassical theory. North (1990, p. 83) also stated that institutions together with technology employ the transaction costs. It takes resources to transform inputs of land, labour and capital into the output of goods and services, and that transformation is a function not only of the technology employed, but of institutions as well. Institutions therefore play a key role in the production cost.

He also argued that game theoretic models, like neoclassical models, assume wealth maximising of the player, whereas the economics literature demonstrates, human behaviour is clearly more complicated than can be encompassed in such a simple behavioural assumption. The contrast in his opinion is amazing between the logical implications of the performance of economies and neoclassical theory (that has a major contribution to knowledge) whereas in the context of the analysis of markets in developed countries, it does not provide much insight into organisations such as the medieval manor, and the *suq*[8](ibid).

Davis and North (1971) distinguished between the institutional environment and institutional arrangements; Institutional environment is defined as: the background constraints, or 'rules of the game' that guide and govern individuals' behaviour; and institutional arrangements as 'the specific guidelines designed by trading partners to facilitate particular exchanges or the set of fundamental political social and legal ground rules that establishes the basis for production, exchange and distribution, rules governing elections, property rights, and the right of contract'. These can be both formal, explicit rules (social conventions, norms), and background rules of individual actors. The social result (the rule itself) is typically not known or 'designed' by anyone. Institutional arrangements thus are specific guidelines that Williamson (1985; 1996)

[6] In economics, the costs incurred in making a bargain, over and above the benefit exchanged. They typically include research costs, bargaining costs, and enforcement cost; there will also be agency costs if an agent is used. The cost incurred in undertaking an economic exchange, Black et al., (2009 p. 456).

[7] A term used by Simon (1957) to signify the fact that decision makers are not omniscient and have real difficulties in processing information.

[8] *Suq* is translated as the '*Bazaar'* in some parts of the Middle East and North Africa, but the fact is that *Suq* is an Arabic word meanings Market or Market place *per se* and is used throughout the Arab world. *Bazaar* also means Market but it is not an Arabic word.

calls ‘governance structures’. From NIE perspective the economists therefore, concern themselves not only with how these institutions affect economics but also how these institutions are formed.

Williamson (2000) provided a four level structure of institutional analysis to analyse complex institutions.

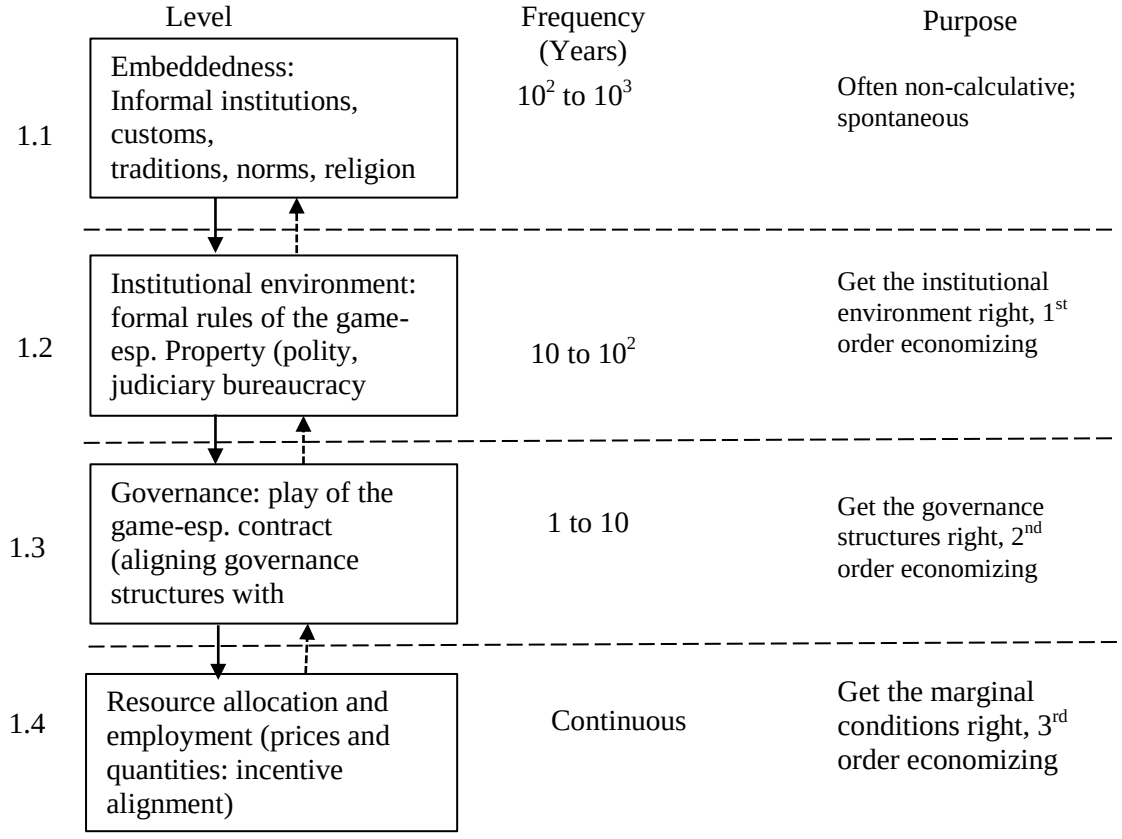
Level 1: Informal institutions; these institutions arise spontaneously over a long period of time and institutions in this level change very slowly, on the order of centuries or millennia. Upon North, (1991 p. 111) who poses the query; what is it about informal constraints that give them such general influence, where the norms, customs, mores, and traditions are located. Religion plays a large role at this level. This level is taken as given by most institutional economists.

Level 2: Institutions are seen as governance structures in level 2. Formal rules created such as a constitution, laws, property rights (North, 1990; 1991). Major changes at this level are rare but are often preceded by major upheavals e.g. massive/civil Wars or occupations (North and Weingast, 1989). This level opens up the opportunity for first-order economising, and get the formal rules of the game right. This level also include the executive, legislative, judicial, and bureaucratic functions of government as well as the distribution of powers across different level of government (federalism) (Williamson, 2000). Although such first-order choices are unarguably important to the economic productivity of any economy (North, 1994; Olson, 1996) increasing change of progressive kind is very difficult to compose. Going beyond the rules of the game (property) to include the play of the game (contract) was needed (Williamson, 2000).

Level 3: In a perfect world, once the rules for property rights are developed at level 2, the government can step aside, except for enforcement and arbitration, these functions are not costless and they are not simple. This is the level at which the game is played and constructs enter into the equation. The role of governance in contracts is to ‘craft order’, thereby to mitigate conflict and realise mutual gains (Williamson, 1996; 2000, p. 599). Many public policy issues moreover turn jointly on the combined use of level 2 and level 3 reasoning, (ibid).

Level 4: It is the level at which neo-classical economics operates. Under the rules of level 3, transactions occur and prices adjust. Essentially, this is the level of the market, adjustments to prices and output occurs more or less continuously.

The following figure (3.2) illustrates these levels:



1.1 Social theory
1.2 Economics of property rights/positive political theory
1.3 Transaction cost economics
1.4 Neoclassical economics/agency theory

Figure 3.2: Economics of Institutions.
Source: Williamson (2000, p. 597)

NIE concerns itself primarily with levels 2 and 3. (Klein, 1999), and analysis here is based on the elementary insight that the creation of institutions and organisations, and their day to day use, requires the input of real resources. NIE paradigm argues that large corporate hierarchies emerge due to the difficulties of efficient exchange where transaction costs are high in those exchanges with uncertain outcomes, few actors, and highly localised knowledge (Williamson, 1975).

Organisational structures are derived as solutions to problems of opportunism where self-interest and the costs of investigation might otherwise interact to produce shirking

(Alchian and Demestz, 1972; Moe, 1984). This analysis was criticised from a Marxian point of view by, Ankarloo and Palermo (2004). They argue that transaction costs are never defined in Williamson's work quoting the imprecise definition of Arrow[9] (1969, p. 48) as Williamson (1985, p. 18) refers to the 'costs of running the system'. Later (Williamson, 1985 p. 19) defines transaction costs as 'the equivalent of friction in physical systems'. They also argue that Williamson does not develop the analysis of 'market failures' instead, the definition of a zero transaction costs context has only a negative role in the construction of Williamson's framework. Organisations were never totally excluded from consideration by economists; institutions played a role in the work of the aforementioned 'orthodox theorists' mentioned by Williamson (2000), such as Adam Smith, J. S. Mill, and Alfred Marshall, although not a central one. NIE impact was noticed on evolutionary game theory and the theory of collective action - this theory covers the incentive to exploit a "free ride" as analysed by Olson (1965), and Hardin (1968) concerning the nature of the group such as its size, age or its purpose.

Institutions in level 2 (above) can be described along a spectrum with 'market' and hierarchy' (Williamson, 1975). At one end lies the pure unknown spot market, which suffices for simple transactions such as basic commodity sales. Market prices provide powerful incentives for exploiting profit opportunism and market participants have to adapt to changing circumstances as information is revealed through prices. However, when product or input markets are not large, bilateral coordination of investment decisions may be desirable and combined ownership of these assets may be efficient. At the other end of the spectrum (from the simple, unknown spot market) lays the fully integrated firm, where trading parties are under unified controlled ownership. These hierarchies offer greater protection for specific investments and provide relatively efficient mechanisms for responding to change, where coordinated adaptation is necessary. Comparing this with the decentralised structures, hierarchies provide manages with worker incentives to maximise profits and normally incur additional bureaucratic costs (Klein, 1999).

It is noteworthy that within institutional arrangements the focus is on 'firm' capabilities (stock of knowledge), which depend on the tacit knowledge they contain, as manifested in organisational routines. This helps in determining the boundary of the firm (Chandler, 1992). Firms exist because they are superior institutional arrangements for

[9] Kenneth Arrow is a political theorist, awarded the Nobel Prize in Economics with John Hicks in 1972.

accumulating specialised productive knowledge independently of consideration of opportunism, incentive alignment and the like, (Foss, 1996).

When economists refer to 'the theory of the firm' they usually mean the theory of production, not the theory of the firm as a legal entity. The firm is a production function or a set of production possibilities. The NIE approach to the firm is usually traced to Coase (1937), who in "The Nature of the Firm" and "The Problem of Social Cost" explained the difficulty for economists to come to terms with the role of institutions in capturing the potential gains from trade and cost of transaction. Coase[10] was the first to explain that the boundaries of the organisation depend not only on the productive technology but on the costs of transacting. NIE sees economic growth and development through its lenses as a response to the evolution of institutions that support social and commercial relationships where economic growth depends on the degree to which the potential risks of trade can be controlled by institutions, and thus reduce information costs, encourage capital formation and capital mobility, allow risks to get priced and shared and otherwise facilitate cooperation.

The public administration as legal entities are defined by Heady (2001, p. 3), Public Administration are the formulation, implementation, evaluation and modification of public policy, but the "new" public administration movement not only reaffirmed the breakdown of the politics-administration dichotomy, it also challenged the traditional emphasis on techniques of administration and stressed the obligations of public administrators to be concerned with values, ethics, and morals, and to pursue a strategy of activism in coping with the problems of society. In a form of systems theory known as "structural functionalism", originated and elaborated by sociologists such as the American Sociologist Parsons, (1937, 1951) proposing in constructing his action theory which was attacked by Silverman, (1971) prevailing models of organisation including contingency arguments and Parson and Selznick's structural-functional views as being overly concerned with stability, order, and system maintenance and proposed an 'action' theory of organisation. Silverman (1971) proposed a phenomenological view of organisations that focuses attention on meaning systems and the ways in which they are constructed and reconstructed in social action. Construing his own action approach with prevailing 'systems' view. It was later adapted by political scientists for analysis of political systems. In the terminology of structural-functional analysis, structures are more or less synonymous with institutions and functions with activities (Scott, 2008).

[10] in his seminal paper entitled 'the Nature of the Firm'

An institution is considered to be a political structure, and public administration is that sector of administration found in a political setting, concerned primarily with carrying out public-policy-decision-making by authoritative decision-makers in the political system. It can be distinguished from private or non-public administration. Thus the core of public administration is politics and public policy, and public administration as an aspect of governmental activity that has existed as long as political systems have been functioning and trying to achieve program objectives set by the political decision-makers (Ostrom, 1986; Heady, 2001).

Coase (1937) pointed out on the other hand regarding the firms; that economics had no positive theory to determine the boundaries of the firm, while within the theory of firm, Jensen and Meckling (1976), defined the "firm" as a separation between ownership and control. Within cybernetics (control and communication) the "firm" is a good example of a system of high complexity in which the input and the output are themselves of extremely high variety (Beer, 1972). Beer (1981) also described the firm by his words:

"*The firm is something organic, which intends to survive*"

Regarding control in business; Beer (1981, p. 39) elaborated in the 'Brain of the firm' three fundamental components of any control system; input, output and the network that connects the two. He described control in business as something much more than intervention of its senior manager; it has to do with information of an extent and complexity, which is beyond the ability of those senior managers to absorb and understand it (Beer, 1981).

North (1990) also used "firm" and "economic organisation" interchangeably in some of his works. Porter (1985; p.106), advised that "Firms" can influence institutional factors such as government policies and unionisation, despite a tendency to view institutional factors as beyond their control. Borrás and Tsagdis (2008: p.8) wrote:

"Firms' agendas are usually informed by profit, growth, or commutative considerations; where as institutional (organisational) agendas are usually informed by the political and general interest considerations of the ruling elite (in the public and private realms)"

Having defining organisation, institution, public administration and firms from social and economic perspectives, the next part is about their development across different organisational, behaviours and political perspectives. Political institutions themselves change, and changes in general are produced through some kind of encounter between

the rules (or action based on them) and an environment (March and Olson 1989, pp. 166-167). Grieves (2010) demonstrated four perspectives on the organisational change:

- A focus on systems and structures (the structural-functional perspectives).
- A focus on governance (the multiple constituencies' perspective).
- A focus on behavioural improvement through personal and organisational development (the OD perspective).
- A focus on constant critique (creativity and volition: a critical theory of change).

3.4 Institutions and Organisations through a Social Perspective

Emile Durkheim termed sociology 'the science of institutions' (Durkheim 1901, 1950: ix); he also terms "social facts" (the symbolic systems of knowledge, belief, and moral authority) as "social institutions". Hughes (1936) developed a model defining an institution as the "establishment or relative permanence of a distinctly social sort". Hughes (1939) identified its elements in the later stage as; a) a set of mores or formal rules, or both which can be fulfilled only by; b) people acting "collectively", in established complementary capacities, where the first element represents consistency, while the second represents the organisation and its performance. Institutions therefore, are understood by most sociologists to exist in the integrated and standardised behaviour of individuals. Scott (2008) affirmed that the sociology of organisations largely gave insufficient attention to the institutional relationships of organisations over a substantial period during its development, from the 1920s to 1970s.

At the time of application cultural-institutional theory to organisation, Herbert Simon's (1945) pioneering work on organisational decision-making was expanded, in collaboration with James March, into an influential statement on the nature of rationality in organisations, which continued until the emergence of the new intuitional approaches in the 1970s. Berger and Luckmann (1967) also argue that social reality is a human construction, a product of social interaction, defining this process as one of "Institutionalisation". In contrast to Durkheim (1950) and Parsons (1951), Berger and Luckmann (1967) emphasised the creation of "shared knowledge", and belief systems rather than the production of rules and norms.

From the 'social perspective', March (1965) dates the origins of organisation studies to the period 1937-1947, noting the appearance of the influential publications of Gulick and Urwick (1937); Barnard (1938); Roethlisberger and Dickson (1939); Simon (1945).

Scott (2008, p. 20) mentioned that institutional theory historically meets organisation studies, and sociologists entered just at the end of this period (e.g. Merton et al., 1952 Selznick 1949), and reviews work connecting organisations and institutions from the 1940s until the emergence of 'new' institutional approaches in the 1970s.

Scott (2008) identified three sub streams in early theories of organisation. The first stream has been inspired by Weber's bureaucracy (1924-1947), and the theory of Social and Economic Organisation (Weber, 1947) (which was translated in to English by Henderson and Talcott Parsons) gained the interests of sociologists including the application of Parsons into Cultural-Institutional. Theory to organisations (Parsons, 1956), which later became the second sub-stream. Parsons (1990) considered the emergence of the notion of Institutional Theory from the mid-1960s to the mid-1970s, and wrote an article for the inaugural issue of Administrative Science Quarterly in 1952), (a new interdisciplinary journal devoted to research on organisations). The third sub-stream involved Herbert Simon pioneering work at the Carnegie Institute of Technology (Carnegie-Mellon University) on organisational decision making. This has provided the basis for the more recent conception of institutions that laid the foundations of neo-institutional organisation theory or NIE. This can also be seen as a continuation through the "open systems" conceptions of the study of organisation, (Katz and Kahn 1966; Scott and Davis, 2007). This research attempted to benefit from both old and new institutionalism, as discussed below.

3.4.1 A Comparison between Old and New Institutionalism

An example of the old institutionalism of Selznick (1949); the leadership of the Tennessee Valley Authority (TVA) who co-opted external constituencies internationally, trading its creators' more populist agricultural designs to protect the rural electrification program (Selznick 1949). By contrast, the new institutionalism that appears in the revised formation of institutionalism has usually downplayed conflicts of interest within and between organisations or else noted how organisations respond to such conflicts by developing highly elaborated administrative structures (Scott and Meyer 1991). The old institutionalism illustrate how the informal structures deviated from and constrained aspects of formal structure; the new one by contrast, locates irrationality in the formal structure itself, attributing the diffusion of certain departments and operating procedures to inter-organisational influences and conformity (ibid).

Both approaches share a skepticism toward rational-actor models of organisation and each views the institutionalisation rational by limiting the options they can pursue (DiMaggio and Powell, 1991). Although, the old and new approaches agree that the institution constrains organisational rationality, they identify different sources of constraint with the older emphasising the vesting of interests within organisations as a result of political trade-offs and alliances, and the new stressing the relationship between stability and legitimacy and 'the power' of "common understanding that is seldom explicitly articulated" (Zucker, 1983).

3.4.2 The Old Institutionalism

March and Simon (1958, 1993) studied three models of organisations:

1) The models of Merton, were concerned with dysfunctional organisational learning and influenced his students such as; Selznick (1949). Both Merton and Selznick renewed interest in Weber's bureaucracy.

2) Selznick's model, like Merton's emphasised the delegation of authority, but Selznick attempted to show how the use of a control technique (i.e., delegation) brings about a series of unanticipated consequences. Merton's students in general distinguished between an organisation as 'the structural' expression of rational action, a 'mechanistic instrument' designed to achieve specified goals, and an organisation as an adaptive, "organic system" affected by the social characteristics of its participants as well as by the varied pressures imposed by its environment. Organisations created as instrumental mechanisms to achieve specific goals over time, are transformed into 'institutions'. Selznick (1957), also explained that Institutionalisation is a process that happens to an organisation over time, reflecting the organisation's own distinctive history, the people who have been in it, the groups it embodies, the vested interests they have created, and the way it has adapted to its environment. Stinchcombe (1968) - one of Selznick's students - built on Selznick's formulation, making more explicit the role of "agency and power". And defined an institutions as "a structure in which powerful people are committed to some value or interest, emphasising that values are preserved and interests are protected only if those holding them possess and retain power".

Differences between Merton, Selznick and Stinchcombe can be noted;

- Merton suggested processes operating in most bureaucratic organisations tend officials toward over conformity;
- Selznick focused on processes within particular organisations as a distinctive set of value commitments.
- Stinchcombe stressed the role of power and elaborated on the mechanisms utilised by powerful actors to sustain their interests and commitments.

3) Gouldner model on the other hand suggests important dysfunctional consequences of bureaucratic organisation.

March and Simon (1958, 1993) argued that their model, like those of Merton and Selznick, attempts to show how a control technique designed to maintain the equilibrium of a system disturbs the equilibrium of a larger system, with a subsequent feedback on the subsystem. One consequence of such dynamics is to decrease the visibility of power relations within the group. Alvesson (1994) proposed another theory of organisational identity "a holistic" and rich impression held by a particular group towards a corporation, partly as a result of information processing (sense-making), carried out by the group's members (e.g. corporate image).

From the social perspective, of the old institutionalism for understanding institutions, Davis (1949) defined institutions as:
"*a set of inter-woven folkways, mores and laws built around one or more functions*" (p. 71).

3.4.3 The New Institutionalism:

New institutionalism or neo-institutionalism is a theory that focuses on developing a sociological view of institutions - the way they interact and affect society. It provides a way of viewing institutions outside of the traditional views of economics by explaining why and how institutions have developed to become similar (isomorphic) across organisations even though they evolved in different ways, and has studied how intuitions shape the behaviour of agents such as people, organisations, and government. Neo-institutionalism traces its roots to the old institutionalism of Philip Selznick and his associates (DiMaggio and Powell 1983).

Societies are most likely to contribute to people's well-being, when there are clear incentives to produce and to obtain the benefits of institutional and organisational collaboration through specialisation and trade. Olson (2000 p.1) suggested that if a

society is to achieve its highest possible income, the incentives offered must not only be clear, but also induce firms and individuals in the economy to interact in a socially efficient way. The new institutionalism focuses on non-local environment either organisational sectors or fields roughly synchronised with the boundaries of industries (Scott and Meyer, 1991). Scott (2008) defined the social perspective of the new institutionalism, as follows:

"Institutions are comprised of regulative, normative and cultural-cognitive elements that together with associated activities and resources provide stability and meaning to social life", (p. 46).

3.5 Power and Co-optation

Benefiting from both the old and new institutionalism two concepts can be useful for this research; the concept of 'co-optation' from the old institutionalism; to obtain face-to-face interaction and investors' leadership. The co-optation concept is expected to be useful in the development arena that lies between public and private sectors boundaries. The concept of power appears when institutions are co-evolving with their environment.

Power is the concept at the heart of this subject. The best known of all the definitions is that of Weber (1920) in 'economy and society'. Weber held that power can arise in a consensual context where subordinates accept it as being used legitimately (authority). Both power and co-optation play a noteworthy role in leadership and management within OID so it is important to highlight both concepts from the legitimacy and policymaking process angle.

3.5.1 Power

Polanyi (1958) perceives that even though a public power were originally based on terror, it could not fail to supplement its coercive force by influence, and that the thoughts exercised for the purpose of controlling their people would inevitably gain ascendancy also to some degree over the rulers' own behaviour (p. 226). 'Power style' can be characterised as competitive or collective; a) A competitive power style is one in which information and knowledge are controlled and manipulated in order to influence peoples' attitudes to events, policies, or personalities; b) Consensus and charismatic power styles are forms of the collective use of power. The former involves participative decision-making and joint problem-solving, whereas the charismatic style makes use of the manager's personality to inspire the members of an organisation to work together

for a common purpose; c) Transactional power style involves the use of negotiation and contingent reinforcement (rewards and penalties) to influence others, this style can be competitive or collective, depending on the decision maker.

Gouldner (1970) noted that 'Power' is - among other things - the ability to enforce one's moral claims. Many studies of political power have focused on formal decision-making within state apparatuses. In Gouldner's system, one consequence of impersonal rules is to decrease the visibility of power relations within the group (regulating work procedures is part of the response to the demand for control from the top hierarchy). Scott (2008) explained that Weber, in his analysis of administrative systems, both public and private, examined the changing sources of legitimating as traditional values, or a belief in the charismatic nature of the leader, increasingly gave way to a reliance on rational and legal underpinnings.

DiMaggio and Powell (1983) introduced "isomorphism" to explain the similarity. There exists a remarkable similarity in the structural features of organisational forms operating within the same organisational field and reinforced this emphasis on "institutional isomorphism" and "power isomorphism".

The needs of power can be handled and expressed both by those who exercise it and by those who are expected to be obedient. The concepts of systems, multiple areas, power and politics, and organisation culture all flow from the concept of organisations as complex interactive structures held together by a balance of the inducements provided to various groups of participants and the contributions received from power (Simon, 1945).

In this research power is used for government institutions that control and enact legislation for private sector activity and directed to economic growth. Social and political power leads us to verify the notion of 'co-optation'. The Omani government has only a single body (one government as stated in the State Basic Law). The civil ministries have hierarchical structures implementing civil service law and financial law, the policymaking and decision-making process are "institutionally isomorphic" (DiMaggio and Powell, 1991) which is about processes with similar legal regulations. One of the powers included in public socioeconomic policy/decision making is the power of the commons especially those concerned with common pool resources (CPRs) such as fisheries, agriculture and minerals wealth.

3.5.2 Co-optation

Learning from the old institutionalism this study focus on 'co-optation', a term devised by Philip Selznick (1948; 2010) to refer to a political process found in formally democratic or committee governed organisations and systems, as a way of managing opposition, claim rights, and needs so to preserve stability and the organisation. Selznick's defined co-optation (*coöptation*) as:

"*The process of absorbing new elements into the leadership or policy-determining structure of an organisation as a means of averting threats to its stability or existence*" (p. 34).

The concept of co-optation, according to Selznick (1949) is an adaptive response of a cooperatives system to a stable need, generating transformation, which reflects constraints enforced by the determined tools of action. He has made extensive use of the concept of co-optation in analysing some aspects of the organisational behaviour of a government agency and investors associations. It can be seen that co-optation is an important element of collective experience and Knowledge Sharing (KS), which reflects a state of tension between formal authority and social power, where the formal authority or leadership reflects real social power, it's stability is assured, and involves commitment. Selznick (1949) also affirmed that with the co-optation concept, we are enabled more closely and more rigorously to specify the relationship between government institutions and the private sector, enabling associations for democracy (grass roots) policy.

Moreover, Selznick (1948, pp. 11-12) argued that co-optation can be 'formal' when there is a need for the organisation to publicly absorb new elements, involving the establishment of openly avowed and formally ordered relationships, in two cases:

1) When the legitimacy of the authority of a governing agency is called into question, one means of winning consent is to co-opt into the leadership, every group or organisation which attempts to exercise control must also try to win the consent of the governed.
2) When the need to invite participation is essentially administrative, to establish the forms of self-government. This is the constructive function of trade unions, where the unions become effective instruments for the elimination of absence or the attainment of other efficiency objectives. Selznick (1948) thus affirmed that any given act of formal co-optation will tend to fulfil both the political function

> of defending legitimacy and the administrative function of establishing reliable cannels for communication and direction. In general, the use of formal co-optation by a leadership does not involve the transfer of actual power. The voluntary association thus established enables local participation in the administration of the authority's programmes.

This type of co-optation is typically expressed in formal terms, for the problem is not one of responding to a state of imbalance with respect to the people as whole, but rather one of meeting the pressure of specific individuals or interest groups, which are in a position to enforce demands. The co-optation mechanism in administration is a process whereby either power or the burdens of power, or both, are shared. The organisational necessity, which states the need for co-optation, occurs in situation in which formal authority is actually or potentially in a state of change with respect to its institutional environment. The formal authority may fail to reflect the true balance of power within the community, and formal co-optation apparently shares authority, but in doing so creates in a dilemma. Formal co-optation requires informal control over co-opted elements, otherwise the unity of command and decision may be at risk (ibid).

Pfeffer and Salancik (2003) mentioned that Selznick (1949) had noted the dilemma posed by the use of co-optation. While support may be achieved, the original aims of the organisation may be redirected. In the instance of the Tennessee Valley Authority (TVA), local conservative agrarian interests, initially hostile to the project, were co-opted but in the process many of the new deal aims and objectives of the program were diverted and many of the project's activities ultimately benefited these agrarian interests.

Co-optation also tells us something about the process by which an institutional environment impacts upon an organisation and effects changes in its leadership and policy. Selznick explained that company unity may be a form of co-optation, or investors unions where the response of formal authority, private or public in large and small organisations, is an attempt to correct a state of imbalance by formal measures, where it will be noted that what is shared is the responsibility for power rather than power *per se*. Selznick referred to this as 'formal co-optation'. He also explained that co-optation may be a response to the pressure of specific centres of power, not necessarily a matter of legitimacy or of a general and diffuse lack of confidence. These may be well established, and organised forces, which are able to threaten the formal

authority, may effectively shape its structure and policy. Non-elected outsiders are 'co-opted' by being given formal or informal power on the grounds of their status, specialist knowledge, or possible ability to threaten essential commitments or goals (Scott and Marshall, 2005).

Economic and industrial sectors can both build their own sector association (to encourage FDIs and DIs) - taking into consideration the commons to participate in the policy making circle or institutions for each sector such as fisheries, minerals, and agribusiness. For dealing with public sector organisations and institutions there is a need for sector to appoint a new element for continuous discussion.

The researcher argues that investor representative from each sector are needed to interact with the government to deal with that sector's problems, in other words 'the co-optation element' can be suggested. This is one of the main arguments of the thesis by creating an interlocking board of directors of firms to elect sectors leaders who can be co-opted in order to face and confront government institutions and deliver their grouped voice before government policy or decision is made. In this context, Pfeffer and Salancik (2003) pointed out that; the practice of interlocking boards provides an opportunity to evolve a stable collective structure of coordinated action through which interdependence is managed. They also argued that, interlocking boards is one way of managing the environment by appointing external representatives to positions in the organisation, through co-optation.

This is a strategy for accessing resources, exchanging formation, developing inter-firm commitments, and establishing legitimacy. It is one of the most flexible forms of inter-organisation coordination, and is easy to implement: two advantages that have made its use pervasive. The flexibility derives from the fact that any organisation can create advisory or directing boards and appoint outsiders to them the organisation has considerable discretion and can choose to appoint representatives from the environment as required. Of course, individuals may refuse the invitation to join the board, but they would not be likely to do so if the linkage offers advantages to both them and their organisations.

The possibility of using the co-optation concept for sector associations can be considered to appoint a co-opting body as an outsider to the organisation's advisory or governing board, This co-opting body could be a person (or a group) who is appointed to a board of directors, advisory committee, policy making or influencing group, or

some other organisational body that has at least the appearance of making or influencing decisions. Such appointments may occur either by means of an election or by direct invitation. This would involve the following:

1- To provide the organisation with managerial skills expertise who can be appointed by the investors of the sector in order to represent their interests.
2- To achieve management control, board members must receive information from the organisation and its operations; the board are prevented from exercising control except under the most extreme circumstances.
3- To act as a sector to negotiate and establish collective structures of inter-organisational action within the governmental policy making processes.

In terms of government interests; the focused sector investors who use natural resources in their industries that can be appropriately utilised and managed, such as agriculture, fisheries, mining, quarrying, building and manufacturing in what has been call 'tragedy of the commons', Hardin (1968) sees there were essentially two way to address the problem of these sectors; either the government has to step in and regulate the commons, or resources have to be divided up between the people who use them and privatised. "The tragedy of the commons[11]" has been used to justify creeping government in many difficult allocation aspects. Ostrom (1989) showed how self-management has worked for hundreds of years; Hardin himself now calls it "the tragedy of the unmanaged commons".

The private sector is sensible when investors' interests are at risk and threat, and are susceptible to investment environment destruction by either the policy and decision makers or investors themselves, during an absence from such participation between public and private sectors. Investors and government can exchange views and share knowledge to reach a mutual understanding during the investment period. This demonstrates that co-optation can be useful in protecting investors' interests by collaboration with the government agencies. Co-optation in this research can be a communication, coordination and collaboration tool that private sector investors use to interact with public sector. As mentioned previously co-optation is proposed in this research for private sector leadership which is derived from the old institutionalism.

[11] The tragedy of the commons is a phrase coined by the ecologist Garrett Hardin describes a situation in which individuals, acting rationally in their own self-interests deplete a share limited resource.

3.6 International Business: Economic Growth and Prosperity

Economic growth and prosperity are two of the main outcomes within the international business discipline of the conceptual framework of this study. In a world, the world eras are shrinking gradually as per UN report (see Appendix 3.2). This expected to impact on socioeconomic in general and investment and business environments in particular to the growth of income and economy growth. Bairoch's study in, Landes[12] (1999) noted that the gap between rich and poor countries is growing and the difference in income per head between the richest industrial nation, say (Switzerland) and the poorest nonindustrial country, (Mozambique), today is about 400:1. Two hundred and fifty years ago, this gap between richest and poorest was perhaps 5:1, and the difference between Europe and East or South Asia (China and India) was around 1.5 or 2:1. Most traditional socioeconomic development approaches accepted economic growth itself as the main societal goal, but the World Bank report concluded that while GDP of most developing countries increased, the standard of living of the poorest people fell by 40% (Lundberg and Squirre 1999).

As mentioned in chapter two, most governments around the world are desperate to improve the quality of the services they deliver, and their image with the citizens they service - and the media who endlessly scrutinise them - prosperity can be seen in the self-interests of a society. Public good and private good are expected to be integrated in favour of national prosperity. Within the socioeconomic environment, investors, dealing with CPRs in the non-hydrocarbon sectors, such as agriculture and fisheries, mining and quarrying, those common-pool resources that refer to property owned by government or by no-one, or by a community of resources users) need to direct their investments to enhance the prosperity of society (Schlager and Ostrom, 1992). The provision of public good depends largely on the notion of "privilege". A privileged group for instance will form when at least one individual derives sufficient net benefits from the collective action. The conditions for a privileged group may depend on the technology of the public infrastructure and its relationship to the underlying game structure (Sandler, 1992 p. 19).

Catch-up strategy can be seen in countries that rely heavily on inward FDI in their industrialisation efforts, and that put a lot of emphasis on policies supporting research

[12] Paul Bairoch study (1979) mentioned in the historian David Landes, introduction to his book *'The wealth and poverty of nations'*, (1999: p. xx).

and development (R&D) and innovation, thus encouraging and attracting FDI in developed countries. According to Fagerberg and Godinho (2005, pp. 3-6) catch-up policy is implemented in order to narrow the gap in productivity and income to compete other neighbouring developed countries. They argued that implementing catch-up processes in Europe, particularly in Germany, led to a strong focus on the relationship between catch-up, 'institutional instruments' and policy.

Two examples can be mentioned about institutions through political perspectives in Arab world literature, which effects on the democracy and political institutional policy changes they are security (power) and funding; which are mostly the common issues among Arab countries when we talk about the economic growth and prosperity. Exploring the relationship between institutions and examining the destabilising effects of the coexistence of overlapping international institutions in the context of the institutions.

In the case of the Arab states system and pan-Arabism (*alurooba*)[13], Barnett (1993) gave an example of a country as a sovereign state (and not simply as an Arab state within pan-Arabism) conceptualising the Arab states system and the corresponding state roles associated with pan-Arabism and state sovereignty and explained the relationship between the part (state) and the whole (the Arab world) discussing the overlap between the institutions of pan-Arabism:

a) The primary concept is the idea of the unity of the Arab world where the focus is on the security and power of the Arab world and not the security and power of any individual Arab state.

b) There is a strong beliefs the belief that the Arab states system should be organised not to project the Arab World's power, but to protect the Arab states' security and allow each state to pursue its own development.

Barnett also mentioned that institutions lengthen the shadow of the future and escape the classic competitive trap fostered by the Prisoner's Dilemma. Because international institutions offer the promise of order and cooperation among self-interested states,

[13] *Alurooba* was born in the literary clubs of Damascus in the late 1800: the movement began to flourish in the decades preceding 'World War I' Heikal, 1978 wrote about the pan-Arabism: "One nation having common interests and security priorities distinct from those of the West… the countries of the Arab world, which enjoyed unity of language, religion, history and culture, created their own system to counter any threat from whatever source" (p. 719).

theorists and policymakers alike have ventured from simply discovering the existence of such institutions to proposing their whole-scale construction and application to confront a series of international problems.

The other issue is the institutional economics and political determinants that are affected by the international funding programmes. Arab world macroeconomic indicators in the MENA regions for instance who were counted the major recipients of International Monitory Fund (IMF) and World Bank program loans, namely, Egypt Morocco, Tunisia, and Algeria (in North Africa) and Jordon (in Asia). They found that IMF and World Bank lending in MENA seems to be oriented toward pro-western regimes that introduce western-style democracy (Harrigan et al. 2006).

3.7 Coordination and Collaboration

The discussion in this section encounters an answer to a hypothesis; "success or failure is less a technological issue and more a people issue", Throughout the literature review the researcher has come across an argument from a number of researchers that people are important to the creation, capture and sharing of knowledge. The builders of knowledge-based systems recognise three types of knowledge; a) factual knowledge, b) inductive knowledge (the rule of inference) and c) procedural knowledge, which is also termed Meta-knowledge (Finlay and Marples, 1997).

The electronic tools for coordination and collaboration are a central issue. Networks in this context are structures of interdependence involving multiple organisations or parts thereof, where one unit is not merely the formal subordinate of the others in some larger "hierarchical arrangement". Networking, then, is the act of creating and or maintaining a cluster of organisations for the purpose of exchanging, acting, or producing among the member organisations (O'Toole, 1997, p. 45).

Scholars of public management increasingly identify networks or other forms of inter-organisational activity as important elements of governance, although few have treated them seriously as objects of careful study, and the implications for management have not been systematically developed (O'Toole 1997). To that end Agranoff and McGuire (1988) explored networking through a comprehensive data set of the inter-governmental networking component of economic development in 237 cities. They presented an article in which they address management in network settings by demonstrating

empirically the governance context of local economic policymaking and by considering the implications of this context for public management. Theoretically, they emphasised the link between the multi-dimensionality of networking in their findings and its implications for the capacity to manage within governance.

The term 'inter-governmental' has taken on the broader meaning of governments working with nongovernmental and private organisations. The inter-governmental networks studied here operate with representatives of different public and non-public agencies and can be viewed as distinct structural arrangement for jointly performing specific task or producing a particular goods and services. Thus, the multi network context of local economic policymaking consists of multiple inter-governmental networks with varying composition and size, depending on the strategic purpose of the particular policymaking task (ibid).

Ansell and Gash (2008) confirmed in their article that over the past few decades, a new form of governance has emerged to replace argumentative and managerial modes of policymaking and implementation, which has come to be known as "Collaborative governance". They reviewed 137 cases of collaborative governance across a range of policy sectors, identifying critical variable that will influence whether or not this mode of governance will produce successful collaboration. Within collaborative complexity, Ansell and Gash (2007, p. 2) define collaborative governance as: "A governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-orientated, and deliberative, and that aims to make or implement public policy or manage public programs or assets." They added "Collaborative governance is ….a type of governance in which public and private sector work collectively … to establish laws and rules for the provision of public good" Ansell and Gash (2007, p. 3).

Gray (1989, p. 11) mentioned that collaboration occurs when a group of autonomous stakeholders of a problem domain engage in an interactive process using shared rules, norms, and structures to act or decide on issues related to that domain (participants orient their processes, decisions, and actions toward issues related to the problem domain that brought them together). However, from NIE perspectives, collaboration sometimes increase transaction costs for organisations, introduces them to new bilateral and multilateral relationship to which they must attend, requires them to develop new skills and abandon or reshape old ones, and makes them more explicitly and perhaps

uncomfortably aware of the relationships among stakeholders that do not include them but may affect them (ibid).

Information and Communication Technology (ICT) plays an important role in facilitating this inter-organisational collaboration and transforming the ways in which these organisations interact among themselves, and with citizens in their daily operations and tasks. Establishing e-government collaboration may be crucial. Chun et al. (2012) explained that citizens, the business community and government institutions themselves are all looking for increased transparency, accountability and efficiency. Reaching these goals requires collaboration, knowledge and information sharing for effective management and the provisions of government services.

This includes; conflict/cooperation, the incentives for stakeholders to participate, power and resources imbalances, leadership and institutional design. This focuses on trust, commitment and shared understanding. Ansell and Gash (2007) referred to this new strategy of governing as "collaborative governance[14]", which brings multiple stakeholders together in common forums with public organisations to engage in consensus-oriented decision making.

In Ansell and Gash (2007) two arguments have been explained; Lynn et al. (2001) interpret governance broadly as "regimes of laws, rules, judicial decisions, and administrative practices that constrain, prescribe, and enable the provision of publicly supported goods and services". The other is Stoker, (2004 p.3) who argues - that governance - as a baseline definition - can be taken to refer to the rules and forms that guide collective decision-making. That the focus is in decision-making in the collective implies that governance is not about one individual making a decision but rather about groups of individuals or organisations or systems of organisations making decisions. Ansell and Gash (2007) agree with Lynn et al. (2001) that governance applies to laws and rules that pertain to the provision of public goods. Conflict/cooperation usually brings multiple stakeholders together in common forums with public organisations and involves, developing a common language for analysing collaborative governance.

In organisation theory, March and Simon (1958) argued that "coordination" is a highly significant problem which is absent from the formal models. This is because the formal

[14] Also defined (in many other areas) which can be summarised as; a process and a form of governance in which participants representing different interests are collectively empowered to make a policy decision or make recommendations to a final decision-making who do not substantially change consensus recommendations from the group.

models usually depart from what is emphasised in a common-sense way about organisations. It appears to be more relevant to the real-world phenomena, than the models, (pp. 34-38). Gulick and Urwick, (1937, p. 24) argued that process departments must be coordinated not only to prevent conflict, but also to guarantee positive cooperation. They need to work hand in hand and must also schedule their work. A failure in one process affects the whole enterprise, and a failure to coordinate one process division, may destroy the effectiveness of all the work that is being done (ibid).

In the literature "coordination" was found to be linked to both cooperation and power, where cooperation is needed for any transaction to take place. If that transaction involves the use and allocation of limited resources it could become very competitive. Power is considered as strength in arranging the terms of one's dealing with other firms or people, such as; countervailing power, monopoly power and bargaining power, and so on. By exploring the cooperation dilemma in a game theoretic framework, wealth maximising individuals will usually find it is useful to cooperate with other players when the play is repeated (the game theory).

Wealth maximising behaviour and socially cooperative outcomes have been a key factor in the way game theory has evolved. The so-called prisoner's dilemma that has been a basis of game theory, is closely allied to Olson's (1965) free-rider dilemma, which suggests a discouraging perspective on the problems of human cooperation and coordination, This causes the prisoner's dilemma: because the game is played only once, it is a dominant strategy for players to 'defect' and therefore not to achieve what would be an efficient outcome with respect to the aggregated well-being of all players.

A theory of cooperation base upon reciprocity has engendered a wide literature concerning the evolution of cooperation, surveyed by Axelrod and Dion (1988) whose findings can be generalised to settings that are quite different from the original situation with two players. They increased the number of players who simultaneously interact, and this tends to make cooperation more difficult. They formed the Iterated Prisoner's Dilemma (IPD) with greater room for cooperation. The Evolution of Cooperation gives an opportunity to the ability of human beings to devise cooperative solutions to problems without the intervention of a coercive state. The large group (*n*-person prisoner's dilemma) explores the difficulties of collective action in these groups, Hardin (1968) emphasised that the difficulties of collective action depend not just on the size of the group, but also on the ratio of costs to benefits.

3.8 The Policy Terminology

The term 'Policy' used in this research; in two different ways; a) as the main research topic for governmental policies, in which a course or principle of action adopted or proposed by an organisation or individual, as of government, political or business, intended to influence and determine decision-making. 'Policy' also means a principle or protocol to guide decisions and achieve rational outcomes'. b) 'Policy' is also use to describe the function of System 5 in the Viable System Model (VSM).

3.8.1 Public Policy

Sabatier (1991b) stated that any theory of the manner in which governmental polices get formulated and implemented, and its actions on the world, requires an understanding of the behaviour of major types of governmental institutions; such as legislatures, courts, administrative agencies, local governments, the general public, political parties, chief executives, the interest groups' behaviour, the presidency, or political behaviour outside those institutions such as public opinion, voting, and political socialisation that the countries focuses upon. Chapman (2004) has focused on explaining the relevance of systems thinking to public policy making processes; he also uses the idea of CAS to get insights for dealing with organisational "complexity" as well as the idea of organisations as "human activity systems" (Checkland, 1981).

Theoretical and empirical research in the NIE has strong implications for antitrust, regulation and other aspects of public policy. This can be noticed through the Davis and North category of institutional arrangements that was discussed in the NIE section of this chapter. Williamson (1985) argued that economists began to incorporate transaction considerations into their understanding of vertical restrictions.

Sabatier (1991b) presents a number of frameworks for policy process that has been developed (Appendix 3.3). The "Structural Choice" framework which according to Moe (1990a, p. 219) complements agency and transaction cost theories by taking into account the implications of political instead of economic actors that act as agents.

The multiple-streams framework also presented by Zahariadis (2007) looks at the policymaking process from the multiple streams lens linking the various stages of the policymaking process under the umbrella of a single lens. Politics (policy formation) and administration (implementation) are not so rigidly divorced (March 1994 p. 109; Olsen 1988). Zahariadis (2007) also addressed the issue of ideas in public policy. While

he does not deny the importance of self-interest, his study does point to the significance of ideas in two ways. First, solutions are developed, as Kingdon (1993) argued, not simply on the basis of efficiency or power, but also on the basis of equity. Second, political ideology is a good heuristic in an ambiguous and rapidly changing world (Kingdon, 1993). March and Olsen (1995) outline some implications without however, paying adequate attention to causal process.

3.8.2 FDI Determinants and Policies

Borrás and Tsagdis (2008) explained a growing interest among economic and political scientists about Multi-level governance (MLG) processes. For cluster MLG, they claim that public action is not the result of public authorities' activities only, it is the result of a set of individual and or collective actions, and felt justified in including institutions (e.g. private, public semi-public, in/formal, located in/outside a cluster) as the second constitutive element of a cluster.

Institutional factors, including governments regulation, tax holidays, and other financial incentives, tariffs, levies, and local content rules, constitute factors representing perhaps the single most important cost driver in the road transport industry in the 1980's (MENA Report 2013). Oman as one of the MENA region country supports investors through providing information on investment climate, laws, and procedures and also project specific information. The government organises visit programs and matchmaking meetings for FDI, and assists investors to obtain various government approvals. It reviews the project proposals prepared by the investors and advises on the appropriate entry strategy for setting up operations. It also assists local investors to identify potential foreign partners and vice versa.

This section provides a special focus devoted to the imbalance between the institutional regulations and the clarity of policies in both investment regulation and promotion, e.g. Investment Promotion Agencies (IPAs) or Investment Promotion Intermediaries (IPIs). In Oman, The Public Authority for Investment Promotion and Export Development [PAIPED] acts as an IPA or IPI, which is a significant issue in developing economies. (see MENA Report, 2013 summary in Appendix 3.4 for more details).

Developing economies can replicate production methods, technologies and institutions currently used in developed countries. FDI economic and institutional determinants

have been examined by a number of empirical studies (Blonigen, 2005). Such studies usually focus on one or more determinants (e.g. Bénassy-Quéré et al. (2005) for a given set of countries and/or sectors (e.g. Kolstad and Villanger, 2008). Nonetheless, they all use secondary data and inferential (e.g. econometric) estimation techniques with the usual limitations these entail. Moreover, qualitative empirical studies of FDI determinants that could rectify such shortcomings are rather rare (e.g. Gorynia et al., 2007). Still, neither the aforementioned quantitative or qualitative studies investigate the equivalent effects for their domestic counterparts. Leaving this gap a side there appears to be an emerging consensus of FDI economic and institutional determinants from such studies. There is a developing economies literature exploring FDI determinants, host FDI policy, institutions, and their reforms, and the effects of FDI on host factors such as employment, knowledge/technology transfer, and suppliers etc., described below.

Moran (1999) assessed the impact of 183 FDI projects in 30 countries during 15 years, and found that a majority of these projects (55 -75 %) had a positive impact on the host national income, although a minority of the projects clearly had a negative impact on the economic welfare of the host economies.

The results of the World Bank (1996) study suggest that several institutional changes have particularly enhanced FDI receipts to transition economies in terms of policies:

- Development of private-owned business in place of state-owned firms;
- Development of legal institutions.
- Domestic price liberalisation and the development of competition policy do not appear, to be significant in motivating FDI.
- The results are highly suggestive of the influence of institutional development on inward foreign investment.
- Foreign investors appear to react positively to government policy that facilitates both exploitation and growth of their own resources and capabilities.

Rugman and Verbecke (2001) consider that foreign investors and host governments have complementary interests with respect to some policy measures and institutional development, yet conflicting interests on other items. The choice of policies to deal with FDI is crucial, therefore, to ensure that the contribution of foreign firms is beneficial to host-country development. Efficient markets depend on supporting institutions that can provide the formal and informal rules of the game of a market economy, allowing lower

transaction and information costs and reducing uncertainty (North, 1990). FDI view institutions as an important aspect of the locational advantages of a potential host country. The specific features of formal institutions shape the incentives faced by private businesses, and consequently have been found to influence the extent of foreign direct investment (Bevan et al, 2004). A study by the World Bank Group (2013) presents some outcomes on whether incentives increase investment (see Appendix 3.4). As part of the economic determinants and FDI attracting policies this research includes this determinate with the questionnaire to seek its importance to the investors.

A number of studies have been done to answer the question 'Do BITs really work?' Salacuse and Sullivan, (2009) introduced an evaluation of bilateral investment treaties. BIT law has become the fundamental source of international law in the area of foreign investment. BITs had existed for centuries, but the primary purpose of these earlier agreements was to facilitate trade, rather than investment.

In terms of formal institutions or constrains; Buthe and Milner (2008) examined the effect of bilateral investment treaties (BITs) on inward foreign direct investment flows (FDI) into developing economies. They have argued that that BITs should be expected to boost inward FDI in general, not just bilateral FDI. They claimed that the statistical analyses have provided strong support for their argument. They found the predicted positive, statistically and substantively significant correlation between BITs and subsequent inward FDI into developing economies in a maximally comprehensive analysis of FDI flows into developing economies during the 1970 to 2000 period. This finding is robust to the inclusion of numerous control variables including measures of domestic policy choice, the use of several alternative estimation methods, and the exclusion of countries and even entire regions that have attracted large amounts of FDI in recent years (ibid).

Moreover, Neumayer and Spess (2005) provided an answer the question: Do developing counties that sign more BITs with developed countries receive more FDI inflows? There is some limited evidence that BITs function as substitutes for institutional quality.

The aforementioned overview of economic, political and international business issues led the researcher to pick some of the main FDI economic and institutional determinants and policies areas from the literature relevant to both the investor and public sectors in the case of Oman case (Table 3.2).

Economic determinants	Institutional determinants
Competition (in production, distribution); Deposits, loans, venture capital; Exchange Rates; FDI stocks (and their sectors; GDP (size of the economy); Growth of the economy; Incentives; Inflation; Infrastructure; Openness (trade);Taxation; Wages; Population	Company formation; patent registration; bond/share issue; Corruption; Cultural proximity; Democratic accountability (Transparency); Institutional quality; Law existence & enforcement (e.g. contractual, property rights, labour, bankruptcy); Stability; Availability of information; Country risk; Education; Government contract denunciation; Income disparities; Support for R&D & innovation; Multi/B (investment) Treaties

Table 3.2: Economic and Institutional Determinants are listed in alphabetic order. Researcher's creation based on the reviewed literature (Al-Maimani and Tsagdis, 2011)

Bearing in mind the above literature concerning the policy constructs to be involved, domestic investors, it was considered that the relevant policy constructs ought to be extended to the areas identified in Borrás and Tsagdis (2008, p.70) listed in (Table 3.3).

Polices attracting new foreign firms to locate in Oman (e.g. tax breaks, land provision)
Policies encouraging firms in Oman to locate in other Oman regions and/or to internationalise
Physical infrastructure development (especially: communication and transport, energy, environmental infrastructures)
Education and training policies
Research and technological development policies (collective production and acquisition of knowledge)
Information diffusion and accessibility for firms (databases, web-sites, information centres, all of them of general, non-customised nature)
Policies providing customised services to firms (e.g. environmental services, labelling, and participation in exhibitions, logistics, design or new production techniques).
Policies helping labour recruitment for firms
Policies for the establishment of firm networks in Oman
Polices for improving quality development in firms
Polices for start-ups and incubation of small firms
Policies for improving availability of venture or risk capital
Environmental policies

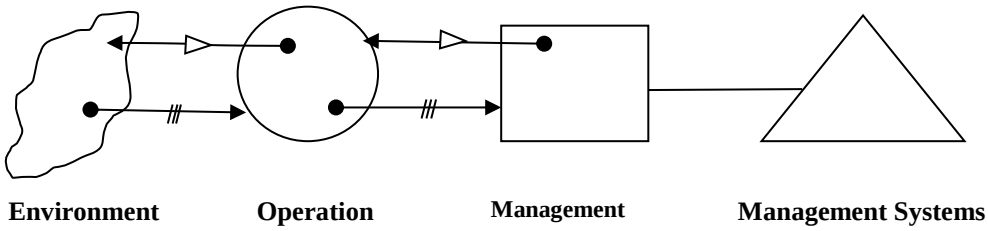
Table 3.3: Range of policy areas relevant to domestic and foreign direct investors. (Adapted from Borrás and Tsagdis, 2008, p. 250).

3.9 Technology Support to Knowledge Sharing

3.9.1 Management

Jackson (2003) reviewed management solutions such as; Scenario Planning, Benchmarking, Rightsizing, Value Chain Analysis, Continuous Improvement/Radical Change, Total Quality Management (TQM), Learning Organisations (LO), Balanced Scorecard; Customer Relationship Management (CRM). (Business) Process Re-engineering (BPR) or Re-engineering the Corporation', and Knowledge Management (KM), Integrated Management, Ecological Management' Human Resources Management, Organisational Change or Corporate transformation, Organisational Architecture' and the Virtual Corporation. He named these 'panaceas' as the 'latest

management fad' of the time, but Jackson thinks as managers facing increasing 'complexity', 'change' and 'diversity' these simple solutions fail because they are not holistic or creative enough. Christopher (2007) positioned the "Management" function in a viable business system as illustrated in (Fig. 3.3a and b). The fundamental problem of management; is the problem of 'complexity'; to know the answer we should go back to Ashby's law (Beer, 1981 p.5).



● Sensors that transducer information into the communications canals
▷ Amplifiers that increase variety
/// Filters that reduce varietv

Figure 3.3a: a viable business system drawn upon Christopher (2007) work.

It also can be illustrated as Figure (3.3b)

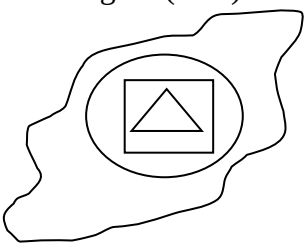


Figure 3.3b: A Business System embedded in Environment. Source: Christopher (2007) p.10.

3.9.2 Knowledge Management

The terms 'knowledge', 'Knowledge Management KM' and 'Knowledge Management Systems (KMS)' needs to be discussed as they appears in different contexts and can be approached from different perspectives. See the definitions and comparisons from different perspectives detailed in Appendix 3.5.

Government employee may also not realise that their experience would be valuable to others, (Martensson, 2000). Some other cultures still discourage the kind of open communication that is the foundation of effective collaboration, and such as employees are more reluctant to share what they know (Goman, 2002). Alavi and Leidner (2001) pointed out, that KM should deliver to-line growth, improve operations (and profit

margins in private sector) but have the KMS succeeded or failed to deliver. Davenport and Prusak (1998) added on top of those initiatives to build a knowledge infrastructure, a web of connections among people and to make knowledge visible and show its role.

Polanyi (1958) traced the tacit personal interactions which make possible the flow of communications. He wrote:

"Yet the mere sharing of intellectual passions directed towards no other persons establishes already a wide range of common values, which are continuous with interpersonal appreciations laid down by morality, custom and law. Moreover, such sharing constitutes an orthodoxy upholding certain intellectual and artistic standards, and as undertaking to engage in in the pursuits guided by them, which amounts in effect to a recognition of cultural obligations". (p. 212).

He mentioned that neurology is based on the assumption that the nervous system functioning automatically according to the known laws of physics and chemistry determines all the workings which we normally attribute to the mind and an individual. The study of psychology shows a parallel tendency towards reducing the subject matter to explicit relationships between measureable variables; relationships which could always be represented by the performances of a mechanical artefact. Technology always involves the application of some empirical knowledge and this knowledge may be part of natural science.

Polanyi (1958) also stated that the explicit knowledge is that which one can articulate, whereas tacit knowledge has not articulated. Tacit knowledge comprises all the personal, intuitive and context-dependent knowledge that allows one to perform competently within a given social context. Knowledge can be in/formal, or un/codified. Thus tacit knowledge can be found in the heads of employees/investors in this research domain, and the experience of stakeholders including the memories of the past experience. Explicit in contrast is the knowledge that comes in the form of books and documents, white papers, databases, and policy manuals, (Nonaka and Takeuchi, 1995).

3.9.3 Knowledge Sharing

Horizontality Knowledge sharing (KS) means sharing and interconnectivity, where knowledge will move within, and across, many organisations as partnering becomes essential to a government's ability to deliver services and integrated decision-making. Looking at formal organisational communication flows and structures is a useful way of beginning to understand the way in which barriers to or support for, information and knowledge sharing already exist (Milner, 2000; Sinclair, 2006).

This thesis, as described by the research objectives (e.g. institutional development and the evolution of cooperation and collaboration) in chapter one, is a project whose the nature tends to cross institutional and organisational boundaries (inter-organisational) and therefore impacts significantly on the human resources factor (knowledge) which means, in turn, that not only the technological factor (ICT systems) but also the organisation complexity factor has become a critical success factor of institutional development from which we need to develop the policymaking process in the public sector supported by private sector knowledge and experience. As most available knowledge on the subject comes from those who are in the private sector or academia and there is little or nothing from within the public sector itself, the public sector has believed that the best way for it to succeed in changing the way it operates is to try and emulate the privates sector, Sinclair (2006).

The "socio-technical" approach has enhanced the way we look at phenomena in this research, from organisational settings in which technology is implemented as a way to assist their members in achieving the mission and goals of government organisations. Coakes (2001) introduced the socio-technical perspective in which technology is only an enabler and the social aspects of managing knowledge become preeminent. This research thus looks at the human and technical sides of a KMS. A contrasting view can be realised, while some analysts believe that information technology (IT) is a key driver for KM, others disagree and believe that knowledge management is about people not technology, and to start from a computer perspective would ensure the failure of knowledge management (Soliman and Spooner, 2000).

The electronic system is an important component of this research study, as it plays and important role in the public and private interaction when it comes to the co-ordination and collaboration between the public and private sectors so to enhance the development of the socioeconomic and institutional environment.

3.9.4 Decision Support Systems

It has been proposed that Churchman's 'inquiring' systems serve as models for the development of 'inquiring organisations'. It is recommended that the Singerian organisational model, and what Mitroff and Linstone (1993) refer to as "Unbounded Systems Thinking" (UST), are adopted to provide a way for DSS research to begin addressing these more complex situations. Thus a new decision making paradigm, which encompasses UST is proposed, and its implications for DSS are considered. DSS

have tended to support the (Leibnizian) analytic-deductive and the (Lockean) inductive-consensual styles, what Mitroff and Linstone (1993) refer to as the "technical perspective". They argue that UST requires consideration not only of the technical perspective, but also broad organisational and personal perspectives, and both ethical and aesthetic issues. They argue that in future DSS should go well beyond support for Leibnizian and Lockean organisations, and provide support for decision-making in Kantian, Hegelian and especially Singerian organisational models. Leibnizian, Lockean, Hegelian and Singerian organisations are described, along with a debate of decision-making and knowledge management in each organisation by Churchman (1971).

Information systems and DSS successfully integrate computerisation activities and support management decision. MIS, DSS and KMS are three IT-based systems that were develop to help different management practices. This researcher argues that the concept of commercial knowledge is an important element for knowledge sharing (KS) in public and private sector collaboration. KS as per Davenport et al. (1998) is a knowledge repository, which is an attempt to accelerate and broaden the traditional KS that happens with the socialisation of newcomers. Employees can draw upon the experience of others in their pursuit of finding solutions to problems. It is also enables investors' experiences to shape the policymaking processes in the government, KS is the process through which tacit or explicit knowledge is communicated to other individuals. To enable KS in an organisation, there is often a need to find the individual or groups with the necessary skills and expertise that may be required in another part of the organisation (Geraint, 1998; Becerra-Fernandez et al, 2004).

This research delves into different technological support systems that consider the aspects of people, technology and process, and which constitute group networks, mainly knowledge-based systems and Management Information Systems (MIS) including; individual and group (I/GDSS). Organisations and their DSS must embrace procedures that can deal with the complexity they face, and go beyond the technical orientation.

Courtney (2001) whose work heavily relied on Mitroff and Linstone (1993) described decision-making and knowledge management issues in inquiring organisations and argued that a new paradigm for decision-making is needed, within previous DSS. This paradigm must address decision-making in more complex contexts than have been argued in the past by DSS researchers. DSS attempts to support semi-structured or non-structured decision-making tasks. Historically, there have been two main DSS types

developed: ‘data’ or ‘model oriented’. The original DSS concept proposed by Gorry and Scott Morton (1971) aimed to attack semi - and un-structured problems - with the computer dealing with the structured portion and human decision-makers dealing with the unstructured portion. Laudon and Laudon (1996), on other hand, reported the Egyptian Cabinet experiences with DSS, which commenced in 1985. During the 1990s, 150 people have been working full time to provide DSS services to the Cabinet on critical issues, through a bilingual (Arabic/English) system. They mentioned the *El* Sherif and *El* Sawy (1988) example of “tariff structure” to replace an inconsistent and complex structure that was thought to be impeding economic growth (see Appendix 3.6).

In Oman, Government web sites are maintained by the central information technology authority (ITA) and the IT departments of each government institution, which delivers online services for all of the governorates (Deakins et al, 2010). This strategy has given birth to the ‘Digital Oman’ initiative, which aims to enlist ICT in support of government services, bolster the business sector and enable members of the community to operate within a digital context. It also provides for the establishment of an integrated infrastructure so that top quality e-government services can be provided for the Omani public and business sectors; a further aim is the development of knowledge-based industries. Thus Knowledge Management (KM) in the public sector, based on the Internet, provides a powerful tool for reinventing local governments, and encourages transformation of the traditional bureaucratic paradigm, (which emphasises standardisation, departmentalisation and operational cost-efficiency) to the e-government paradigm, which emphasises coordinated network building, external collaboration and customer services (Ho, 2002; Espinosa and Al-Maimani, 2010).

3.10 A Systems Approach to Institutional Development

Structural-functional change, as opposed to the closed-systems perspectives of physics, considers the Fayol (1949) links between “structure” and “function”. A number of approaches that have attempted to resolve some of its difficulties for example: the hard/soft systems methodologies, systems dynamics, cybernetics, critical, systems heuristics, and postmodern systems thinking (Jackson, 2003). These all concern the structural actions and functional interrelationships within organisations. Selznick (1948) suggested that organisations (as systems), maintain themselves by means of five

essential imperatives, which are the mechanisms of a stable "organic system" and which can be applied by analogy to any organisation.

Grieves (2010, p.19) pointed out that the value of the structural-functional perspective lies in its ability to change the arrangement of tasks and procedures in relation to the customer or client's specification, and in its ability to look at an organisation as a control mechanism. He considers that organisations are "cooperative systems" with adaptive social structures, made up of interacting individuals, subgroups, and formal and informal relationships, and that they are contain variable aspects, such as "goals" linked to "needs". The biological sciences were seen as rescuing social science from the laws of traditional Newtonian physics, which saw everything as a closed system (Katz and Kahn, 1966). The open-systems model of Katz and Kahn showed in Fig. 3.4 define the relationship between its elements:

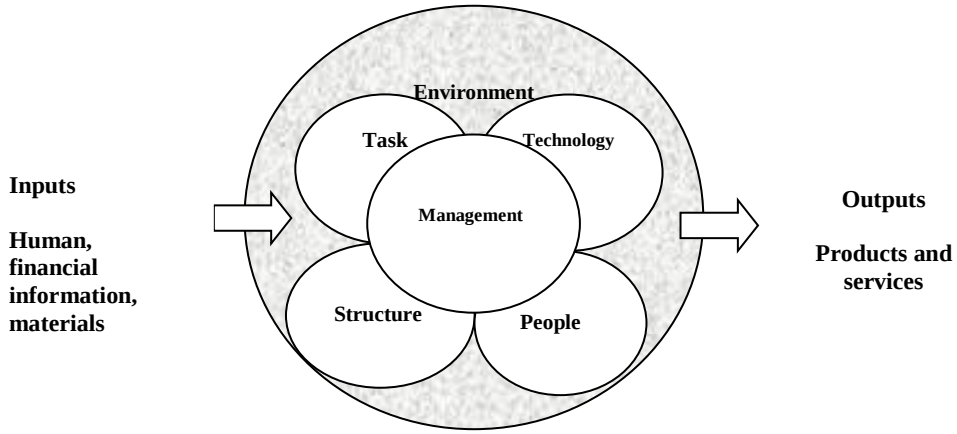


Figure 3.4: The Open-systems Model. Source: Katz and Kahn (1966) in Grieves 2010.

Stacey (2007 p. 35) argued that the new systems theories developed among three pathways over much the same period of time, a) General Systems Theory, Bertalanffy (1968) developed by biologists and economists. b) Cybernetic systems (Ashby, 1956; Beer, 1966, 1979, 1981; Wiener, 1948) developed by engineers concerned with adaption to the environment. c) Systems dynamics (Forrester, 1958, 1961, 1969; Goodwin, 1951; Philips 1950; Tustin, 1953) developed by engineers who turned their attention to economics and industrial management problems (with feedback loops).

3.10.1 Systems

Etymologically 'System' is a word that has a Greek root that means 'co-existence'. As defined by Jackson (2003) and Espejo and Reyes (2011), a "System" is a set of

interrelated parts that we experience as a whole. It is a complex whole the function of which depends both on its parts and the interactions between those parts. System language, associated with biology and control engineering, gave birth to systems thinking a trans-discipline studying systems in their own right in the 1940s and 1950s. Hoverstadt (2008 p. 308) defined a system as "a set of components or activities that interact and produce emergent properties". The nature of the connections can be as or more important than, the components themselves. Christopher (2007) explained that the term 'system' in system science, is not the system of everyday conversation.

Ashby's (1956, pp. 86-117) black box is shown in Fig. 3.5 (below). His law of Requisite Variety is that 'only variety can destroy variety', or that 'only variety can absorb variety' and has been explained by various authors (Beer, 1966; 1979; Espejo, 1989; Christopher, 2007; Hoverstadt 2008; Espinosa and Walker, 2011). Variety must be attenuated to the number of possible states that the controlling entity can handle. According to Beer (1984) organisational complexity is measured by variety which is defined as is defined by the number of possible states that a system can exhibit variety. Thus, variety is the number of distinguishable systemic states. Variety is a key concept in Beer's VSM. Effective organisation depends on proper management of complexity.

Figure 3.5: The concept of Black Box of Ashby

Christopher (2007) follows Beer and indicates that, 'Requisite Variety' in a controller is achieved in two ways by; 1) increasing (amplifying) control variety through self-control at all levels of recursion and making decisions at the operational level though enhanced autonomy. Thus as many more people through the organisation are given control of their own working environment, the variety in the control function is greatly increased. 2) reducing (attenuating) the variety in operations and in the environment which is to be controlled by a) first, selecting wisely what is important to the successful achievement of organisational goals, then b) selecting and monitoring useful measures of what is important. There are probabilistic systems (that can be complex, or very complex), where we know all the parts, but the behaviour of the parts will vary, as will the relationships among the parts and the interrelationships with other systems). A small or

large business is can be a very complex, probabilistic system, or deterministic, where we know all the parts, what they do, and their relationships with other parts, and we can fix it when it fails to work properly (ibid).

One of the main requirements in the specification of a system is its 'boundaries'. The biologists argue that the an organism's 'boundary' (see Fig. 3.6) splits the system from its environment, and to sustain itself in a steady state, the organism must carry out transactions across this boundary to and from its environment. The processes that maintain the steady state are referred to as 'homeostatic, an example being the self-regulating mechanism maintaining body temperature, despite environmental fluctuations (Jackson, 2003 pp. 3-5). Thus, understanding boundaries is critical in understanding systems, (Hoverstadt, 2008). Ulrich (2003) made major contributions to systems thinking concerning the establishment and drawing of boundaries, to decide how improvement is to be defined and what action should be taken. Ulrich has drawn 12 boundary questions in the mode of 'ought to be' such as; client, purpose of a system, measures of success (improvement), decision-makers power in his Critical Systems Heuristics, The VSM assists in boundary setting by offering a means to define the system in focus. Boundaries can be built for the analysis of interactions as well as cross-boundary coordination.

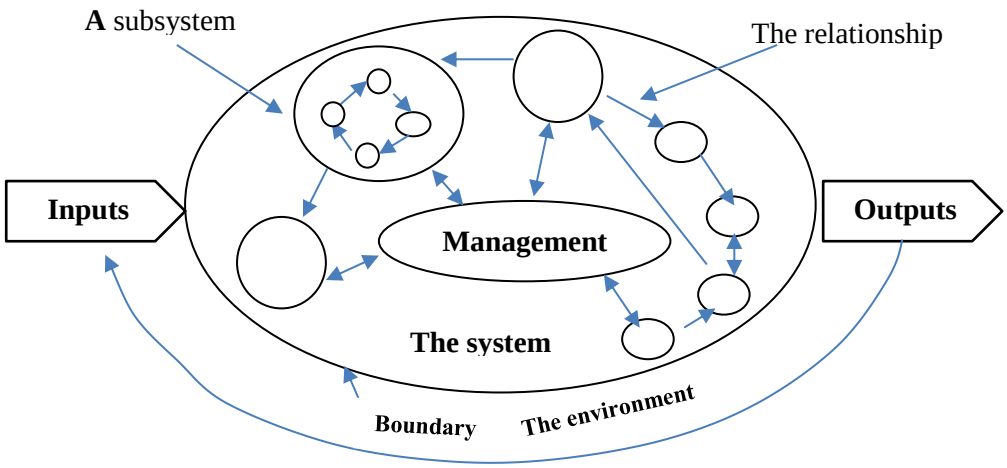


Figure 3.6: The biological system model adapted from Jackson (2003, p. 6)

3.10.2 Systems Thinking

Systems thinking was born out of von Bertalanffy's (1968) general systems theory in the 1950s, which led to the development of a wide range of theoretical positions and approaches to systems practice. Systems thinking is 'holistic' in character, addressing

issues such as context, structure and viability (Beer, 1985), and it is a process of reflection about the real world which use systems ideas. There is another definition derived from that of Checkland and Scholes (1990), it is a discipline for seeing the structures that underlie complex situations, and for discerning high from low leverage pints. It offers a language that begins by restructuring how we think.

Senge (2006), considered systems thinking as the 'fifth discipline' of the learning organisation, and a conceptual framework, a body of knowledge and tools that has been developed to make the full patterns clearer and to help us see how to change them effectively. Systems thinking integrates the following four disciplines, and keeps them from being separate latest organisation change fads. Senge (2006) explains these disciplines as follows:

1) The discipline of personal mastery: the discipline of continually clarify and deepening the 'personal vision' and energies of developing patience and of seeing reality objectively. This discipline fosters the personal motivation to continually learn how our actions affect our world.
2) The discipline of mental models: this dicipline deeply ingrained assumptions, generalisations, or even picture of images that influence how we understand the world and how we take action. Many insights into new markets or out-dated organisational practices fail to get put into practice because they conflict with tacit mental models.
3) The discipline of building shared vision: organisations manage to bind people together around a common identity. A company shared vision has revolved around the charisma of leader. The discipline of building the shared vision, a practice of sighting shared pictures of the future that foster genuine commitment and end enrolment rather than compliance.
4) The discipline of team learning: starting with 'dialogue' and 'thinking together' the capacity of members of a team to suspend assumptions and enter into genuine thinking together. In business, there are prominent examples where the intelligence of the team exceeds the intelligence of the individuals in the team, and where teams develop extraordinary capacities for coordinated action.

Checkland (1981) recognised similarities between the approaches of Organisational Research (OR) Systems Analysis (SA), and Systems Engineering (SE). He labelled this kind of systems work as 'hard systems thinking' (Reductionist thinking). These kinds of

practitioners are concerned with intervening in a system to define clear goals, identify problems and propose rational solutions. According to Jackson (2003) Checkland is considered the founder of Soft Systems Methodology (SSM) that differs from hard systems in the way systems are used. In hard system methodology, the observer or analyst perceives systems that are considered to exist in the external world, systems that can be modelled and improved. In SSM, the observer or analyst perceives complexity in the external world and organises their exploration as a learning system; thus, it is the process of enquiry that is systemic (Checkland, 1999).

Mingers and Brocklesby (1997) outlined some of the philosophical, cultural and cognitive feasibility issues that multi-methodology raises. They affirmed that in recent years, the number of methods, techniques and methodologies within the broad field of 'Management Science' including both Systems and OR have expanded. They mentioned that the main attempt at imposing some order is that Jackson and Keys (1984) through the vehicle of the 'system of systems methodology' (SOSM) and, subsequently, Flood and Jackson (1991) through 'total systems intervention' (TSI). Different methodologies are complementary, making different assumptions about the problem situation, and therefore it is necessary to make a choice as to which methodology is appropriate for a particular intervention.

Bulow (1989) cited in Chapman (2004, p. 74) wrote:

"*SSM is a methodology that aims to bring about improvement in areas of social concern by activating in the people involved in the situation a learning cycle which is ideally never ending. The learning takes place through the iterative process of using systems concepts to reflect upon and debate perceptions of the real world, taking action in the real world, and again reflecting on the happenings using systems concepts. The reflection and debate is structured by a number of systemic models. These are conceived of as holistic ideal types of certain aspects of the problem situation rather than accounts of it. It is taken as given that no objective and complete account of a problem situation can be provided*", (p.74)

This research therefore, will follow the learning cycle steps of Checkland's SSM. The rich picture technique will be used to delineate the concept of this research, and identify the relevant human activity systems, built root definitions and in general provide insight into the problem situation. These will be turned into conceptual models that are explicitly one-side images of reality expressing a particular world view (*Weltanschauung*)[15] (Jackson 2003).

[15] A German term for world view, Jackson (2003, p. 10).

It should be affirmed that the process pays attention to the factors of Espoo's TASCOI[16] mnemonic (Esejo and Reyes, 2011), excluding the environment factor from CATWOE[17]. This research will apply the research *status quo* situation, Checkland referred to systems as 'holons', (Checkland, 1982; Checkland and Scholes, 1990; Jackson, 2003), whereas Espejo sees that systems definition from 'holons' are mental constructs, ideas, hypotheses of wholes triggered by observations of the world, regardless of whether they have as referent closed networks of interacting people. In this sense holons are offered only as intellectual (epistemological) devices to think about the world. They are important to support people's conversations of possibilities (ibid).

The researcher argues that his contribution to knowledge involves an attempt to incorporate Beer's VSM into the SSM learning cycle within the suggested methodological framework which aims to provide materials for debate about possible change.

3.11 Complexity Theory

In the 1970s the chaos and complexity theory movement began to take shape. Complexity theory focuses on those aspects of organisational life that generate more anxiety to managers most of the time (Gleick, 1987). Stacey (2007) suggested that organisms could be more usefully understood as self-organising systems which are very different from mechanisms. The term 'complexity' in this study refers to important insights coming from complexity sciences, concerned with the essential uncertainty and unpredictability of a great many natural phenomena. Complexity comes from the interconnectedness of many different elements. Since this is theoretically immeasurable, in practice it means that the number of connections and distinctions that an observer subjectively recognises or needs to recognise is infinite. The complexity of an organisation is greater than that of management and the complexity of the environment is even greater (Hoverstadt 2008, p. 302). Jackson (2003) explained that by the time that the Santa Fe Institute was set up, the original term 'chaos theory' was giving way to the conception of 'complexity theory'. Complexity theory, is represented as being applicable to the behaviour over time of complex social as well as natural systems. Jackson also pointed out that social systems are not just Complex Adaptive Systems (CAS) bound by the fixed rules of interaction of their parts, rather they are complex

[16] Espejo' mnemonic of TASCOI (Transformation, Actors, Suppliers, Customers, Owners, Intervention).
[17] A mnemonic used by Checkland for (Customers, Actors, Transformation process, World view, Owners and Environmental constraints).

evolving systems that can change the rules of their development as they evolve over time.The 'Holistic' and 'Complexity' approaches that influence our thinking in the topics of complex human social systems are illustrated in Espinosa and Walker, (2001) see Appendix 3.7. Thomson (1967, p. 283) pointed out that a complex organisation is a set of interdependent parts which together make up the whole because each contribute something and receive something from a whole, which in turn is interdependent on its wider environment (ibid).

The literature shows that there is no one theory of complexity but many paradigms involving complex systems, complexity theory and systems theory. Organisations and their environment are characterised by nonlinear feedback loops, which make them sensitive to small differences in initial conditions and ensure that their behaviour is unpredictable. One example as per Gleick (1987) involves Edward Lorenz a meteorologist who worked on weather forecasting on a computer using 12 equations, and three rather than six decimal points. He discovered that a tiny change in a complex system's initial state can alter long-term behaviour very significantly; this became known as the "butterfly effect". He suggested that a single flap of a butterfly's wings today might, over time, alter the weather system to such an extent that it could lead to a storm somewhere else in the world (Jackson, 2003). Traditional hierarchy works in (silos of excellence), while in complexity organisation the nonlinear approach is used such as that shown in the following diagram (Fig. 3.7):

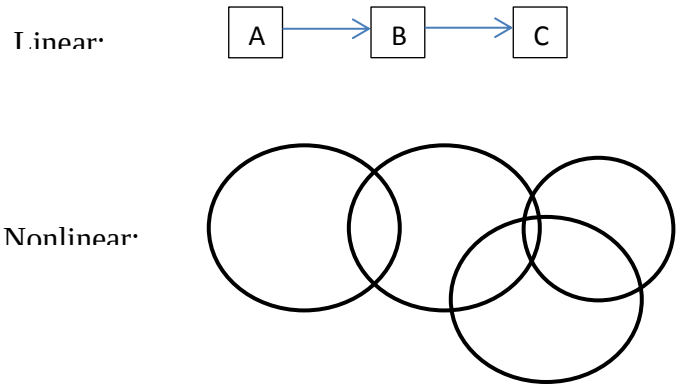


Figure 3.7: Linear and nonlinear Structure (from the literature

As discussed earlier, policy processes and institutional development is extremely complex process, as it involves multiple actors and agents (government organisations and institution, and investors) with different objectives and resources over varying periods of time. As the literature review shows, hierarchical top-down command and control practices have become common practice with the embedding of mechanistic and

reductionist thinking (which assumes linear cause and effect relationships) in current methods in the fields of public sector, political economy, policy and decision-making development (Capra, 2003; Chapman, 2004). Institutions reduce uncertainty by providing structure to everyday life, they are a guide to human interaction and know-how to perform these interactions (North, 1990). Based on Stacey's diagram (Fig 3.8); (Stacey 2002), Geyer (2012)[18] explained that government sector policy/decision making can be divided into five zones.

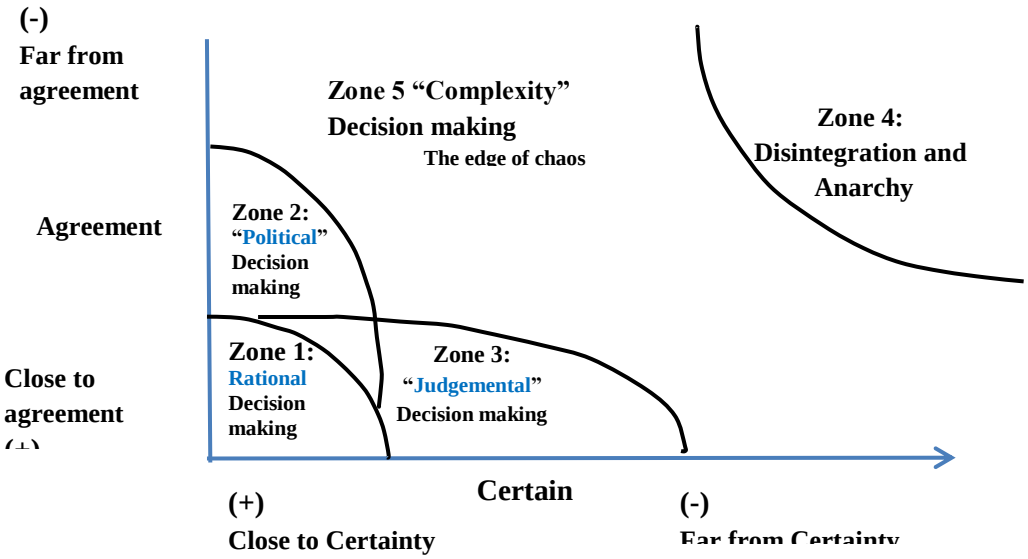


Figure 3.8: Stacey diagram of the complexity arena as explained by Geyer, 2012

The vertical axis of agreement shows political agreement (from high to low levels of agreement) and other axis of certainty (from high to low levels of certainty).

Zone 1 is the zone of 'order' or evidence-based policy/decision making, where everybody agrees what the problem is, and experts know how to solve it, (the home of traditional policy/decision making). Zone 2 is an area of disagreement where we begin to talk about 'political decision-making'; experts know how to solve the problems but different groups want different things. Zone 3 this is an area where everyone agrees what the problem is, but the difficulty is, the experts don't know how to get there, the experts becomes less and less certain and we have 'a judgemental policy/decision making' area where experts try to find a consensus. Zone 4 combines the high level of uncertainty and low level of agreement winding up into an area of disorder or chaos; different actors want different things and different strategy to solve the policy problem, incremental, small strategy and constant adjusting is the best they can possibly do. Zone

[18] Robert Geyer's video explaining the Stacey diagram: http://vimeo.com/25979052

5 is the area between zones; 1, 2 and 3 on the one hand, and 4 on the other hand it is the zone of complexity where elements of judgemental policy/decision making are combined with elements of political policy/decision making, bargaining, consensus building etc., and a whole range of strategies. The fundamental problem is that everything should be dragged into Zone 1- the golden zone of policy. Connecting this issue to the policy/decision making in institutional policymaking, there is a multiplicity of agents involved in decisions about the investment. The recent institutional developments and the remaining needs for further improvements show that the problem addressed in this thesis is one of high complexity. The thesis justified the choice of a systemic approach using SSM and VSM (Fig. 3.9) to model and analyse the whole situation of the public and private collaboration in policy/decision making for investment and to decide what should be improved.

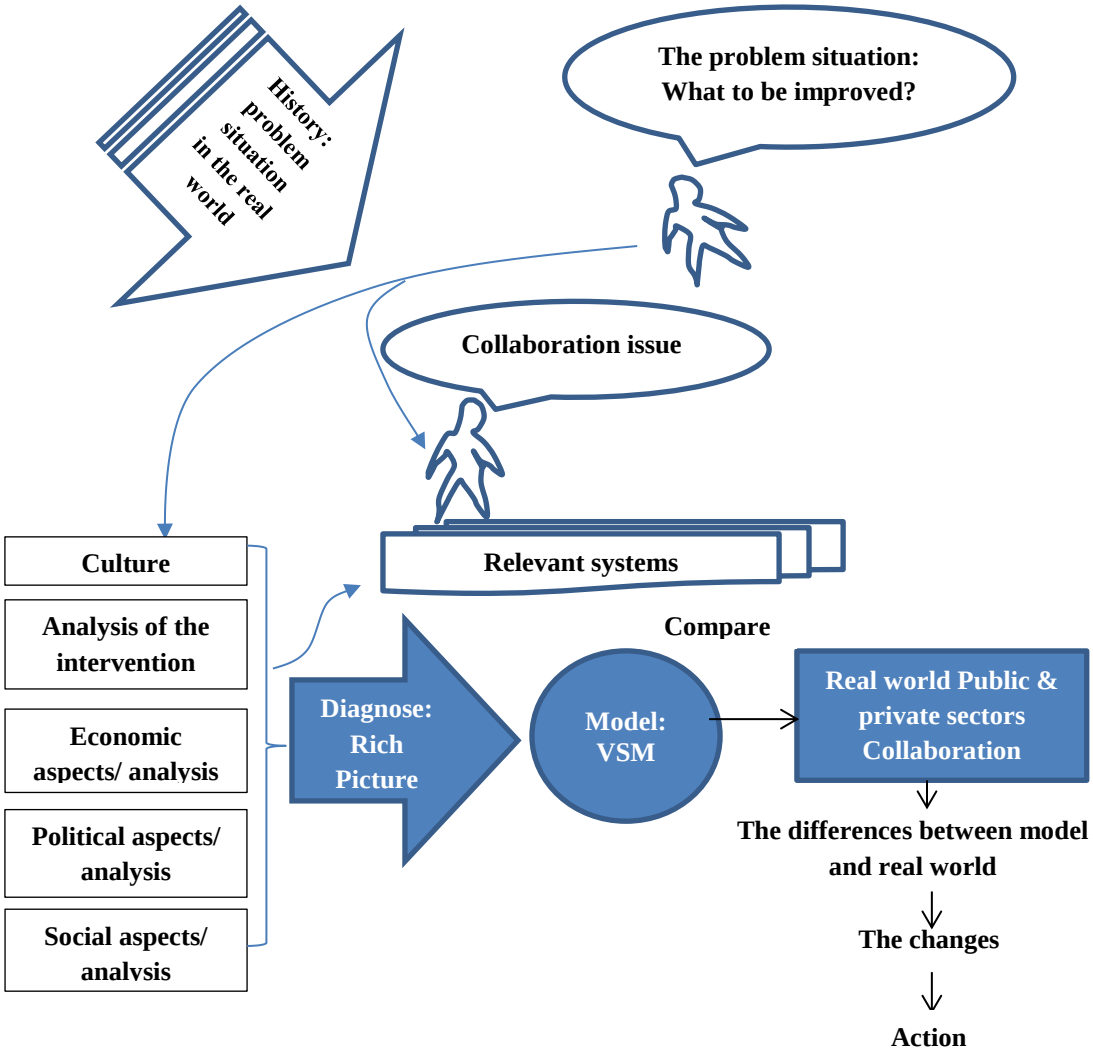


Figure 3.9: An Outline of the Process of Soft Systems Methodology. Based on Checkland and Scholes, (1990).

3.12 Organisational Cybernetics and the Viable System Model

3.12.1 Organisational Cybernetics

The birth of cybernetics is generally accepted to be in (1948, 1961) when Wiener wrote the original book of that name. He wrote:

"*We have decided to call the entire field of control and communication theory, whether in the machine or in the animal, by the name Cybernetics which we form from the Greek Kybernetes or steersman*" (1961: p. 11).

Beer (1985) also confirmed that Norbert Wiener, was one of the founding fathers of cybernetics, but Beer prefers the shorter definition that cybernetics as 'the science of effective organisation'. Beer also wrote:

"When people refer to the firm, or any other institutions, as viable they are often referring to economic viability" (1985: p. x)*...An organisation is viable if it can survive in a particular sort of environment"* (1985: p. 1).

This research could benefit from the interrelation of the complexity theory, systems thinking and cybernetics can be illustrated in Fig. 3.10a where cybernetics seen as part of system science and they all interference and being part of each other.

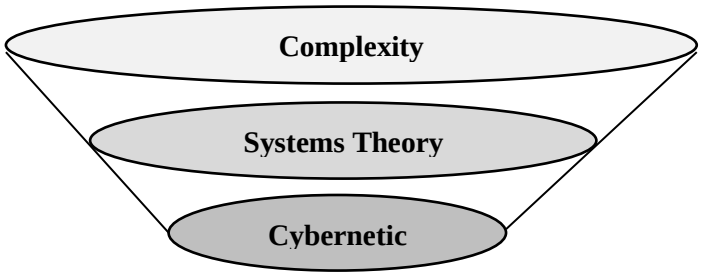


Figure 3.10a: Interrelation of the complexity and systems thinking and cybernetic

However, this diagram could be viewed from the top where the systems theory is nested within the general field of complexity studies and cybernetics fits within the field of Systems Theory Complexity theory is, like Systems theory, is part of the wider study of Complexity. Therefore, the nested research groups could be seen as explained in Fig 3.10b. Cybernetics is also mentioned by Hoverstadt (2008) as an approach to understanding 'organising' that models organisations as systems with multiple feedback loops. Thus, it provides an alternative approach to viewing organisations as just collections of individuals or as machines.

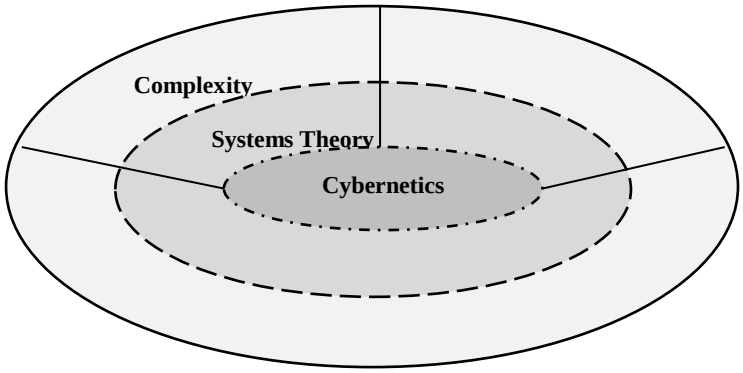


Figure 3.10b: Nested Interrelation of the Complexity and Systems Theory and Cybernetic

3.12.2 The Viable System Model (VSM) Methodology

Beer (1985) invented the VSM which, through the literature has been intensively described and explained. Organisational cybernetics uses a cybernetic model the VSM, to try to manage issues of complexity and turbulence that are beyond the capacity of hard systems approaches to handle. Complexity theory is often associated with unpredictability and with the study of disorders. There have been many attempts to make use of the ideas involved in systems thinking to make progress in different areas, with varying degrees of success, many of the systems methods and their application have been reviewed comprehensively by Jackson (2003), Espejo (2006) and others.

Viable Systems are made up of viable systems that are themselves made of viable Systems, they are in recursive levels or as Hoverstadt (2008) terms them ‘Fractal levels. He defined the fractal as ‘a type of structure in which a set of design rules are replicated in systems, and sub-systems. So the VSM is a fractal model with the same generic structure at all levels. Fractals have the capacity to build very complex and variable structures from a simple set of rules (ibid).

Beer considered that an organisation can be designed following the basic criteria that emerge from neuro-physiological networks; the following figure (3.11) illustrates the human nervous system, in such a way as to explain how it provided the inspiration for the VSM. The human neuro-physiological system includes regulating mechanisms to maintain the internal stability and to direct conscious movement of the human body. In the first place, the organs and physiological systems of the human body rely on sharing information to detect external change and activate their own self-regulation; this leads each of them to maintain internal stability. Secondly, the human brain and the sensory

organs detect environmental perturbations, and react to handle crises, direct the movement of the body, and integrate local activity into an organic[19] balance. Self-regulation and conscious adaptation are the essential abilities of human neuro-physiological systems for maintaining an effective organisation. According to Beer, a viable system comprises five systems[20] inspired by the nervous system, in acting at two dimensions: The Systems S1-S3 perform autonomic management to achieve predefined objectives. The Systems S4-S5, perform conscious adaptation to environmental challenges; they are the strategic function of management.

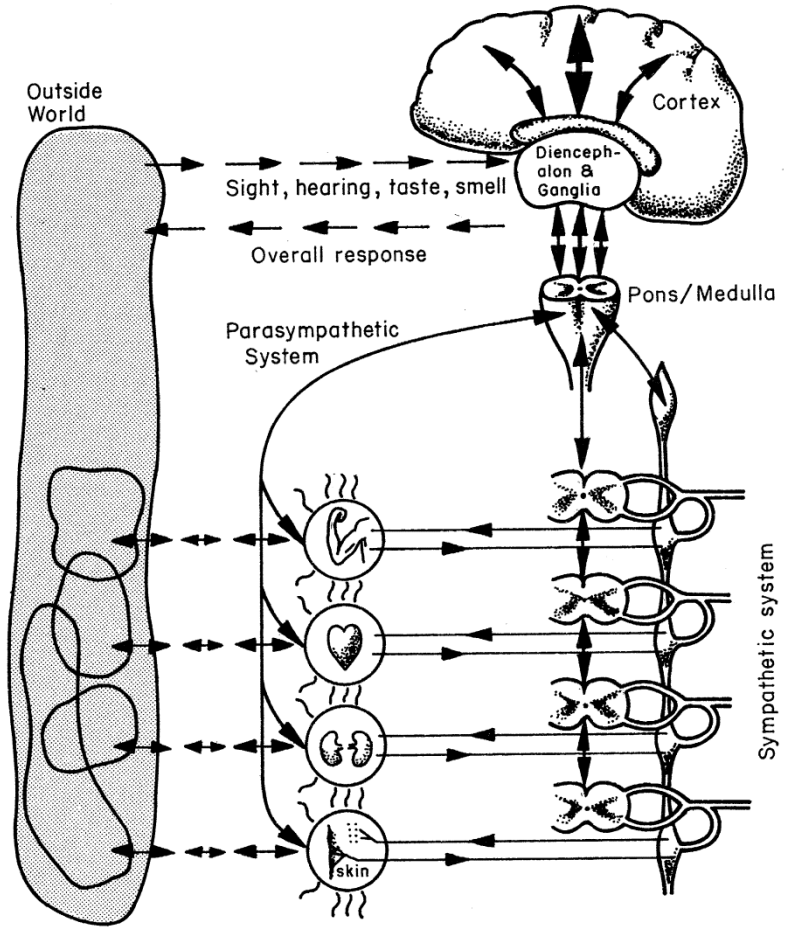


Figure 3.11: Neuro -physiological system/VSM, adopted from Espinosa and Walker (2011: Fig 2.3 p. 42).

[19] The researcher is planning to consider the public policymaking process institutions as organic viable system to a collaborative public-private process from Beer's perspective (1981; 1985), which intends to survive and prosper.

[20] [20] Systems 1 to 5 will be abbreviated in this thesis as S1 to S5. In plural they will appears as S1s to S5s respectively.

All parts must work together for an effective organisation. The meta-system consists of S2, S3, 3*, S4 and S5, and provide the meta-systemic language. Beer's VSM can be summarised as follows:

System 1: 'Muscles, organs: operations and primary activities' that delivering value to the stakeholders, differentiated from support and management activities, Systems 1 are designed and operated as viable systems. The given name is 'operation' or 'local management'. This research considers the S1 is the public institutions' manage and regulate economic sectors that fulfil these criteria in national and industrial level. They are autonomous regarding day-to-day decision-making and use self-regulation to co-evolve with their environmental niche. Stakeholder: literally an individual or group that has a stake in the organisation that is structurally coupled to the organisation.

System 1 is responsible for producing the products or services of the organisation. As the VSM is a recursive model, then each of the S1 is itself a viable system and should have own sub-systems (S2-S5). It could therefor survive on its own. In management vocabulary, this means a division has the autonomy and ability to determine those actions more conductive to keep itself alive.

System 2:'The sympathetic nervous system', whose function is to stabilise the activity of muscles and organs: coordination and conflict resolution. The name given to S2 is 'coordination', or 'conflict resolution' but more accurately, as defined by Beer 'anti oscillatory'. It is an organisational mechanism that prevents operational activities from destabilizing one another, where conflicts of interest occur. The implication of this system is, organisational performance can usually be increased and management workload reduced by improving coordination. S2 works with the self-interested elements of S1 and ensures they act as a coherent, coordinated mutually supportive operation, which is significantly more effective than the same units working in isolation. S2 employs techniques such as shared language. In the case of this research a KMS is the information tool and technological standards and communication protocol).

Espinosa and Walker (2011), described S2's role as to maintain stability, it has to oversee the entire complex, interacting cluster of S1 and attempt to keep everything running smoothly and efficiently. This system coordinates with S1, (the primary activities) so it's role involves any process which deals with conflict of interest by damping oscillations either in advance by using techniques like a timetable or after the event by dealing with an unforeseen oscillation.

System 3: ‘Base brain. Pons and medulla’; provides internal regulation, and creates synergy by encouraging collaboration between the S1s. S3 is: responsible (with system 1 and 2) for the ‘inside and now’ or ‘here and now’, of the viable system. The given name to this system is varies in the literature: it is sometimes called ‘control’ referring to its role regulating the operational units, or ‘cohesion; due to its role providing coherence to the operation. Beer referred to S3 as ‘synergy’ and stated ‘its role is fundamentally synergistic’ (Beer 1979 p. 207). S3 uses a technique called the resource bargain) allocation of financial, physical, technological, resources) to negotiate an agreement with each S1, this makes sure that the operational levels are in agreement with the upper strategic level, and the criteria for decision making at operational levels are in agreement with strategic criteria from upper organisation levels. The resource bargaining also enables S3 to create the synergies between the S1. S3 is also responsible for enforcing legal and corporate law and norms, and for the accountability of all S1. The following diagram (3.12) shows the S3 interaction with S1.

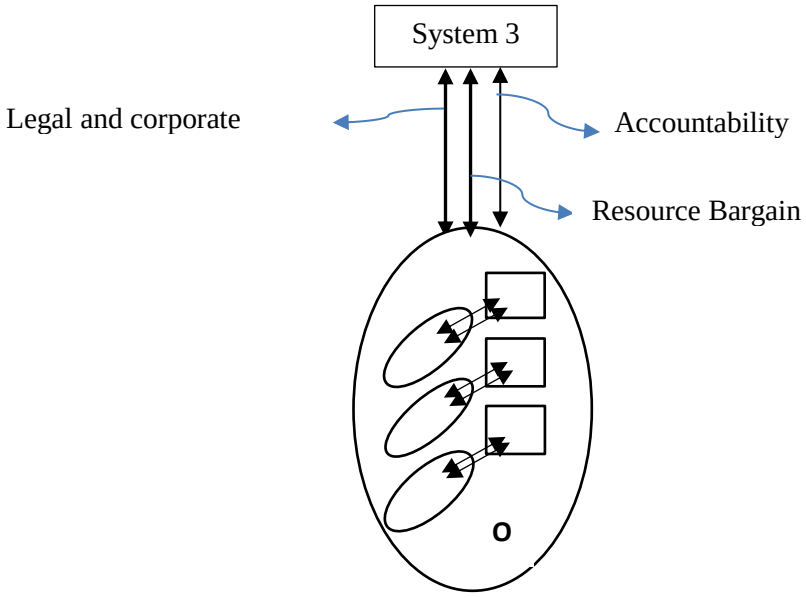


Figure 3.12: System 3 adapted from Espinosa and Walker work (2011)

System 3*: Non-formal mechanism for collecting information directly from the operational level, this provides extra information to help S3 to oversee, monitor and regulate the internal of the organisation. System 3 involves all the communication channels that communicate general and operational management decisions, through which the operational elements can be directed. S3* need to know how well each of the Systems 1 manages to be in control of its own task in order to provide effectively the required services and connect them properly into an effective network.

S3/S4: The result of this analysis is to offer recommendations about any adjustments required to improve the variety of either S3 or S4, and therefore the balance between them. Another recommended analysis of the adaptation mechanism is to assess the quality of S4 in scanning the environment, and the strength of communications between the S4 of the whole organisations and its local S4s (i.e. S4s inside each of its S1s). It is important to make sure that local creativity is feeding the organisational S4 and vice versa. In addition, the appropriateness of the variety operators connecting together S5 (policy function), S3 (control) and S4 for the purposes of this research are a subject of study. If, for instance, the S5 policy function has no appropriately developed variety attenuators for filtering the complexity coming from S3 or S4, analysts should recommend at this stage the design of appropriate attenuators or amplifiers. Most organisations use nowadays some sort of performance management system (e.g. Balance Scorecard, Key Performance Indicators) to monitor organisational performance and support executive decisions (e.g. policy, strategy formulation, resource distributions).

System 4: 'Diencephalon and input form senses'; environmental scanning and forward planning and adaptation: This system gathers information from both the external environment, and from the internal environment (via S3). It creates strategies within the context of both S5 policies and S3 information on the capacity of the operation. It is sometimes named as 'Intelligence or development management' by practitioners. This system focuses outside on the world and futures strategic direction, based on both this external information (threats and opportunity) and the internal information (capacity of operation). It works on environment scanning (external environment with inputs from the inside environment (through S3), and forward planning and adaptation. S4 is concerned with novelty, adaptation to threats and opportunities and future strategic direction. After ensuring a stable and optimised set of operational units (S1), and S2, S3- the 'inside and now'), the viable system needs S4 'outside and then', to ensure it can survive in a changing environment. Thus, S4 comes up with plans to adapt to the new circumstances, and therefore, it insures long term viability. In case of this research S4 is about institutional development and strategic planning.

S4/S5: The Systems S4-S5, perform conscious adaptation to environmental challenges; they are the strategic function of management. The term adaptation; refers to the interactions within the meta-system elements (i.e. between S2, S3, S4 and S5) when

making core political, strategic and tactical decisions in the context of the external environment. It should include all the councils, committees, meetings, forums or any other schemes where information coming from S4 and S3 are brought into consideration for policy or strategy making (S5). Once identified, one should analyse if there are any existing concerns, about the quality of the conversations between decision makers, the availability and quality of relevant information to make decisions, and the average quality of the decisions made.

System 5: 'The cortex'; Higher brain functions: organisational identity and ultimate control S5 is responsible for the organisational closure, identity and ethos. The given name for this system is usually 'Policy' of 'Identity'. It oversees the interaction between the S3 and S4 homeostatic which must operates with requisite variety and decides on robust, creative and feasible policies. This system ideally, represents the views of all the stakeholders.

Beer, 1985, defines 'Homeostasis' as stability of a system's internal environment, enabling the system to cope with an unpredictable external environment. S5 must insure that every individual and group is working within policy constraints. Identity; defined by what the organisation does by understanding its purpose or by understanding its structural coupling (its relationships). So identity is important in understanding the organisation's strategic risks and to provide a context for strategy. The implication of this definition is that one can define organisational identity by understanding the nature of the organisation's relationships with its stakeholders. System 5's job is to make sure that everyone in the organisation is pulling in the same direction. S5 is for policies and strategic visions a sponge soaking any remaining variety not dealt with by other systems - and deals with *algedonics* (early warning pain/pleasure alarm signs that requires immediate attention). S5 provides logic closure to the viable system. It also monitors the S3/S4 homeostasis and allocates resources to S3 and S4 to ensure they are well balanced.

Integrating knowledge capability into a task means that the organisation must possess more variety to handle management complexity (Leonard, 2000; Yolles, 2000). The form of variety is information, therefore in addition to structural considerations; the effectiveness of information flows must also be considered (Yang and Yin, 2007).

The function of knowledge within an organisation includes:

- To governs internal stability (S2 and S3)
- Alignment with environment competitiveness (S4)
- Pursuing future organisational development (S5)

The relationship between the VSM and KM as explained by Yang and Yen, (2007) in the follows (Table 3.4), (more clarification is added by the researcher):

VSM System	Name	Function	Analogy to human nervous system	Knowledge level
S 5	Policy (Beer, Espejo). (Identity)	Define the future development of organisation (Provides closure, Defines and enforces vision and values)	Consciousness adaptation	Inter-organisation organisation
S 4	Anti-oscillatory (Beer) Intelligence (Espejo), Development Hoverstadt.	Define the status in competitive industry. Alignment with environment development Environmental scanning. (Ensures adaptation to environmental threats and opportunities. Research and Development)		Inter-organisation organisation
S 3	Synergy (Beer) Control or Cohesion the term of (Espejo, 2011)	Govern the stability of the internal environment of the organisations Responsible for the internal resource allocation communication gateway between System 4 and Systems 1 (Internal regulation Synergy. Legal and corporate requirements)	 Autonomous management	Organisation
S 2	Anti-oscillatory (Beer). Co-ordination (Espejo)	Local regulatory between divisions Anti-oscillation between divisions (Conflict resolution, Damping-oscillations between divisions Stability Harmonisation)		Group
S1	Implementation	Producer of organisation self-regulation Pursue the predefined objectives to maintain internal environment's steady state (to do the work which provides products or services in line with the vision and values from System 5)		Individual

Table 3.4: functions of a viable organisation and Knowledge Management levels (Yang and Yen, 2007)

Although VSM is one of the strongest models of effective organisational cybernetic performance, the literature shows a number of critical views, Jackson, (1989), elucidated that Beer's work receives a high esteem in the operational research and managerial science community, where it is regarded as the most substantial, creative

contribution in the whole literature of the discipline. However, in organisation theory his work receives little serous attention: many practitioners can find no circumstances in which they could implement the VSM effectively. Beer faced criticism from Ulrich's arguments concerning the VSM and its application in Chile (Jackson, 1989).

However, a few years later, Jackson admitted that organisational cybernetics, as embodied in the VSM, offers a model of great generality that can be applied to all types of system and organisation, and to systems at different levels in the same enterprise. He argued that the VSM integrates the findings of around fifty years of work in the academic discipline of organisation theory and it goes beyond organisation theory by incorporating those findings in an applicable management tool that can be used to recommend very specific improvements in the design and functioning of organisations. The model is insightful in the way it treats organisation and environment relations (Jackson, 2003).

The suggestion is to attempt to develop frameworks and make recommendations as to how policymaking processes in Oman five non-hydrocarbon sectors could be formulate to make suitable transformation of these sectors to embrace a viable and nonlinear structure, where the system in focus exhibits collaboration governance for more effective policy structures and ensures joint working and joined up thinking. This will be elaborated in the next chapters.

3.13 An elaboration on the literature gap

This section elaborate the literature gap mentioned in chapter one; the VSM has been used with national level that was ambitiously implemented by President Allende in Chile in 1971-1973 to regulate the whole economy of that country (Beer, 1981. 2nd part). Beer and a large team modelled the Chilean economy and developed a real time performance management system, pioneering cybernetic practice in public policy and economic development.

More recently, Angela Espinosa applied VSM projects in Colombia to create an eco-regional approach to sustainable development in the Colombian national environment system the so called SINA consisting of the Ministry of Environment, a set of regional environment corporations (CARs), and a number of environmental research institutes, the main challenge was the lack of coordination experienced at the level of the

ecosystem and a failure to follow through on the development of a National Environmental Information Systems (NEIS) (Espinosa, 2002 in Jackson, 2003).

Espinosa also leaded other projects to use the VSM at the national level in Colombia: for strategic information management at the President's Office (Espinosa, 1995); to redesign the National Auditing Office (Espinosa, 1998, Espejo & Reyes (2011)); to redesign the national school system (Espinosa & Jackson, 2002); and to monitor the impact of the national program to fight poverty (Espinosa, 1997; 2006).

VSM also used with Firms; more recent systems shows that there have been many other studies around the world, where the VSM has been applied to corporate and business firm's performance. The VSM used as a diagnostic tool in a British company manufacturing done by Espejo in 1978 (Espejo and Harnden, 1989) to diagnose general problems such as how apt is the organisation in reflecting and deciding about its policy. Britton and McCallion (1989) applied the VSM as the basis to formulate government policy on vocational training in New Zealand by diagnosing organisational deficiencies in the trade-training network. VSM has been introduced (in a paper and packaging company with around 8000 employees) in five countries as a consistent tool to develop organisational competence especially to promote decentralisation and increase the conscious flow of information, see Holmberg (1989). Espejo and Reyes (2011) also introduced VSM in an airline company to unfold and model the transformation's complexity. There are many other examples in corporate and business field. Also the VSM applied by Leonard in 1987 (Leonard, 1989), to examine the place of the television station in commercial broadcasting in the United States, this application studded recursive relationships include ownership, network, affiliation, government regulation. Foss (1989) described an application of the VSM in organisation of a bee hive or "fortress factory", (further cybernetics literature will be explained in literature review chapter).

Through systems practice, the researcher found that the interaction means between private and public sector to facilitate the public and the private sector organisations and institutions collaboration has not tackled in current systems literature. This will be elaborated in next chapters combining the literature of institutionalism (Selznick, 1949) and institutional economics (Williamson, 1985; North, 1990) and policymaking (Sabatier, 2007).

It is therefore, while the VSM has been applied to national government and to corporate and business firms' performance. There are few studies where the VSM has been used to support policy in the public and the private sectors simultaneously. This is a major gap in the systems literature. There is a somewhat corresponding gap in traditional institutional development literature, concerning public policymaking and institutional development (ID) to facilitate collaboration between the public and the private sector organisations and institutions.

Both gaps promoted the development of this thesis: it aims to make an original contribution in the field of ID, regarding the necessary and sufficient conditions for enhancing sector-specific collaboration, using investment policy formulation in economic growth at strategic and tactical levels, in the context of a developing economy. This is to be tested in the context of Oman in particular.

In addition; Jackson (2003) argued critically, that although the VSM offers a scientific justification for empowerment and democracy in organisations, it does not explain how participation and democracy can actually be arranged. This research tries to answer this criticism by exploring issues of power and co-optation in new ways not considered in the original VSM theory. This thesis attempts to use both concepts as interaction between Systems 1 and its Subsystems within VSM.

Looking for appropriate ways of filling these significant gaps became the main driver for this study. It was found that while current policies support public and private sectors collaboration in theory, on the ground it appears that it is not generally happening as expected. In particular, when it comes to sharing knowledge and experience of the private sector to support public sector's policies, tacit knowledge and experience originating from investors and businessmen/women is rarely considered in public policymaking, where it could be effectively utilised.

3.14 Conclusion

The purpose of this chapter is to clarify through a literature review the theoretical and empirical underpinning for this research. According to the conceptual framework which involved different disciplines perspectives and lenses, this research subsequently will synthesise in the next chapter into a coherent theoretical framework for institutions development.

Central to this framework is the holistic approach and the subsequent identification of Checkland's SSM and Beer's VSM's as appropriate tools. The five VSM's Systems are policy located in S5, research, development and intelligence in S4 and operational overview and synergy in S3. Coordination in order to avoid conflicts of interest is in S2 while the operational units are the local management of non-hydrocarbon sectors (public institutions) comprise S1. The use of the necessary tools through knowledge management and technology support (such as GDSS), was identified. Collaboration and Co-optation between the Systems 1 (public institutions and private sector associations), were identified as homeostatic functions fundamental to the way the VSM models effective organisation. Jackson's criticism (about participation and democracy) can be addressed through the methods developed in this thesis to articulate public and private sector collaboration and through employing the co-optation concept within the VSM as another complementary gap in the literature which needs to be filled.

The systems approach, complexity and cybernetics along with policy and organisational theories are highlighted as having particular relevance to this thesis. Finally, filling the gap in the literature that is identified - the use of VSM in public and private sectors simultaneously is clarified. In the following chapter the elucidated constructs will be combined to develop the methodology for this research.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

This chapter presents the philosophical aspects, approaches, strategy, and methods to be used to address the research problem. The research design specifies a number of activities and draws boundaries to enable the researcher to channel his thoughts in specific directions anticipating potential problems during the implementation phase. This is followed by the development of a systemic methodological framework. The final one is devoted to data collection sampling and fieldwork characteristics.

The researcher will use the following diagram (Fig. 4.1) to structure the discussion of this research.

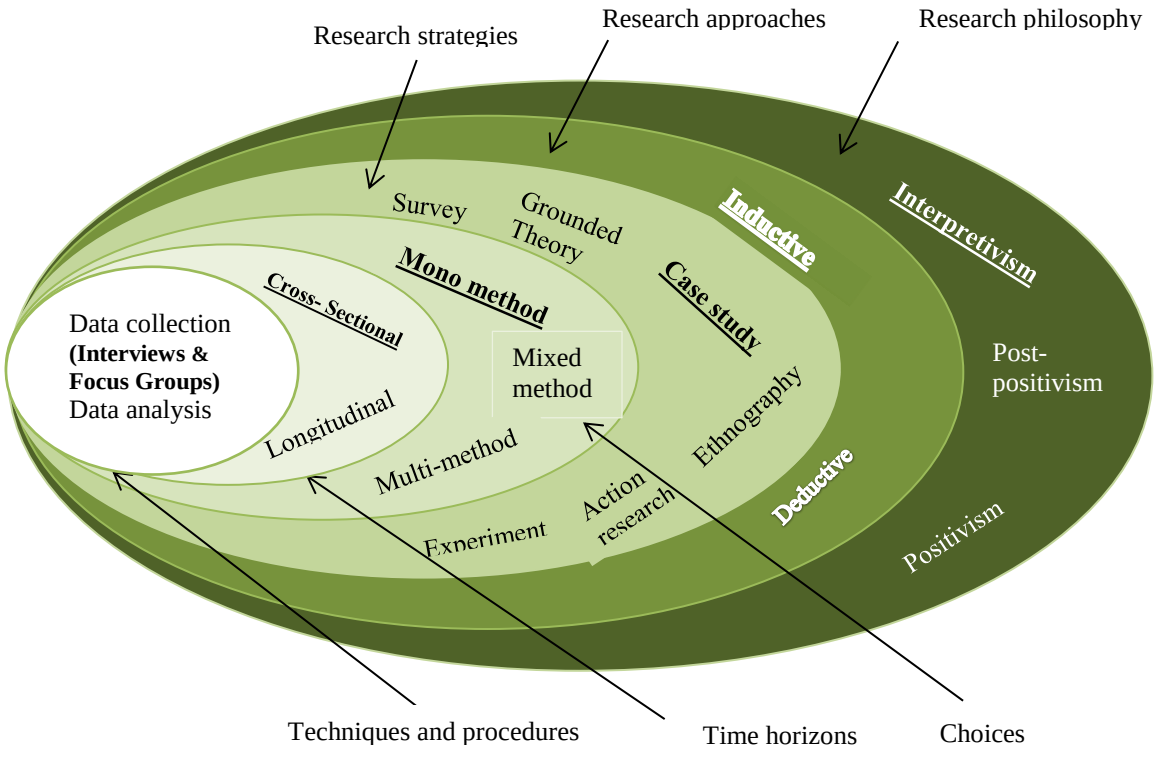


Figure 4.1: The Research 'Onion': A highlight on the thesis methodology.
Source: Saunders et al. (2009, p. 108)

4.2 Research Philosophy

Following Lincoln and Guba (1990) and Ponterotto (2002, 2005), a summary of philosophical anchors of ontology, epistemology, axiology, rhetorical structure and methodology, gained through the literature review is presented in Appendix 4.1. The methodology will commence with Interpretivism research philosophy compared with some particular philosophical aspects.

4.2.1 Interpretivism

An interpretivist philosophical approach was found to be the most suitable to accommodate the purposes and aims of this thesis. Complexity such as that exhibited by institutional and organisational development processes, would not be easy to accommodate within a non-interpretivist concept or a paradigm where reductionism is prevailing. As discussed previously, Denzin (2011) introduced that any successful institutional and organisational development must encompass autonomy, democracy and shared decision-making, all involving human action and consequently differing viewpoints and world-views (*Weltanschauungen*). Philosophy is an intellectual activity, since it addresses a wide range of interlinked questions about the nature of understanding, logic, language and causality many of which occur in various other sciences (Scott and Marshall 2005).

Essentially, interpretivists hold that reality is constructed in the individual mind, rather than it being an externally singular entity (Hansen, 2004). The position adopts a "hermeneutical approach", which maintains that meaning is hidden and must be brought to the surface through deep reflection, (see Sciarra, 1999). This reflection can be motivated by the interactive researcher-participant dialogue (this research strategy). Thus a distinguishing characteristic of constructivists is the centrality of the interaction between the investigator and the object of research. The researcher and the participants jointly co-create and co-construct findings from their interactive dialogue and interpretation. The goals of interpretivism are both idiographic and *emic*[1], (Pedersen 1999).

[1] This term addressing rules of language, Pedersen (1999). The origin of *emic* is from phonemic (language specific)

Gibbs (2007: p.5-6) has drawn a comparison between nomothetic and idiographic. Nomothetic approach assumes that the behaviour of a particular person is the outcome of laws that apply to all. It tries to show what people, events and settings have in common and to explain them. In qualitative research Gibbs states that it is done by looking for variations and differences and trying to relate or even correlate them with other observed features like behaviours, actions and outcomes.

The idiographic approach studies the individual (person, place, event, setting etc.) as a unique case. The focus is on the interplay of factors that might be quite specific to the individual, though Gibbs mentions that even if two individuals have some aspects in common; these will inevitably be substantially affected by the many types of differences between them such as age, culture and social background. The concern with idiographic often manifests itself in case studies. It stresses not only the uniqueness of each case, but also the holistic nature of social reality. Idiographic is often seen as a specific strength of qualitative research especially when it associated with certain analytic techniques, (ibid).

Hood and Johnson (1997) explain that idiographic stems come from the Greek *idios*, which means applying to the individual; while *nomothetic* has its semantic origins in the Greek *nomos*, which refers to application to people generally, as in general patterns or universal statements or laws. Idiographic research focuses on understanding the individual as unique, complex entity and every descriptive and detailed in presentation such as case study. In contrast, *nomothetic* research uncovers general patterns of behaviour that have a normative base. It has a primary goal of prediction and explanation of phenomena rather than understanding the individual in depth. It is objective and impersonal with a focus on generalisable findings, Ponterotto (2005).

Hamilton (1994) mentioned that Kant's work highlights a central aspect of constructivist thinking; that you cannot portion out an objective reality from the person who is experiencing, processing, and labelling that reality. Interpretive epistemology assumes that knowledge can only be created and understood from the point of view of the individuals who live and work in a particular culture or organisation. Interpretivism research philosophy requires the researcher to seek to understand the subjective reality and meaning of participants. The researchers embracing this philosophy argue that rich insight can be lost if the complex world is reduced into *nomothetic* generalisation. They do not believe in

positivism. Positivism as per Saunders et al. (2009 p. 598), is the epistemological position that advocates working with an observable social reality. The emphasis is on a highly structured methodology to facilitate replication, and the end product can be law-like generalisations similar to those produced by the physical and natural scientists. They also defined the interpretive paradigm as a philosophical position, which is concerned with understanding the way we as humans make sense of the world around us, and stated that interpretivism is the epistemological position that advocates the necessity to understand differences between humans in their role as social actors. (Saunders et al., 2009, p. 593).

This emphasises the difference between conducting research among people rather than objects such as computers. The metaphor of the theatre suggests that as humans we play a part on the stage of human life. Saunders et al. (2009) compare phenomenology with interpretivism, the definition used for research paradigms is as follows: a paradigm is a way of examining social phenomena from, which particular understandings of these phenomena can be gained and explanations attempted (p. 118). They also found that it is crucial to the interpretivist philosophy that the researcher has to adopt an empathetic stance. The challenge here is to enter the social world of our research subjects and understand their world from their point of view. Some would argue that an interpretivist perspective is highly appropriate in the case of business and management research, particularly in such fields as organisational behaviour, marketing and human resource management. Not only are business situations complex, but they are also unique, and are a function of a particular set of circumstances and individuals coming together at a specific time, (ibid).

Within the broad interpretivist paradigm a constructivist philosophy has been expected. The constructivist paradigm and assumptions as described by Guba and Lincoln (1994: p. 13) is underpinned by the assumptions; Ontological and relativistic that there are multiple realities constructed in both form and content by individuals or groups. These constructions can be more or less informed or sophisticated (rather than more or less true) and subject to alternation. The adopted epistemological approach is; subjective. The researcher and subject work together, as the research process takes place. The methodology includes using hermeneutical tools and dialectical discourse between the researcher and his subjects, aiming to compare and contrast different constructions and to determine a consensus construction that is more informed and sophisticated than previous constructions.

In addition constructivist reinterprets positivist research quality criteria. The traditional positivist criteria of internal validity, generalizability or external validity, reliability and objectivity depend on a realist ontological standpoint and without the underlying assumptions of this position, the criteria can lose meaning and be unachievable (Guba and Lincoln, 1994). Guba and Lincoln (1994, p. 114) translated the positivist criteria of quality into Trustworthiness criteria of:

a) **Credibility** - corresponding to internal validity and addressed by using multiple data sources, considering alternative explanations and having key informants review the findings (Yin, 2003, p. 34).
b) **Transferability** – corresponding to external validity and addressed through appropriate research design (Saunders et al., 2000, p. 100), creating thick contextual descriptions, using identification of potential similarities and fit (Schofield, 1993) and generalising to theory rather than to statistical populations (Yin, 2003, p. 10).
c) **Dependability** – corresponding to reliability and addressed through following data collection protocols (Yin, 2003, p. 34). Parallel to reliability in quantitative research Guba and Lincoln (cited in Bryan and Bell 2007, p. 414), but Bryan and Bell (2007) argued that auditing has not become a popular approach to enhancing the dependability of qualitative research within management and business, partly due to some of the problems that are associated with it, among them is that it is very demanding for the auditors, bearing in mind that qualitative research frequently generates extremely large data sets, and it may be that this is a major reason why it has not become a pervasive approach to validation.
d) **Conformability** – corresponding to objectivity and also addressed by the review of findings by key informants. Conformability- is concerned with ensuring that, while recognising that complete objectivity is impossible in business research, the researcher can be shown to have acted in good faith (Bryman and Bell 2007) conformability is corresponding to objectivity and also addressed by the review of findings by key informants. The above discussion of the answers to the KRQs of this research identifies several key contributions as well as areas of further research mentioned next.

4.2.2 Philosophical issues about organisational perspectives

The research came across three perspectives; Positivism, post-positivism and interpretivism (considering ontology and epistemology) can be made from an organisational perspective. Positivist epistemology assumes that you can discover what truly happens in organisations through the categorization and scientific measurement of the behaviour of people and systems; and assumes that language mirrors reality, and that reality and its objects can be described using language without any loss of meaning or inherent bias; (Schneider 1993; Van Maanen 1995). For positivists, good knowledge is generated by developing hypotheses and propositions, gathering and analysing data, and then testing the hypotheses and propositions against the external reality represented by their data to see if they are correct.

Positivist epistemology is based on foundational principles that celebrate the values of reason, truth and validity. Positivist organisational theorists study organisations as objective entities and are attracted to methods adapted from the physical or hard sciences. They gather data using surveys and laboratory, or field experiments relying upon measures of behaviour that their assumptions lead them to regard as objective; based on statistical analysis of the data collected using these methods, they derive theoretical models that they believe provide factual explanations of how organisations operate.

In contrast, interpretive epistemology assumes that knowledge can only be created and understood from the point of view of the individuals who live and work in a particular culture or organisation. Interpretivists assume that each of us acts in particular situations and makes sense of what is happening based on our experience of that situation and the memories and expectations we bring to it. This means that there may be many different understandings and interpretations of reality and interpretive epistemology leads us to use methods designed to access the meanings created by others and describe how they come to create those meanings.

However, we know that our understanding of others is filtered through our own experiences, and therefore we can never be objective about the interpretations made by other. Interpretivists believe they can work alongside others as they create their realities

and, by studying their interpretations and interactions in particular situations, develop inter subjective awareness of and appreciation for the meanings produced.

This stance is what turns a researcher into an interpreter, bridging meaning between the researcher's academic experiences and the experiences of organisational members: both of these experiences are subjective, and bias is controlled (but never eliminated) through rigorous training in self-reflection. Such training is designed to teach how to separate the interpretations from those of the people studied. This method allows describing the understanding for those who were not there to witness what was experienced.

Interpretive epistemological stance helps to become sensitive to predict, the meanings others will make, to develop an intuitive capacity of the range of meanings that are likely to emerge in given circumstances by specific people with whom one is sharing adequate inter-subjective understanding. The policy and decision making environment of various actors and stakeholders with a diversity of aims necessarily requires identification of differing viewpoints. This variety of those stakeholders, therefore involves a variety of underlying assumptions, which need to be revealed. The researcher assumes that interpretive philosophy will facilitate this understanding and reduce the risk of losing rich contextual insights.

The research claims knowledge through an alternative process and set of assumptions combined with interpretivism perspective, See: Berger and Luckmann 1967; Lincoln and Guba 1985; 2000; Mertens 1998; Crotty 1998; Schwandt 2000; Neuman 2000; Creswell 2003). Assumptions identified in these works hold that individuals seek to understand the world in which they work and live. They develop subjective meanings of their experience, which are directed toward certain objects or things leading the researcher to look for the complexity of views rather than narrowing meanings into a few categories or ideas, in order to rely as much as possible on the participants' views of the situation being studied. The more open-ended the questioning, the better, and the researcher listens carefully to what people say or do in their life or work setting.

The critical ideological paradigm is one of emancipation and transformation, one in which the researcher's proactive values are central to the task, purpose, and methods of research. The origins of this critical paradigm are most often traced back to the institute of social

research at the university of Frankfurt in the 1920s (Creswell 1998). Like interpretivists, criticalists advocate a reality that is constructed within a social historical context. However, more so than constructivists, criticalists conceptualise reality and events within power relations, and they use their research inquiry in the hope emancipating oppressed groups, (see Ponterotto 2005). They emphasize a dialectic stance on the researcher-participant interaction that aims to empower participants to work towards democratic change and transformation. To offer a comparison between the interpretivist (the philosophy of this research) and other philosophies such as Positivist, Post-positivist, critical ideological and philosophical paradigms, the following section shows the main differences.

4.2.3 Positivism and post-positivism

Positivism is a function of the Modernist enlightenment period of Descartes, and Locke, during 17th and 18th centuries. Moving away from the Dark Age it focused on accepting, obediently the totalitarian force of royal or religious decree, who brought with it the notions of the centrality of the individual, the world as objectively knowable, and the use of language, including numerical language as the conveyor of truth (Gergen, 2001; Ponterotto, 2005, and others such as Cacioppo et al., 2004 and Sciarra 1999) have explained positivism as a form of philosophical realism that remains close to the hypothetic-deductive method. They focus on a priori hypotheses that are most often stated in quantitative propositions that can be converted into mathematical formulas expressing functional relationships (Guba and Lincoln 1994; McGrath and Johnson 2003). The main goal of positivistic inquiry is an explanation that ultimately leads to prediction and control of phenomena. Stacey (2007) mentioned that Kant developed transcendental idealism as an alternative to realism and scepticism who think that we know reality though the capacities of the mind and it is transcendental because the categories through which we know are already given outside our direct experience

Lincoln and Guba (2000) mentioned that post-positivism arose out of dissatisfaction with some aspects of the positivist stance: whereas positivists accept an objective reality, and apprehend reality; post-positivists admit an objective reality that is only imperfectly apprehended. They also mentioned that this position holds that human intellectual mechanisms are failing and that life's phenomena are basically intractable, and thus one can never fully capture a true reality. A key distinction between the positivist and post-positivist

views is that the former stresses 'theory[2] verification and the latter theory of falsification; even with the verification-falsification differentiation between positivist and post-positivist paradigms, the two perspectives share much in common (Ponterotto, 2002; 2005).

Both positivists and post-positivists aim to provide an explanation that leads to prediction and control of phenomena; both perspectives emphasise cause-effect relations of phenomena that can be studied, identified, and generalised; both paradigms are founded in objective, detached researcher roles; and both function from a *nomothetic*[3] and *etic*[4] perspective, which refers to universal laws and behaviours that transcend nations and cultures and apply to the humans. Positivism and post-positivism serve as the primary foundation and anchor for quantitative research, (Pedersen, 1999).

In short, Positivism holds that the goal of knowledge is simply to describe the phenomena that are experienced, where the purpose of science is simply to stick to what can be observed and measured. Positivists assume that anything that cannot be measured can be known; they see the world as deterministic, operated by laws of cause and effect, largely mechanistic and predictable; and see observation and measurement as the core of the scientific endeavour hence it is empirical. Post-positivists recognise that all observation is fallible and imperfect and has error, and that all theories are revisable. They also see that the goal of science is to hold consistently to the goal of getting it right about reality, even though this goal can never be perfectly achieved.

4.3 The Research Approach

Nachmias and Nachmias (1992) explained research design as a plan that guides the investigator in the process of collecting, analysing and interpreting observations. Phillibert et al. (1980) - cited in (Yin 2003) – sees the research design as the blueprint of research, dealing with at least four problems; what questions to study, what data is relevant, what data to collect, and how to analyse the results.

[2] Theory**:** (psychology) in logic and mathematics, a coherent system of primitive concept axioms, and rules. Theory (sociology) is an account of the world which goes beyond what we can see and measure.
[3] *Nomothetic* or law-like generalisation
[4] The origin of ethic is from phonetic (language general)

Yin (2003), Hussey and Hussey (1997) and Collis and Hussey (2003) identified four different types of research purposes; exploratory, descriptive, explanatory, analytical or predictive, and explained that whatever the purpose the research may have, empirical evidence is required. Yin (2003) admits that there are large overlaps among them (p. 5). Yin, (2003) illustrated that ("What" questions) may be either; exploratory (in which case any of the strategies could be used) or about prevalence (in which surveys or the analysis of archival records would be favoured), both are the cases in this research.

4.3.1 Deductive/Inductive Approach

Both deductive and inductive approaches are concerned with general statements, but much qualitative research examines the particular, the distinctive or even unique, Creswell (2003). The choice between inductive and deductive logic is discussed by a number of authors, Hussey and Hussey (1997); they defined deductive research as a study in which a conceptual and theoretical structure is developed, which is then tested by empirical observation; thus particular instances are deducted from general influences. On the other hand the deductive method is referred to as moving from the general to the particular. They also defined inductive research as a study in which theory is developed from the observation of empirical reality; thus general inferences are induced from particular instances, which is the reverse of the deductive method since it involves moving from individual observation to statements of general patterns to or laws.

Deductive theory represents view of the nature of the relationship between theory and research: a social scientist needs to specify how data can be collected in relation to the concepts that make up the hypothesis. In short the process sequence goes from theory to hypothesis, data collection, findings then hypotheses confirmed or rejected and then revision of the theory. While the inductive research process starts with observations and findings and then builds a theory (Bryman and Bell, 2007 pp. 11-14). Croswell (2003) presented the inductive logic of a research project in a qualitative study as follows (Fig. 4.2):

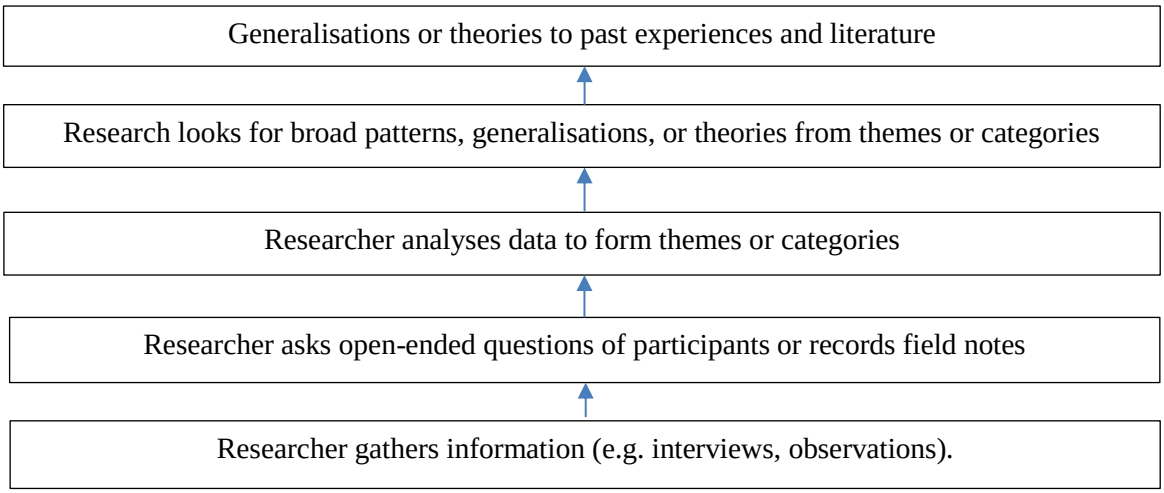


Figure 4.2: inductive logic; adapted from Creswell (2003 p.132)

4.3.2 Subjective/Objective Aspects

A research paradigm can be adapted to the extent to which the researcher is subjectively involved in or has an influence on the research outcome or objectively distanced from or independent in the execution of the empirical work (fieldwork). This research is considered exploratory empirical research. What is significant is the recognition of the fact that exploratory research involves a subjective aspect, which should be recognised in the analysis and interpretation of data, gathered. Particular attention was paid to this aspect of the research. It began by setting the rationale for the selection of the data collection methods focusing on the population selected, the procedures implementation, sampling and the technique of analysis and data validity and reliability presenting ethical implications.

Hussy and Hussey (1997, p. 10) defined empirical evidence as 'Data based on observation or experience. Cavaye (1996) and Myers (1997) seek to understand people within a socio-technology context; a partially qualitative approach to data gathering was used. The selection of a qualitative approach also fits well with Hussey and Hussey's views (1997, p. 20), who defined qualitative research as a subjective aspect which includes examining and reflecting on perceptions in order to gain understanding of human activities. This aspect was adopted for this research project. Saunders et al. (2009) argued that the complexity of the world of business and management cannot be limited by laws and generalisations associated with a positivist paradigm, as this leads to loss of richness and insights. The focus of positivism on reasoning and causal relationships has also resulted in the loss of the

element of innovation and creative thinking, and the freedom of the researcher to break though assumptions to lead to this innovation and original findings (Strauss and Corbin, 1990; Davis, 2003).

Qualitative and quantitative research methods both have strengths and weaknesses. Saunders et al. (2000) agree that in reality there is usually a mixture of both qualitative and quantitative research within a study; both quantitative and qualitative methods may be used appropriately with any research paradigm' (Guba and Lincoln, 1994, p. 105) this is also the case here.

4.4 Research Strategy

The case study is a research approach that entails the detailed and intensive analysis of a single case (the term is sometimes extended to include the study of just two or three cases for comparative purposes) (Bryman and Bell, 2007, p. 725). Rubin and Rubin (1995) and Yin (2003), mentioned that interviews are one of the most important sources of case study information although this research did not implement fully case study research, the primarily data collection included a study of the Oman case. Such an observation could be unexpected because of the usual association between interviews and the survey method. Yin (2003) argued that people have confused case study teaching with case study research. In teaching he mentioned that case study materials may be deliberately transformed to demonstrate a particular point more effectively, while any such step in research would be strictly forbidden. Primary data collection and analysis as a research strategy requires an all-encompassing method covering the logic of design, data collection techniques, and specific approaches to data analysis, (ibid).

Yin (2003) presents five different applications of case studies:

- Applications in exploratory research
- Applications in explanatory research where complexity can discount the use of experiments.
- Applications in descriptions of real life contexts.

An influential single-case design study has been used for the application of a methodological framework (Stake 1994). Oman was a single-case study area.

Creswell (2003) suggests consideration of alternative strategies of inquiry (Table 4.1):

Quantitative	Qualitative	Mixed methods
Experimental designs	Narratives	Sequential
Non-experimental designs, such as: survey	Phenomenologies	Concurrent
	Ethnographies	Transformative
	Grounded theory	
	Case studies	

Table 4.1: Inquiry Strategies (Creswell, 2003).

As a research strategy, the case study is used in many situations to contribute to our knowledge of individual, group, organisational, social, political, and related phenomena (Yin, 2003). The case study has seen a common research strategy in business (Ghauri and Gronhaug, 2002). The case study is also found in economics; the structure of a given industry or the economy of a city or a region may be investigated by using partially the case study method. The distinctive need for case studies arises out of the desire to understand complex and social phenomena (Yin, 2003). The case study method allows investigators to retain the holistic and meaningful characteristics of real-life events such as individual life cycles, organisational and managerial processes, and international relations (ibid).

Questions of ‘how and ‘why’ lead to the use of case studies focusing on contemporary events, histories and experiments or preferable research strategies, and as this study is exploratory any of the strategies could be used. A comprehensive research strategy should not be confused with ‘qualitative research’ as is the case of this research.

4.5 Techniques and Procedures (Data collection methods)

All types of research have an essential logical design that links the research question with the data to be collected and its final findings (Yin, 2003, p. 20). This will be shown in the final chapters. The data to be collected and the methods to be employed should fully fit with the purpose and objectives of the study (Saunders et al., 2000).

Inquiry strategy, Creswell (2003), provided “three sequential strategies”; sequential explanatory design, sequential exploratory design (Fig. 4.3), and sequential transformative Design. The sequential exploratory design is followed for this research inquiry. It can be described as follows.

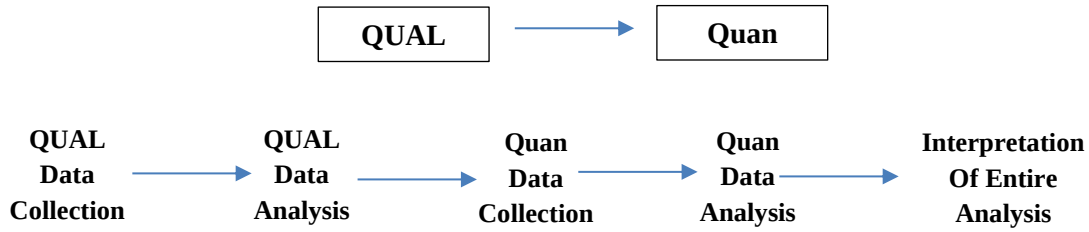


Figure 4.3: Sequential Exploratory Design adopted from Creswell (2003)

This section highlights on qualitative and quantitative methods. Myers (1997) explained that while quantitative research methods were originally developed in the natural sciences to study neural phenomena, qualitative methods were developed in the social sciences to enable researchers to study social and cultural phenomena. Qualitative research can explore a wide range of dimensions of the social world including the texture and everyday life, (Mason 2002, p. 1).

This research project seeks to analyse and explain, a complex case study organisation, the public sector institutions in Oman, in particular the institutional and technological changes in the public sector required to enhance foreign and domestic investment in the non-hydrocarbon economy. It aims to do it through a mono method choice by following an inductive logic based on existing theories. This inductive research methodology was chosen to enable the generation of empirically based knowledge which provides greater insight into the complexity of the field. It also allows unexpected results to emerge. The emphasis on an exploratory approach is to improve the understanding of the case study organisation, which has been investigated. This research design is based on a qualitative method choice (Mono method); the researcher (multiple stages) of data collection and the refinement and interrelationship of groupings of information (Strauss and Corbin, 1990). The primary characteristics of this design are the constant comparison of data with emerging groupings and theoretical sampling of different groups to maximise the similarities and the differences of information, (Creswell, 2003). This is complemented by qualitative methods such as; open-ended question interview data, observation data, document data, and audio-visual data and text and image analysis, it is therefore, a suitable electronic programme will used and highlighted in this chapter. In the qualitative approach Creswell (2003) also recommends strategies of inquiry, use of best practices of research as the researcher positions himself or herself; collecting participant meanings, focusing on a single concept of phenomenon,

bringing personal values into the study, and studying the context or setting of participants. This validates the accuracy of findings; makes interpretations of the data, thus creating an agenda for change or reform, and collaboration with the participants (p. 9). In addition, Eisenhardt (1989) points out that it is not necessary or particularly desirable to have a random selection of cases as long as it is possible to 'replicate or extend emergent theory'.

4.5.1 Interview

As this research employs both interviews (with investors) and focus groups (FG) (for public institutions) the literature for both of these methods is reviewed. The researcher may conduct face-to face interviews with participants, telephone conversations or engages in focus group interviews, (Creswell, 2003). Thus, in this research data is generated through individual interviews (with investors) and FGs (of public institutions policy and policymakers). Morgan (1998) mentioned that it can be a part of an on-going, multi-method study when used in conjunction with individual interviews, surveys, experiments, or participant observations. Crotty (1998) suggested designing a research proposal, considering questions concerning: what epistemology informs the research (objectivism or subjectivism) and what theoretical perspective (philosophical stance) lies behind the methodology in questions (positivism, post- positivism, interpretivism, critical theory etc). Croswell, 2003, illustrates knowledge claims, strategies of inquiry, and method frameworks (Fig. 4.4).

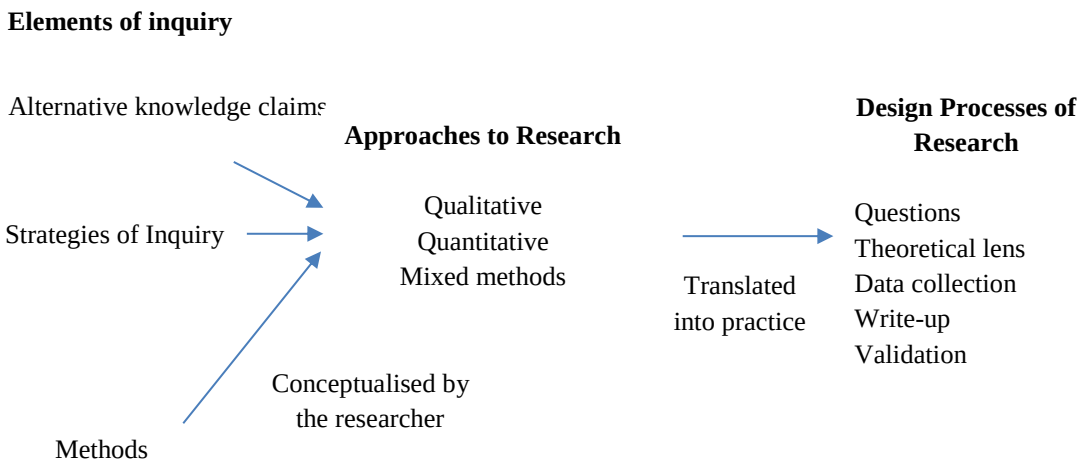


Figure 4.4: Knowledge Claims, strategies of inquiry framework cited from (Croswell 2003, p. 5 Figure 1.1)

ons; semi structured questions are prepared to cover the intended scope of the interview taking into consideration holistic approaches. There was a need to develop an interview guide as an orientation for the interviewers. The interviewer can deviate from the sequence of the questions, and do not necessarily follow to the exact formulation of the questions, (Flick 2011).

Merton and Kendall (1946) constructed an interview guide with some helpful criteria such as:

- Covering a broad range of meanings of the issue.
- Non-direction in the relationship with the interviewee.
- Specificity of the views and definition of the situation from their point of view.
- The depth and personal context shown by the interviewee.

The interviews will be in the form of guided conversations rather than structured queries, although pursuing a consistent line of inquiry, the actual stream of questions in an interview is likely to be fluid rather than rigid, where two tasks are to be done:

a) Following the researcher's own line of inquiry as reflected by his semi-structured study protocol and;

b) Asking actual (conversational) questions in an unbiased non-threatening manner that served the needs of the investigating line of inquiry.

4.5.2 Focus Group (FG) Technique

Focus group technique: (public sectors representatives): Population: aggregate of elements defined prior to the selection of the sample. (Study population: is the aggregated of elements from which the sample is actually selected from each type of elements). Byers and Wilcox (1991) have revealed that a FG closes the gap between the interviewees' initial perceptions of a topic and their final reports of what they have seen. The FG provides the opportunity to obtain data which is necessarily relevant to any particular group or setting (Merton et al., 1956; Morgan and Spanish (1984) - cited in (Byers and Wilcox, 1991). Byers and Wilcox (1991) mentioned that (Axelrod 1975) employed a number of essential ingredients for a successful FG such as: clearly understood objective, homogeneity within group, recruiting should be done to insure homogeneity and a sufficient number of qualified

participants, a well prepared moderator who listens should insure confidentiality and promote openness and must insure that the discussion does not stray too far from the point of interest and must not rule out things that may seem unrelated, free-flowing dialogue, and should refrain from contributing to the discussion unless necessary, and guiding the discussion only when necessary finally the data can be analysed by either a qualitative, or ethnographic summary or a quantitative systematic coding via content analysis (Morgan, 1988, P. 64). Byers and Wilcox also included in their observation the suggestion of Lederman's (1989) in Byers and Wilcox (1991) five fundamental assumptions for FG that:

1) People are a valuable source of information;
2) People can report on themselves, and that they are articulate enough to verbalise their thoughts, feelings, and behaviours;
3) A facilitator who focuses the interview can help people retrieve forgotten information;
4) The dynamics in the group can be used to generate genuine information, rather than the (group think) phenomenon and;
5) Interviewing a group is better than interviewing an individual.

They also have listed the advantages and disadvantages as follows:

The advantages:

1. Release of inhibition by participants.
2. Handling contingencies
3. Time effective (if compared with individually interviews)
4. Interpretability of data.
5. Provision of basic exploratory information.

The disadvantages:

1. Cost (moderator fees, facility rental, recording and transcribing, data analysis and interpretation, and participant incentives)
2. Subjects' conformity.
3. Biased results. (An analyst should not generalize from FG results to the larger population as the respondents are volunteers who may be more extroverted, outgoing, and social than the average individual).

Calder (1997) suggested that for exploratory purposes, the issue of generalizability is not particularly important since the goal is to generate ideas for scientific constructs or compare scientific with everyday explanations. According to Calder (1997) generalizability for the phenomenological approach is easily accessed through follow-up quantitative research.
On the other hand Godman (1962) suggested requirements of good group interviews such as objectivity, reliability, and validity.

- Objectivity; by avoiding the bias of the interviewer and/or the research team. The moderator should refrain from contributing to the discussion as much as possible and perform actions carefully.
- Reliability; "Why" questions to be asked rather than "how many" and to generate hypotheses rather than assert their representativeness, the question of reliability become less important.
- Validity; FGs tend to suffer from inhibiting factors just as do other methods of qualitative research. Through his experiences with FGs, Godman (1962) concluded that discrepancies between (attitude expressions) and (actual behaviour) are relatively small in well conducted FGs, implying reasonable validity of the method.

This research adopted a focus group strategy which follows the suggestions of Byers and Wilcox (1991) that provide useful methods of analysing FG data, Lederman (1989), suggested exact transcripts from tape recordings as standard procedure but notes that exact transcripts are not always possible or necessary. One of the sources that this research considers is Krueger (1988) who suggested the following;

1- Consider the words; the actual and its meaning.
2- Consider the context; examine the context by identifying the "triggering stimulus" for comment and then interpreting the comment in light of the context or stimulus.
3- Consider the internal consistency; the research should note when there is a shift in opinion, which is relevant to the purpose of study.
4- Consider the specificity of responses by giving more weight to responses that are specific and concrete rather than those that are vague and ambiguous.

5- Finding the big ideas. Words, body language the intensity of comments rather than from isolated comments (see Kruger 1988, p. 116) in other world, the researcher should not get caught up in counting the number of times something is said, rather look for patterns.

The above suggestions were taken into consideration along with practical advice and guidance for the FG data (Franz, 2004[5]). Initial exploratory structured and semi-structured interviews were held with key stakeholders in Oman's non-hydrocarbon sectors. These were the foreign direct investors and domestic investors. From these key stakeholders emerged who were approached as potential interviewees for the FGs. To sum up: by adopting a qualitative method choice the researcher can employed the case study approach, which offers an attractive way of using a variety of research methods to produce a rounded portrayal of the identified subject. VSM questions to obtain data to perform a detailed VSM diagnosis and design, to explore the problems of the decision and policymaking processes coordination and collaboration and to provide contextual background information and knowledge.

4.6 Data Analysis Background

As previously discussed, this research adopted an interpretive approach that enabled understanding of complex behaviour in human activity systems and also encompassed the multiple viewpoints of the various players. In line with these requirements and the aims of the study the research design included those data collection tools most suited to the task, namely document analysis, and semi-structured interviews. However in using these methods a large amount of data was generated which then required analysis. It is the use of an analytical framework that can aid in giving structure and some sense of coherence to these unwieldy amounts of data (Ritchie and Spencer 1994). The following (Fig. 4.5) is an analytical framework for this research journey devised by Ritchie and Spencer (1994) and adapted with inputs from the work of Miles and Huberman (1994). The diagram illustrates the components of data analysis according to Huberman and Miles (1994) which fits in this research methodology. Mapping and interpretation is dependent on which function or

[5] A template used in by Franz, H.W. (2004), report on the German focus Group 5th Framework Programme.

purpose is required, although the essential processes are the same with the researcher comparing and contrasting and searching for patterns and links. The other strand of analysis involved the qualitative data collected in the interviews to enable VSM diagnosis. They were organised into categories of similar ideas and problem areas and these problems were then mapped out using VSM. This then gave the basis for VSM diagnosis and design.

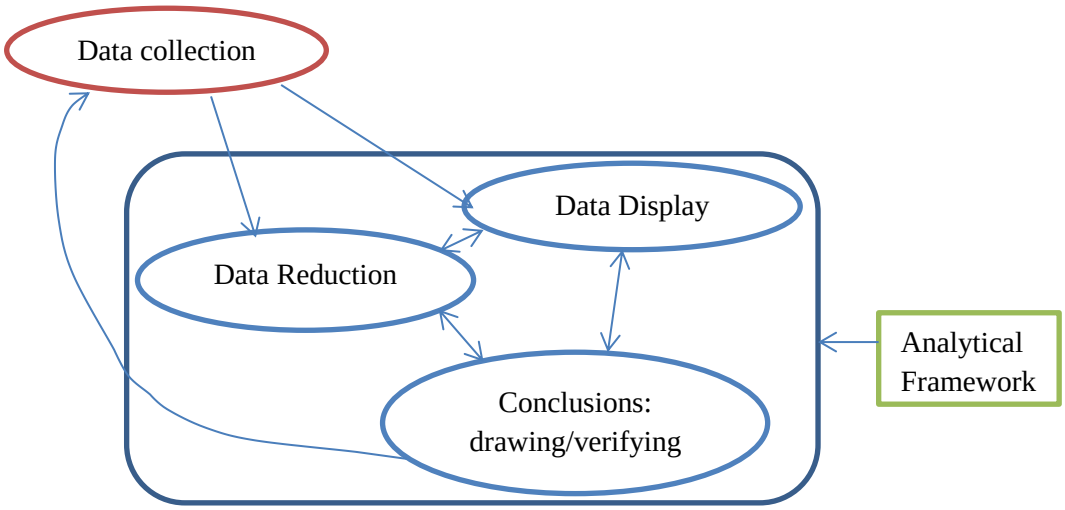


Figure 4.5: Components of Data Analysis: Interactive Model and Analytical Framework. Source: Adapted from Huberman and Miles (1994, p. 429 cited in Watts 2009 p. 111). (Colour highlighting added).

4.7 The Research Methodology Summary

An interpretive, qualitative paradigm is viewed and adopted for this research (Collis and Hussey (2003); Saunders et al., 2009; Denzin and Lincoln 2011). The research approach is mainly inductive approach, in line with the intepretivist paradigm, where the data itself can suggest themes. An inductive approach begins with the building of a conceptual framework based on the findings of the review of the literature. The research design and purposes are mainly exploratory and the description of the real world was mirrored in system thinking. The research strategy is a qualitative and interpretive approach; semi-structured interviews/focus group were components of data analysis: an interactive model and an analytical framework were developed from the literature review. Based on this, a methodological framework to guide the research process was developed using this conceptual framework. The intention was that this framework would inform and guide policy process/implementation, particularly by assessing the current situation concerning

institutional and organisational development, decision and policy making with regard to structure, collaboration, and communication and control.

The components of data analysis are as follows:

- Step One: (familiarisation) Reviewing all of the material gathered to gain deep understanding; then overview core ideas while making preliminary notes on themes and coding (the research use N-vivo 8 software); then following Huberman and Miles Model (Huberman and Miles 1994) for data reduction.
- Step Two: this framework is to refine version using emergent themes (logical and intuitive thinking, Ritchie and Spencer 1994).
- Coding (moving to coding into thematic preference). Meaning judgements, analysis more visible, accessible and more open to replication.
- Holistic view of the data, comparing the original context to synthesised thematic charts, as per Huberman and Miles model; illustration of concepts, issues and ideas.
- Matching the final step with the research question (mapping and interpretation) at this stage Ritchie and Spencer (1994) describe the function of qualitative research as; defining concepts mapping phenomena (dependent on which function required), creating typologies, finding associations, providing explanations and developing strategies.

Systemic treatment of all collected data: due to data overload where some information is missed because of the vast amount to analyse, the researcher can be selective during the first impressions or with data from unreliable informants. The researcher aims for transparency of methods, to verify the conclusions. A reflexive approach is recommended, so the research addressed those threats to validity using the strategies offered by Ritchie and Spencer (1994); and Huberman and Miles (1994), reflexivity usually refers to the view that researchers – in some way or another - reflect the views and interests of their field and also refers to the capacity of researchers to reflect upon their actions and values during research whether in producing data or writing explanations, (Gibbs, 2007). There was triangulation by using data from the interviews, observations and secondary documents analyses; and a reflexive approach was used.

4.8 Developing a Systemic Methodological Framework

This study path towards organisational and institutional development and change will involve the following steps and each step also involves respective types of data analysis:

1. Rich picture (socioeconomic and institutional factors).
2. Identify the main strategies for development.
3. Preliminary institutional diagnosis.
4. Identify investors' perceptions on needs for institutional transformations.
5. Finding structural constraints for economic and institutional transformation.
6. Design of organisational and technological improvements.

As the research objectives as introduced in section 1.3.1, consider developing a more useful framework for policymaking that offers a means to address public private collaboration in a complex environment, the creation of a helpful conceptual framework for this study is desirable to serve the purpose of addressing the lack of a systemic methodology to support the organisational and institutional development in particular to strengthen the context for public policymaking regarding foreign and domestic investment. The proposition here is to build and implement a "Systemic Policymaking Process Structure (SPPS)" framework for:

- Systemic Public sector (inter-organisational) collaboration;
- Systemic Public-Private sector collaboration

SPPS, as depicted in Fig. 4.6 consists of three phases:

Phase one used to describe the real world and the problem situation (i.e. comprises two stages). It acts as an aid for the in depth understanding of the problem situation. Phase two also comprises two stages, during the first one the VSM is used to reflect on the data gathered in phase one and during the second step to analyse the structure of interactions of the key actors. Finally, phase 3 (comprising of three stages) recommendations are made for implementing change through the suggested institutional and technology developments.

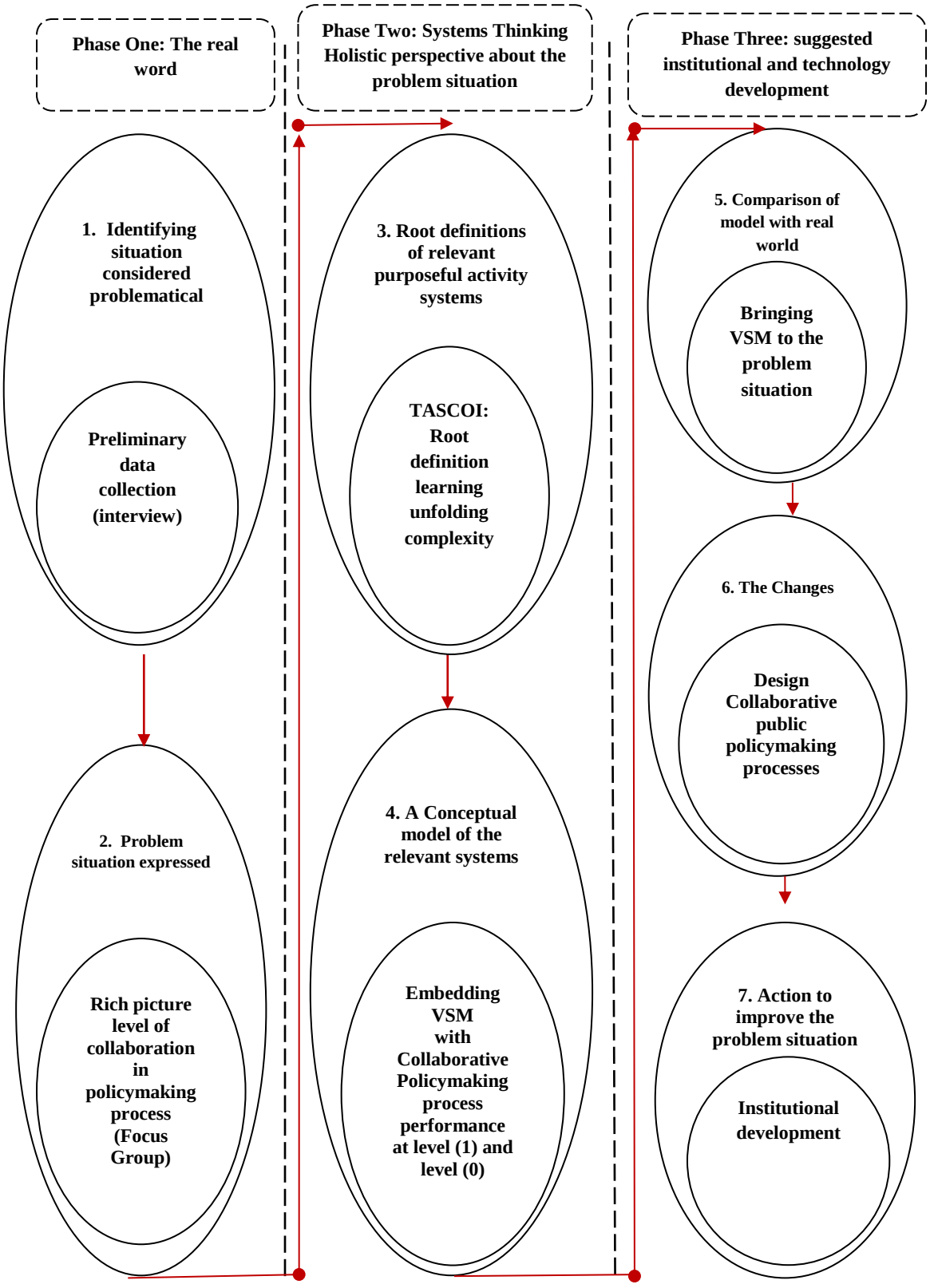


Figure 4.6: Systemic Policymaking Process Structure (SPPS) Framework

4.9 Systemic Policy Process Structure Framework Analysis

Phase one, 1: Identifying the situation considered problematical

This first stage of SPPS illustrates the uneasiness felt by individuals in policy which leads to identification of problematic situations that demand attention. In this stage the researcher analyses the level and quality of existing policymaking processes, the investor's needs, and the impact of policy on investor's needs which highlight the current problem situation.

Stage 2: Problem situation expressed (Rich picture)

This stage expresses the problem situation described in stage one by drawing rich pictures of each of the five non-hydrocarbon sectors. This is to gain creative understanding of the problem situation. The rich pictures were constructed by gathering data about *status quo* of the structure and process and chapter (two) is part of building the rich picture.

Phase two: Stage 3: Root Definitions of relevant purposeful activity systems (TASCOI)

In this stage, there will be a shift to systems thinking involving 'human activity systems' providing an insight into the problem situation to show the level of collaboration in policymaking and experience and knowledge sharing. The TASCOI technique is used for learning (see chapter three) and unfolding the processes and the actors' complexity. Root definitions are built paying attention to the factors brought by TASCOI. A separate TASCOI analysis needs to be constructed from the data, recalling the thick descriptions (Rosen 1991). Focus group data were also used and coded along with the interview data to do data triangulation.

Stage 4: A Conceptual Model of the Relevant Systems (VSM)

The VSM is built upon the theoretical foundations of systems theory and organisational cybernetics and is a generic approach to the modelling of a system based on its viability in terms of its interactions with its external environment.

The SPPS methodological framework will attempt to address issues of structuring and implementing joint working and/or joined up thinking and interacting for better collaboration, communication and control, thus proposing a new organisational system to deliver on the ground within industrial economic sectors.

The SPPS framework would need to be tested and evaluated and modifications discussed in an iterative inductive/deductive process; to obtain data to perform a detailed VSM analysis and design, to explore the problems of the policy and decision making process and to provide contextual background information; to explore coordination and collaboration and add to the sector-specific network data analysis. The second part of the analysis involved the qualitative data collected in the interviews to enable application of the VSM.

This step includes defining the System in Focus: Identifying by using data from domestic and foreign investors' interviews and public institution focus group; and qualitative data analyses to prepare identity statements from all the subject's perceived systems, looking at different perceived purposes and grouping the organisations accordingly. VSM diagnosis and design was undertaken by identifying the primary activities and the meta-system regulatory sub-systems (this will be highlighted upon in chapter six) for each of the five non-hydrocarbon sectors.

Phase three: Stage 5: Comparing the model with the real world

Bringing system thinking back to the real world with the proposed institutional changes: based on inter-organisational collaboration theory and using N vivo and SPSS statistical applications, this stage will complement VSM of both the dynamic and structural aspects of the governmental policymaking process. This stage assumes that information and knowledge sharing are essential for successful policy process; it guides the analysis on control and communication issues that could impede the process.

Phase Three: Stage 6: The Changes: Design Collaborative public policymaking process

This stage should design public-private collaborative public policymaking processes with the help of two supporting pillars; a) The human support (experience and knowledge sharing) and b) technological support (proposing an electronic support system) a decision-making process in order to structure an advanced or downstream decision-making for strategic policymaking in the public sector.

Phase Three: Stage 7: Action to improve the problem situation: Public policymaking Institutional development

In this stage action can be taken to alleviate some of the initial unease and improves the problem situation. This step targets Institutional development (ID) changes and the designing of improved collaborative arrangement resulting in better economic growth. This improvement of the problem situation can be achieved through ID involving human and technological support.

Inter-organisational collaboration theory Gray (1989) is benefited from to explore the relationships of the "actors" involved within the field, and to builds pictures of the relationships. The key "actors" as systems and sub-systems should be questioned as to which organisations they have relationships with in regard to Public sectors inter-organisational collaboration; Public sectors institutional dealings and Private sector firms' co-optation.

The framework has been developed, and is ready to be applied. In data collection for instance, the systems hermeneutical techniques are to allow valuable and practical consensus views to emerge underpinned by the use of the VSM as hermeneutic support (VSM system explain the relationship to each other) the systems inter action). The application of constructivist research quality criteria is to confirm trustworthy and dependable findings. The "Systemic Policymaking Process Structure (SPPS)" aims to address the lack of systemic methodologies to deliver institutional development for public policymaking processes.

4.10 Sampling and Coding Data Collection

4.10.1 Data Gathering

Interview nodes were as follows:

- Investor's profile.
- Strategic vision and investor's role.
- Polices and decision-making that attract investors.
- The experience and knowledge sharing with public institutions (PIs) and among investors themselves.
- The improvement; policies for easing the investment and firm operations.
- The needs and incentives gained and fulfilled and those not.

- Economic and Institutional determinants (per respondent/Sector/related public institutions (PIs).

The data collection method for this research considers and follows Saunders et al. (2009), five Ps: - prior planning prevents poor performance - and their probability sampling multi-stage method (simple random, systematic, stratified random and cluster). It is also called multi-stage cluster sampling; this research defines the suitable sampling frame based on research questions or objectives and then decides on a suitable sample size, in this case six investors from each sector (three domestic and three foreign).

This research involves two samples from different populations (discussed in this section); the first sample of investors was used to determine the second sample of institutional representatives. Semi-structured interviews were held with investors (as questions were complex and open ended Saunders et al., 2009) in order together the data that could be used to delineate the population of relevant Institutions. Appendix 4.2a contains the question schedule for the semi-structured interviews. Data collection also comprised secondary data obtained from official documents, strategies, published reports (by focus group participants), brochures and newspapers (to gain background and contextual information) and reports about the GCC countries. The inclusion criterion for investors was theoretical saturation; whereas for institutional representatives it was relevance as reported by the investors.

The following diagram (Fig. 4.7) illustrates the method through which the qualitative data was gathered:

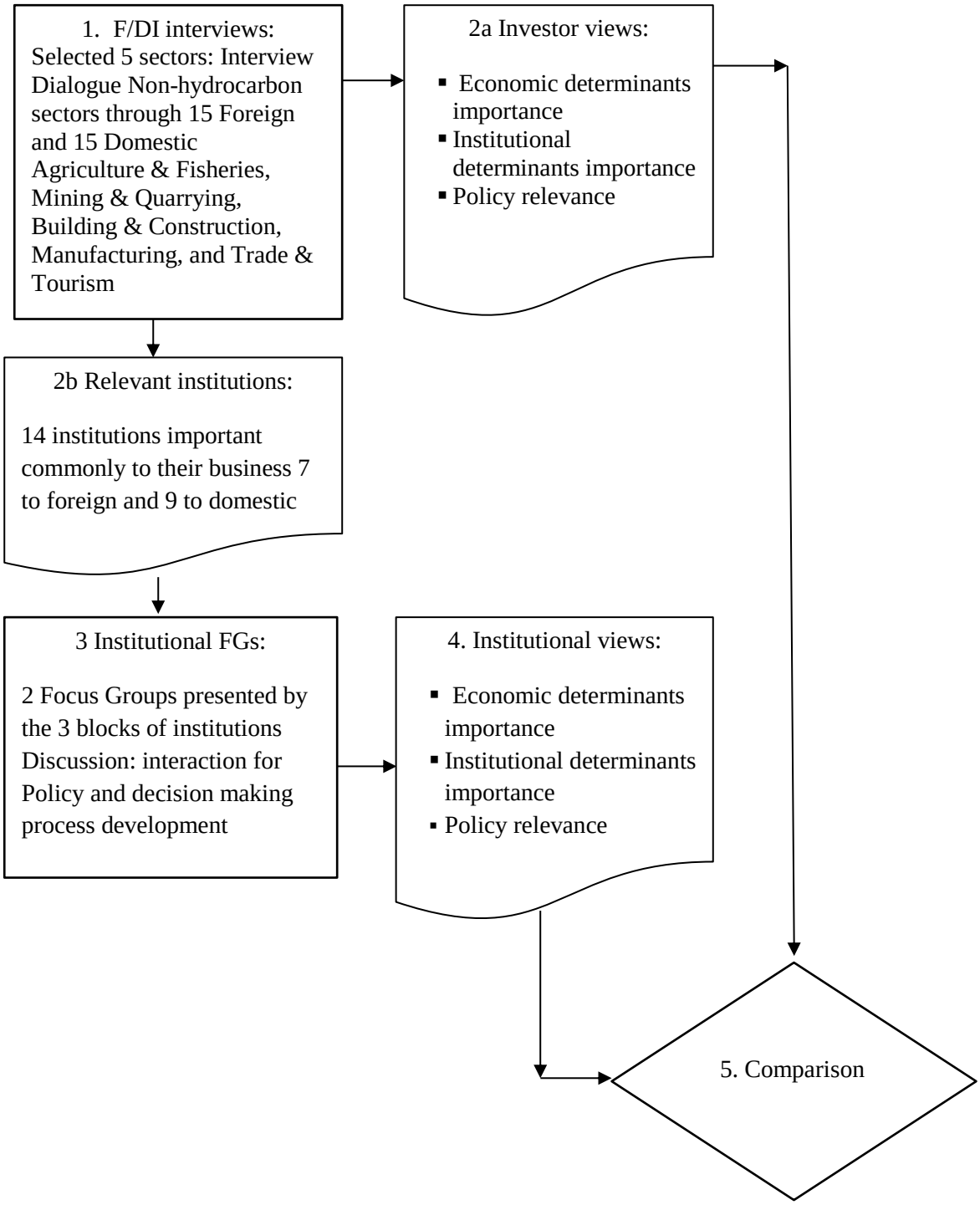


Figure 4.7: Primary data collecting flowchart

Oman follows the International Standard Industrial classification (ISIC) system that has been developed by the United Nations. The sampling method for the interview defined the population as a list of information provided by the MCI Commercial Registration (CR) department (2010). Sampling 'unit' is the element available for selection, and sampling frame as a list of all sampling 'units' available for selection at a stage of the sampling process. This research thus employed the term 'unit' because it is not necessarily people who are being sampled from the universe of firms, and as sample (segment of the population) those units that were selected for investigation (Bryman and Bell, 2007).

The CR department at MCI, showed that around 44,000 firms in total were registered in the five non-hydrocarbon sectors in 2010 (details of each sector were discussed in chapter two). Some of these firms although registered were not functioning (inactive) at that time. The CR department, estimated the percentage of inactive firms to be approximate roughly 23% of the FDI firms, and for DIs firms this reached (61%). The CR department also reported that hydrocarbon sectors that inactive firms rarely exceeding 5%, as holding CR registration is restricted and conditioned.

These inactive firms for FDIs and DIs is attributed (by CR department) to several factors; the start-ups tend to request for CR (easily obtained), but there are a number of those who soon (mostly after a year or two) close down the business for not having sufficient time to run a business, or does not have the requisite experience for business continuity. However, the CR remains valid for five years renewable without business activity. One further reason for the particularly large number of DIs are the civil servants or private sector employees owners that can no longer continue with their own business or as JVs with FDIs.

To have a more accurate population, inactive firms have been excluded from the population, and also excluded the number of sole ownership the firms below 250,000 to have a net total of large size enterprise (LSE) (capital above the threshold OMR 250,000 (USD 650,000) around 10,000. It was found that the total population of LSEs 50% were below this threshold making around 5,000 as total population for the five sectors, and sampling 1,000 units each (see Table 4.2 below).

	DI	DI less 60% inactive firms	FDI	FDI less 25% inactive firms	F/DI firm population	Sole ownership (SO)	Total without (SO)
Agribusiness &Fishing	419	168	57	43	599	123	476
Mineral	129	52	29	22	177	19	158
Building and constructing	4,181	1,672	1,782	1,337	7,116	1,153	5,963
Manufacturing	2,843	1,137	735	551	4,692	1,114	3,578
Trade	23,962	9,585	5,925	4,444	30,300	4,713	29,887
Tourism	1,137	455	237	178	1,741	367	1,374
Total	32,671	13,068	8,765	6,574	44,625	7,489	41,436

Table 4.2: Foreign Direct investors and Domestic Investors populations during Interview in 2010

Systematic sampling (Saunders et al., 2009) was used to compute the "sampling fraction" which is the proportion of the total population that needed to selected. This was computed on the basis of the formula: Sampling Fraction = $\frac{\text{Actual sample size}}{\text{Total population}}$.

Representative sample is a sample that reflects the population accurately, where a comprehensive sampling frame excluding the units that do not meet the criteria for inclusion e.g. firms with less than 250,000 capitals.

The purposeful sampling size (*n*) decided to be 50 units due to the time and resources available. Accordingly, the sampling friction of units rounding it to the nearest say 940 is $\frac{n}{N}$ $= \frac{50}{1{,}000}$ = i.e. 1 in 20, which mean n = 50 units to be sampled from the total population of the five non-hydrocarbon sectors. This means that the number of each sector is 10 units represented by 6 investors. However, as multiple units are often own by the same investor (e.g. family business and holding companies) the researcher found that a number of 30 investors accounted for those 50 unites. Yielding the six investors in each of five sectors that comprised the sample for this research, however, the researcher also planned to include SMEs within the thirty investors. Thus as SMEs (investing in a capital of OMR 15,000 and above) account for 19% of the DIs total ($\frac{6{,}000}{32000}$ x 100) so it was decided that the SMEs would comprise 20% of the sample.

Interview technique (semi-structured interview and unstructured interviews), a purposeful discussion between the researcher and the respondent in order to gather valid and reliable data that is relevant to the research questions and objectives. The coding system on the other hand involved open coding of the data using categories, themes and patterns (Strauss and Corbin 1990) around the framework of the VSM. Bilingual data (English/Arabic) was e originally planned but most of the data gathering was done in English. Comments, answers and quotes from the respondents were organised into sector and F/DI categories with the help of N vivo software, where research problem were mapped for VSM and TASCOI. The observational data was also used and coded along with the interview data to gain data triangulation and it enabled thick description and diagnosis, (Rosen 1991). The researcher reviewed all of the material to gain an overview of the depth, variety and range of the data. Qualitative data was collected from investors in the interviews for VSM diagnosis.

The vast majority of the interviews were undertaken in the English language (even with some domestic investors) with only a few domestic SME investors requesting that Arabic was used. Appendix 4.2d shows the Start-up and investment history of investors is between 1870 and 2007. There are 14 investors who commenced their business before the vision implementation among them 8 investors who stared business during the 1970s or even earlier (4 investors) and 16 investors who began their investment activities during the implementation of the vision.

4.10.2 Sampling Limitation and Bias

Time limit-consuming requirements of the interview process may result in a reduction in willingness to take part on behalf of some of those to who the researcher would like to talk. This may bias his sample, in terms of the people from whom data is collected (Robson, 2002). That was considered carefully and attempts were made to overcome through the approach taken to sampling. Such an observation could be unexpected because of the usual association between interviews and the survey method. The researcher found himself doing two tasks: 1) following his own line of inquiry as reflected by his semi-structured study protocol, and 2) asking his actual (conversational) questions in an unbiased manner that also serves the needs of the investigating line of inquiry. The actual stream of questions (in spite of the researcher being pursuing a consistent line of inquiry) in a focused interview is likely to be fluid rather than rigid, (Merton et al. 1990).

4.10.3 Response/non-response of Investor Interviewee:

Convenience sampling has been employed due to ease of access. Purposive and revelatory sampling has also come into play (Saunders et al. 2000; Yin 2003) in terms of size. As mentioned earlier the sample size was n=50 units or (LSEs) firms, but it was found that as there was a number of family business holding companies some chosen companies are found being the same investor appeared in different sector. Therefore, out of these 50 firms there were firms owned by one investor (holding companies) so n = 30 investors representing those 50 units. Among 30 investors some SMEs who are relevant to the research topic they represent 20% of the total of LSEs appeared to be within the characteristics of fieldwork.

Eventually only six respondents from each sector were interviewed. The non-responsive investors, excuses were as follows:

1. Available but with busy schedule (inability to locate respondent or unable to make contact)
2. Travelling schedule

A qualitative approach was used to gather data during the interviews, through semi-structured questions. The software consists of tool bars of table, editing, coding, and links with a list/details view pane. Navigation view panes consist of sources Nodes, sets, queries, models, links classifications and folders. The program sorts the data from interviews as transcript and links the material together (Themes or Coding[6]), this is then stored in "containers" called "Nodes" with survey details such as respondent nationality, and answers to the questions with recording notes and reminders as annotations. N vivo allowed the researcher to seek for similar and conflicting opinions or ideas (positive and negative of different themes) and to capture memos (to capture the insights and discoveries). In queries the researcher can find which words the interviewees used and words that catch his eye. In gathering the answer of each question, N vivo associates to node properties with attributes of interviewees (experience years, gender, etc.).

[6] Coding is a fundamental analytic process for many types of qualitative research (Gibbs, 2007).

The steps for the interview process are as follows:

- Choose a sampling frame of the relevant discrete groups: Foreign Direct Investors (FDIs); Domestic investors (DIs)
- Allocate each group a unique number, FDI 1, FDI 2, ...; DI 1, DI 2 and so on
- Select a small sample of the relevant discrete group using some form of random sampling such as sector-specific (Agriculture and Fishing sector (A&F), Mining and Quarrying (M&Q) so the respondent from of Mining and Quarrying sector will be known as M&Q/FDIs/F2.

4.10.4 Sampling Characteristics 'Interview'

1) The **'sectors category'**

- Agriculture and Fisheries sector (A&F).
- Mining and Quarrying sector (M&Q).
- Building and Construction sector (B&C).
- Manufacturing sector (MAN).
- Trade and Tourism sector (T&T).

2) The '**data resources category'**

- Domestic investors (DIs) (interview)
- Foreign investors (FDIs) (interview)
- Public institutions (PIs) (Policymaker)/Public institutions (PI) (Focus Groups).

The first step of the fieldwork conducted by the researcher in 2010/2011, was undertaken by preparing six pages (15 Questions) in English and Arabic that asked to the investors both (DIs) and (FDIs) during the interview. Appropriateness of location was important such as inviting the interviewee to a hotels' lobby or as the investors' preference, to be held in his office. This was in line with the appropriateness of the researcher's appearance at the interview and the nature of the opening comments to be made when the interview commences the first few minutes of conversation generally have a significant impact on the outcome of the interview and on the level of credibility and reliability of information obtained. Sensitive questions need to wait until near the end of an interview, allowing a greater time for the interviewee to build up trust and confidence in the researcher (Healey and Rawlinson, 1994 in Saunders et al., 2009).

3) The **'questionnaire category'**

- Policy/decision-making improvement requirement
- Experience/knowledge sharing.
- Investors' needs to be fulfilled.

These questionnaire can be seen in Appendix 4.2 a, b and c, and the ethical issue considered as well, Appendix 4.3 shows the Consent Form that used during data collection methods through interview and focus group (English and Arabic). The three categories shown in the second panel, were used during the data collection (before reduction) to have a general view of the way the data from the 'semi-structured questions' were organised.

The presentation of the findings starts from the aggregate level that is, exploring the domestic and foreign direct investor patterns, and proceeds to an examination of the respective disaggregated sector-specific patterns. It aims to make visible the various patterns, all rankings are sample means on a scale of 1 (least important) to 5 (most important), as well as any relative changes in their importance (stability) since the firm's initial FDI. When forming structured questions a five point Likert scale for rankings was used (Likert, 1961; 1967), to find out the patterns of issues that both type of investors expected the government to improve. The public institutions opinion was also examined towards the same end (to understand the regulatory and investment attraction impact that can be seen less or more important from their point of view as well as public institutions policymakers).

4) The **'determinants and policies** category':

A. Economic Determinants importance (as gathered from the literature review - chapter three)

1 Population.
2 GDP (size of the economy.
3 Growth of the economy.
4 Infrastructure.
5 Deposits, loans, venture capital.
6 Openness (trade).
7 FDI stocks and their sectors.
8 Exchange Rates.

9 Wages.
10 Inflation.
11 Taxation.
12 Competition (in production, distribution).
13 Incentives.

B. Institutional Determinants as gathered from the literature (chapter three)

1 Country risk.
2 Corruption.
3 Transparency: Democratic accountability.
4 Stability.
5 Institutional quality.
6 Cultural proximity.
7 Law existence and enforcement (e.g. contractual, property rights, labour, bankruptcy).
8 Multi/B (investment) Treaties.
9 Company formation.
10 Patent registration.
11 Bond/share issue.
12 Availability of information.
13 Education.
14 Income disparities.
15 Support for R&D and innovation.
16 Government contract denunciation.

C. Policies areas of importance policies from Borrás and Tsagdis (2008) (see chapter three)

1. FDI attraction
2. Internationalisation
3. Infrastructure
4. Education and training policies
5. R&D
6. Information diffusion
7. Customised services to the firms
8. Labour recruitment Policies
9. Establishment of firms networks
10. Quality improvement
11. Start-ups and SMEs
12. Venture/risk capital policies
13. Environmental policies

Referring to the sampling section in this chapter; the observations of interviews found as follows; they involved 15 domestic (from D1 to D15) and 15 foreign direct investors (from F1 to F15) spread evenly across the five sectors of GDP three investors in each. The interviews were conducted between April and October 2010 and completed in 2011 and 2012. Each interview lasted about ninety minutes, and paper based aids with questions were

used. Some interviews were tape-recorded, and in cases were the interviewee declined to be tape-recorded short hand notes were taken. Follow up telephone interviews were undertaken in case of clarification or missing data. A summary of FDIs and DIs (Male/Female) per sector and type of business is shown in following table (4.3).

			Gender	Male													Female											
			Country of origin	Brazil	India	Australia	Bangladesh	Canada	Cyprus	Egypt	France	Korea	New Zealand	Pakistan	USA	Oman	Brazil	India	Australia	Bangladesh	Canada	Cyprus	Egypt	France	Korea	New Zealand	Pakistan	USA	Oman
Sector	Ownership		Size																									
Agriculture & Fisheries	Joint venture		SME								F6																	
			LSE		F14																							
	Wholly owned	Single owner	SME																									
			LSE																									
		Family business	SME																									
			LSE		F2											D6/ D3/D11												
		Small number of owners	SME																									
			LSE																									
Mining & Quarrying	Joint venture		SME																									
			LSE			F1		F10					F15			D10													
	Wholly owned	Family business	SME																									
			LSE																									
		Single owner	SME																									
			LSE													D4												
		Small number of owners	SME																									
			LSE													D15												
Building & Constructions	Joint venture		SME						F13																			
			LSE				F11								F12													
	Wholly owned	Family business	SME													D8												
			LSE																									D14
		Single owner	SME																									D9
			LSE																									
		Small number of owners	SME																									
			LSE																									
Manufacturing	Joint venture		SME																									
			LSE											F7		D1												
	Wholly owned	Family business	SME																									
			LSE		F9											D2												
		Single owner	SME																									
			LSE																									
		Small number of owners	SME																									
			LSE	F3												D7												
Trade & Tourism	Joint venture		SME																									
			LSE		F4							F8																
	Wholly owned	Family business	SME																									D12
			LSE													D5												
		Single owner	SME							F5																		D13
			LSE																									
		Small number of owners	SME																									
			LSE																									

Table 4.3: A Summary of Sample Characteristics Emphasising Interviewees

Fieldwork Characteristics 'Focus Group': The qualitative aspects of the preliminary data are considered through the interviews with investors and FGs with PIs for their empirical findings. In terms of interviewee selection a purposive quota sampling method was devised where participants were selected in terms of pre-specified criteria and characteristics (Bryman and Bell, 2003; Sekaran, 1992, p. 229).

Data collection (question 18) the investors' interview and the ticking technique were used to find actors for

6) the answers were coded:

- Focus Group (FG) 1
- Focus Group (FG) 2

The essences of forming the two Groups: FGs composition should reflect the institutions the investors identified as relevant to the targeted sectors. Therefore, it was decided to employ some selection criterion (standard/principle) to decide which of the 52 institutions involved in the first stage of the fieldwork (investor interviews) would participate in this second stage (FGs).

Within the semi-structure interviews with investors there are economic and institutional determinants and policy areas (Appendix 4.2b). The Oman public institutions, organisations agencies are depicted in a chart in a non-hierarchy manner (see Appendix 4.2c state structure). To identify the characters of the institutions population and composition, Figs. 4.9a and 4.9b (below) demonstrates the institutions that were verified by Investors (FDIs and DIs). Four sets of public institutions (52 institutions in all) cover the structure; although it should be noticeable, that DIs tend to rank public institutions higher than FDIs (an average of 4 vs. 3). This could be partly explained by the fact that DIs tend to interact with a large number of public institutions (PIs) in comparison to foreign investors. Taking the respective average in terms of the difference PIs make to DIs and FDIs four groups seem to be delineated. Fig. 4.8a illustrates:

i) First set of institutions (14 institutions) seen as important and relevant to FDI and DI simultaneously (in red round ball mark);

Ministry of Commerce and industry (MCI) One Stop Shop (OSS), Banks, Ministry of Manpower (MMP), Ministry of Ministry of Foreign Affairs (MFA),

Ministry of Regional Municipalities, and water resources (MRMW), Ministry of Finance (MF), Ministry of Environment and Climate Affairs (MECA), Ministry of Health (MH), Ministry of Housing (MHg), Ministry of Transportation and Telecommunications (MTC), Royal Oman Police (ROP), Tender Board (TB), and Ministry of National Economy (OME or MoNE) which was recently abolished and replaced by the Supreme Committee for Planning (SCP).

ii) Second set of institutions (7 institutions) that are seen important and relevant to FDI more than DI. (in Green filled square mark);

Diwan of Royal Court (DRC), Ministry of Education (ME), Sultan Qaboos University (SQU), Ministry Interior (Governorates), Ministry of Heritage and Culture (MHC), and Ministry of Oil and Gas (MOG), Ministry of Health (MH).

iii) Third set of institutions (9 institutions) seen as important and relevant to (DI) more than FDI, (in Blue filled triangle mark).

Ministry of Defence (MOD), Ministry of Agriculture and Fisheries (MAF), Ministry of Tourism (MT), Public Authority for Investment Promotion and Export Development (PAIPED), Central Bank of Oman (CBO), Royal Guards Oman (RGO), Muscat Municipality (MM), Public Establishment for Industrial Estates (PEIE), Public Authority for Stores and Reserve Food (PASRF).

The thirty institutions mentioned in (i [14], ii [7], and iii [9]) are referred to as **Investment Concerned Public Institutions (ICPIs)** in this thesis.

iv) Fourth set of the rest of institutions (22 institutions) not seen as important and relevant to either FDI or DI's business. They gained low rate although they differ slightly (in Black diamond mark).

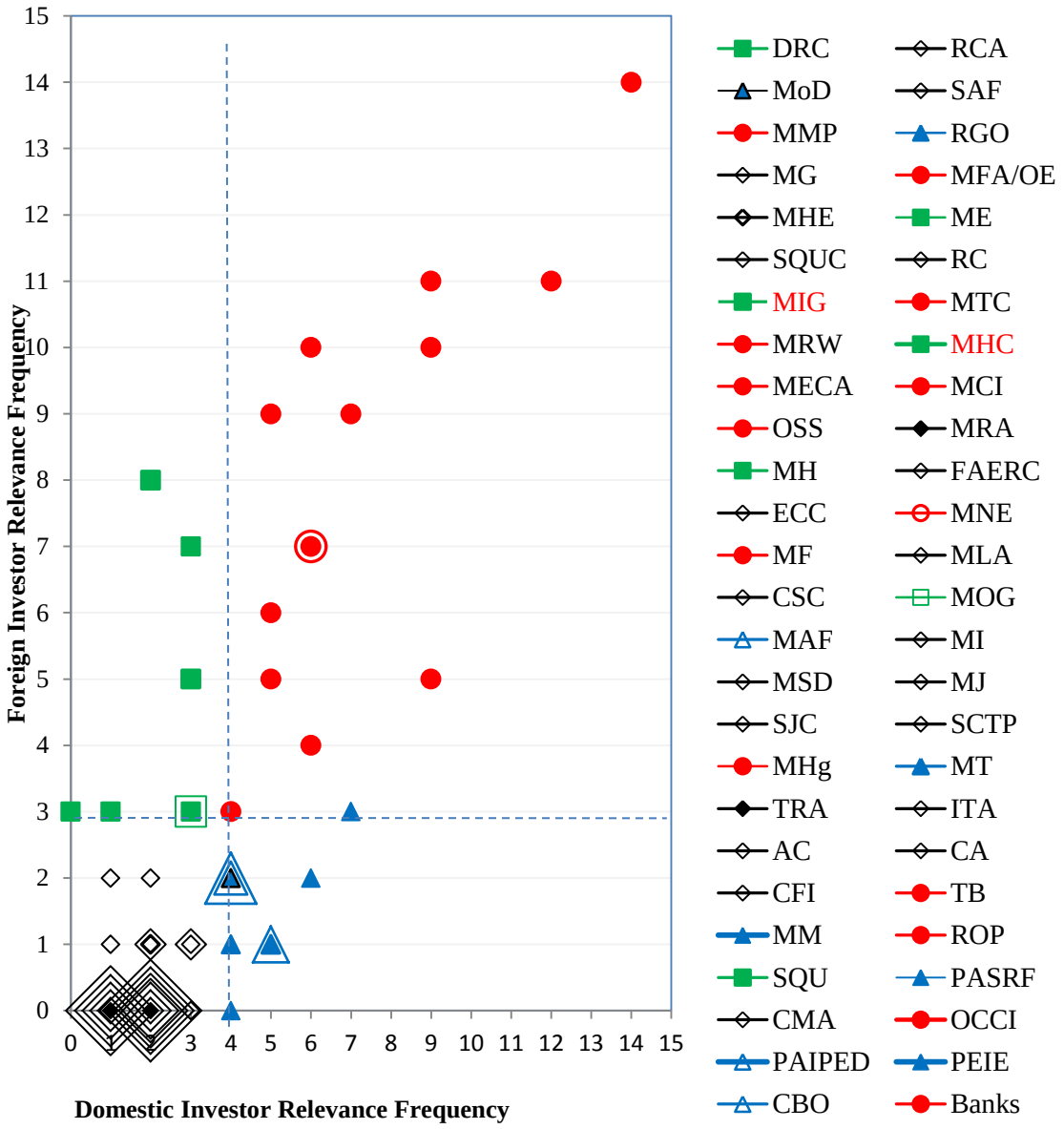


Figure 4.8a: Investors perspectives to Public Institutions relevance to their business.

The aforementioned three sets are illustrated in Fig 3.8a. The research considers these thirty institutions as Investment Concerned Public Institutions (ICPIs). Albeit there are institutions on the edge of two sets, which can be counted or considered in any two sets, such as the Ministry of Health. Attempts were then made to recruit the remaining FG participants from institutions that are either domestic or foreign (but not both) investors found them to be relevant, thus bringing the total number of FG participants to 19. Therefore, the first focus group (FG1) represents the institutions that serve and are related

to the sectors that had met their vision 2020 targets (by 2010) such as MAN, T&T, B&C, whereas the second focus group (FG2) represents institutions that serve and are related to the sectors that had not achieved their targets by 2010 such as A&F and M&Q.

The PIs are also shown in (Fig. 4.9b) as island of each sector.

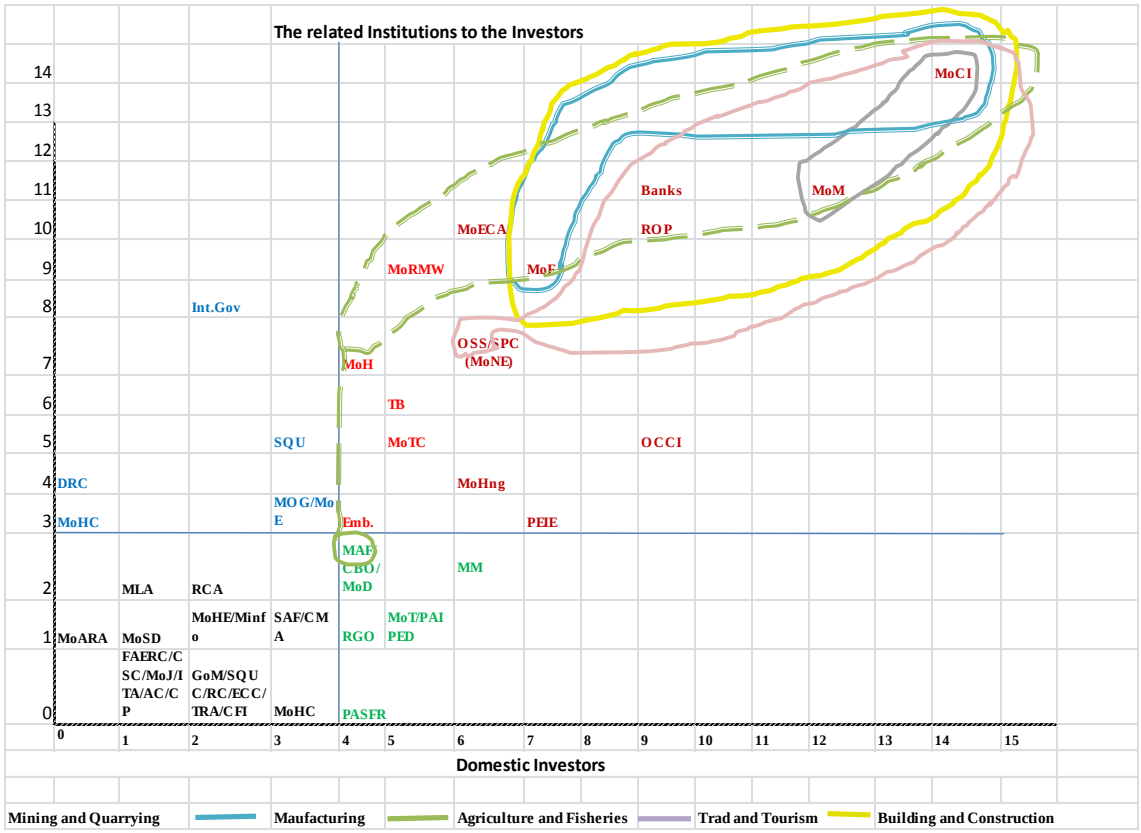


Figure 4.8b: Islands of most important institutions that can be seen by each sector among Investment Concerned Public Institutions (ICPIs).

All (30) institutions (first, second and third set of groups) were invited through telephone conversations: some declined or were unable to participate. In total 11 institutions relevant to both types of investors participated in sectors that related to Agriculture and Fisheries, and Mining and Quarrying Sectors. FGs try to understand differences in perspectives between groups of institutions representatives and people in power, and to provide different views of top management and front line services providers to the investors. In general, this is to seek more qualitative data to support the study and to provide insights. For focus groups the researcher acts as the moderator having invited the public institutions in two FGs to attend as participants. The focus groups questions (FGQs) were prepared. There

were two types of questions arrival questions, and b) a list of questions consisting of opening question key questions and closing question. The composition of Focus Groups has been done as per (Table 4.4 and Fig 4.9). This table and the figure are composed according to investors selection of public institutions that most important to their business this frequency illustrated in Appendix 4.2e.

HiF+HiD	TVD	TVF	FGp
MCI	**14**	**14**	**3**
MMP	**12**	**11**	**1**
Banks	**9**	**11**	**1**
ROP	**9**	**10**	**2**
OCCI	**9**	**5**	**1**
MF	**7**	**9**	**1**
MECA	**6**	**10**	**1**
OSS	**6**	**7**	**1**
OME	**6**	**7**	*****
MHg	**6**	**4**	**A**
MRW	**5**	**9**	**A**
TB	**5**	**6**	**1**
MTC	**5**	**5**	**1**
MFA/OE	**4**	**3**	**A**
Total	**14**	**14**	**13**

No more

HiD	TVD	TVF	FGp
PEIE	**7**	**3**	**1**
MM	**6**	**2**	**A**
MT	**5**	**1**	**2**
PAIPED	**5**	**1**	**A**
MoD	***4***	***2***	
MAF	***4***	***2***	***1***
CBO	***4***	***2***	
RGO	***4***	***1***	
PASFR	***4***	***0***	***1***
Total	**9**	**9**	**5**

HiF	TVD	TVF	FGp
MIG	**2**	**8**	**A**
MH	**3**	**7**	**1**
SQC	***3***	***5***	
ME	***3***	***3***	
MOG	***3***	***3***	
DRC	***1***	***3***	
MHC	***0***	***3***	
Total	**7**	**7**	**1**

LowD+F	TVD	TVF	FGp
SAF	**3**	**1**	
CMA	**3**	**1**	
SCTP	**3**	**0**	
RCA	**2**	**2**	
MHE	**2**	**1**	
MI	**2**	**1**	
MG	**2**	**0**	
SQUC	**2**	**0**	
RC	**2**	**0**	
ECC	**2**	**0**	
SJC	**2**	**0**	
TRA	**2**	**0**	
AC	**2**	**0**	
CFI	**2**	**0**	
MLA	**1**	**2**	
MSD	**1**	**1**	
MRA	**1**	**0**	
FAERC	**1**	**0**	
CSC	**1**	**0**	
MJ	**1**	**0**	
ITA	**1**	**0**	
CA	**1**	**0**	
Total	**22**	**22**	

Table 4.4: The Composition of Focus Groups (figures illustrate the frequency of foreign and Domestic opinion.
Note: HiF: High Frequency (Foreign investors). HiD: High Frequency (Domestic investors) TV: total value

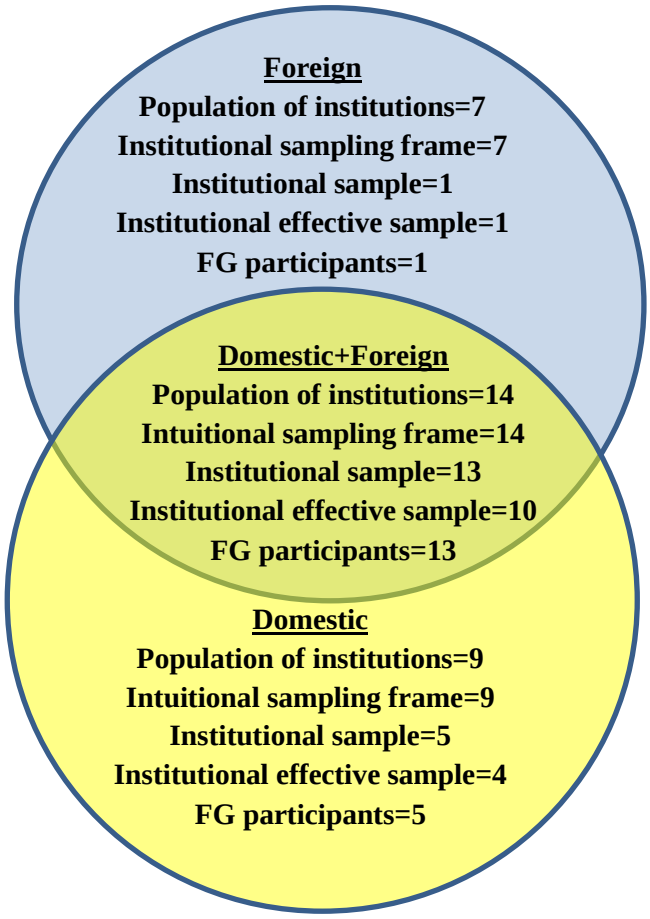


Figure 4.9: The composition of Focus Groups

However, as these institutions involve a number of sub-institutions (e.g. MCI has industry, commerce, and mining divisions or ROP has a customs and in Port services divisions) the total number of participants from this group of institutions was elevated to 14.

Table 4.5 (below) illustrate those institutions representative. Ministry of Health (on the border of set (1) and set (11 was taken as set (ii) representative.

FG1		FG2	
Institution	Participant title	Institution	Representative
MCI (Directorate General for Industry)	Director General for Industry	MCI (Minerals Div.)	Deputy Director General for Minerals
MCI (Directorate of Commerce)	Director General for Commerce	OSS	Director of Investors Services
MF (Taxation Dev.)	Director of Taxation- Secretary General for Taxation	MECA	Director; Environment
		MAF	Director General of Fisheries
		MH	Director General of Private Health Enterprises
Banks	Manager ODB	PASFR	CEO
MMP	Manpower regulations in charge	OCCI	Not attended
PEIE	Director of Investors relation	TB	Director General
ROP (Customs Div.)	Director of Customs duty	MTC	Ports
ROP (ports)	Sultan Qaboos Port		
T&T	Advisor of Tourism Minister		

Table 4.5: Implementation of FGs Composition

4.11 Conclusion

This chapter presented the philosophical aspects, approaches, strategy, and designed methods chosen to address the research problem. The coding, themes and patterns which set around the framework are five categories structured. For the research methods of data collection and analysis are mapped for both the interviews and the focus groups. This chapter developed a Systemic Methodological Framework (SPPS) to guide this study. It may be of use in further studies.

CHAPTER FIVE

FRAMEWORK IMPLEMENTATION DATA ANALYSIS PHASE ONE

5.1 Introduction

The "Systemic the Policymaking Process Structure (SPPS)" framework has been developed, in previous chapter and is now ready to be applied to a case concerning the structuring of a strategic developmental policymaking process. Placing this study within the constructivist paradigm will enable the researcher to explore implications in a dynamic manner based on the changing multiple stakeholders' viewpoints that are inherent in institutional development, due to the lack of viability in the non-hydrocarbon economic sectors of Oman.

This includes institutional development, so this chapter begins with the "investment strategic vision" which specified that;

"Working towards developing new sources of national income alongside the oil revenues with a view to replacing them in the future, enhancing the proportion of investments going to income generation projects especially in the areas of industry, mining, agriculture and fisheries, and distributing investments geographically in order that they may benefit all the regions of the country and its entire people, and in order to eliminate the disparity in the standard of living" (Investment Strategic Vision 2020, 1995).

Thus, public policies in general, and FDI policies in particular, need to maintain a level playing field for domestic and foreign direct investors, in order to foster the successful implementation of the country's development vision. This is not to say that the country's vision is not amenable to change and that the task at hand is one of policy implementation, but to merely highlight the fact that at any given time policy and institutional reform are taking place within a wider vision, in this case the Oman Vision 2020. Prior to delving into the SPPS, it is perhaps useful to recall the vision 2020 targets effective from 1996:

'.. increasing government revenue especially from the non-hydrocarbon sectors and working on increasing the economic growth rates of diversification activity and increasing its contribution in the Gross Domestic Products (GDP)", and; "…developing the non-hydrocarbon sectors exports of products and service through increasing its volume and **improving the level of quality and institutional development through increasing the private sector contribution to the GDP**, increasing the savings, encouraging the FDI, providing the investment climate and expanding the private sector role and activities', (Strategic Vision Target 2020).

It is obvious from the above strategy that it is important to improve the quality and level of institutional development through increasing the private sector contribution to GDP and to enhance the business of economic sectors (manufacturing, trade & tourism, agriculture & fisheries, mining & quarrying, and building & construction), which are expected to maximise their contribution in GDP growth. This is expected to lead to Oman's sustainable development and an improved competitiveness index in the world list.

5.2 The SPPS Framework Implementation

The inductive approach of this research began with the building of a conceptual framework based on the findings of the literature review. The systemic policymaking structure SPPS framework development would need to be evaluated and modifications discussed in the context of an iterative inductive process that includes:

- Obtaining data to perform a detailed VSM diagnosis and redesign to explore the problems of policy.
- Providing contextual background information.
- Exploring the value of the framework in attempting to address issues of structuring and implementing, where environmental complexity necessitates better collaboration, coordination, communication and control.

The initial phase of the SPPS framework is about identifying the situation considered problematic, and the problem itself through building a rich picture. The implementation of the SPPS will now follow. This chapter covers the SPPS stages dedicated to preliminary data collection through Stage 1 and Stage 2 of phase one (Fig. 5.1).

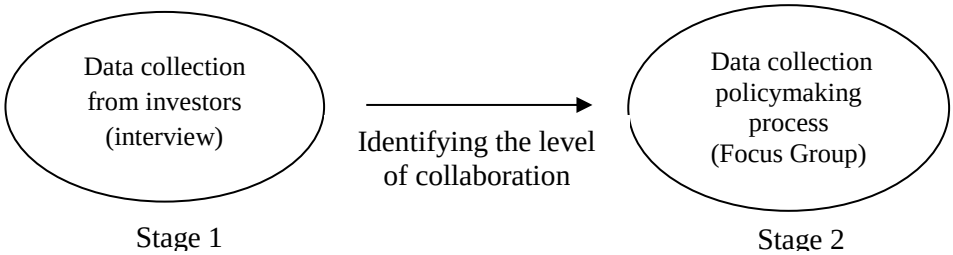


Figure 5.1: Phase one: Identifying and expressing situation considered problematical

Stage 1: Identifying situation considered problematic

This to identify the situation considered problematical in the public policymaking levels in Oman for investment, and to set and model the theoretical boundaries for actors (the relationships). As explained in chapter two (section 2.7), the non-hydrocarbon sectors are described for each of the five sectors that need institutional enhancement. According to the 2020 vision, the hydrocarbon sectors' share of GDP needed to descend but actually it soared up. This certainly was at the expense of the non-hydrocarbon sectors.

However, the non-hydrocarbon activities made a large improvement in 'services activities' including trade and tourism but maximising the non-hydrocarbon sectors' share and increasing its contribution up to 81% of GDP by 2020 still involves significant improvement: there is a long way to go to reach this target. One of the required improvements in the investment climate may involve increasing inward investment and enhancing economic growth to develop these institutions in two areas;

a) Human support to structure a public policymaking process by encouraging trust and collaboration among economic sectors, and by advancing through experience and knowledge sharing with the private sector.

b) Technological and ICT support by building a platform of interaction between private and public sector ultimately to gain institutional development for 'joined-up working'.

This is one of the main arguments which emerged from interviews and PIs focus groups that was found to be problematic. The *status quo* needs to be unfolded and further understanding with regards to the system identity, control and communication and private sector leadership, interacting with the public sector. This includes giving a viable management to policies, which, as the literature shows, is less developed when it comes to systems approaches to policy in public and private sectors simultaneously.

Stage 2: The problem situation expressed in a rich picture

The problem situation was expressed by using a rich picture (Checkland, 1981) by building a "thick" description (Holliday, 2007) in chapter two to delve into the research problem that described in chapter one and to find out the network of interconnected data, and discussion within the coherence of the argument, structured by themes, codes

and the panels mentioned in the previous chapter. The fieldwork was carried out in order to examine the impact of institutional development on the growth of those economic sectors in Oman, as a developing country, where investors' issues are found to be a significant factor, contributing to GDP growth and the country's strategic vision. This is on the basis of diversification of its economy, to shift from depending on hydrocarbon to non-hydrocarbon sectors' activity. Within the aforementioned SVT2020 and ISV2020, the Omani government intends to maximise and increase the benefits and returns of the non-hydrocarbon sectors that participate, up to 81% of GDP. Correspondingly, the contribution of the oil and gas sector needs to be reduced and to 19% of GDP (Oil 9% and Gas 10%) by 2020.

The observational data was used and coded along with the interview data. Data gathering, coding and sampling was divided into groups or categories in a way described in the previous chapter. There are two issues that lead to an expression of the problem situation:

1. Examining the policy significance to the investors and the public institutions, and economic and institutional determinants and policies areas.
2. The government's power delegation on policymaking, and the private sector investors' leadership to face public institutions.

5.3 Policy Significance to Investors and Public Institutions

The opinion of Foreign Direct investors FDIs (F) and domestic investors DIs (D) are examined by ranking economic and institutional determinants and policy areas that are important to them. On these areas, the opinions coming from public institutions individually and through focus groups – were compared with those of the investors.

5.3.1: Observations and Data Gathering and Analysis: individual perspectives

a) Economic determinants (per investor individual perspective)

From Fig. 5.2a below, it is to be noted that even the lowest determinant (viz. FDI stocks) is above the 2.5 threshold of the five point Likert scale used. Such high rankings

suggest that most of the economic determinants, and especially those including; growth, tax and incentives with an average of (4.2) or higher infrastructure and openness (4.5) should form part of the respective policy agendas that can be discussed further in policy areas. Examining the similarities and differences between the two sets of data (from FDIs and DIs) it can be noted that DIs rank on average all economic determinants at approximately the same level (population, infrastructure, and openness and wages), or higher (GDP, growth, venture capital, exchange rates, competition, incentives) than FDIs.

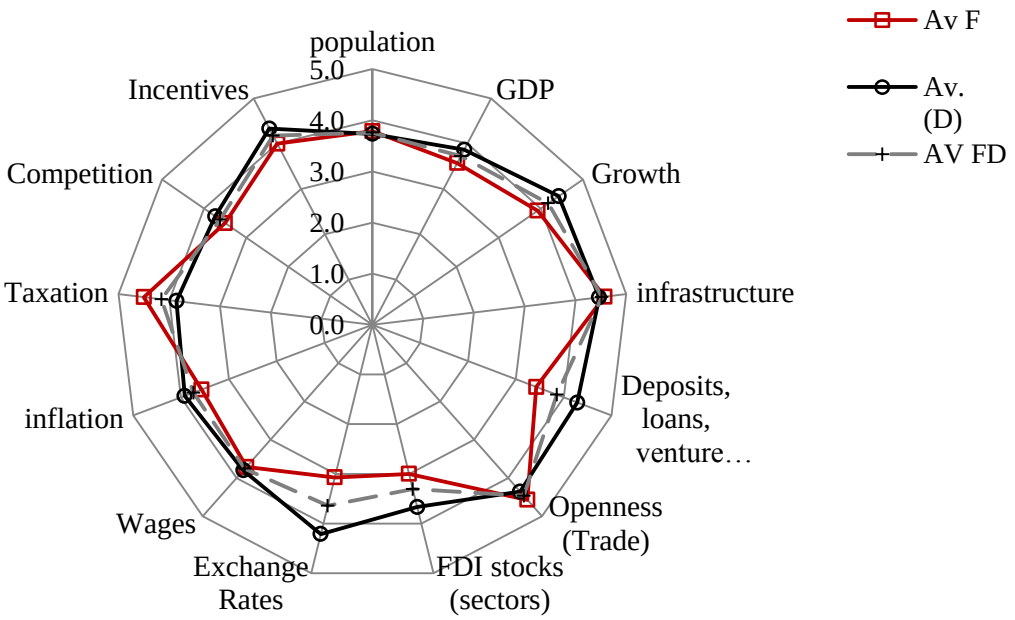


Figure 5.2a: Economic determinants comparison (Investors Individual Opinion).
Sources: Authors' elaboration, based on interviews with foreign and domestic investors (N=30)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

Assuming that both groups are correct in their assessment, the higher DIs ranking could be interpreted as suggesting that direct investment decisions by DIs are determined to a larger extent, in comparison for FDIs, by economic factors outside their control. This raises the question as to why DIs appear more susceptible to economic determinants; especially as the extent to which this shared views varies across industrial specialisations.

Considering Table 5.1: in general, both DIs and FDIs tend to exhibit similar amounts of internal variation across their rankings, they are incentives and competition determinants, both with a (0.9) standard deviation (STDEV) when FDIs reported a (1.4) STDEV respectively. As the former determinant is also highly ranked by DIs (4.3), more so than by FDIs (4.0), this can only raise serious concerns over the decision outcomes of DIs in the absence of such incentives.

	Respondents / Economic Determinants	Average F	STDEV F	Average D	STDEV D	Average FD	STDEV all
1	population	3.8	1.2	3.7	1.5	3.8	1.4
2	GDP	3.6	1.2	3.9	1.1	3.7	1.1
3	Growth	3.9	1.1	4.4	1.2	4.2	1.2
4	infrastructure	4.6	0.6	4.5	1.1	4.5	0.9
5	Deposits, loans, venture capital	3.4	1.2	4.3	1.1	3.9	1.2
6	Openness (Trade)	4.6	0.8	4.4	1.2	4.5	1.0
7	FDI stocks	3.0	0.8	3.7	0.9	3.3	0.9
8	Exchange Rates	3.1	1.3	4.2	1.0	3.6	1.3
9	Wages	3.7	0.6	3.8	0.9	3.8	0.7
10	inflation	3.6	0.8	3.9	1.1	3.7	0.9
11	Taxation	4.5	0.8	3.9	1.4	4.2	1.2
12	Competition	3.5	1.4	3.7	1.0	3.6	1.2
13	Incentives	4.0	0.9	4.3	1.0	4.2	0.9

Table 5.1: Economic Determinants (Investors Individual Opinion)
Sources: Authors' elaboration, based on interviews with foreign and domestic investors (N=30)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

On the other hand, there are two further economic determinants where DIs exhibit substantial variation in their rankings; inflation and FDI stocks. It is somewhat fortunate that both of these economic determinants have the lowest rankings. Moreover, their STDEV 1.1 could be partly attributed to the difference in DI industrial specialisation. Even if this turns out to be the case it needs to be noted that the understanding of the role, importance, of these two economic determinants is certainly not shared across the DIs, and thus some respective educational programme could be of help so to develop a shared understanding, in par with that of the FDIs STDEV 1.1

b) Institutional Determinants findings (per individual investor perspective)

The importance of institutional determinants importance is illustrated in the following Fig. 5.2b for FDIs or DIs showing both the average and the standard deviation. It should be noted that even the last determinant (share/bond issue) is above the 2.5 threshold of the five point Likert scale. Such high rankings suggest that most of the institutional determinants and especially up to and including country risk determinant should form part of respective policy agendas (policy areas to be discussed further below). Interestingly for both DIs and FDIs, institutional determinants are on average ranked almost as highly as economic ones; the latter are ranked slightly higher by (0.1). This similarity should give some further food for thought concerning the respective policy area priorities.

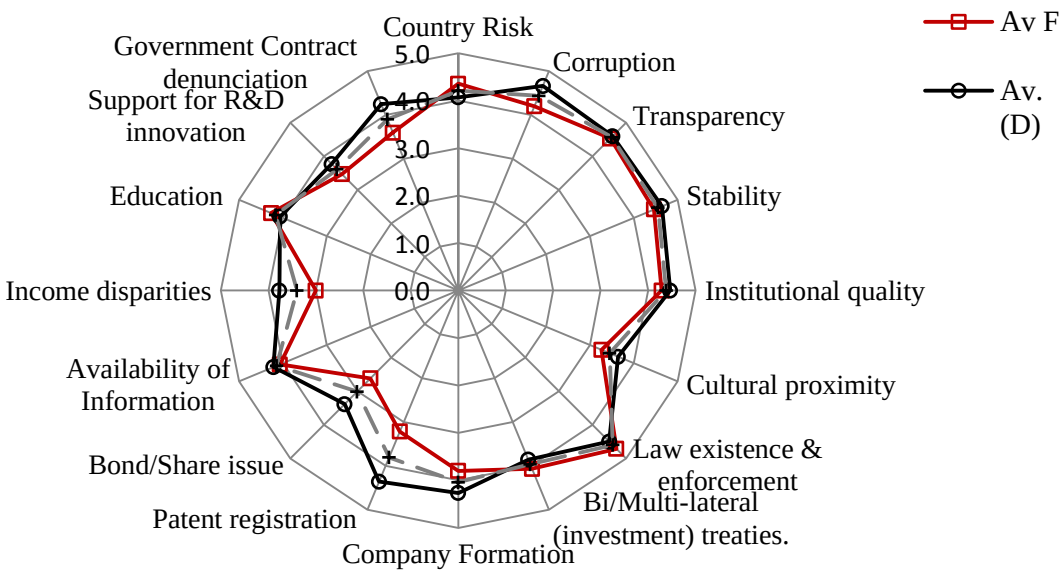


Figure 5.2b: Institutional determinants comparison (Investors Individual Opinion).
Sources: Authors' elaboration, based on interviews with foreign and domestic investors (N=30)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

In particular, DIs rank on average all but one of the institutional determinants (Multilateral/BIT) at approximately the same level of (country risk, transparency, stability, cultural proximity, law existence and enforcement (rule of law), information availability, education, and R&D/innovation support), or higher (corruption,

institutional quality, company formation, patent registration, bond/share issue, income disparities and government contract denunciation) than FDIs. This adds further support to the earlier comments concerning the heightened external influences on the investment decisions of DIs, by extending them to institutional factors.

The aforementioned institutional determinants ranked high by domestic investors seem to suggest some particularly pressing policy areas. In general as shown in Table 5.2, DIs tend to exhibit the same STDEV on average 1.1, and almost the same in economic and institutional determinants (1.0) DIs tend to exhibit slightly higher rankings in comparison to FDIs, on average across their rankings 4.2 to 3.9 respectively. Again this should add to the earlier concerns over the DIs' shared understanding of the role, importance, of institutional determinants.

	Respondents ID / Importance	Av F	STDEV F	Av. D	STDEV D	Av. (F+D)	STDEV all
1	Country Risk	4.4	1.0	4.1	1.3	4.2	1.2
2	Corruption	4.2	0.9	4.7	0.6	4.4	0.8
3	Transparency	4.5	0.5	4.6	1.1	4.6	0.8
4	Stability	4.5	1.0	4.6	1.1	4.6	1.0
5	Institutional quality	4.3	0.7	4.5	0.8	4.4	0.8
6	Cultural proximity	3.3	1.3	3.6	1.2	3.5	1.3
7	Law existence & enforcement	4.7	0.5	4.5	0.9	4.6	0.7
8	Bi/Multi-lateral (investment) treaties.	4.1	0.8	3.9	0.8	4.0	0.8
9	Company Formation	3.8	0.9	4.3	0.8	4.0	0.9
10	Patent registration	3.2	1.3	4.4	0.7	3.8	1.2
11	Bond/Share issue	2.6	1.3	3.4	1.0	3.0	1.2
12	Availability of Information	4.1	1.3	4.2	1.4	4.1	1.3
13	Income disparities	3.0	1.5	3.8	1.1	3.4	1.4
14	Education	4.3	0.7	4.1	1.2	4.2	1.0
15	Support for R&D innovation	3.5	1.0	3.8	1.3	3.6	1.1
16	Government Contract denunciation	3.6	0.8	4.3	1.0	3.9	0.9

Table 5.2: Institutional Determinants (Investor's Individual opinion)
Sources: Authors' elaboration, based on interviews with foreign and domestic investors (N=30)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

There are four institutional determinants where DIs appear particularly convergent in their rankings. These are: corruption, institutional quality, company formation and patent registration within a STDEV 06 to 0.8. Given the high rankings of these institutional determinants (in the 4.3 to 4.7 range) and the fact that DIs rankings are at least 0.3 above those of their foreign counterparts, efforts should be made to address any shortcomings in these areas such efforts should be to alleviate their respective concerns. It should also be noted that there are three other institutional determinants of concern to DIs in particular, (patent registration, income disparities, and bond/share issue) where the domestic investor rankings exceed those of their foreign counterparts (0.8 to 1.2 points of the five point Likert scale). However, there is substantial internal disagreement among DIs with STDEV ranging from (0.9 to 1.3). Other institutional determinants with large divergence of opinion (i.e. with STDEV 1.4) among DIs concern the availability of information (determinant 12), which will be picked upon in the sector-specific analysis.

Turning to FDIs, it is to be reported that the ‘rule of law', as an institutional determinant of FDI had the smallest STDEV 0.5 among institutional determinants with highest ranking (4.7) and within economic determinants ‘infrastructure’ as smallest STDEV (0.6) with the highest ranking (4.6). Clearly, additional expedient efforts should be placed in this policy direction. Interestingly, among DIs the STDEV of these both determinants is twice as high (approximately 1.0). This is investigated further in terms of sector-specific analysis.

c) Policy importance to the investors (individual investor perspective)

Now we need to consider those policy areas that are depicted in Fig. 5.2c. It should be visible that all policy areas were on average, given relatively high rankings 3.6 to 4.5 on the five point Likert scale. This suggests that for both groups of investors all policy areas are of significant importance to their investments. This should encourage further policy developments in all areas of Fig. 5.2c.

DIs in particular rank on average all but one policy area (FDI attrition) at approximately the same level (infrastructure, education and training R&D, information diffusion and environment), or higher (internationalisation, customised firm services, labour

recruitment, networking, quality development, SME start up and incubation and venture/risk capital) than FDIs.

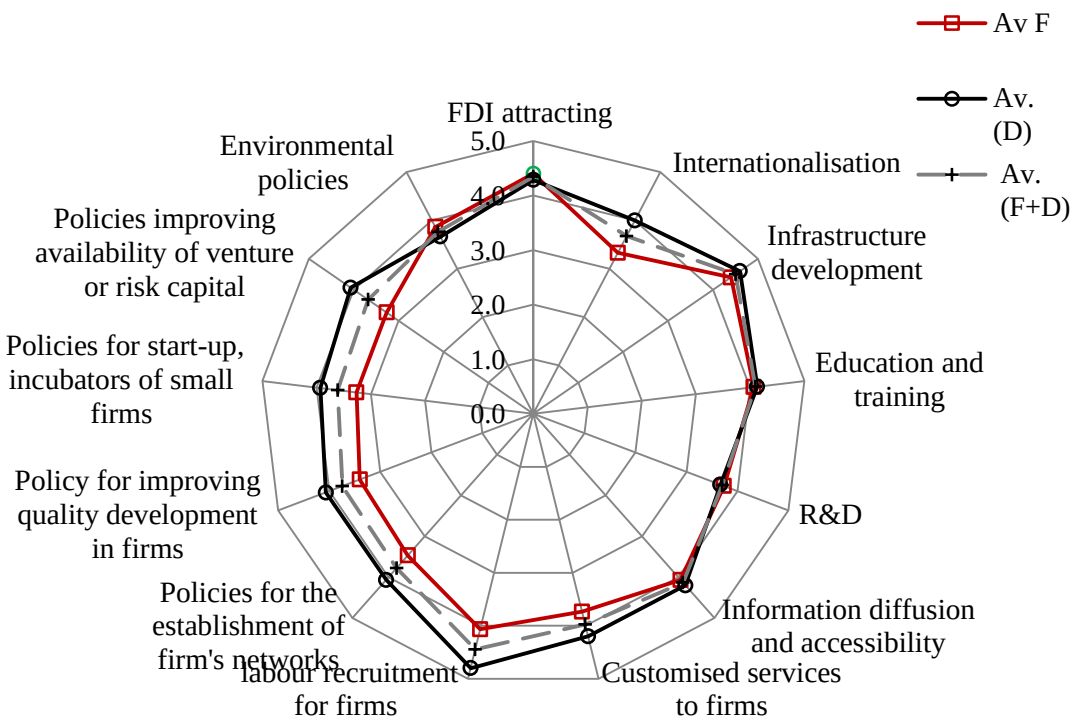


Figure 5.2c: Importance of Policies Comparison (Investors Individual Opinion).
Sources: Authors' elaboration, based on interviews with foreign and domestic investors (N=30)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

Interestingly, when it comes to policy, there seems to be less internal disagreement among the two groups of investors, whose rankings exhibit rather small differences in their respective standard deviations. However, it is to be reported that among all policy areas the one with the smallest standard deviation (0.6) for DIs is labour requirement. Given that DIs also ranked labour recruitment highest (4.8) while for FDIs the respective values were 1.1 and 4.1 policy should focus upon this area so to address the cause of any disparities. The so far findings should have provided an appropriate context to appreciate the differences that policy areas make on DIs and FDIs as depicted in Table 5.3.

	Respondents / Policies / Importance	Av F	STDEV F	Av. (D)	STDEV D	Av. (F+D)	STDEV all
1	Policies attracting FDI	4.4	1.0	4.3	0.9	4.3	0.9
2	Policies Internationalisation	3.3	1.3	4.0	1.1	3.7	1.3
3	Physical infrastructure development	4.4	0.7	4.6	0.9	4.5	0.8
4	Education and training	4.1	0.9	4.1	1.1	4.1	1.0
5	Research and technological development (R&D)	3.7	1.0	3.7	1.2	3.7	1.1
6	Information diffusion	4.1	1.0	4.2	0.8	4.1	0.9
7	Polices providing customised services to firms	3.7	0.9	4.2	0.9	4.0	0.9
8	Policies helping labour recruitment for firms	4.1	1.1	4.8	0.6	4.4	0.9
9	Policies for the establishment of firm's networks	3.5	1.0	4.1	0.7	3.8	0.9
10	Policy for improving quality development in firms	3.4	1.2	4.1	0.8	3.7	1.1
11	Policies for start-up, incubators of small firms	3.3	1.2	3.9	1.1	3.6	1.2
12	Policies improving availability of venture or risk capital	3.3	1.6	4.1	1.2	3.7	1.4
13	Environmental policies	3.9	1.2	3.7	1.3	3.8	1.2

Table 5.3: Policy Areas (Investor individual opinion)
Sources: Authors' elaboration, based on interviews with foreign and domestic investors (N=30)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

In order to identify policy areas in more depth, the researcher began examining investors' individual opinions concerning the importance of economic and institutional determents (quantitatively). The importance of policy areas varies across the different sectors among FDIs and DIs. Examining the support of economic determinants, both FDIs and DIs highest rankings suggest that most of the economic determinates, especially growth, tax and incentives policies and higher (infrastructure and trade openness) should form part of the respective policy programmes. Similarity in economic determinants: population, infrastructure, openness and wages, DIs exhibit higher values in: GDP, growth, venture capital, exchange rates, competition, and incentives. This was investigated further in terms of sector-specific analysis of the rankings, and comparison of STDEV in three areas of economic determinants (see Table 5.3), institutional determinants, and policy areas.

Regarding economic support in the policy areas; its importance varies across the different sector-specialisations with agriculture, fisheries and manufacturing ranking economic determinants on average much higher than mining and quarrying. Both similarities and differences between DIs and FDIs appear to persist at the sector-specific level. Importance of the institutional determinants also varies across the different sector specialisations.

5.3.2: Observations and Data Gathering and Analysis: (investors' sector-specific perspectives).

a) Economic Determinants (sector-specific perspective)

The sector-specific importance of Economic Determinants for both DIs and FDIs can be reported in the following Table 5.4.

	Economic Determinants	MAN			B&C		A&F				M&Q			T&T		
		F	D	A	F	D	A	F	D	A	F	D	A	F	D	A
1	Population	**4.0**	**4.7**	**4.3**	**4.3**	**3.0**	**3.7**	**4.3**	**4.0**	**4.2**	**2.3**	**2.7**	**2.5**	**4.0**	**4.3**	**4.2**
2	GDP	**3.7**	**4.7**	**4.2**	**4.0**	**4.0**	**4.0**	**4.7**	**4.3**	**4.5**	**2.3**	**2.7**	**2.5**	**3.0**	**3.7**	**3.4**
3	Growth	**4.3**	**5.0**	**4.7**	**4.3**	**4.7**	**4.5**	**4.3**	**4.0**	**4.2**	**2.3**	**3.7**	**3.0**	**4.5**	**5.0**	**4.8**
4	Infrastructure	**4.3**	**5.0**	**4.7**	**4.3**	**4.7**	**4.5**	**4.7**	**4.3**	**4.5**	**4.7**	**3.7**	**4.2**	**5.0**	**4.7**	**4.8**
5	Deposits, loans, venture capital	**2.7**	**5.0**	**3.8**	**3.0**	**4.3**	**3.7**	**3.7**	**4.3**	**4.0**	**4.3**	**3.3**	**3.8**	**3.5**	**4.5**	**4.0**
6	Openness (Trade)	**4.3**	**4.0**	**4.2**	**4.7**	**4.7**	**4.7**	**4.0**	**4.7**	**4.3**	**5.0**	**3.7**	**4.3**	**5.0**	**5.0**	**5.0**
7	FDI stocks (sectors)	**3.0**	**4.0**	**3.5**	**3.0**	**3.0**	**3.0**	**3.0**	**4.0**	**3.4**	**3.0**	**3.3**	**3.2**	**3.0**	**5.0**	**3.7**
8	Exchange rate	**2.7**	**5.0**	**3.8**	**2.7**	**4.0**	**3.3**	**4.0**	**4.3**	**4.2**	**3.7**	**3.3**	**3.5**	**2.0**	**4.5**	**3.3**
9	wages	**3.7**	**3.3**	**3.5**	**3.3**	**3.3**	**3.3**	**4.3**	**4.3**	**4.3**	**3.3**	**3.7**	**3.5**	**4.0**	**4.3**	**4.2**
10	Inflation	**3.0**	**4.0**	**3.5**	**3.3**	**4.0**	**3.7**	**3.7**	**4.3**	**4.0**	**3.7**	**3.3**	**3.5**	**4.5**	**4.0**	**4.3**
11	Taxation	**4.0**	**3.7**	**3.8**	**5.0**	**3.3**	**4.2**	**4.7**	**5.0**	**4.8**	**4.0**	**3.3**	**3.6**	**4.5**	**4.0**	**4.3**
12	Competition	**3.7**	**4.0**	**3.8**	**3.7**	**4.0**	**3.8**	**4.7**	**4.0**	**4.3**	**2.0**	**3.3**	**2.7**	**3.5**	**3.3**	**3.4**
13	Incentives	**4.3**	**5.0**	**4.7**	**4.0**	**4.7**	**4.3**	**4.0**	**5.0**	**4.5**	**4.5**	**3.7**	**4.0**	**3.0**	**3.3**	**3.2**
	Average	**3.7**	**4.4**	**4.0**	**3.8**	**4.0**	**3.9**	**4.2**	**4.4**	**4.2**	**3.5**	**3.4**	**3.4**	**3.8**	**4.3**	**4.0**

Table 5.4: investors (sector-specific) perspective to Economic Determinants A: Average.
Sources: Authors' elaboration, based on interviews with foreign and domestic investors (N=30)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

It can be seen in Table 5.6 that the importance of the economic determinants varies (from 3.4 to 4.2) across the different sector-specialisations with agriculture and fisheries (A&F) together with manufacturing (MAN) ranking economic determinants on average much higher than mining and quarrying (M&Q). The patterns reported in Fig. 5.2a concerning the similarities and differences between DIs and FDIs appear to persist at the sector-specific level. Their differences seem to be noticeable in particular at (MAN), (T&T) sectors where DIs in these sectors ranks the importance of economic determinants higher than their foreign counterparts by 0.5 and 0.7 respectively).

This adds further support to the need for the remedial actions introduced in Fig. (5.2a), as one could argue that the importance of these economic determinants on domestic investment decisions in these sectors is stronger in the context of FDIs. The sector-specific disaggregation of the economic determinants rankings also clarifies the earlier reported patterns concerning inflation and FDI stocks: it should be visible from Table 6.5 that both determinants are more highly ranked by domestic investors in trade and tourism. This suggests a stronger focus on policy development in these sectors; e.g. establishing why this is of relatively heightened importance, and DIs' development programmes in these areas.

b) Institutional Determinants (sector-specific perspective)

Turning now to the institutional determinants; the sector-specific patterns are summarised in Table 5.8. It should be visible from Table 5.5 that the importance of the institutional determinants varies from 3.7 to 4.2 across the different sector specialisations. The lower end (minimum) is slightly higher than that of the respective economic determinant measures. This could be interpreted as suggesting that the importance of institutional determinants is heightened across all sector specialisations. Moreover, the patterns reported in Fig. 5.2b appear to persist at the sector-specific disaggregated level and the main differences in the importance of institutional determinants between DIs and FDIs are encountered in the same sectors for which disparities in economic determinants were reported, i.e. manufacturing, trade and tourism. The overall stability of the sector order across both economic and institutional

determinants adds further support to the identified patterns and the differentiated needs of these sectors.

	Institutional Determinants	MAN			B&C			A&F			M&Q			T&T		
		F	D	A	F	D	A	F	D	A	F	D	A	F	D	A
1	Country risk	**4.3**	**5.0**	**4.7**	**4.0**	**4.7**	**4.3**	**4.0**	**5.0**	**4.5**	**4.5**	**3.7**	**4.0**	**3.0**	**3.3**	**3.2**
2	Corruption	**4.3**	**5.0**	**4.7**	**4.3**	**4.3**	**4.3**	**4.3**	**5.0**	**4.7**	**4.0**	**4.0**	**4.0**	**4.0**	**5.0**	**4.5**
3	Transparency	**4.3**	**4.7**	**4.5**	**4.3**	**4.7**	**4.5**	**4.3**	**5.0**	**4.7**	**5.0**	**3.7**	**4.3**	**4.7**	**5.0**	**4.8**
4	Stability	**4.7**	**5.0**	**4.8**	**4.3**	**4.7**	**4.5**	**5.0**	**5.0**	**5.0**	**4.3**	**3.0**	**3.8**	**4.0**	**5.0**	**4.5**
5	Institutional quality	**3.7**	**4.3**	**4.0**	**4.0**	**4.7**	**4.3**	**5.0**	**4.3**	**4.7**	**4.0**	**4.0**	**4.0**	**4.7**	**5.0**	**4.8**
6	Cultural proximity	**3.0**	**3.3**	**3.2**	**3.0**	**3.3**	**3.2**	**4.0**	**4.0**	**4.0**	**2.3**	**3.7**	**3.0**	**4.0**	**4.0**	**4.0**
7	Law existence & enforcement	**4.7**	**5.0**	**4.8**	**4.3**	**4.7**	**4.5**	**5.0**	**5.0**	**5.0**	**5.0**	**3.7**	**4.2**	**4.7**	**5.0**	**4.8**
8	Bi/Multi-lateral (investment) treaties	**3.3**	**4.3**	**3.8**	**4.3**	**3.7**	**4.0**	**4.3**	**3.7**	**4.0**	**4.0**	**3.7**	**3.8**	**4.3**	**4.0**	**4.2**
9	company formation	**4.0**	**4.7**	**4.3**	**4.3**	**4.0**	**4.2**	**4.0**	**4.3**	**4.2**	**3.3**	**3.7**	**3.5**	**3.7**	**4.7**	**4.2**
10	patent registration	**3.0**	**5.0**	**4.0**	**3.7**	**3.7**	**3.7**	**3.3**	**4.5**	**3.8**	**2.0**	**4.0**	**3.2**	**3.7**	**4.7**	**4.2**
11	Bond/share issue	**3.0**	**4.0**	**3.5**	**2.7**	**3.3**	**3.0**	**2.3**	**3.5**	**2.8**	**2.5**	**2.7**	**2.6**	**2.5**	**3.5**	**3.0**
12	Availability of information	**3.3**	**4.3**	**3.8**	**3.3**	**4.0**	**3.7**	**4.0**	**4.0**	**4.0**	**5.0**	**3.7**	**4.3**	**4.7**	**5.0**	**4.8**
13	Income disparities	**3.3**	**3.5**	**3.4**	**2.0**	**3.3**	**2.7**	**3.3**	**3.5**	**3.4**	**3.0**	**4.0**	**3.6**	**3.5**	**4.3**	**4.0**
14	Education	**4.3**	**4.3**	**4.3**	**4.0**	**3.7**	**3.8**	**4.7**	**4.7**	**4.7**	**4.0**	**4.0**	**4.0**	**4.3**	**3.7**	**4.0**
15	Support for R&D innovation	**2.7**	**4.0**	**3.2**	**3.3**	**3.3**	**3.3**	**4.0**	**4.0**	**4.0**	**3.7**	**3.7**	**3.7**	**3.7**	**4.0**	**3.8**
16	Government contract denunciation	**3.3**	**4.7**	**4.0**	**3.7**	**4.0**	**3.8**	**3.8**	**4.5**	**4.2**	**3.7**	**3.5**	**3.4**	**3.7**	**4.5**	**4.0**
	Average	**3.7**	**4.4**	**4.1**	**3.7**	**4.0**	**3.9**	**4.1**	**4.4**	**4.2**	**3.8**	**3.7**	**3.7**	**3.9**	**4.4**	**4.2**

Table 5.5: investors (sector-specific) perspective to Institutional Determinants
Sources: Authors' elaboration, based on interviews with foreign and domestic investors (N=30)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

The sector specific disaggregation of the institutional rankings also makes visible the aforementioned (discussion under Fig. 5.2b) divergence of opinion among domestic investors concerning R&D, innovation support and government contract denunciation

as it makes clear the divide between the sectors. Taking government denunciation and R&D/innovation support as an example, it can be seen in Table 5.6 that within manufacturing the importance of this determinants stands at 4.7; whereas within building and construction at a mere 3.3. However, these two institutional determinants do not exhibit the largest sector variation for DIs, which is encountered in stability but only at 3.0 by mining and quarrying DIs. Similarly, country risk ranks at 5.0 in the first and third sectors, but only at 3.3 in trade and tourism. On the foreign direct investor side such large sector- specific disparities are only encountered at information availability that ranks from 5.0 in mining and quarrying to 3.3 in trade and tourism. Across the different sectors there is roughly the same amount of divergence of opinion within each group of investors. This adds further support to the need for sector-specific policy developments that go beyond the lines of the simpler DIs and FDIs distinction.

c) Policy Areas: (sector-specific perspective)

Having highlighted differences in institutional rankings in the above sectors, it also needs to be reported that overall sector variation between domestic and foreign direct investors is negligible. That is, across the different sectors there is roughly the same amount of divergence of opinion within each group of investors. This adds further support to the need for sector-specific policy developments that go beyond the lines of the simpler DIs and FDIs distinction. Policy importance also seems to differ across sector specialisations as summarised in Table 5.6.

	Policy areas	MAN			B&C			A&F			M&Q			T&T		
		F	D	A	F	D	A	F	D	A	F	D	A	F	D	A
1	Policies FDI attracting	3.7	4.3	4.0	5.0	4.0	4.5	4.0	4.5	4.2	4.3	3.7	4.0	5.0	5.0	5.0
2	Policies of Internationalisation	2.7	4.7	3.7	3.0	3.7	3.3	3.7	3.0	3.3	2.3	4.3	3.3	5.0	4.3	4.7
3	Physical infrastructure development	4.0	5.0	4.5	4.7	4.7	4.7	4.0	5.0	4.5	4.3	4.0	4.2	4.7	4.3	4.5
4	Education and training within the firm	4.0	4.3	4.2	4.0	3.3	3.7	4.3	4.7	4.5	4.0	4.0	4.0	4.0	4.3	4.2
5	Research and technological development	2.7	4.3	3.5	3.7	3.3	3.5	4.3	3.7	4.0	4.0	3.7	3.8	4.0	3.3	3.7
6	Information diffusion and accessibility for firms	3.0	4.7	3.8	3.7	3.7	3.7	4.0	4.0	4.0	5.0	4.0	4.5	4.7	4.7	4.7
7	Policies providing customised services to firms	3.0	4.7	3.8	3.3	4.0	3.7	4.0	4.0	4.0	3.7	4.3	4.0	4.7	4.0	4.3
8	Policies helping labour recruitment for firms	4.0	5.0	4.5	4.0	4.7	4.3	4.0	5.0	4.5	3.7	4.3	4.0	4.7	5.0	4.8
9	Policies for the establishment of firms' networks	3.0	4.0	3.5	4.0	4.3	4.2	3.7	4.0	3.8	2.3	4.0	3.2	4.3	4.0	4.2
10	Policy for improving quality development in firms	3.3	3.7	3.5	3.3	4.7	4.0	4.0	3.7	3.8	2.3	3.7	3.0	4.0	4.7	4.3
11	Policies for start-up, incubators of small firms	2.7	4.3	3.5	3.0	4.7	3.8	4.0	3.7	3.8	3.0	3.7	3.3	3.7	3.3	3.5
12	Policies improving availability of venture or risk capital	2.0	5.0	3.5	3.0	4.7	3.8	3.3	3.7	3.5	4.7	3.7	4.2	3.3	3.3	3.3
13	Environmental policies	4.3	4.3	4.3	3.3	4.0	3.7	4.3	3.0	3.7	4.3	4.0	4.2	3.0	3.0	3.0
	Average	3.3	4.5	3.9	3.7	4.1	3.9	4.0	4.0	4.0	3.7	3.9	3.8	4.2	4.1	4.2

Table 5.6: investors (sector-specific) perspective to policy areas
Sources: Authors' elaboration, based on interviews with foreign and domestic investors (N=30)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

It should be visible in Table 5.5 that the importance of policy areas varies (from 3.8 to 4.2) across the different sectors. It could thus be noted that the sectors variation in the importance of policy areas is almost identical to the one encountered in the importance of institutional determinants. Moreover, in comparison to the aggregate patterns reported in Fig 5.2c the baseline has increased from the aggregate (3.6 to 3.8) for the lowest sector, mining and quarrying. However, the sectors disaggregation of policy importance produces some additional insights in comparison to the respective sectors disaggregation of both economic and institutional determinants. For example in some sectors like trade and tourism, or agriculture and fisheries the differences between the

two groups of investors disappear, while in other sectors like manufacturing they are amplified. This adds further support to the earlier introduced suggestions for sector-specific policy developments, as well as a direction for delineating policy areas that are a) highly ranked by both DIs and FDIs across all sectors; e.g. FDI attraction, labour recruitment; b) highly ranked only by FDIs (e.g. infrastructure) or domestic investor (e.g. quality development) but across all sectors; c) highly ranked policy areas for specific sectors. Although polices aiming to increase the availability of loans, venture and risk capital are ranked in penultimate place by both DIs and FDIs they receive ranking of 4.7 to 50 by FDIs in mining and quarrying and by DIs in manufacturing, building and construction.

The importance of the various polices to the five non-hydrocarbon sectors are illustrated in Fig. 5.3.

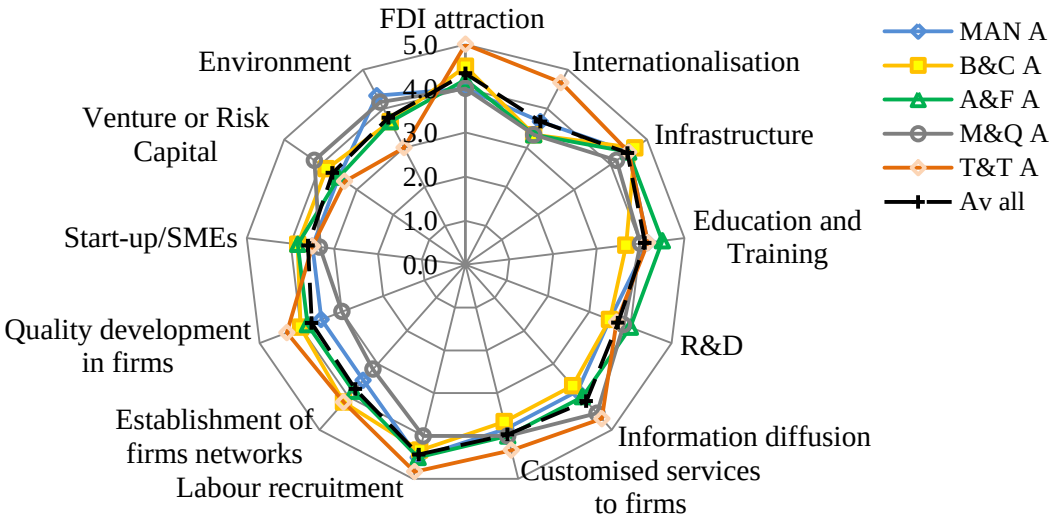


Figure 5.3: Policy areas' Importance to each sector
Sources: Authors' elaboration, based on interviews with foreign and domestic investors (N=30)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

5.3.3: Observations and Data Gathering and Analysis (investors' sector-specific perspectives)

a) Stability of the Economic and Institutional determinants' importance

Fig. 5.4a and 5.4b suggest that the vast majority of investors across all sectors consider the importance of both economic and institutional determinants to increase or at least be stable in the future. There is, however, a small minority of investors across a few

sectors (viz. agriculture and fisheries, manufacturing and mining and quarrying) that expect their importance to decrease in the future and more so for institutional determinants.

1) economic determinants

E D importance stability: Per sector investors

	MAN	B&C	A&F	M&Q	T&T
Increase	6	6	11	0	13
Stable	7	7	2	11	0
Decrease	0	0	0	2	0

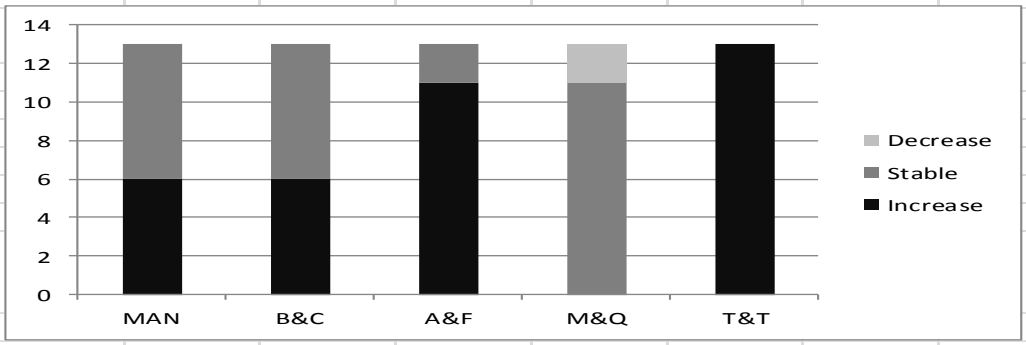


Figure 5.4a: economic determinants stability.

2) institutional determinants

I D importance stability: Per sector investors

	MAN	B&C	A&F	M&Q	T&T
Incdrease	7	3	9	6	10
Stable	8	13	6	9	6
Decrease	1	0	1	1	0

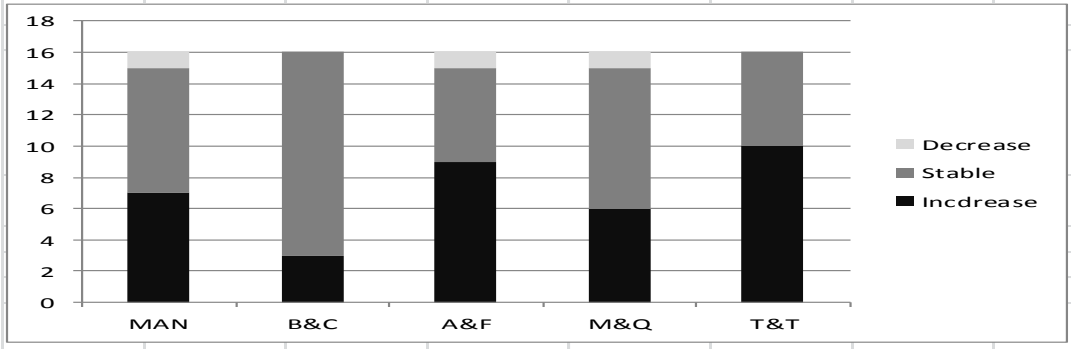


Figure 5.4b: institutional determinants stability.
Sources: Authors' elaboration, based on interviews with foreign and domestic investors (N=30)

5.3.4: Observations and Data Gathering and Analysis (Investors vs. Public Institutions Representatives (PIRs)

- **A Comparison between the Two FGs of PIRs**

The tow FGs exhibit some disagreement concerning a handful of economic determinants (such as growth, infrastructure deposits, loans, venture capital trade openness, and FDI stocks) while converging among all other economic determinants (Fig. 5.5a).

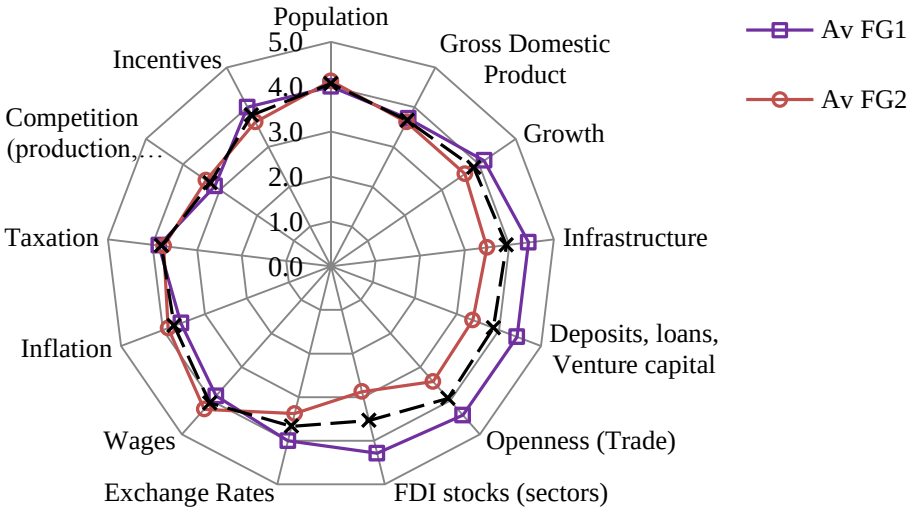


Figure 5.5a: Economic Determinants importance by the two FGs of PIRs

Sources: Authors' elaboration, based on focus groups with institutional representatives (N=22)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

However, it seems that the picture is different between focus groups (1&2): they ranked almost identically the importance of corruption and availability of information, government contract denunciation and support for R&D innovation determinants. They were not, however, in close agreement with the rest of determinants where disparity is found in country risk, transparency, stability, institutional quality. This disagreement widens with respect to Bi/Multi-lateral (investment) treaties, company formation, patent registration and education. It is interesting to note that Focus groups (FGs) who are the representatives of the public institutions rankings includes ; (FG2) ranked institutional determinants lower than FG1 and that FG2 have not as of 2010, achieved their 2020 targets. The institutional determinants graphic is shown in Fig. 5.5b below.

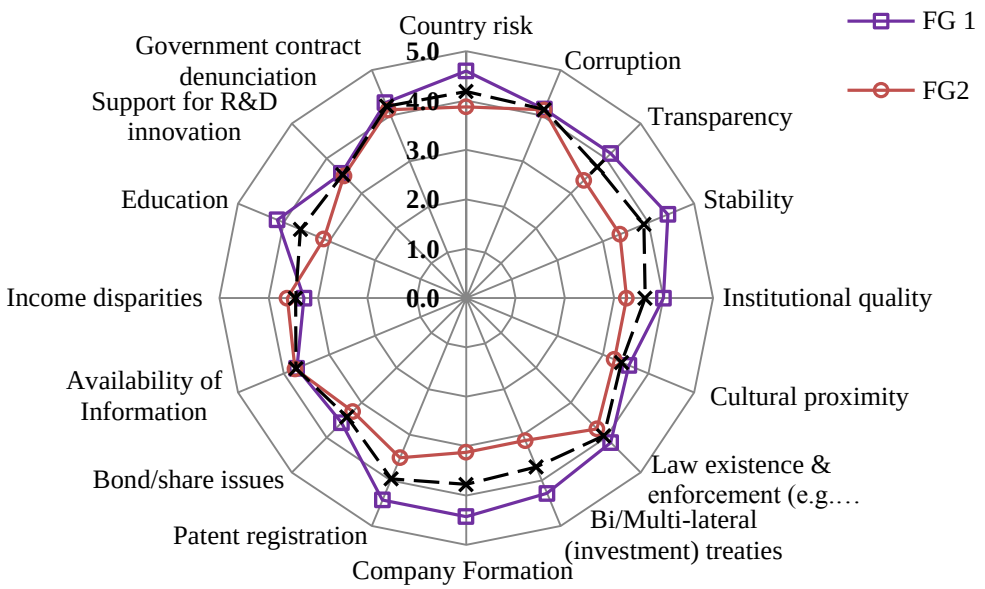


Figure 5.5b: Institutional Determinants in the two FGs (PI opinions.
Sources: Authors' elaboration, based on focus groups with institutional representatives (N=22)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

Interestingly, in Fig. 5.5c (below) both groups are almost in agreement with most policy areas of importance to FDI, except internationalisation, education and training and R&D Policies.

Policies

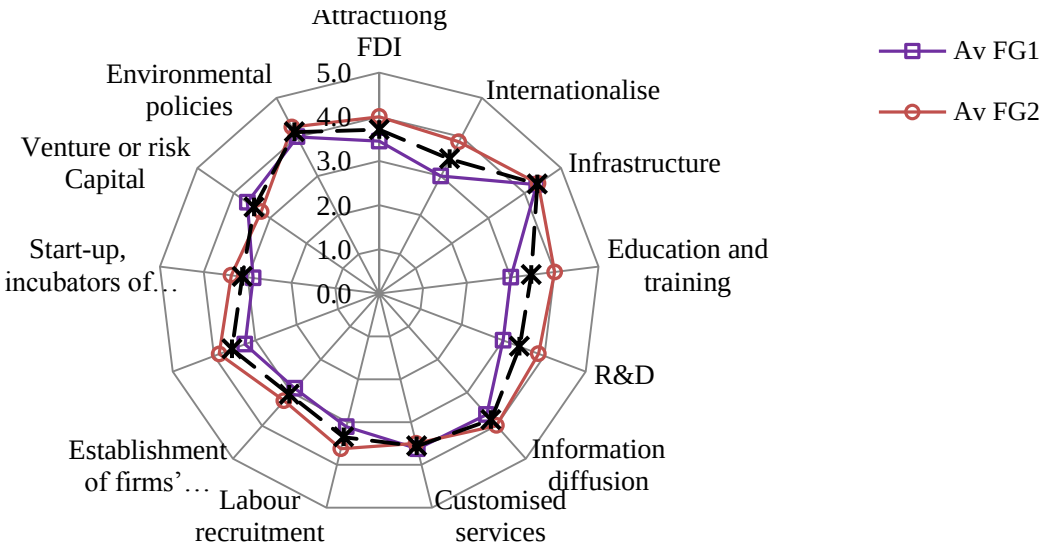


Figure 5.5c: policy area comparison between the two FGs opinions.
Sources: Authors' elaboration, based on focus groups with institutional representatives (N=22)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

- **Importance of Economic Determinants Comparison between (institutions and Investors)**

A comparison between PIRs opinions (the data collected during the focus group) and the investors aforementioned opinions shows the similarity in investors' opinions about economic determinants. The figures show the similarity in five determinants out of thirteen GDP, deposits, loans, venture capital, exchange rate, and inflation.

Institutions ranked higher only to population and wages determinants, which means the PIs realise those determinants importance more than investors themselves to (their) investment. The rest of determinants are ranked higher by the investors Table 5.7a.

	Economic determinants	PIRs	Investors	PIRs minus Investors
1	Population	4.1	3.8	-0.3
2	Gross Domestic Product	3.7	3.7	0.0
3	Growth	3.9	4.2	0.4
4	Infrastructure	3.9	4.5	0.6
5	Deposits, loans, Venture capital	3.9	3.9	0.0
6	Openness (Trade)	3.9	4.5	0.6
7	FDI stocks (sectors)	3.5	3.3	-0.2
8	Exchange Rates	3.7	3.6	0.0
9	Wages	4.1	3.8	-0.3
10	Inflation	3.7	3.8	0.1
11	Taxation	3.8	4.1	0.3
12	Competition (production, distribution)	3.3	3.6	0.3
13	Incentives	3.8	4.1	0.3

Table 5.7a: Economic Determinants average (PIRs vs. Investors)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

- **Comparison between (Investors vs. PIRs) in Institutional Determinants**

In comparison with PIRs the data collected during focus group about institutional determinants shows a similarity in investor's opinions in some determinants such as country risk, culture proximity, income disparity and R&D/innovation). PIRs gave more importance to patent registration, bond and shares issues, and to government contracts denunciation, which means that institutions realise those determinants are of more importance than investors themselves (Table 5.7b and Fig. 5.6a).

	Institutional determinants	PIRs	Investors	PIRs minus Investors
1	Country risk	4.2	4.1	0.0
2	Corruption	4.1	4.4	0.3
3	Transparency	3.8	4.6	0.8
4	Stability	3.9	4.5	0.6
5	Institutional quality	3.6	4.4	0.7
6	Cultural proximity	3.4	3.5	0.1
7	Law existence & enforcement (e.g. contractual, property rights, labour, and bankruptcy)	3.9	4.7	0.7
8	Bi/Multi-lateral (investment) treaties	3.7	4.0	0.3
9	Company Formation	3.8	4.1	0.3
10	Patent registration	4.0	3.8	-0.2
11	Bond/share issues	3.4	3.0	-0.4
12	Availability of Information	3.7	4.1	0.4
13	Income disparities	3.5	3.4	0.0
14	Education	3.6	4.2	0.5
15	Support for R&D innovation	3.5	3.6	0.1
16	Government contract denunciation	4.2	3.9	-0.3

Table 5.7b: Institutional Determinants average (investors vs. PIRs)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

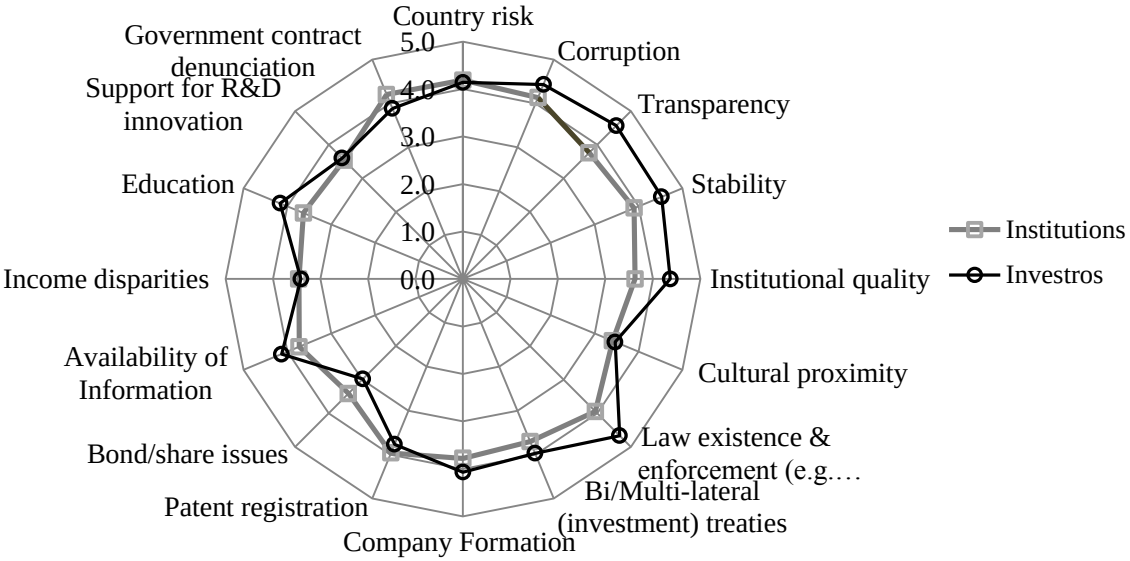


Figure 5.6a: Institutional Determinants in Average (investors vs. PIRs)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

- **Comparison between Investors vs. PIRs in Policy Areas**

In comparison with PIRs, the data shows that the similarity in both opinion about policy areas in some those policies such as FDI attraction and environment issues. Other than infrastructure all policy areas are ranked lower by the institutions. It may be interpreted that the importance of these policies for investors is more significant than from PIRs point of view. (Table 5.7c) and (Fig. 5.6b)

Policy areas	PIRs	Investors	PIRs minus Investors
FDI attraction	3.7	3.8	0.1
Internationalisation	3.4	3.7	0.3
Infrastructure	4.4	4.2	-0.1
Education & training	3.5	4.5	1.1
R&D	3.4	3.9	0.5
Information diffusion	3.8	4.5	0.7
Customised firm services	3.6	3.3	-0.2
Labour recruitment	3.4	3.6	0.3
Networking	3.1	3.8	0.7
Quality development	3.6	3.8	0.2
SME incubation/start up	3.1	4.1	1.0
Venture/risk capital	3.4	3.6	0.2
Environment	4.1	4.1	0.0

Table 5.7c: Policies areas (investors vs. PIRs)
Notes: sample means on a scale of 1 (less important) to 5 (most important).

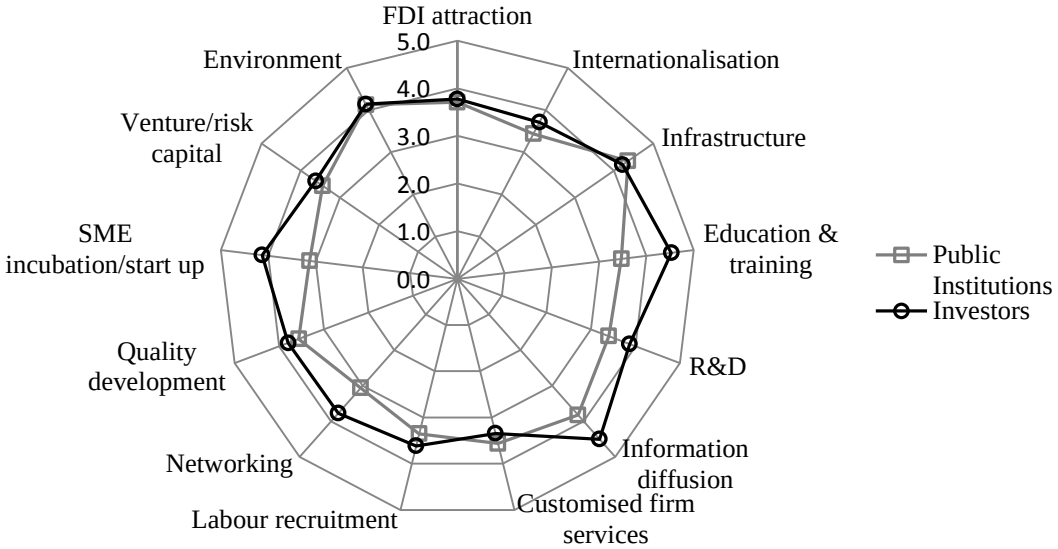


Figure 5.6b: Policies importance (investors vs. PIR)

Notes: sample means on a scale of 1 (less important) to 5 (most important).

Through the data gathering, analysis and observations (Investors vs. PIRs); it shows that the similarity in investors opinion about economic determinants in five out of thirteen determinants viz. GDP, Deposits, Loans, Venture capital, exchange rate, inflation. PIRs ranked higher only to population and wages determinants, which means the PIRs realise those determinants importance more than investors. The rest of determinants are ranked higher by the investors. In comparison with PIRs the data shows that the similarity in investors' opinion in institutional determinants such as country risk, culture proximity, income disparity and R&D/innovation. PIRs ranked higher to patent registration, bond and shares issues, and to government contracts denunciation, which means the PIRs also realise those determinants importance as the investors themselves to their investment, or more.

A critical discussion follows, based on both interviews report (Appendix 5.1) and the focus group (Appendix 5.2) of the PIRs.

From the above analyses it is an interesting outcome that there is a convergence of opinion not only among the five non-hydrocarbon sectors investors themselves, but also there is a robust convergence in both PIRs' and investors' opinions to concerning not only economic and institutional determinants, and also policy areas, That they both groups think, is highly important. Inductively this convergence of both group's (PIRs and investors) opinion indicates that the mentality of both public institutions employees (policy and decision makers) concurs with private sector mentality, specifically, in business beliefs, norms and values. Finally this also suggests that the proposed synergy in interaction between public and private (joined-up thinking and join working) towards policy governance is a definite possibility. This research therefore, argue and recommend that in order to improve implementation of a more effective policy governance processes there needs to be a convergence in the public and private sectors and investors thinking in order to participate jointly in the public policy making processes.

Although this appears to be an extraordinary outcome of the research, on reflection it is not a surprising issue, if we know that doing business in Oman is not restricted to

investors but involves civil services employees in government institutions, who are allowed legally for doing business and have one sole commercial establishment or to be a partner in a local limited liability companies (LLC) and other legal commercial entities, or to establish a joint ventures with FDIs. They may buy and sell shares and bond equities in Muscat Security Market and participate in IPOs. Having said that, it is public sector employees are forbidden to participate in the tenders or to have any type of business with the public institution they work for. This is to protect public money and avoid conflicts of interest. The history behind this is that, when the country development commenced in 1970, there were a very few family business companies with a very small local market. The government has since then opened up business opportunities to all government employees (except military personnel). This research argues that the government employees have worked with a private sector mentality in Oman the last 40 years (1970-2010) and possibility of join thinking towards policymaking.

- **The investors needs/attraction in public institutions policies (regulatory and investment attraction).**

Institutional development required by the investors. This section provides a breakdown of the respondents' point of views from qualitative data to triangulate some of the policies that have been identified within this chapter. Boundaries for qualitative analysis of interactions (government to government and business to government and vice versa) can identify the systems in focus. A number of respondents admitted that they were aware of the potential benefits of the vision 2020 targets and the benefits that could be gained through more policy clarity and more collaborative joined up thinking. Foreign investors expressed the opinion that the Oman government realised their importance of investing in Oman:

"*Oman approaches us as a business partner*" FDI/B&C F12[1]. Another FDI mentioned *"We are very grateful to the cabinet of ministers of the Sultanate for granting to us the extraordinary authorisation to incorporate 100% FDI which gave us the necessary time to find the right strategic local partner that could fit our specific needs"*.

Both DIs and FDIs articulated the needs to attract domestic and foreign investors alike. In general they tend to mention their needs within their perception of the policies. They

[1] FDIs/A&F/F12: Refers to a foreign investor, in Agriculture and fishing sector, the foreign/domestic investor's interview number.

emphasised policies, laws and regulations, and procedural issues that have been explained during the interview with the individual domestic and foreign investors: For instance. Foreign investors stated (FDI/B&C/F11):

"*The government institutional decisions do attract foreign investors like us because of stability in the decisions/policies made*", *(FDIs/A&F/F6).*

The national economy of Oman, either industrials sectors such as agribusiness, fishing, mining, quarrying, building and construction and manufacturing, or the services sectors such as; tourism and trading, are the main joint concern of both the government and private sectors jointly. Their contribution as non-hydrocarbon economic sectors is continuously growing (see appendix 2.4), investors continue to think that their need are not fully fulfilled (see investors interview the following needs list (summarised from appendix 5.2).

A&F: Incentives and needs of this sector:

DIs	Incentives Gained (Obtained)	Not gained or obtained yet	FD Is	Gained (Obtained)	Not gained or obtained yet
D3	▪ Taxes waivers ▪ Soft loans for new industries ▪ Most of the needs are fulfilled and satisfied	• Manpower mapping and policies. • Financial facilities	F2	• Most are fulfilled	• five years tax holiday and Lease on factory land payment Industrial Estates to be eased
D6	▪ Soft loans ▪ Taxation exemptions on food manufacturing. ▪ All needs are fulfilled	• Company registration without fixing company capital. • Freedom of freehold for foreigners	F6	▪ Most are fulfilled	• Funds should be made available at an earlier stage.
D11	▪ Soft Loans. ▪ Duty exemption for imports. ▪ Omani products campaign and preference in-awarding tenders.	▪ Financial assistance for the expansion of the existing business.			

A&F: Improvement areas in PIs decision-making:

DIs	Improvement areas	FDIs	Improvement areas
D3	• Quality of education is not relevant with the trading practices in this country.	F2	• The paperwork, • Facing daily and red tape in export procedures. • Too many PIs are involved • A lack of coordination between public entities. • Inter Govt. delays to ease.
D6	• Commercial registration needs to be easier. • Expanding the Industrial estates area. • Ministry of Commerce and industry needs to give the authority to legal offices and not to notary public.	F6	• Designated structure to support advice and guide foreign investors. • Easier access to finance. • Less red tape
D11	• Soft loans, tax free. • Simplification of paper works documentations. • Improve the manufacturing base of essential products including agricultural commodities to reduce over dependence on imported food stuff, vegetables and fruits. • Awareness of the local products available to the public. • Liberalising the recruitment of manpower.	F14	• Bureaucratic in some parts; adopt some information systems to enhance performance for decision-making. • Labour law adjustment to encourage more investor.

M&Q: Incentives and needs of this sector:

DIs	Incentives Gained (Obtained)	Not gained or obtained yet	FDIs	Gained (Obtained)	Not gained or obtained yet
D 4	• Waiver of Custom Duty		F 10	• A policy of openness and a stable fiscal and economic environment i	
D 15	• Governme nt soft loan from Oman Developm ent Bank (ODB)	• Solving of long procedures problem	F 15	• Only a minor amount of information has been gained from the PIs historic mining and geological dugutak data.	• Digital formats and provided over the web. • The PIs need to provide enough information and data to encourage investment in minerals,
D 10		• More Banks penetration into the business is required	F 1	• Education. • banking system communications	have restriction on the communications - no skype

M&Q: Improvement areas in PIs decision-making:

DIs	Improvement areas	FDI	Improvement areas
D10	• Omani laws should be similar to developed world countries. • inter-organisational coordination should results to quicker decisions. • Qualified and experienced personnel should be at the helm of affairs in all critical departmental positions. • One focal decision-making Ministry, to help and resolve any investor or business community problem that could not be resolved by the respective Ministry".	F 1	• A separate Ministry for resources and energy where by oil and gas and minerals come under One Ministry looking at the resources, • That MCI should have willpower to develop a One Stop Shop, encouraging investors by dealing with all other government issues instead of investors trying to deal with the issues and going to one place (One stop shop for permissions). • - Omani warden, like Australia and everywhere else, you have a Mining Warden Court, the authority and the power of a lower court and it only deals with mining issues,
D15	• Participation of the private sector in the Decision-making process for the investment. • The government need to limit the beadledom or personal inferences of decision makers' pretences to a law which most of it impedes the procedures for investment.	F 10	• "One-Stop-Shop" permitting and approval process for new mining projects. • Better access to historical mineral exploration data gathered in the past – in computerised format (electronic Data). • Lifting of the current moratorium on the application for new exploration ground
		F15	• A one-stop shop for mineral title, mining and environmental requirements.

B&C: Incentives and needs of this sector

DIs	Incentives Gained (Obtained)	Not gained or obtained yet	FDIs	Gained (Obtained)	Not gained or obtained yet
D9	"R&D and Training" Power, electricity, Telephone and Internet"	Quality of service	F 11	Mostly our needs are fulfilled	• More free trade zones to be opened up. • More Omani employee training and development polices on the future from the Government. • Easy process of obtaining 'Clearance' to recruit employees".
		"The activities of public institution overlap.	F13	Happy with incentives received" "Most needs are fulfilled	PIs to help identify areas of opportunity and encourage investors by giving them incentives

B&C: Improvement areas in PIs decision-making:

DIs	Improvement area	FDIs	Improvement area
D8	-More transparency - Clear plan ahead of time - Fair practice to all - Local labour training - Less bureaucracy - Less paper work	F11	▪ Change towards more FDI investment focus ▪ Opening more of Free trade zones and additional Tax holidays by the Government. ▪ Quotes and training of *Omanisation* requirements ▪ More cooperation among GCC countries and free trade between them • - Private sector should be allowed in every possible sector for Sultanate of Oman future growth and success.
D9	- Speed of decision making. - Create laws that protect the landlord, just as much as they protect the tenant. - Improve the *Omanisation* laws (transport).	F13	• Quicker decision making when working with more than one ministry. • One place where the investor is able to get all information he needs from all ministries. • Encourage more foreign investors that are prepared to share knowledge and practices • PIs helped by ensuring consistent policies and regulations to help investors.
D14	- Friendlier systems/Procedures. - Speedy decisions/approval - Better communication		

MAN: Incentives and needs of this sector:

DIs	Incentives Gained (Obtained)	Not gained or obtained yet	FDIs	Gained (Obtained)	Not gained or obtained yet
D1	• Credibility, extraordinary government support since 1995, a moral support and administrative support. • Support of income taxes and customs duty was very good. • Preference to national product. • The customs duty. Income tax. Registration of company's • process in MCI	• Financial support was little. • There are PIs are not giving important that domestic investors • Government is focusing highly on quality and the quality has got a cost, where in the market could be seen a fad quality, that incentives which was to be given to the national product against the international and against the regional has not implemented in a full faith". • The stability of the processes,	F3	• Customs duty exemption for equipment and machines. • Corporate income tax exemption for five years extended for additional five years. • Industrial investors' forums to discuss common problems find solutions and extract logistical and physical synergies.	•Getting more exemption from withholding tax on payment of technical services/royalties and stabilisation of the current tax status, benefits that we got in several other jurisdictions". •a bigger interface between different ministries and PIs
D2	Our model has so far been successful but greater growth and consequent benefit to the country or the Macro economy cannot be achieved relying on this tried and tested self-reliant system.	• Bureaucratic barriers. • Manpower requirement. • Approvals and permits for developmental investments, regulatory approvals from agencies like Civil Aviation, Municipality and Ministry of Housing	F7	• Soft loans, 10-year income tax breaks, mining permits and availability of Natural gas.	• PIs must provide continued assistance in the area of Natural gas availability, which has unfortunately not been forthcoming
D7	The electrical distribution companies that have government shares in has helped our company's activities	• No incentives given in Electrical constructions field.	F9	Mostly all needs are fulfilled	Holiday for 5 year and lease of land in Rusayl industrial estate".

MAN: Improvement areas in PIs decision-making:

DIs	Improvement area	FDIs	Improvement area
D1	• Clarity of the decision, clarity in regulations, much more detailed manuals. • The government little bit to be proactive rather than post active.	F3	• The simplification of the 100%FDI approval process. • The concentration of the customs duty exemption process in only one ministry • Further development to OSS
D2	• Coordination between different Ministries and Government agencies essential to achieve the economic growth, diversification and the 2020 plan. • Transparent, unambiguous and fast decision making where every Government Ministry or Agency is made obliged by law to respond to the applicant within a maximum time limit and/ or write back to the applicant informing the reason for denial if at all.	F7	• A complaint agency to be set up with over ruling powers to look into and swiftly dispose of complaints from businesses / investors if they do not receive due attention from any Government Dept. or agency within the maximum stipulated time.
D7	• Incentives by providing industrial lands for new projects. • Decreasing the bank interests to encourage the investors. • Reviewing all laws and regulations specially the *Omanisation*,	F9	• Speed action; • Simplicity in procedures; • Avoiding inter-government delays.

T&T: Incentives and needs of this sector:

DIs	Incentives Gained (Obtained)	Not gained or obtained yet	FDIs	Gained (Obtained)	Not gained or obtained yet
D5	• Soft loans in different sectors, Export guarantee, • Government stands by companies; in the case of the industry goes into the difficulties to support (give you a supportive loan for sometimes) so this is sort of beneficial, however in my opinion,	Health and education enhancement	F4	• Value of IP and scalability locally and globally" • Infrastructure like networks / access to high speed internet is fulfilled to a large extent.	• cost of doing business is a disadvantage • Education of workforce is only partly fulfilled, one need to look at finishing schools for
D13 (SME)	The government provides *Sanad*[2] that help investors to start business		F5 (SME)		• encourage SMEs organisations in terms of taxations and exemptions, manpower and rules and constrains.
D12	• Banks loans procedures need to be eased and other bank procedures for other type of loans. • Government to build premises for small investors we have shortage				

[2] Omani entrepreneurs programme

T&T: Improvement areas in PIs decision-making:

DIs	Improvement area	FDI	Improvement area
D5	• Easy in licensing. • Ministry of labours and work force (Manpower) making it easier, Ministry of Environment; • Tourism sector need direct support by Ministry of Tourism.	F4	• Shorter decision cycle and more transparent decision process. • Government to invest on organizations that creates sustained value / Intellectual Property (IP). • Create Industry specific forums for knowledge exchange and addressing the pinpoints of the customers and the Industry
D12	• Simplification of the registration process I mean activation of e government projects. • Kiosks services and applying though internet. Flow up process by the government institution that investors feel his importance. • Minimising the period of decision-making. • Government to conduct a study about Oman Market to know the insufficiency of local investment if any then, it should be deployed in order to be known by the investors. • Granting facilities to help in investment attraction to open new free zone for trade. • Omani qualified experience needs to be utilised to participate in further development planning.	F5	▪ Easier rules and regulations and requirement for starting business it is very important that we see how the government attracts more investors by having easier way to start of the business and; ▪ encourage based labour industries, they have to go in the industries that do not need high number of labours but high quality of skilled labours which can attract more investors to the country; ▪ Provide more e-services, and this one of the solutions that can facilitate all the business transactions online.
D13		F8	• Free transaction for land • Good support for infrastructure

- **Laws and regulations and processes**

This section examines foreign and domestic investors' opinions on institutional determinants which emerged during the interview about Law existence & enforcement (e.g. contractual, property rights, labour, and bankruptcy) and the policy areas of Labour recruitment. Investors also periodically monitor polices, (Such as labour law, the Ministry of Manpower procedures issues, mining, investment and laws development) and on this basis, decide to invest: The Labour law and Ministry of Manpower procedures issue and mining law and investment law development the investors also

asked in general the deployment of policies periodically that make the investors see and decide to invest, (DIs/T&T/D12). Investors also asked for the development of a more transparent corporate law with faster execution and more practical manpower strategy, (DIs/A&F/D3).

- **Labour law**: Investors emphasised the importance of labour law modification, the problem of getting skilled labour, and training local manpower in interests of the economic growth. Both foreign investors and domestic investors raised labour policy issues during the interview. Domestic investors expressed this difficulty as follows:

  "the government should make Labour clearance procedures easier for domestic investors since we don't have qualified Omani people in some fields", (DIs/MAN/D13; DIs/T&T/D13).

  "*We need the Ministry of Manpower to help us and realise the growth, …to recruit people because we still in a instance stage in terms of developing skill manpower there has to be some concessional consideration from Ministry of Manpower"*, (DIs/A&F/D3).

  "*We can see that Ministry of Manpower is totally in different world, it does not really interact with what is happening really, they are no flexibility in there in any initial investment industry or business they need flexibility. Now in this flexibility one has to be a very interactive rather than reactive to things*". "*Ministry of Manpower needs to make labour clearance procedures easier",* (DIs/T&T/D5).

  Domestic investors also added local labour training to their basic needs, (DIs/B&C/D8).

  "We have exceeded that the government and we still find the difficulties to get the rest of skilled people so it put us to slow down on our manufacturing processes as well. So that is one area I think the biggest challenge right now is our manpower mapping and policies specially to manufacturing concerns and to those concerns which have high priority areas such as Manufacturing and hospitality and IT services or Intellectual services, (DIs/A&F/D3). Domestic investors also mentioned that *Omanisation* decisions in the Ministry of Manpower need to be eased and "*problems of Ministry of Manpower is that, they work as police, so they need of liberalising the recruitment of manpower*", (DIs/A&F/D11). *Manpower law and regulations need to be amended or new law and regulation should be issued* (DIs/MAN/D2)

  Foreign investors on the other hand submit their statement and indirectly mentioned the labour law issue by saying:

"*I really wish to see the open market like some other GCC countries where the investors can have the freedom to having the manpower requirements without any constrains also encourage SME's which make a big difference in our line of business where even freelance working at home contribute highly in this kind of business*", (FDIs/T&T/F5). "*Labour law (especially in the agricultural field) needs to be adjusted to encourage more investor*, (FDIs/A&F/F14).

FDIs also added that, labour policies of Ministry of Health and Ministry of Labour need to be revised

"*Ministry of Manpower: Labour polices rules are sometimes unclear. Government should provide help and support to companies in manpower"*. (FDIs/A&F/F2).

Foreign investors have mentioned the ambiguity of the law.
"More dialogue with Ministry of Manpower and fair treatment of companies", "Ministry of Manpower rules are sometimes unclear and definitely not fair for investors". "… Employees can leave the company without any notice while there are long and lengthy procedures in case a company wants to dismiss an employee. Omanisation is definitely a must and each and every Omani should have a job, but the Government should provide help and support to companies in order for them to train in an efficient way". (FDIs/A&F/F6).

- **Investment Law and Commercial Laws**: FDI policy improvement includes modernising the investment law and public institutions of Oman which is within the objectives of this research. They stated;

"*We believe it could be very positive if the government could expedite the approval process for the creation of a 100% FDI. The decision could be or maybe delegated to the MCI level. The development of the net of 'bilateral investment treaties' and of 'treaties to avoid double Taxation' is critical for the attraction of foreign investors*", (FDI/MAN/F3).

A number of FDIs needs seem are fulfilled by public institutions. The domestic investors also mentioned; "*Decisions encourage people to invest in the local market rather than deploy their funds abroad*", (DIs/B&C/D8&D9). (see investment figure about Omani investment abroad in chapter two)

They still demand the simplification of the system and fewer procedures (DIs/B&C/D8). Commercial registration needs to be easier than the situation at the moment, (DIs/A&F/D6), and there is also the need for freedom in company registration without fixing the company's capital boundaries and freedom of

freehold for foreigners (DIs/A&F/D6). Although this last comment came from a domestic investor, it speaks on behalf of the foreign investors being a partner in a JV.

- **Mining Law:** *"The need to mending mining law in tune with Australia"* (DIs/M&Q/D10).
- Tender law and policies: *"Policies related to 'Tenders' especially those related to infrastructure and social insurance funds to enhance local security market"* (DIs/MAN/D7).
- **Immigration law**: Our immigration law needs to be a little more fine-tuned like the advanced world, (DIs/A&F/D3).

- **Banking Laws and regulations**: Domestic investors expressed their need for improved banking policies for improving availability of venture or risk capital (loan facilities and procedures) and for institutional development in various issues**,** while FDIs did not mentioned any comments about loan facilities throughout the interviews.

  "*We need to have more progressive banking sector towards hospitality and real estate financial facilities and a sort of blending those kind of progressive and housing because". "We have young population*." (DIs/A&F/D11), and *"Very inflexible kind of regulations we talk about the banking norms in the country and how in stringent,* (DIs/A&F/D3).

  Domestic investors in general requested a prompt easing of the procedures in soft loans which would help to increase the volume of investments. They also asked for government help in revising the loan granting mechanism, as they think that the procedures are extremely stringent. (DIs/A&F/DI; DIs/A&F/D6; DIs/T&T/D12; DIs/A&F/D6).

  Tender law and regulation: easy centralised tender board registration demanded by DIs/T&T/D13.

5.4 Outputs of the Exploratory Phase One: Findings

1. The findings of the qualitative interviews with the investors reported the need for advocate action to deal with the most problematic factors for doing business in Oman, taken from the world economic competiveness index mentioned in Appendix 2.5 in chapter two. These problem concern restricted labour regulations, an inadequately educated workforce, a poor work ethic in the national labour force, inefficient government bureaucracy and the need for ID.

2. The findings strongly suggest that both domestic investors' (DIs) and foreign investors' (FDIs) individual perspectives are convergent in their attitude about the importance of economic and institutional determinants to their business. DIs exhibit almost the same rankings on average, at approximately the same level or higher than FDIs. Even the lowest determinant is above the 2.5 threshold of the five point Likert scale. This does not bode particularly well, as one would expect DIs to have developed skills and competencies allowing them to deal more effectively with their domestic institutional environment in comparison to FDIs. The degree of convergence as well as a high ranking in institutional determinants, can be noticed in several areas especially those related to institutions such as 'Institutional quality' and the 'rule of law' (during the analysis this later determinant was used interchangeably with 'law existence and enforcement'). The investors overall ranked institutional quality at 4.4 with close agreement among them, with a standard deviation (STDEV) of 0.8 (FDIs rank: 4.7 and STDEV: 0.7 and DIs: rank: 4.5 STDEV: 0.8). The 'rule of law' ranked overall 4.6 and convergent opinion of STDEV 0.7 (FDIs: 4.7, STDEV: 0.5 and DIs: 4.5, STDEV: 0.9). These close attitudes, can be compared with PIRs who ranked these determinates at 3.6 and 3.9 respectively. This can be interpreted as some minor differences between private and public sectors thinking concerning the significance of rules and

institutional development in investors' business. Adding to that the investors' highest ranking (4.7) to the 'rule of law' and, within economic determinants, 'infrastructure' was given the highest ranking (4.6). Therefore, an additional expedient effort should be placed in this policy direction in relevant institutional areas.

3. Alongside the above output, policy reform agendas considered the vast majority of economic and institutional determinants very few of these were ranked by investors as less important to their business (e.g. patent registration and bond/share issue for FDIs). However, the pursuit of such policy reforms need to be prioritised in terms of the determinants identified as most important by the investors. In terms of economic determinants these include: infrastructure, trade openness, incentives, and growth; whereas in terms of institutional determinants the most important are transparency, stability, and the rule of law. However, it was also found that DIs tend to rank the vast majority of determinants higher than their counterparts, and it appears that some particular attention needs to be paid to the development of their competences. This discussion will be inked to the literature review in the next section to elaborate this issue.

4. Both groups of investors find all policies areas are to be important to their business, which should encourage further policy developments; e.g. in terms of the analysis and discussions of the determinants delineated above. However, as DIs also appear to rank most policy areas higher than their foreign counterparts, policy efforts should also be expanded in making DIs less dependent on government policy, while at the same time policy should place conscious effort in developing self-sustaining private sector dynamics. It was also possible to identify public-sector institutions (inter-organisational) related to the aforementioned determinants and policies that seem to make a rather large difference to one or both groups of investors.

5. The disaggregated sector-specific analysis of the above patterns provided some important additional insights, which suggest that the appropriate

policy development platform should not be binary (i.e. domestic vs. foreign) but multi-dimensional and sector-specific as there is a sector-specificity to the above patterns that would be costly to neglect. From the sector-specific perspective, the importance of the economic determinants vary **(from 3.4 to 4.2)** across the different sector-specialisations, with agriculture and fisheries, together with manufacturing ranking economic determinants on average much higher than mining and quarrying. The patterns concerning the similarities and differences between domestic and foreign investors appear to persist at the sector-specific level. Their differences seem to be particularly noticeable in sectors where DIs rank the importance of economic determinants higher than their foreign counterparts (by 0.5 and 0.7 respectively). This adds further support to the need for the remedial actions, as one could argue that the importance of these economic determinants on domestic investment decisions in these sectors is stronger in comparison to their foreign counterparts. This suggests a stronger focus on policy development in these sectors; e.g. establishing why this is of relatively heightened importance compared to DIs' development programmes in these areas. On the foreign direct investors side such large sector- specific disparities are only encountered in 'information availability' that ranks from 5.0 in mining and quarrying to 3.3 in trade and tourism. This last issue was triangulated with interview results and it was found that mining and quarrying sector investors explained that they suffer from unavailability of digital data from PIs for their business. It is therefore, the policy regarding need for information which requires particular attention. However, the trade and tourism sector investors see it as less important than the former sector. Linking this with theories from the literature review chapter, some insight may emerge regarding the policies of information significance.

6. The importance of the institutional determinants also varies **(from 3.7 to 4.2)** across the different sector specialisations. That is the lower end (minimum) is slightly higher than the respective economic determinant

measures. This could be interpreted as suggesting that the importance of institutional determinants is heightened across all sector specialisations. The order of the sectors stays more or less the same, with only a minor reversal taking place between manufacturing and trade and tourism.

7. Policy areas from sector-specific perspective rankings vary **(from 3.8 to 4.2)** across the different sectors. It should be noted that this sector variation in the importance of policy areas to their business is almost identical to the one encountered in the importance of institutional determinants. However, the sectors' disaggregation of policy importance produces some additional insights in comparison to the respective sectors' disaggregation of both economic and institutional determinants. For example in some sectors like trade and tourism, or agriculture and fisheries the differences between the two groups of investors disappear, while in other sectors like manufacturing they are of a high significant. This adds further support to the earlier suggestions for sector-specific policy developments, as well as providing a direction for delineating policy areas. Policy needs to be developed in response to those areas that ranked as most important in the economic determinants which vary from 3.4 to 4.2) institutional determinants (from 3.7 to 4.2) and policy areas (from 3.8 to 4.2). The investors are more driven by these determinants, so this needs to take place and considered as part of policy reformation (analysed further in phase two) and learning outcomes (discussed in phase three) which will reflect on these findings and changes. Action and recommendations need to be taken, using the evidence and findings to support them. So there should proposals for a few and clear actions that emerge as the result of these findings in the final chapter (7) to rethink the main topics that have been focused upon. Furthermore, the stability of the economics and institutional determinants were explored. The findings from both investors' individual perspectives demonstrated that sector investors see it of importance that both types of the determinants are increasing or remain stable. However in agriculture and fisheries, manufacturing, and mining and quarrying are of the opinion that some

determinants importance is decreasing to their investment. This increasing situation was triangulated with the data that came from answers to the interview's semi-structured questions. This increased situation needs to be taken into consideration while modelling the VSM of the sectors in recursion level 1 in the next chapter.

8. A comparison between the two FGs involving PIs' opinions was done and it was found that the agreement among the two focus groups varies only slightly with respect to economic determinants such as growth, infrastructure deposits, loans and venture capital, and trade openness, and to a greater extent with respect to FDI sectors' stock, while there was convergence among other economic determinants. They ranked almost identically the importance of corruption and availability of information, government contract denunciation and support for R&D innovation. They were not, however, in close agreement with the rest of determinants where disparity is found in country risk, transparency, stability, and institutional quality. This disagreement widens with respect to Bi/Multi-lateral (investment) treaties, company formation, patent registration and education. So it is interesting to note that Focus Group2 ranked institutional determinants lower than FG1, although both FGs exhibited a great degree of similarity in policy areas. This provided evidence of their susceptibility towards the economic and institutional determinants, and the possibility of joined up working with investors' experience. Further diagnosis will be done through triangulation with qualitative data in the next chapter. This situation needs to be taken into consideration while modelling the sectors VSM in recursion level 0 in the next chapter.

9. There was a similarity in both investors and PIRs' attribute to policy area significance such as FDI attraction and environment issues. Other than infrastructure all policy areas were ranked lower by the PIRs than investors. It was noticed that the most significant determinants and policy areas were confirmed in both methods: emphasising the importance of higher ranked economic determinants such as; infrastructure, trade

openness, growth, tax and incentives. Therefore, this confirms the need to exchange experiences between investors and PIRs, to gain from the private sector experience and knowledge, to develop more flexible policies while implementing public-private sector collaboration. This will be further elaborated and triangulated through qualitative data (interviews) during the VSM diagnosis.

10. Among policy areas, labour recruitment was given by DIs both the smallest standard deviation (0.6) and highest (4.8) which means the convergence in DIs opinion towards labour recruitment and labour law in Oman and one of the most important issue which became a main outcome of this research was a primary focus in most investors' interviews. This was triangulated with interview outcomes of DIs and there is conformity of this agreement among them. FDIs on the other hand ranked at labour recruitment at 4.1 (lower than DIs) but with divergence of attitude among them (STDEV: 1.1), Thus it can be assumed that labour recruitment is more of a problem for DIs than for FDIs. A lot of work should therefore be done by the Ministry Manpower to reform the existing labour law; further diagnosis needs to be done using VSM modelling, in order to design a better policy in this area, which is seen to be of significance to investors' business interests.

5.5 Theoretical Linking with the Findings of Phase One

Recalling the NIE theory, for more understanding of institutions and organisations and linking it with this phase outputs, North (1990) clearly stated that his theory of institutions is constructed from a theory of human behaviour combined, with transaction cost theory. When combined we can understand why institutions exist and what role they play in the functioning of societies. If a theory of production is added, we can then analyse the role of institutions in the performance of economies. It is clear from the findings that developing domestic competences is an issue of significance. Policy areas (as North 1990 emphasised), and the way knowledge develops shapes our perceptions of the world around us and in turn those perceptions shape the search for knowledge; but there are cognitive limits which can be referred to bounded rationality which Williamson (2000) also refers to as 'unavoidably incomplete'. In such cases - if DIs are involved in public and private collaboration, this limited rationality will increase organisational transaction costs. DIs need to attend bilateral and multilateral workshops which allow them to develop new skills and knowledge and reshape their old skills.

A number of economic and institutional determinants were selected from the NIE doctrines (tenets) such as; cost transaction and property rights. It also interprets the rules (institutions or rules of the game) that underlie economic activity, depending on North's demarcation between institutions and organisations. Institutions vs. Organisations, was essential and could be used and associated with a systemic approach. He affirmed that the purpose of the rules (institutions) is to define the way that the game is played conceptualising organisations as players of the game. This is essential because the intention of the research is to use 'collaboration' through interaction and interface between public and private sector perspectives involved in governing the public sectors policymaking processes. Distinguishing institutions (analogous to the rules), and organisations (as players) paved the way for a better understanding of both concepts' role in economic growth. The formal institutions' written rules are found to reduces uncertainty by providing structure to guide public-private interaction. The research also rests on Williamson's (2000) 4 level institutional economics analysis. Fig 3.2 illustrated these institutions levels (the institutional environment and the institutions of

governance: from level 1 to level 4 institutions) depending on its frequency (years) existence or to change. Williamson mentioned that the solid arrows in his model mean that the higher level imposes constraints on lower level immediately below. In this case level 1 (informal institutions) imposes constraints on level 2 (formal institutions). The reverse arrows of the diagram from lower to higher level (dashed) single (indicate) feedback from formal to informal institutions.

NIE concerns itself primarily with levels 2 and 3. (Williamson 2000; Klein 1999), but this research considered the principles of level 1 (informal institutions), for private-public collaboration to become as boundaries around formal institutions (level 2) such as; norms, customs, mores, and traditions. The research also adds institutional values and religious belief issues as informal institutions, (which change slowly and remain valid for centuries). The gaps in formal constraints could be covered by informal institutions, level 1 of the social analysis illustrated. The informal institutions could overcome PIs power (authority) to utilise an element from institutionalism to aid the private sector to confront/interface public sector power. Level 2: Economics of property rights/positive political theory; formal institutions (formal rules) are seen as governance structures: constitution, laws, property rights which rarely changes by major upheavals (such as wars). This includes; executive, legislative, judicial, and bureaucratic functions of government as well as the distribution of "power" across different level of government organisations.

Turning to phase one finding, several laws need to be modernised such as labour law, commercial law, investment law and mining law, all of which have an impact on transaction cost economics (level 2 institutions). After developing property rights at level 2, the government can step aside and resources are allocated to the highest value of the market. Except for enforcement and arbitration, these functions are neither costless nor simple, (Williamson 2000). This is the level at which the game is played; many public policy issues moreover, turn jointly on the combined use of level 2 and 3 reasoning. As mentioned above, property rights is a level 2 kind of institutions and a private sector system cannot function properly unless property rights are created in

sources, then the users of resources have to pay the owner to obtain it from an NIE point of view (see institutional determinants significant findings).

This issue is also related - in the economic system that relates to natural resources in this study – to the position of individual with respect to the utilisation of scarce resources (called in this research common-pool resources or CPRs) such as; agriculture, fisheries and minerals, and also to sector-specific level investment or even to the national level in the hydrocarbon (Oil and Gas) sector. One of the scarce resources which this research explained is the *rentier* issue (discussed in chapter two).

Most of the economic and institutional determinants and policy areas that have been analysed have a direct relationship to the property rights element. The transaction cost element, on the other hand, has a precise connection with most of the chosen determinants. Exchange of knowledge and information, information diffusion, rule of law and the institutional quality which create costs in policy/decision making process, and their magnitude affects the way in which economic activity is organised and carried out in this research. It can be seen in bargaining, decision costs and enforcement (rule of law) costs of institutional determinants. Individuals (investors) have to use time and resources to secure information as they have limited ability to process data and or plans, concerning the nature of the decision maker in an economic system. Thus, the transaction costs impact precisely on the exchange of knowledge and information for the policymaking process, and the transaction cost appears as an important issue during collaboration. The basis is that those humans are not rational in their behaviour, as people are conceived as possessing limited and bounded rationality. It is clear that they must incur transaction costs (nonzero transaction costs), some institutional determinants chosen for this research pattern also relate to this “bounded rationality” which incurs information and knowledge costs, and ultimately effects transaction costs. The research described in this chapter (phase two and three) builds on economic and institutional change combined with economic performance NIE theory and collaboration theory, for complementary use with systems theory.

5.6 Conclusion

This chapter describes the data gathered from interviews and focus groups, and has identified the problem situation. The economic and institutional determinants, as well as policy areas important to DIs, FDIs, and PIs, were examined and analysed in different categories such as individuals' sector-specific groups and PI's perspectives. These outcomes will be combined with systems theory in phase two of the SPPS as described in the next chapter. Thus, the next chapter which covers the organisational Cybernetics part of this research (phase two) followed by the situational learning part of the SPPS framework (phase three).

CHAPTER SIX

SPPS FRAMEWORK IMPLEMENTATION THE HOLISTIC PERSPECTIVE & INSTITUTIONAL DEVELOPMENT: PHASES TWO & THREE

6.1 Introduction

This chapter describes phases two and three of the SPPS framework; phase two includes stages 3 and 4. Stage 3 aims to identify and clarify the primary activities, their purpose, and how they are organised at different levels. It employs different systemic tools including Checkland's root definitions of the primary activity, Espejo's TASCOI mnemonic and Beer's unfolding of complexity. Stage 4, aims using the VSM, to deal with the complexity of problem area by mapping and diagnosing the various systems in focus building upon the theoretical foundations of systems theory and cybernetics.

Phase three of the SPPS framework concerns institutional and technological development and involves stages 5, 6 & 7. Stage 5 identifies the required changes, the redesign of collaborative public policymaking processes is discussed in stage 6 and finally recommendations for action, which are necessary to improve the problem situation, are made in stage 7.

This study, aims to contribute to the body of knowledge of systems and cybernetics with insights into cybernetic practice through the exploration of the use of the VSM to encourage public and private sector collaboration. This chapter uses a systems approach to examine whether stakeholders are willing to come together for collaborate in joint, mutually supportive working on issues that had become apparent through the initial stages of the fieldwork.

PHASE TWO

6.2 Stage3: Root Definitions of Relevant Purposeful Activity Systems

The system in focus included the five non-hydrocarbon economic sectors at the national level in Oman. These are the primary activities for recursion level 0. The fieldwork (interview and focus groups) provided the qualitative data to enable this analysis. Data from the respondents was organised into categories of the problem areas, which were then mapped onto the VSM. Unfolding the complexity (recursive mapping) helps to

identify the levels of organisation of the key economic sectors on which the study is focused, and to reflect on core issues concerning their viability, in particular to reflect on the public institutions policymaking processes.

The complexity of the economic sectors within the Omani economy is unfolded as per Fig. 6.1a & 6.1b as follows:

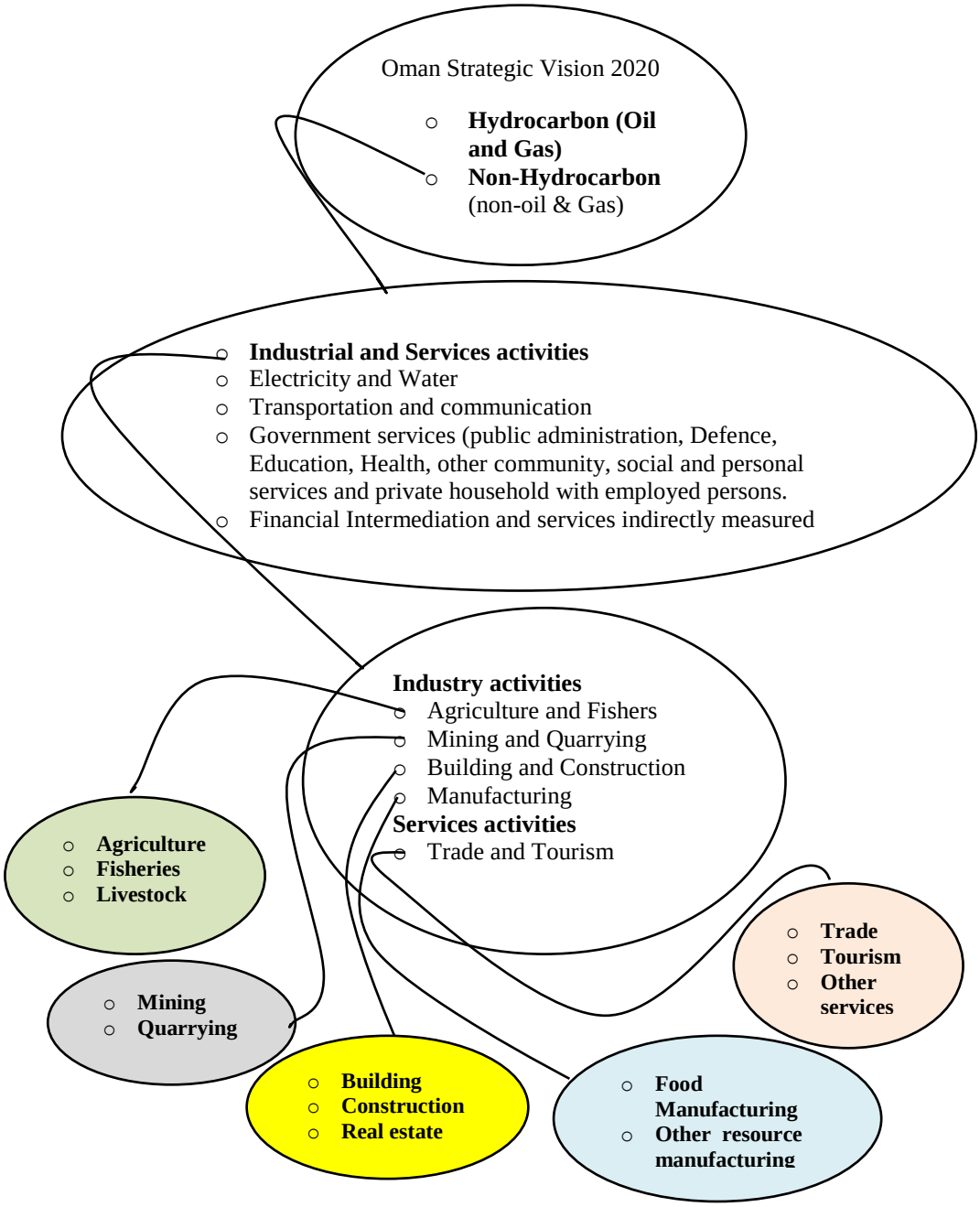


Figure 6.1a: Unfolding Complexity for the Key Organisations for the Omani Economy

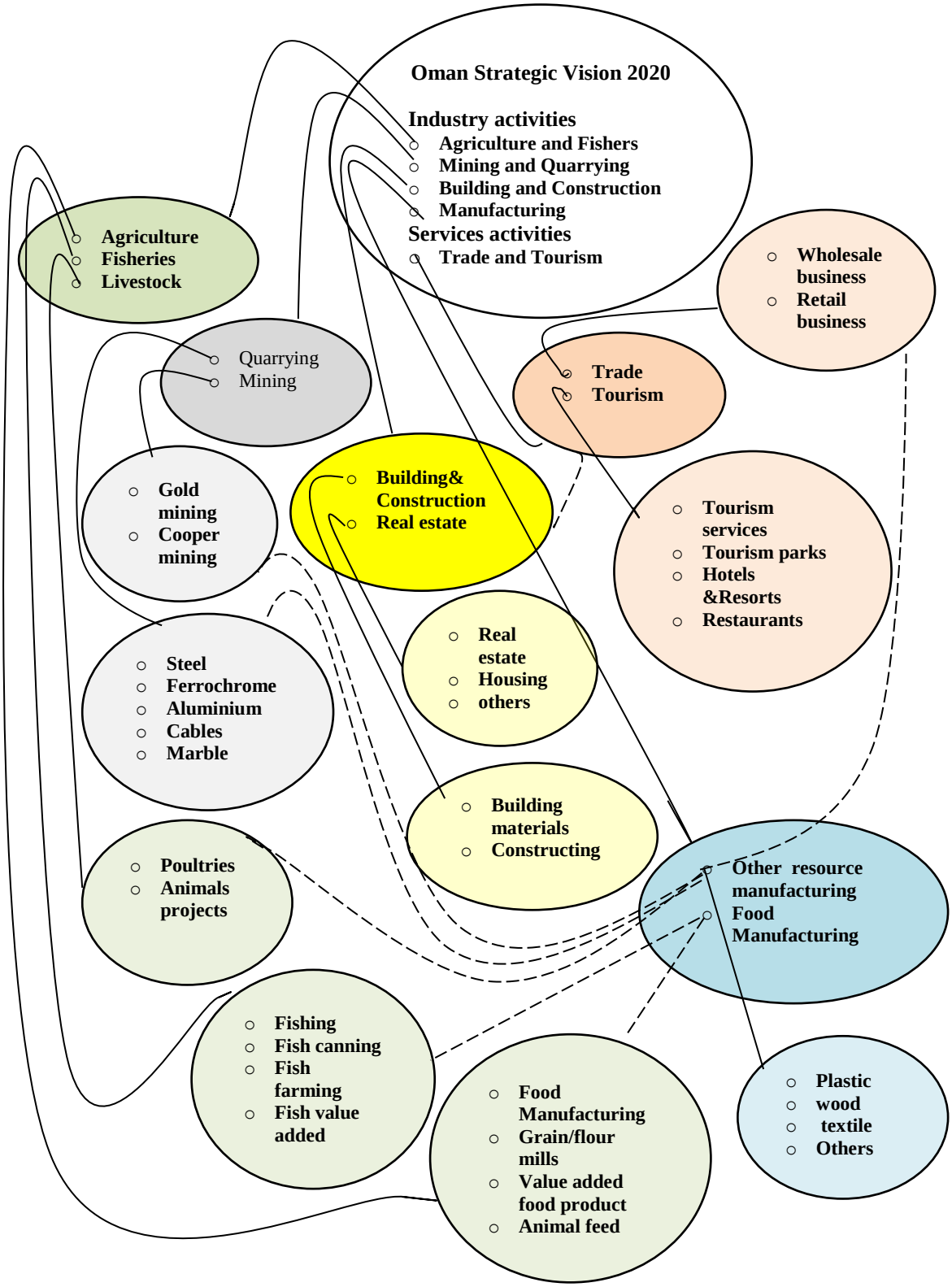


Figure 6.1b: Unfolding Complexity for the Key Organisations in the Industrial and Service Sectors Recursion levels 2, and 3 (following Oman Strategic Vision 2020)

Recursion 0 - The Oman economy: with 2 sub-systems (hydrocarbon and non-hydrocarbon).
Recursion 1 - The Non-hydrocarbon sector, including 5 sub-systems.
Recursion 2 - The Industry & Services sector with 5 sub-systems.
Recursion 3 - All sub-systems from Recursion 2.

Based on this recursive mapping and unfolding the complexity of the relationships between the government institutions (recursion level 0), the industrial and economic sectors (recursion level 2) and the subsections (recursion level 3), the qualitative data will be mapped using the VSM. This recursive mapping and the VSM systems approach could aid the formulation of the policy framework to develop economic growth in the non-hydrocarbon sectors of Oman. During discussions of recursion level 2 - the unfolding of complexity for both the individual economic system of the non-hydrocarbon sectors and its subsystems - there will be an interaction between investors' which acts as subsystem, with the public institutions which acts as Systems 1. This paved the way to identifying the problem observable in the system in focus.

Institutional evolution (formal and informal) seen through the lens of the NIE paradigm, supporting social and commercial relationships, where economic growth depends on the degree to which the potential risks of trade can be controlled by those institutions and thus reduce information costs (within transaction costs), encourages capital formation and capital mobility, allows risks to get priced and shared and otherwise facilitates cooperation and ultimately economic growth and development.

6.3 Stage 4: A Conceptual Model of the Relevant Systems

SPPS includes the use of the VSM as it was necessary to identify the problems observable in the system in focus, and the boundaries where the system interacts with the external environment. Mapping the complexity of the organisational system includes its interacting socioeconomic environment concerning public and private collaboration (elaborated later in this chapter). S4 collects the relevant environmental information (such as political, legal, economy, human resources, international and local business, demographic, culture and social environment), and brings it together with information on internal performance and adapts and balances in the context of S5 (VSM's policy function).

This environmental interaction with both the Meta-system and the operation is depicted in the following figure (Fig. 6.2).

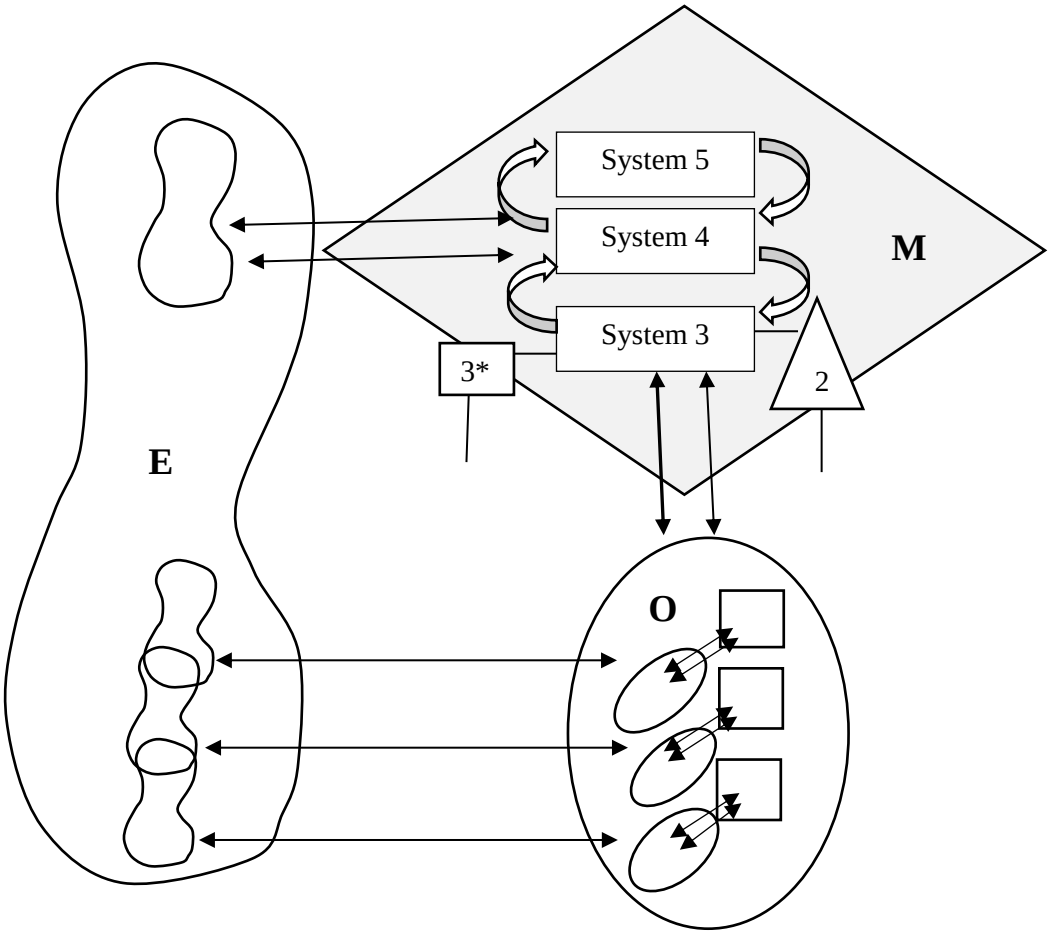


Figure 6.2: Beer's Basic VSM (M) Meta-system, (O) operation and (E) Environment.
Source: Walker (2006).

A viable system is an organisational system able to develop certain products or services and keep doing so in a changeable and sometimes chaotic environment. To analyse complex organisation like the non-hydrocarbon sector in Oman as a viable system, we have to begin by identifying the different embedded organisational systems (levels of recursion). Now we can, using the data obtained from the interviews and focus groups, analyse the different elements that constitute the viable system, that is, the operations (primary activities) and the meta-system (management and technological support to operations). Tables 6.1a & b provide a summary of the primary and meta-systemic activities at the non-hydrocarbon sector level of organisation (see Fig 6.1b).

a) Meta-systems: non-hydrocarbon sector level of recursion:

System	Given names/ Responsibilities	VSM Criteria for Analyses	Data Collection Questions
S5 in the system in focus	Policy:	**Principles, Vision and strategies:** It should guarantee a balance debate between the S3 and S4 homeostat processes.	- Strategic vision achievement (SVT2020). - Investment strategic vision target (ISVT). - Interviews (Appendix 5.2a). - Focus Groups (FGs): Appendix 5.2b
S4 of the system in focus	Intelligence	**Institutional development**: Outside and future strategic direction centre for policy making collaboration. Focusing on institutional development and strategic planning (Environment scanning; external environment external information: threats and opportunity)	- Managing public and private sector information and knowledge. - Investors experience. - Adaptation FDI and DI needs, and International organisations- BITs & FTAs. - Interviews (Appendix 5.2a). - Focus Groups (FGs): Appendix 5.2b
S3 of the system in focus	Cohesion or Control	**Experience and Knowledge sharing and policy collaboration:** Here and now situation and optimising of S1 units. This system makes sure that the sectors are in agreement with upper strategic level, oversees monitor and regulate the internal state of the organisation.	- Enabling achievement of policy making collaboration. - Operating policy making joined up thinking. - Financial issues in S1s: transaction costs for collaboration. - Interviews (Appendix 5.2a) - Focus Groups (FGs): Appendix 5.2b
3*	Monitoring (Sporadic)	**Auditing**: Informal mechanism for collecting information directly from the operational level.	- Sporadic informal institutions. - Council of Oman (state and *A'Shura* councils) - Enabling policy making governance
S2 of the system in focus	Co-ordination:	**Control and coordination: GDSS suggestion.** Organisational mechanism that prevents operational activities from destabilising one another. Shared language information.	- Human & ICT support (perceived in the organisation - threatening or facilitating- organisation. - Integration knowledge through sharing platform GDSS/ PIs and investors leadership. - Interviews (Appendix 5.2a)Focus Groups (FGs): Appendix 5.2b

Table 6.1a: Meta-System and Data Interpretation: Recursive level (1)

b) Primary Activity: Recursion level (1)

S1 and subsystem Identification	Specifying Systems
The purposes to be pursued (participator approach)	Considering public institutions of Oman as a large organisation (national level), responsible for public policy with inputs from other supreme councils and the private sector,
Determine the relevant system & System of which the system in focus is a part of wider system environment	System in focus- recursion level (0) Public Policy Making Management: System 1(s); Investment Concerned Public Institutions (ICPIs) recursion level (0)
System 1: The viable parts of System 1 of the system in focus	Local Management: Ministries, regional departments recursion level (1) Interviews (Appendix 5.2a) (FGs): Appendix 5.2b
Sub-system (s): Economic Sector	Economic Sectors Associations (ESAs)

Table 6.1b: Primary Activity Data Interpretation.

Having identified the primary and meta-systemic activities and roles, we can develop a TASCOI Analysis (see chapter three); Espejo's TASCOI technique (Esejo & Reyes, 2011) serves to analyse the core tasks and stakeholders of each recursion level. TASCOI analyses constructed from the data, recalls the thick description issue (Geertz, 1973; Mason, 2002). The description is detailed and contributed to an understanding and the eventual analysis of the setting studied. The focus group data was coded along with the interview data to gain data triangulation and to achieve the second loop of the research.

The thick description was used to compensate for any possible respondent and interviewer bias and also to gives insights to aid diagnosis for the non-hydrocarbon sector, as presented in Table 6.2. As shown in the table, all the firms involved in non-hydrocarbon activity are regulated by the concerned public institutions; they aim to keep the investors' attraction within each economic sector, in order to achieve the country's prosperity and economic transition, while providing a balanced context. The aim of the organisational transformation to be designed at this level is to create a more effective public policy making process, involving foreign and local investors.

TASCOI analysis of the stakeholders:

Transformation	Transforming existing policymaking process in ICPIs into improved process to a more effective policy making system (Public-Private Collaborative) in a sector.
Actors	PIs policymakers and FDIs and DIs Investors of the sectors.
Suppliers	Facilitators: Human support: knowledge and experience of investors for policies through co-optation. Technology support; information and communication technology (ICT) facilities; Information Technology Authority (ITA) and The Telecommunications Regulatory Authority (TRA).
Customers	Government, investors, communities, and other stakeholders.
Owners	The public and Investors of sectors
Interveners	The Council of Ministers (CM) The Council of Oman (CO) The Financial Affairs and Energy Resources Council (FAERC) The Supreme Council for Planning (SCP) The Board of Governors of the Central Bank of Oman (CBO) The Supreme Judicial Council (SJC) The Civil Services Council (CSC) The Investment Concerned Public Institutions (ICPIs). The Communities of CPRs The Investors of the sector. Auditors including; The State Financial and Administrative Audit Institution (SFAI), and The Public Authority for Consumers Protection (PACP).

Table 6.2: TASCOI for Non-hydrocarbon Economic Sectors on sector levels collaboration for policymaking processes level (1)

6.4 Sector-specific Level Recursion: Level (3)

6.4.1 Collaboration in Agriculture and Fishing Sector

A VSM diagram of this sector is shown below:

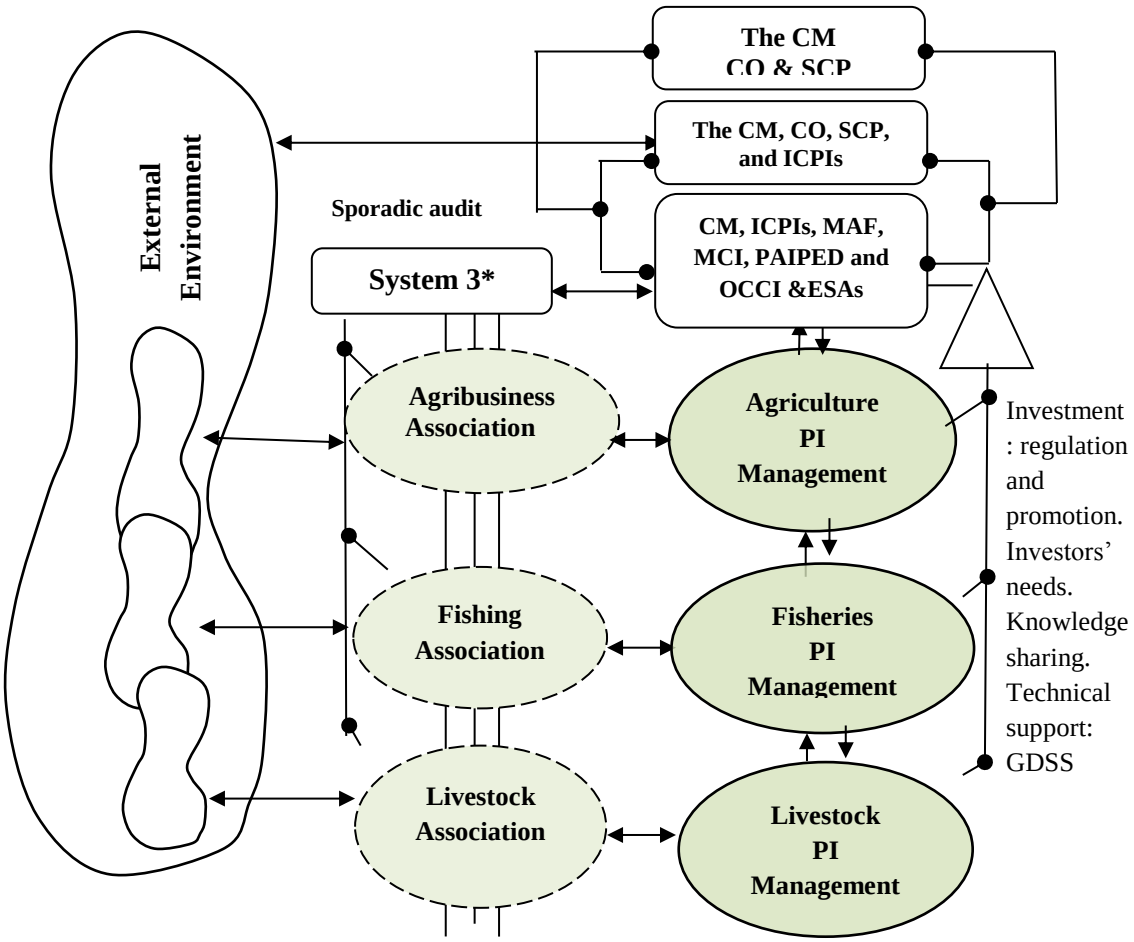


Figure 6.3: VSM for Agriculture and Fishing sectors and suggested (dotted) sub-systems

System 1: A&F Sector's Regulatory Management

Fig 6.3 illustrates the VSM of the Agriculture and Fisheries Sector. As can be seen there are three primary activities (S1s) they are Agriculture, Fisheries and Livestock. The institutions making up the meta-system (S2, S3, S4 and S5) are also shown. The local management and regulatory body of this sector (S3) is the Ministry of Agriculture and Fisheries (MAF) and its regional departments in the governorates. In this sector the significance of investors' knowledge and experience was seen as important by the respondents.

From the interview and focus groups outcomes (Appendix 5.2a and 5.2b), feedback loops between the three S1s and their environments do not seems to be operating effectively. To ease these problems, it will be necessary to implement more robust data collection channels for decision and policymaking. This can be done with suitable variety amplifiers and attenuators that can provide information and knowledge to the S1s within their operating environment. Consideration will have to be given to provide enough channel capacity on the agriculture and fishing environment loop. The environmental loop includes knowledge and experience of agriculture and fisheries that could be improved by developing the local management and their regional administrations to allow a more cohesive approach through the meta-systemic channels to balance the variety in the loop connection agriculture and fishing with its environment.

System 2: A&F Sector's Coordination and Interaction

The integration issue was emphasised by the interviewees. The DIs of this sector proposed that the main government institutions' policies need to be reviewed, and the Ministry of Agriculture and Fisheries (MAF) database need to be integrated with the database of the Ministry of Commerce and Industry (MCI), the Ministry of Manpower (MMP), the Ministry of Regional Municipality and Water Resources (MRMWR), the Ministry of Finance (MF) (Taxation Secretariat General), the Oman Chamber of Commerce and Industry (OCCI), Royal Oman Police (ROP) (Immigration), and the Public Authority for Investment Promotion and Export Development (PAIPED), (A&F DIs respondents: D3, D6, D 11).

The FDIs explained that the reason for this integration is that the paperwork is very heavy and in several cases not justified, and although exports are promoted, the FDIs are facing red tape[1] on a daily basis in export procedures in some PIs. There are too many institutions involved and they suffer from a lack of coordination. The existing one-stop-shop (OSS) was considered to be a significant improvement, and all related entities should be included within the OSS (A&F FDIs respondents: F2, F6).

Thus, institutional decisions need to be integrated through electronic support systems such as a collaboration coordination platform. Further, online connectivity and two-

[1] The long and cumbersome routine procedures

way communication is needed between Investment Concerned Public Institutions (ICPIs) and investors. Focus Group 2 (FG 2) considered that the absence of this direct interaction leads to rumours in the investment field such as "The quantity of fish in the Sultanate's regional waters has been depleted and has decreased" Although this is not true, such rumours will adversely affect the foreign investors and make them unlikely to apply to establish fishery projects in the country, in spite of the presence of adequate fish quantities. (This statement might be true only with some kinds of migrating fish species).

System 3: A&F Cohesion and control in policymaking collaboration

Some concerns were raised with regard to policy and decision-making where the level of uncertainty is large (Stacey 2002). There were some organisations that operate within the meta-systemic S3 role, and from the literature review we can learn of the need to create special districts such as the suggested Fisheries Management Councils which should be reformed in each coastal town (Al-Oufi 1999). He suggested that the Omani government can process crucial information on coastal fisheries and inform the fishermen of external effects that may occur, such as extinction of some species in the seas of Oman. This will reduce the information costs and ultimately have an effect on transaction costs.

The size and complexity of this sector is large and includes agribusiness, fishing and livestock business, all of which deal with natural resources. This complexity can be broken down to further sub-subsectors, extending the unfolding of complexity. S3 in this case will be more operational, and can provide an important function for fishing, agriculture and livestock to achieve economic growth.

Agriculture and fisheries were originally separate institutions (two ministries) when the interview took place, but were brought under the umbrella of one ministry during the institutional and organisational changes in 2011. The investors' found this unsatisfactory and it could be an explanation of the lack of coordination S2 especially within domestic investors. The interview data and focus groups show that there is no real separation of roles in agriculture and fisheries between S3, S4 and S5. The domestic and foreign investors affirmed the need for collaboration between PIs and agriculture and fisheries sector domestic investor:

"We need to work closely on various things - there has to be a very effective chamber of commerce with a dynamic leadership at the moment. We need to have food trade forums like in manufacturing, shipping and logistics and various thing; and enough dialogue between traders and practitioners of various trades to exchange ideas and share challenges" (A&F/D3).

He also declared that the investors do not have a forum through which they can share information and knowledge (this increases the information costs). However, investors of this sector need to open a dialogue to talk about their corporate challenges, in the Ministry of Manpower. They asked for very flexible regulations and banking norms in the country and explained how they are currently far too stringent.

Regarding knowledge sharing and collaboration between government and investors, the FDIs and DIs confirmed the following:

The response from the investors (see Appendix 5.2a: code A&F 1) shows that the collaboration environment needs to be improved: the investors raised their aspirations for two way knowledge sharing, so that both sides (private and public) can gain from each other's knowledge and experience, and thus reduce the information transaction costs. The A&F sector investors also raised a concern on the OCCI role for this collaboration.

System 4: A&F Intelligence: Institutional Development

The main actors of S4 in this sector are CM, SCP and MCI through their online communicating with investors (as suggested by the investors). They need to a) provide boundaries through which the organisations interact b) deal with socioeconomic environment and international policies (BITs and FTAs) c) improve investment related laws and institutions. d) Facilitate and create an investment climate that allows investors' knowledge and experience to operate and e) share and collect feedback from the environment such as operating difficulties and challenges as well as finding potential opportunities.

The degree that Omanis depends on agriculture and fishing for both their livelihood and as a major source of food is high, and employment for the people of Oman is dominated by these sectors. However, the main challenge for agribusiness concerns water scarcity (see chapter two). Despite these challenges, agriculture is expected to contribute 5.1%

of GDP in 2020. The fisheries vision target is, however, achievable as there is a large potential for FDIs to invest in this sector because of the availability and quantity of fish species. It was recorded that, Oman has benefitted from the FTA with USA, 29% of its food industry production that has been exported to USA. FDIs in this sector were satisfied that their needs are fulfilled by PIs so they did not mention any further financial incentives that may be needed. DIs listed some incentives that they have benefited from such as: taxation exemptions on agriculture and fisheries manufacturing, soft loans, duty exemption for imports, the Omani products campaign, and a preference of Omani products in government procurement (A&F respondents: D3, D6 and D11).

A&F DIs and FDIs suggests for public institutional improvement:

DIs	A&F: Things to be improved in PIs	FDIs	A&F: Things to be improved in PIs
D3	▪ A more transparent corporate law with faster execution and more practical manpower strategy. ▪ Our immigration laws need to be little more fine-tuned like advanced world.	F2	• Labour policies, Inter Govt. delays to ease through e-government. • Labour polices of the Ministry of Labour and the Ministry of Health.
D6	▪ Commercial registration needs to be easier than the situation at the moment. ▪ *Omanisation* decision in Ministry of Manpower needs to be easier. ▪ Expanding the Industrial estates areas. ▪ Problems of Ministry of Manpower. (They work as police). ▪ MCI needs to give the authority to legal offices and not to notary public.	F6	• Wider One Stop Shop (OSS) • More dialogue with Ministry of Manpower and fair treatment of companies. • Easier access to finance. • Less red tape
D11	▪ Simplification of paper works documentations etc. ▪ Provide proper guidance about the investment opportunities. ▪ SMEs to be given equal opportunity to enter into healthy business. ▪ Improve the manufacturing base of essential products including agricultural commodities to reduce over dependence on imported food stuff, vegetables and fruits. ▪ Awareness of the local products available to the public. ▪ Liberalising the recruitment of manpower.	F 14	• *Try to decrease bureaucracy in some parts, adopt some information systems to enhance performance for decision-making*

System 5: A&F VSM-Policy

The following table presents the A&F vision 2020 targets. It is important to mention that, in the policy area (S5 in VSM language) CM, SCP and CO aim to ensure vision targets are achieved as specified below.

Economic Activity	1996 % (1)	2020 % (2)	Change % (2-1) (3)	Av. Contribution 1996-2010 % (4)	60% of 2020 figures % (2)x60% (5)	Variances % (4-5)
Total Hydrocarbon Activities	35.0	19.0	-16	43.6	11.4	-32.2
Total Non-hydrocarbon activities	58.1	78.1	20.0	57.9	46.9	11.0
Agriculture & Fisheries	04.1	05.1	1.0	2.0	3.1	-1.1

This sector still needs a lot of effort to achieve its 2020 target (5.1 % of GDP), so institutional development (formal and informal) is needed. Both investors and focus group described their role in this level of organisation as a S5 role. This sector investors' opinion regarding the strategic vision is illustrated in Appendix 5.2a: code A&F 2. Both foreign and domestic investors are fully aware of this vision and they have a role to play to achieve its goals in food security and to reach its targeted figure in agriculture and fisheries.

Diagnosis of the Agriculture and Fishing Sector

At the operational level A&F investors as well as the other sectors investors confirmed the need to form Economic Sector Association (ESAs) which do not formally exists as of the interview period (2010-2011). In the viable systems model diagram of each sector, ESAs appeared as dotted-line circles sub-systems as investors' suggested.

In VSM terms, we can say that both S3 and S4 are operating in a very informal, ineffective manner, thus impeding the development of the sectors. The required interaction between them was not obvious, leading to a poor S3 / S4 homeostat, and thus poor decision-making for the sector as a whole.

In general, industry data was unobtainable for many investors which increases the information and transaction costs in this sector. This low variety situation caused by a lack of useful digital data, meant that informed decisions could not be made with confidence and thus inappropriate actions could put system viability at risk. Generally 'Outside and Then' considerations (S4) were poorly handled. This not only had an

effect on the current viability of the system but also will impact on the system's ability to function in the future.

The fact is, in this sector, domestic investors are involved with the strategic vision (S5). DIs confirmed that this strategic vision is good for the sectors' targets. FDIs' opinion of the strategic vision was convergent with those of DIs. This sector's investors mentioned that they feel part of the vision and they have a role to play to achieve the target. This strengthens the S5 role.

6.4.2 Collaboration in Mining and Quarrying Sector

The following diagram (6.4) illustrates the VSM for the Mining and Quarrying Sector, showing the two S1s (mining and quarrying) and the meta-systemic sub-systems.

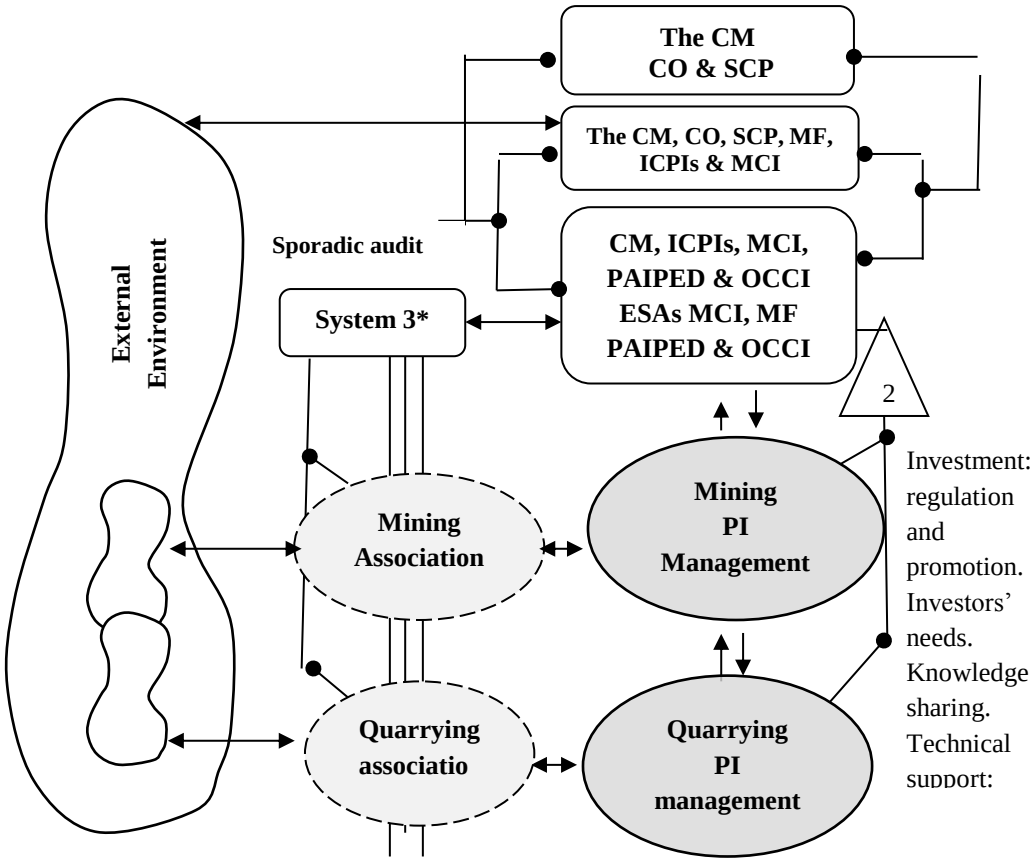


Figure 6.4: VSM for Mining and Quarrying and suggested (dotted) sub-systems

System 1: M&Q: Sectors Regulatory Management

The local management are the Ministry of Commerce and Industry, and its regional departments in the governorates within ICPIs. Online connectivity was found to be

significant for two way communications with Investment Concerned Public Institutions (ICPIs). In this sector, the respondents believe the formation of the sector associations (drawn within dotted lines) is necessary.

Respondents reported some problems associated with the S1 environment loops. This is similar to the situation in the agriculture and fishing sector as they both produce/use raw materials that are within natural CPRs, where problems arose with 'the commons'. The sector's local management of M&Q on the horizontal axis, the two PIs, are not adequately linked and tend to delegate power to their regional department the lower levels of recursion.

The respondents also reported a lack of interaction with the PIs. Low level generalised information and digital data was seen as a main problem with this sector that could be improved if data was shared and the aforementioned interaction was created. This non-interaction caused some uncertainty and discouraged investment, as has been discussed in chapter five.

As it is the case of the A&F sector, at the operational level of this system, the feedback loop between S1 and its environment is not operating effectively. To ease these problems it will be necessary to implement a more robust data collection channel. This involves suitable variety amplifiers and attenuators that can provide information and knowledge to the S1s within their operating environment, (to lower the transaction cost and information cost).

System 2: M&Q Collaborative and Coordination and Interaction

Mining and Quarrying foreign investors mentioned that:

FDIs	M&Q
F 15	"*The data is often incomplete and some important data is withheld, especially at a country scale, this along with a lack of a consistent mineral tenure system makes investment less attractive and in some cases impossible. We need to understand clearly and know that any project we identify for development will not be taken away from us and our partners. Also we need a clear understanding of how local Omani companies can be involved in this development"*
F 1	"*I think Oil and Gas are far more matured as industry and manufacturing much more matured. The other industries have expertise all over the world India, Europe, UK, etc. The mining industry you can get best of all you are looking to Canada or Australia they are most advanced in terms of technology and discoveries*

The need for co-ordination (S2) of investors of this sector (M&Q/D4, D10 and D15) suggests the integration of all government institutions and departments related to mineralisation that provide services to the investors. They need to be brought under one umbrella of the MCI with final decision making powers given to the department of minerals, in a manner similar to first world countries. FDIs of this sector also think in the same direction:

FDIs	M&Q: Co-ordination
F 10	"*We expect the government to assist us in the permitting process for mine development once we have made a copper or gold discovery*"
F 15	*"Provision of all data held by government to help us develop our targets before we start development work, also transparent mining legislation to allow you to acquire and develop projects without sovereign risk. It would be useful to have a one-stop shop approach similar to countries such as Australia and New Zealand".*

System 3: M&Q: Cohesion and control in policymaking collaboration

S3's role is 'fundamentally synergistic' (Beer 1979) and thus involves activities which are collaborative (e.g. collective working) within the Mining and Quarrying viable system. Mineral data and information and knowledge exchange is important for strengthening the relationship between public institutions and investors. Domestic investors explained that investors of these sectors mentioned that knowledge sharing between government institutions and the private sector will enhance the mutual relationship between the two parties to achieve the joint goals. Foreign investors also expressed their need for the information as the government holds historical mining data and geological data that would help in developing new projects. Their opinion is illustrated in (Appendix 5.2a: code M&Q 1).

System 4: M&Q: intelligence: Institutional Development

M&Q DIs and FDIs suggestion for institutional improvement:

A domestic investor of this sector said that *"We need that more penetration of banks into the business"*. "*Most of the banks have stopped funding real estate sector. They should fund based on the customer's credibility"*. D 10

A foreign investor mentioned "*Only a minor amount of information has been gained from the government regarding historic mining and geological data. We know there is*

an important paper based resource held by the government that will be much more useful if it is converted into digital formats and provided over the web" F 15.

In short they need a clear understanding of how the government requires investment and development of mineral projects into the future. M&Q investors' suggest that the things to be improved in public institutions are as follows:

DIs	M&Q: Things to be improved in PIs	FDIs	M&Q: Things to be improved in PIs
D10	• Omani laws revision. • Inter-Ministerial/ departmental coordination should be harmonious and the OSS forum. • Qualified and experienced personnel should be at the helm of affairs in all critical departmental positions. • One focal decision-making Ministry, which acts as a bridge between the business community and other ministries should be in place.	F 1	• A separate Ministry for resources and energy. Including oil and gas. • like Australia, the need for Mining Warden Court,
		F 10	• *"One-Stop-Shop" permitting and approval process for new mining projects.* • *Better access to historical mineral exploration data gathered in the past (electronic Data).*
D15	• *Participation of the private sector in the decision-making process especially for the investment.* • *The government need to limit the beadledom or personal inferences of decision makers' pretences to a law which most of it impedes the procedures for investment.*	F15	A one-stop type shop for mineral title, mining and environmental requirements.

System 5: M&Q: VSM-Policy

The Mining and Quarrying sector still needs a lot of efforts to achieve its 2020 target of 2.0 % of GDP. See the following Table.

Economic Activity	1996 % (1)	2020 % (2)	Change % (2-1) (3)	Av. Contribution 1996-2010 % (4)	60% of 2020 figures% (2)x60% (5)	Variances % (4-5)
Total Hydrocarbon Activities	35.0	19.0	-16	43.6	11.4	-32.2
Total Non-hydrocarbon activities	58.1	78.1	20.0	57.9	46.9	11.0
Mining and Quarrying	00.6	02.0	1.4	0.3	1.2	-0.9

The strategic vision was seen by M&Q investors as shown in Appendix 5.2a: code M&Q 2. In general, domestic foreign investors mentioned that they are implementers of the vision to achieve the GDP percentage of this sector's 2020 vision target.

Diagnosis of the Mining and Quarrying Sector

The channels of coordination of S1 activities were poor in some cases. PIs do not coordinate amongst themselves or with investors of the sector when they make decisions. The investors of this sector doubt the effectiveness of OCCI rule to serve their needs. The mineral environmental knowledge and experience of the private sector could be improved by developing the local management and their regional administrations. This would allow a more cohesive approach through the meta-systemic channels to attenuate the confusion in the variety on the mineral environmental loop and the issue of knowledge and experience of investors.

There is incomplete and ineffective management and control in the mining and quarrying sector. There are some concerns raised with regard to policy decision making where uncertainty is large (the complexity zone), where there is a high level of non-agreement and uncertainty (read from the investors' interviews). There were some organisations that operated within the meta-system in a S3 role. The comments from this sector investors advocate what was suggested by Al-Oufi (1999) to form special district committees such as a Mineral Management Council this may reduce the information and transaction cost of the sector. This suggestion also made by the foreign investors of this sector to have especial Warden:

"*I have a wish to form an Omani warden, you may not need it in this country but certainly in other countries like Australia and everywhere else, you have 'Mining Warden Court', deals with mining issues,* M&Q/ F1.

There is no real separation of roles between the three systems; S3, S4 and S5, as in the case of the A&F sector. A poor homeostat was functioning: S3/S4 is out of balance as most of the time is spent in conversations about investor's needs (especially digital data) and more incentives from PIs, while little regulation is exercised. They confirmed that they have in important role to play to achieve the vision targets, this mean the possibility of the S5 function.

6.4.3 Collaboration in Building and Construction Sector

The following diagram (6.5) illustrates the VSM for the Building and Construction (B&C) Sector, showing the three S1s and the meta-systemic sub-systems.

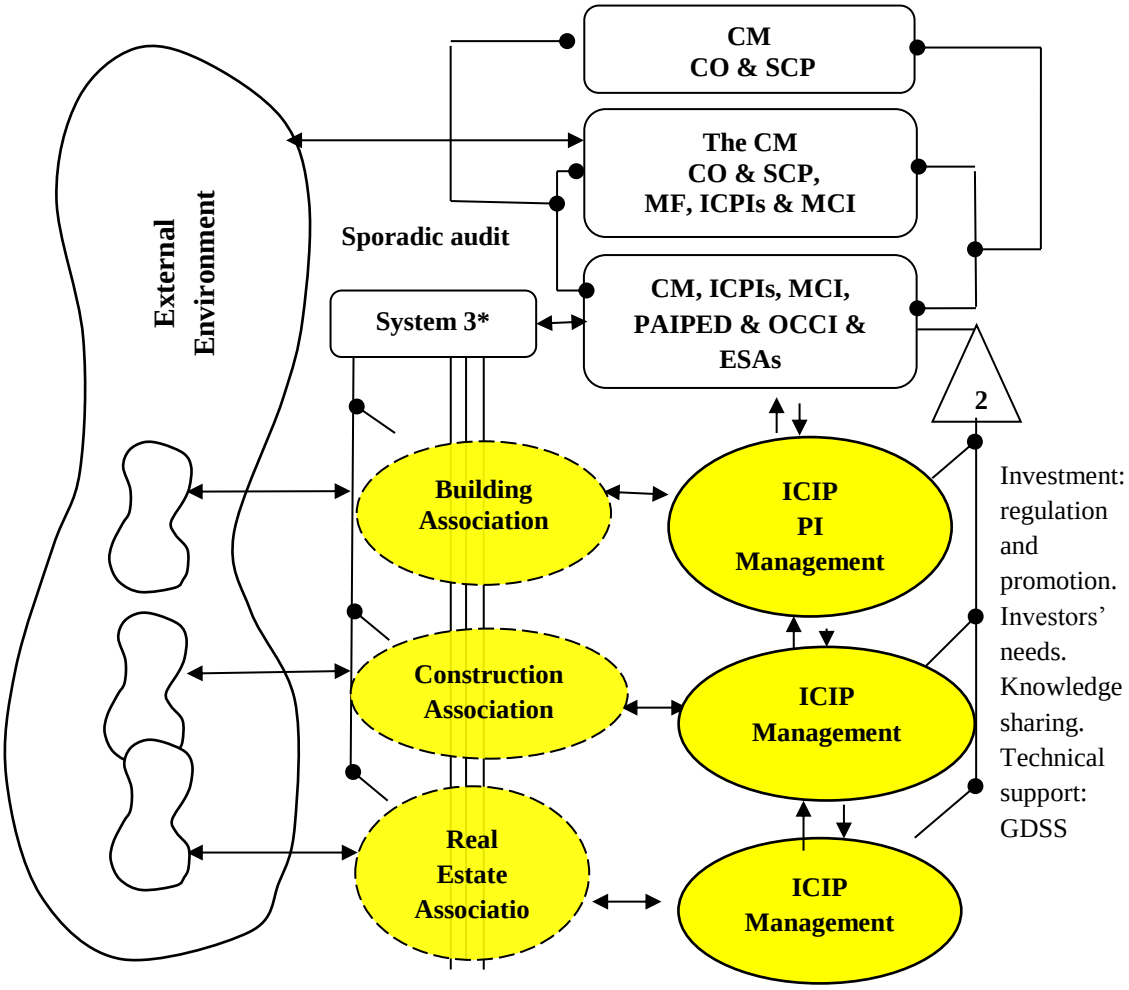


Figure 6.5: VSM for Building and Construction and suggested (dotted) sub-systems

System 1: B&C: Sectors Regulatory Management

The three Systems 1 are as shown, the building sector, the construction sector and real estate. The local managements are a number of ICPIs such as MCI, MTC, MT and MMP and their regional departments in the governorates. Online connectivity was found to be a significant factor for two way communication between ICPIs and investors. This can be confirmed through the data collection.

System 2: B&C: Sectors collaborative coordination and interaction:

Both DIs and FDIs in the B&C sector believe that the inter-organisational decision-making integration needs to be through the integration of all ICIP, with a direct interaction between PIs and investors; moreover the B&C foreign investors mentioned the following:

FDIs	B&C: Co-ordination
F11	*"We expect the Gov. Of Oman provide us locals as per our request as we have failed in getting proper Omanis for our organisation and to make a single door approval policy for major activities. Further we want the Sultanate to go towards achieving WTO policies in a more aggressive manner"*
F13	*"Decisions on investment policies, market regulations, taxation, labour, banking regulation."*

System 3: B&C: Cohesion and control in policymaking collaboration:\

The S3 activities involve collaboration (collective working) within the building and construction and real estate sectors. In summary domestic investors expressed their need for more interaction with PIs and to have a transparent information experience which will help both PIs and investors, as knowledge sharing is no longer a need, but it should be in place amongst PIs. Foreign investors think that knowledge sharing can help with understanding regulations and the various procedures in PIs. The B&C investors' opinion about the knowledge sharing and collaboration is detailed in Appendix 5.2a: Code B&C 1.

System 4: B&C: intelligence: Institutional Development

B&C DIs and FDIs suggestion for institutional improvement: Things to be improved in public institutions.

DIs	B&C: Things to be improved in PIs	FDIs	B&C: Things to be improved in PIs
D8	▪ Clear plan ahead of time ▪ Transparency ▪ Fair practice to all ▪ Local labour training ▪ Less bureaucracy ▪ Less paper work	F11	• Change towards more FDI investment focus. • Focus on overall/3dimentional development of the Sultanate of Oman irrespective of source of the FDI. • Quotes and training of *Omanisation* requirements • More cooperation among GCC countries and free trade between them
D9	▪ Speed of decision making. ▪ Create laws that protect the landlord, just as much as they protect the tenant. ▪ Improve the *Omanisation* laws (transport).	F13	• Quicker decision making. • One place where the investor are able to get all information he needs from all ministries. • Encourage more foreign investors that are prepared to share knowledge and practices
D14	▪ Friendlier systems/Procedures ▪ Speedy decisions/approval ▪ Better communication		

Respondents mentioned that decision are made without consulting the sectors' opinion or even before any information had been collected. Respondents from both FDIs and DIs, said there is often no informed vision to the policies. The data gathered tended to involve the individual public organisations and none of the decisions was shared among other organisations, although some of these policies and decision are discussed through joint committees. Some others are under data protection, and therefore some investors are not able to get data from the government. General industry data was unobtainable for many investors, and this low variety situation (caused by a lack of useful digital data) meant that informed decisions could not be made with confidence and system viability could be threatened by inappropriate actions. The Outside and Then considerations of S4 were not being taken into account. This not only had an effect on the current viability of the system but also will impact on the system's ability to function in the future.

System 5: B&C –VSM-Policy.

There was no coherent system identity (S5), or commitment to shared goals (FDIs and DIs). Many of the organisations had an identity based on operating with their own individual purpose, and did not see themselves as belonging to an overall system. S5 was operating in a very informal way (as was the case with the other meta-systems) and was not formally expressed in terms of functions, role and responsibilities.

Economic Activity	1996 % (1)	2020 % (2)	Change % (2-1) (3)	Av. Contribution 1996-2010 % (4)	60% of 2020 figures % (2)x60% (5)	Variance s % (4-5)
Total Hydrocarbon Activities	35.0	19.0	-16	43.6	11.4	-32.2
Total Non-hydrocarbon activities	58.1	78.1	20.0	57.9	46.9	11.0
Building and Construction	03.2	10.0	6.8	4.0	6.0	-2.0

The above table shows that this sector still needs a lot of efforts to achieve its target by 2020 (10 % of GDP). B&C investors' opinion about the strategic vision is illustrated in Appendix 5.2a: code 2.

Diagnosis of the Building and Construction Sector

It was found that there is lack of an effective S2 channel and thus coordination of S1 activity was poor. FDIs stated that there is no coordination within the sector. Some private sector organisations do not coordinate with their PIs, when PIs intend to make decisions, and they doubt the effectiveness of OCCI channels, so the operational systems are not linked with the meta-system via regulatory or promotional channels, and therefore are not holistic either at sector level or at national level. The outcome here is that efficient channelling of information to the meta-system needs to be developed to attenuate some of the variety occurring horizontally. This may include implementing GDSS to be a platform for knowledge sharing that can be then effectively managed.
PIs of this sector lack effective horizontally linkages, and tend to delegate power to their regional departments lower levels of recursion. The respondents also reported a need for interaction with the relevant PIs, so they can be better informed by the investors. Currently there is ignorance of private sector opinion when it comes to the issuance of the decisions concerning the sector. There are a number of difficulties each sector investors reported from both investors and PIs focus groups.

The feedback loop between S1 and the Building and Construction environment is non-existent or at least not operating effectively. To ease this problem, it will be necessary to implement a more robust data collection channel for decision and policymaking. This will require suitable variety amplifiers and attenuators that can provide information and knowledge to the S1 within their operating environment. The environmental loop

knowledge and experience of the private sector could be improved by developing the local management and their regional administrations; this would allow a more cohesive approach through the meta-systemic channels to attenuate the confusion on the environmental loop.

6.4.4 Collaboration in the Manufacturing Sector

The following diagram (Fig 6.6) illustrates the VSM for the Manufacturing (MAN) Sector, showing the three S1s (Food manufacturing, LSE Manufacturing and SME manufacturing) and the meta-systemic sub-systems. Unlike other sectors, this sector is linked with other industrial sectors' systems and sub-systems as shown in the unfolding of complexity diagram.

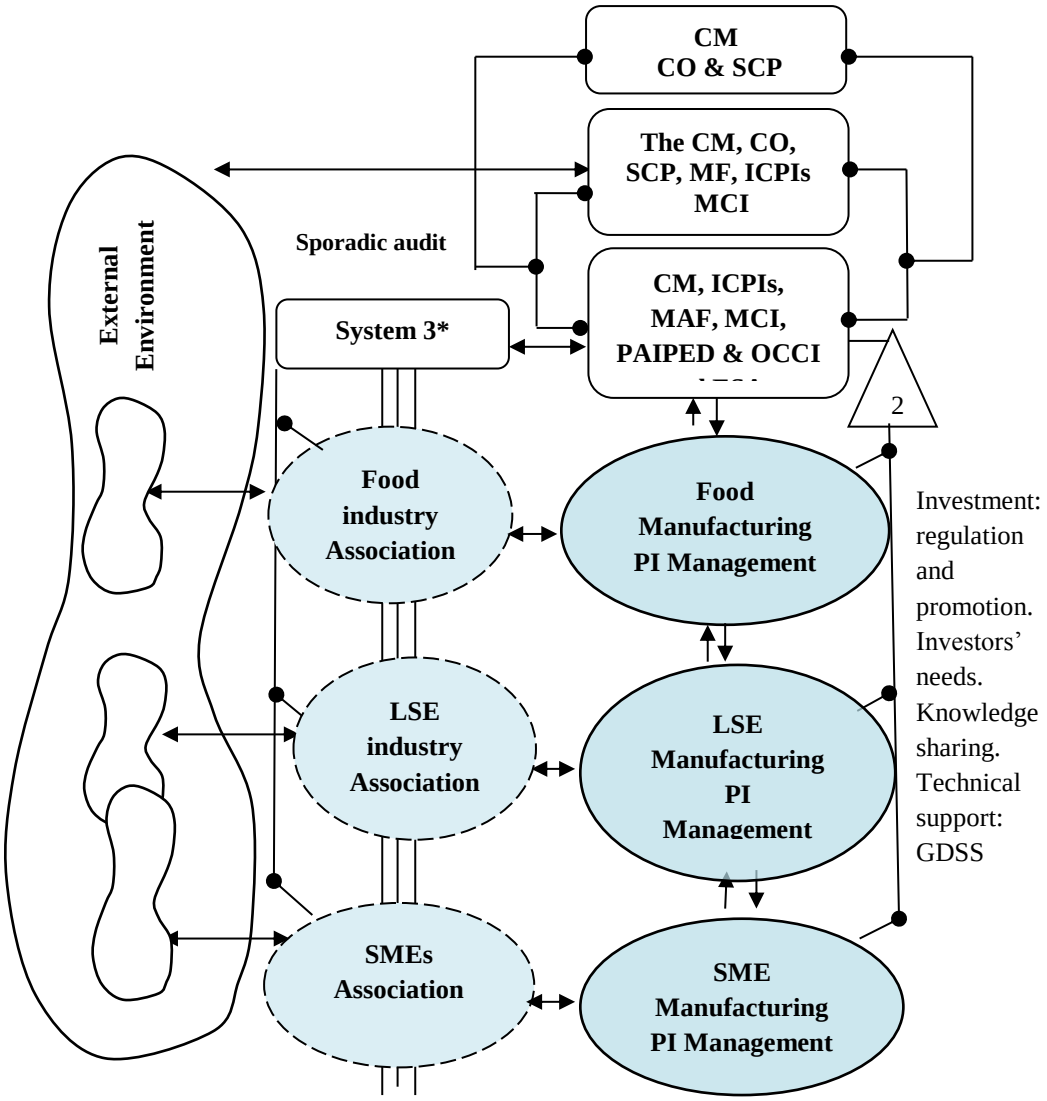


Figure 6.6: VSM of manufacturing sector and suggested (dotted) sub-systems

System 1: MAN: Sectors Regulatory Management

Further analysis of the interviews and focus group data, using the VSM categories and with the support of the N vivo software, has helped to depict some of the more obvious links among the public institutions and organisations as well as the investors' participation through the OCCI role (see chapter two). Having said that, the outcome does not show that all these role and relationships are fully functioning and operating successful in this sector, as the following analysis explains; it reveals the need for integration of the databases of all PIs, which take care of the manufacturing affairs.

System 2: MAN: Sectors collaborative coordination and interaction

The individual businesses see themselves as part of the government policy/decision making processes but they have asked for institutional integration among government organisations.

System 3: MAN: Cohesion and control in policymaking collaboration

Lack of collaboration between the S1s appears to be related to lack of a coordinating S2 and connectivity facilities, which ultimately has an impact on control and communication between the PIs themselves and between PIs and investors. It also impedes them from engaging successfully in policy making and to exercise multi-level governance in the manufacturing sector. Improving this would facilitate collaboration. in policymaking and would provide investors knowledge and experience. Various respondents reported that there was a lack of data to inform decision-making. In general domestic and foreign investors opinion varies between direct dialogue vary between the private and public sector and indirect dialogue (through OCCI). Investors' opinion of this sector about sharing knowledge and experience agencies collaboration can be seen in (Appendix 5.2: code MAN 1).

The above results showed that proper channels between the S1s and their operating environment need to be redesigned, to amplify the variety and enable a more valuable evaluation of environmental circumstances so to improve the quality of operational decisions. This includes provision for more shared information and knowledge with

awareness of where collaboration will be necessary to gain the benefit of manufacturing investors' experience.

CO has been involved in sporadic skimming for different aspects specifically revising the legalising point of view to improve the quality of regulation of the local management (PIs). This separation between the roles of S2 and S3 and 3* is needed in the manufacturing sector in order to work more systemically, and accordingly S2 could be redesigned and improved as follow; investment regulation and promotion modification and enhancement and identifying investor's needs through knowledge sharing between the PIs and sectors investor implementing GDSS.

System 4: MAN: intelligence: Institutional development

This sector has also shown the lack of information and knowledge sharing and unitary decision-making which suggests poor intelligence for policy and decision-making and a lack of experience and knowledge sharing, as high-lighted by the respondents of this sector. A domestic investor in the Manufacturing sector felt that FDI incentivising policy was not always apparent; one of them said: "*people are talking in the incentives over incentives, I do not agree on that, because that creates a dummy baby".*

MAN DIs and FDIs suggestion for public institutional improvement:

DIs	MAN: Things to be improved in PI	FDIs	MAN: Things to be improved in PI
D1	▪ Clarity of the decision, and regulations, no personal judgment ▪ The government need to be proactive rather than post active.	F3	• The simplification of the 100% FDI approval processes. • The concentration of the customs duty exemption process in only one ministry. • The further development of 'One Stop Shop'
D2	▪ Transparent, unambiguous and fast decision making ▪ A complaint agency to be set up with over ruling powers to look into and swiftly dispose of complaints from businesses / investors if they do not receive due attention from any Government Dept.	F7	• The need for policy on Natural Gas availability.
D7	▪ Providing industrial lands for new projects. ▪ Decreasing the bank interests to encourage the investors. ▪ Reviewing all laws and regulations specially the *Omanisation*.	F9	Speed; Simplicity; Avoiding inter-government delays.

System 5: MAN VSM-Policy

The System in focus is the Manufacturing sector, in the context of collaboration with local management of (PIs). The sub-systems are investors of manufacturing/industry associations. The table below shows that this sector needs to maintain the growth in order to achieve their target towards 2020 (15 % of GDP), (2010: 10.8% of GDP: already reached the target figure in 2010: 9%).

Economic Activity	1996 % (1)	2020 % (2)	Change % (2-1) (3)	Av. Contribution 1996-2010 % (4)	60% of 2020 figures% (2)x60% (5)	Variance s % (4-5)
Total Hydrocarbon Activities	35.0	19.0	-16	43.6	11.4	-32.2
Total Non-hydrocarbon activities	58.1	78.1	20.0	57.9	46.9	11.0
Manufacturing	05.4	15.0	9.6	8.1	9.0	-0.9

Manufacturing investors' opinion about the strategic vision is shown in Appendix 5.2a: code MAN 2. Domestic investors considered the vision as a good tool and plan but they wished that there was a medium plan as the growth from 5% to 15% needs to be followed up. They think they have a role to play. Foreign investors consider that it is a well thought plan. All investors think that they are part of it.

Diagnosis of the Manufacturing Sector

The VSM diagnosis suggests that the Manufacturing sector has more viability and is more connected than that in the previous three sectors. S5 has more organisations involved in the operation and local management and regulatory action, such as free zones and industrial estates in the regions (chapter two) and also there are clearer responsibilities and mechanisms for policy making. The higher authority role and responsibilities are clearer than in the other sectors, thus S5 in the system in focus is more reliable, with a clearer identity and ethos targeted to the achievement of investment principles, vision and strategies.

Analysis of primary data demonstrates that S4 and S3 are more robust with a better balance between the core decisions on strategies and policies are both highly creative through experience, and have good human and technological support. MCI, PAIPED,

OCCI and PEIE are working coherently to achieve the industry growth target of the 2020 vision. Within S5 (Policy), the matching between investment strategies needs to be done to ensure the viability of this sector.

As this sector is interrelated with four other sectors the VSM needs to be designed not only taking into consideration the problems raised in this sector, but also taking into consideration the environment of the other related sectors. This involves issues of the highest complexity among the five sectors.

6.4.5 Collaboration in Trade and Tourism

The following diagram (6.7) illustrates the VSM for the Trade and Tourism (T&T) sector, displaying four S1s (Trade, Tourism Services and ICT) and the meta-systemic subsystems.

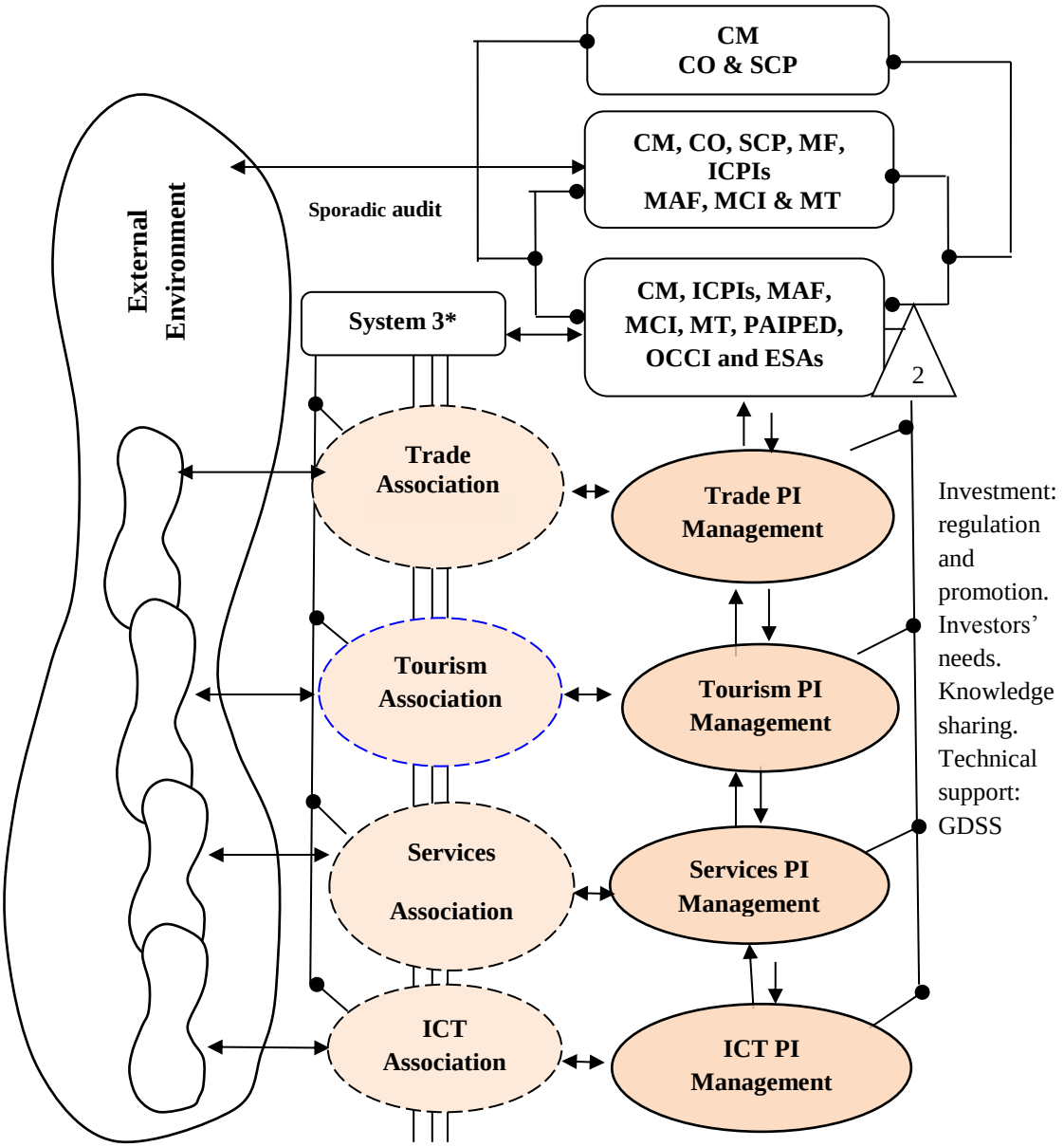


Figure 6.7: VSM of Trade and Tourism sector and suggested (dotted) sub-systems

The VSM diagnosis of this sector suggests that the Trade and Tourism sector - as in the case of the manufacturing sector – tends to have some viability. There are more organisations involved in the operation, local management and regulatory roles and they have clear responsibilities and mechanisms. The N vivo software depicts more obvious links among the public institutions and organisations as well as the investors' participation and the OCCI role. The outcome does not show that all of these roles and relationships are fully functioning and operating, but suggests that in the trade sector, the meta-systemic roles are functioning more effectively.

System 1: T&T: Sector Regulatory Management

There was clearly an issue involving the connections between the S1 operating units and their environment. It was found that the problems were indicative of poorly functioning or non-existent environmental channels for the S1, and results also showed that the proper channels between the S1s and their operating environment will need to be redesigned specially in tourism to amplify the variety and enable a more valuable evaluation of environmental conditions and thereby improve the quality of operational designs.

System 2: T&T: Sector collaborative coordination and interaction.

The respondents of the T&T sector reported that investors' coordination is a major issue, in particular that individual businesses did not see themselves as part of the government policy/decision making processes. They asked for institutional connectivity and integration among government organisations.

DIs	T&T: Co-ordination	FDIs	T&T: Co-ordination
D12	"*I think all public institutions need to be integrated; for example if Ministry of Manpower intending to stop hiring employees from abroad then Ministry of education and High education and research council need to work together in find a solutions to qualify Omani's for employment market*"	F4	"*Ministry of Oil & Gas, Ministry of Finance and Ministry of Manpower recognized our value creation as key and have supported our organization more as compared to the other Ministries, and of course manufacturing in respect of as special purpose vehicle via Oman Oil and huge amount of multinationals coming into the country, that is very sure and strong foundation for the country of Oman*"

System 3: T&T: Cohesion in Policy making collaboration

The design of an effective S3 and system 3* would provide more cohesion for the system as a whole, thus creating a better context for collaboration and increasing system viability. Lack of collaboration appears to have its origins in the lack of coordination between the PIs themselves; this ultimately affects the ability of PIs and investors to successful participate in policy making and multi-level governance. More connectivity and better communication channels between the PIs will facilitate the collaboration in policymaking and help to take advantage of investors' knowledge and experience. Various respondents reported that there was a lack of data to inform decision making.

In the Trade sector PIs (inter-organisational) share experience and knowledge to collaborate on policy and decision making, and that attract investors; the investors realised the important of this sharing, investors' opinion about the strategic vision is listed in Appendix 5.2a: code T&T 1. The separation between the roles of S2 and S3 and 3* is needed in the Trade and Tourism sector to improve their viability. S2 needs to be redesigned and may be improved by separating information auditing.

System 4: T&T: Institutional development

Poor intelligence (S4) problems raised during interviews encompasses many organisations in a network of public and private sectors (voluntary bodies) particularly if the main funding of any meta-system is going to come from the public authority. It will be necessary to take this into account when designing more useful meta-systemic structures in government institutions. Design of more useful and robust environmental channels allowing for the scanning of potential future and emerging patterns and trends will increase the variety available to the system and thus improve viability. At this level of recursion, Trade and Tourism will have to use the environmental channels to continually assess their preferences and any potential future threats and opportunities with regards to the system operation. These may involve changes in legislation, such as modernising laws and regulations that concerns the investments in the sector. This would have an impact on Trade and Tourism businesses and should have been anticipated in advance through environmental channels.

T&T DIs and FDIs suggestions for institutional improvement: Things to be improved in public institutions.

DIs	T&T: things to be improved in PIs	FDIs	T&T: things to be improved in PIs
D5	▪ Tourism sector need direct support by Ministry of Tourism. the travel and Hotels section	F4	• Shorter decision cycle and more transparent decision process. • Government to invest on organisations that creates sustained value / Intellectual Property (IP). • Create industry specific forums for knowledge exchange
D12	▪ Minimising the period of decision-making. ▪ Activating all e government projects applying registration though internet. ▪ Investors feel his importance. ▪ Granting facilities to help in investment attraction to open new free zones for trade	F5	• Easier rules and regulations.
D13	▪ Easier labour clearance procedures. ▪ Easier commercial registration formality. ▪ Easy centralized tender board registration	F8	• Open business for foreign companies themselves. • Free transaction for land (costless transaction)

System 5: T&T: VSM-Policy

A S5 will have to be designed to bring cohesion to the system as a whole which create an identity and establishes a Trade and Tourism ethos within the country to which all investors within tourism and trade can belong. T&T investors' opinion to the vision 2020 is illustrated in Appendix 5.2: code T&T 2.

Diagnosis of the Trade and Tourism Sector

The framework has provided a means of exploring relational links within interviews and focus groups whist the VSM provided the means to investigate management and operational mechanisms, the functioning and vitality of the linkages. The TASCOI tool was found to be useful in exploring the systemic identity of Trade and Tourism sector.

The higher authority roles and responsibilities in T&T are clearer than in the other sectors, thus S5 in the system is more focused and reliable, and S4 and S3 are more stable. It was found that this guarantees a more balanced debate between S3 and 4 (the S3/S4 homeostat) so that the core decisions on strategies and policies are both highly creative and based on day-to-day operational information through experience and human and technology support. It should be noted that at the higher recursion, the VSM of Oman, S5 must embrace investment strategy to insure the viability of this sector. It

must design its structure not only taking into consideration the problems raised in this sector but also those of other related sectors.

6.5 Policymaking Collaboration VSM Recursion Level (1)

The following diagram (Fig. 6.8) illustrates the VSM for the Industrial and Services sector within Oman's non-hydrocarbon sector, which combines a services sector (trade and tourism) and the four industrial sectors diagnosed in 6.4 Recursion Level 2 (see Fig. 6.1 (b)).

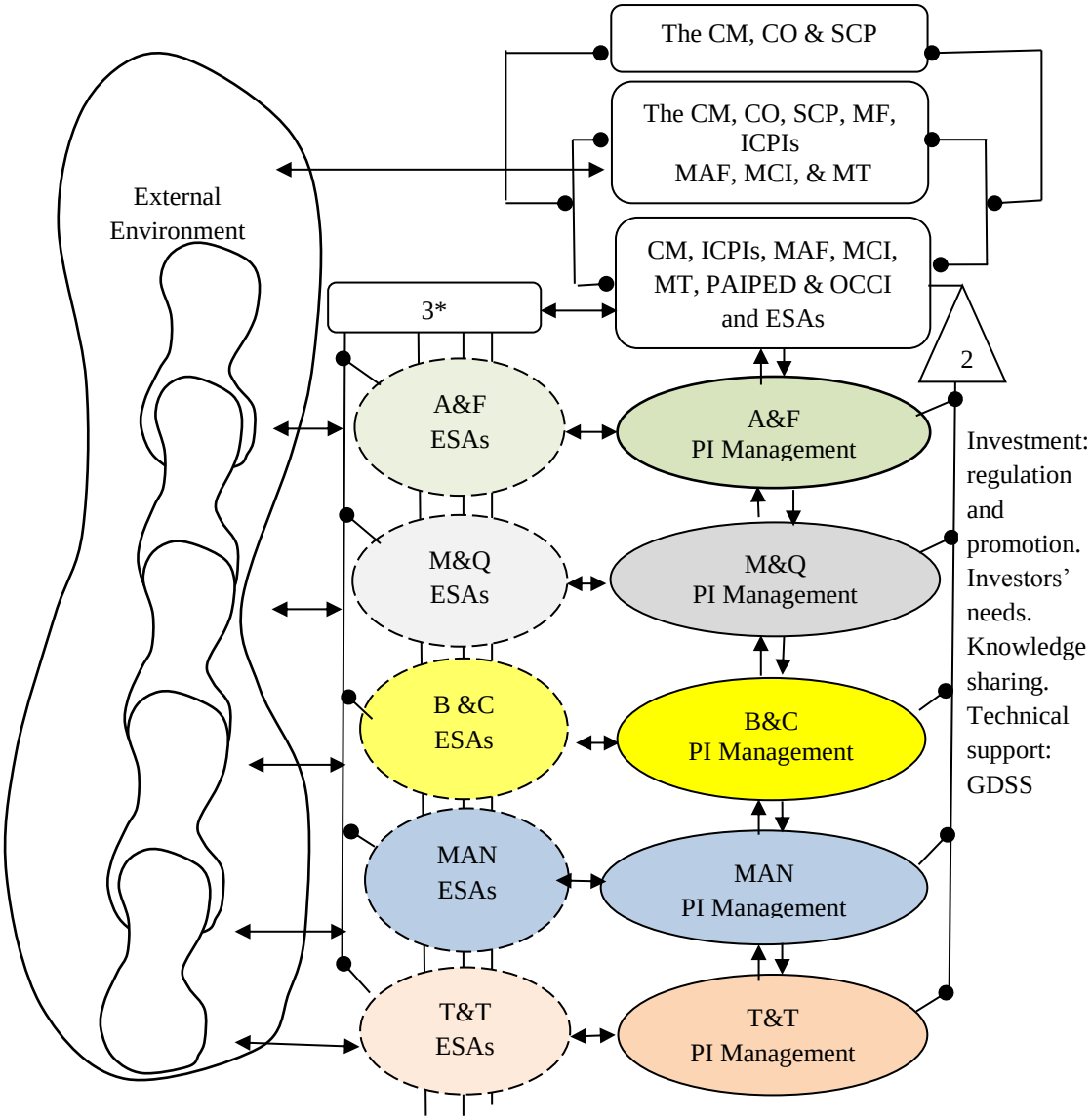


Figure 6.8: The Viable System Model: Recursion -Level (0) Institutional development and suggested (dotted) sub-systems

Each of the Systems 1 has been diagnosed in the previous section of this chapter as a viable system in its own right (corporate level). It should be noted that each S1 is composed of its management and an Economic Sector Association or ESA which interacts with its environment: ESAs are depicted with a dotted boundary as they are suggestions from investors and PIRs and have yet to be formed.

TASCOI analysis:

TASCOI defines the stakeholders, who provide the environment for public institutions to learn what they need for their policy governance, using a support framework and internal and external resources (private sector knowledge and experience) to ensure they can develop the knowledge and skills in the Omani government. Table 6.3 (below) refers to the public regulatory firms that aim to balance regulatory with investment attraction aspects, in order to achieve economic growth and prosperity.

Transformation	Transforming existing policymaking process in the public institutions (PIs) into improved process (Public-Private Collaborative) in order to meet non-hydrocarbon economic sectors' strategic vision targets (SVT2020) and investment strategic vision (ISV2020) through institutional development.
Actors	PIs policymakers and FDIs and DIs Investor's in Non-hydrocarbon sector
Suppliers	Facilitators: Human support: knowledge and experience of investors for policies. Technology support; information and communication technology (ICT) facilities; Information Technology Authority (ITA) and The Telecommunications Regulatory Authority (TRA).
Customers	Government, investors, communities, and other stakeholders.
Owners	The public and private sector
Interveners	The Council of Ministers (CM) The Council of Oman (CO) The Financial Affairs and Energy Resources Council (FAERC) The Supreme Council for Planning (SCP) The Board of Governors of the Central Bank of Oman (CBO) The Supreme Judicial Council (SJC) The Civil Services Council (CSC) The Investment Concerned Public Institutions (ICPIs). The Communities of CPRs The Investors. Auditors including; The State Financial and Administrative Audit Institution (SFAI), and The Public Authority for Consumers Protection (PACP).

Table 6.3: TASCOI for Non-hydrocarbon Economic Sectors on National Level collaboration

The breakdown of data for this system in focus indicates the results of the relationship between the five Systems of the VSM and those sectors diagnosed.

a) Meta-system: Recursive (2)

System	Given names to the system/ Responsibilities	VSM Criteria for Analyses	Data Collection Questions
S5 in the system in focus	**Policy**	**Principles, Vision and strategies:** It should guarantee a balanced debate between the S3/S4 homeostatic processes	Strategies Focus Groups (FGs): Appendix 5.2b.
S4 of the system in focus	**Intelligence**	**Institutional development**: Outside and future strategic direction centre for policy making collaboration. (Environment scanning; external environment external information: threats opportunities.	- facilitating the achievement of purpose. - Enabling achievement of policy making governance. - Dealing with international policies. Creativity and patent issues. Focus Groups (FGs): Appendix 5.2b
S3 of the system in focus	**Cohesion or Control**	**Experience and Knowledge sharing and policy collaboration:** Here and now situation and joined up thinking and collaborating with sub S1s. Oversees monitors and regulates the internal part of the organisation.	- Operating policy making joined up thinking. - financial issues in System 1(s):transaction costs for collaboration, (Human & electronic support) Focus Groups (FGs): Appendix 5.2b. Experience and knowledge sharing
3*	**Monitoring (Sporadic)**	**Auditing**; Informal mechanism for collecting information directly from the operational level.	- Sporadic informal institutions. - Council of Oman - Enabling policy making governance
S2 of the system in focus	**Co-ordination**	**Control and coordination: GDSS suggestion.** Organisational mechanism that prevents operational activities from destabilising one another. Shared language information.	Human & ICT support, perceived in the organisation Integration knowledge sharing platform GDSS/ PIs and investors leaders. Focus Groups (FGs): Appendix 5.2b,

Table 6.4a: Meta-System Recursion 2.

System 1 of the system in focus: (VSM-Operations/local management).

System	Given names to the system	VSM Criteria for Analyses	Data Collection Questions
S1 and Sub-System 1	Operation	Primary activities of system in focus are Omani economic sectors that have high relevance to foreign and domestic investment the country income diversity; and the government institutions responsible for promoting and regulating its investments. **S1s** are regulatory management and (power) of (ICPIs) related to non-hydrocarbon Sectors: - Agriculture and Fisheries sector. - Mining and Quarrying sector. - Building and Construction. - Manufacturing. - Trade and Tourism. **Sub-system 1s**; are the suggested investors leaders to interact with the government local managements (S1s)	Focus Groups (FGs): Appendix 5.2b.

Table 6.4b: Operation (Systems 1) and Data Interpretation recursion 1.

The data was collected during the interviews and classified by using N vivo software. It was used to analyse the relationships between various organisations operating as S1s in public institutions, for this System-in-Focus.

A S1 is itself a viable system: it could survive on its own; it needs to be as autonomous as possible regarding day-to-day decisions as it co-evolves with its changing environmental niche. This autonomy can be seen as part of creating 'requisite variety': the balance can be achieved by either increasing (or amplifying) operational variety (by more machines, ICT applications and software, longer working hours or more human resources skills injecting) or decreasing (attenuating) environmental variety. This research - as discussed in previous sections- resulted in a proposal to form ESAs for each sector, as the investors demand to reach to a higher authority directly, without the intermediary of the OCCI. They did not, however, mention how this could be done, or the instrument they should use for its development. The OCCI on the other hand rejects this suggestion as it is the OCCI's responsibility and role to interact with PIs. The OCCI members including the OCCI's Chairman opposed this idea when they stated that they are representing the whole corporate sector and negotiating with government institutions on their behalf. They strongly emphasised:

"*we should not encourage formation of sectors association as it is our role to act for the whole private sector*".

Interestingly, PIs were of the opinion that they are supportive to this investors' claim. FG1 expressed the significance of ESAs to lead each sector separately;

FG 1	FG 2
"We suggest that investor sectors or even sub-sectors need to be represented by appointing 'leaders' to be directly involved in collaboration with Public Institution (PIs) in each of economic sector investors. This is a better way to face government power and authorities". FG1	"*we definitely need in Oman to establish associations for each sector e.g. for fisheries, this because they know their own problems, and they can explain them in a better way to the government. We as a group strongly recommend establishment of associations to maintain each sectors interests*". "*there yet no association in Oman*". "*We emphasise that the private sector investors need for a proper leadership before the direct interaction, and interfacing. Their affairs to be well managed when it comes to collaborate with government organisations or institutions, but we don't think that we need for each single sub-sectors a separate association, otherwise we will be having hundreds of associations, and we will be end up with associations for bakery, butchers, and vegetable shops and so on. Instead a large sector only needs to interact with the government institutions through a qualified authorised representative".*

Both FG1 and FG2 agreed on the participation of the private sector in public policymaking processes that related to economic sector governance. The majority in FGI were of the opinion that the private sector should be allowed to participate in the process of specifying the governmental policies in general, and agreed that investor participation in government policy is important. A minority was of the opinion that governmental policies should not necessarily adopt *all* private sector opinions, especially those contradicting public interests. This focus group reported that investors' demands concerning incentives, tax holidays and exemptions can be excessive, and thus policy-making should not be a unilateral process directed only by the private sector. The consensus vote was that the OCCI should play a stronger role in the process of specifying governmental policies and decisions related to the private sector in the absence of sector associations.

The majority of FG2 believe in the necessity of private sector participation. However they consider that the final decision must be taken by the government independently. The Government and the private sector both will have their interests and in the process small stakeholders might get affected. Therefore, a broader circle of stakeholders must be identified and their opinions considered. Different opinions from different walks of life will provide for a broader spectrum of ideas and suggestions, which can then be refined and used to create better services. A minority even believe that such participation should be directly by stakeholders and not necessarily through OCCI, (i.e. by the society), so that there should be freedom of opinion.

System 2 of the system in focus: policymaking Collaboration (VSM-co-ordination).

The coordination problems were indicative of the lack of an ineffective S2: coordination of S1 activities was poor in some sectors or even completely lacking. DIs and FDIs stated that there is no coordination within the sector when they make decisions. There was doubt about the effectiveness of OCCI channels, so the operational systems are not linked with their meta-system, thus they are not holistic (as at the lower recursion level). This outcome suggests that efficient channels connecting the operation to its meta-system need to be developed to attenuate some of the variety occurring horizontally (inter-organisational). This brought forward an argument for implementing an electronic system such as GDSS to be a platform for knowledge sharing, which can be then effectively managed and used for the benefit of all.

The confusion and duplicate roles that appears in the meta-system are seen to be a barrier to the sharing of experience, information and knowledge. We have also seen this at the lower recursion level, for example, there were complaints from M&Q in particular and other sectors in general that the PIs did not keep everyone up to date with what was happening in their sector. The flow of information was also hindered in both directions between the meta-system and the S1s. New meta-systemic structures will have to be designed to deal with the criticism of the PIs including the cohesive functions of S3, 3* and S2.

The five sectors need to be linked with all ICPIs horizontally, and as well as with their regional department vertically. The respondents also reported their need for interaction with the ICPIs, so that they can be informed by the investors. There was concern about the ignorance of private sector opinion when it comes to the issuance of a decision by a ICPIs. Respondents also reported some problems associated with the S1 environment loops for the sectors. Feedback loops between S1 and its local environment, and the entire environment at the whole-system level (S4) do not seem to be operating effectively. To ease these problems it will be necessary to implement a more robust data collection channel for decision and policymaking.

A group decision making support system is suggested during the discussions, which can be done with suitable variety amplifiers and attenuators that can provide information and knowledge to the S1s within their operating environment. This would allow a more cohesive approach through the meta-system channels to attenuate the confusion in the variety on the environmental loop and the utilisation of knowledge and experience from investors.

Channels to communicate, cooperate or coordinate with the investors are discussed for recursion level 2. The majority of both focus groups were of the opinion that interaction with the investors can be more effective through creating Social Networks; FG1 thinks that not all ideas and suggestions get incorporated but a lot of ideas were generated through the interaction between the investors and public institutions. Good suggestions do come in. Information and Communication Technology (ICT) is one of the communication tools that would enable the private sector to deal with Omani institutions more easily. Institutions generate the investors' ideas that come through electronic systems and meetings; they are discussed in advisory panels and decisions taken through committees. They emphasised the need to create a formal focal point or a

single window to act on behalf of the public institutions, to work as a counterpoint to any informal processes, and which meets with the economic sectors to discuss each sector's issues separately.

FG2 thinks that permits need to be issued electronically and data bases should be clustered (Industrial Institutions, Commercial institutions, Social institutions and so on) and integrated through e-government projects and the Information Technology Authority (ITA). For a more effective S2: FG2 think that a "sharing platform" is necessary; investors can participate in public institutions policy and decision making (related to investors) and share dialogue and knowledge through the proposed sector association (ESA), or through (OCCI) or other means.

FG1 are in agreement that the best way to encourage the investors to look for in-kind incentives is through more accurate information and by easing their interaction with the government institutions through ESAs. They think there is a need to have programmes that allow government agencies to reach to the investors through road-shows, and a need to create links between the government economic institutions and the Oman Development Bank. There should be an alternative means for the private sector's participation in deciding on those government policies related to them.

FG2: Launching a project must be announced to the public via print and electronic media such as newspapers, Social Networking Sites, pamphlets etc. Alternatively there could also be presentations held from time to time at the OCCI where new projects can be announced and questions addressed. They agreed that the final call on that would be from the investors and the decision would be theirs too. Investors are needed to give OCCI their feedback on the experience of being associated with the OCCI and may give suggestion that OCCI could review. This would help OCCI in reviewing their policy for a specific project or more generally. FG 2 also affirmed that sharing a platform is necessary. The interviews also resulted in a suggestion to construct a platform through which the S1 sub-systems can coordinate and collaborate. The FGs suggested that proper private sector leadership needs to be created. Two concepts are derived from the literature review a) leading investors through co-optation (to be embedded in S1) and b) Group Decision Support System (GDSS) could be helpful to be a co-ordination platform in S2 (see Fig. 6.9).

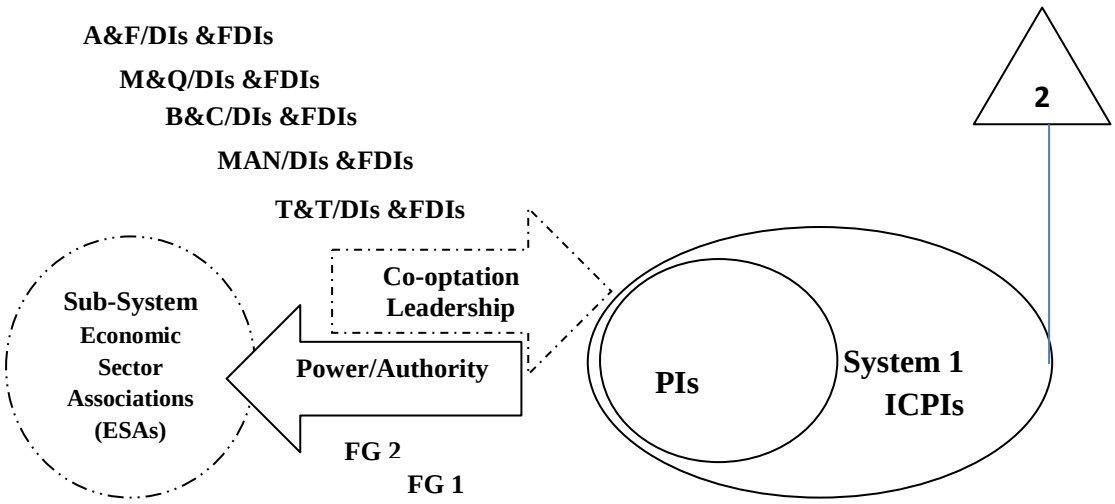


Figure 6.9: Co-optation and Power embedded in to VSM: The Interaction between System 1 and its sub-systems of System in Focus

System 3 of the System in focus: (VSM-Cohesion in policymaking Collaboration)

The current system is seen as autocratic, and needs to be changed to be more democratic involving S1s, by defining how much freedom each S1 elements possesses. This system translates overall policy into operational plans. FGs have highlighted this issue. FG1 discussed and reached the conclusion that investors' attraction leads to an improvement in the sector's share of the economy and the international market. Interaction happens through Social Networking sites but Web based polls may not hold much credibility. Face-to-face interaction is a good alternative source of monitoring customers' feedback. They suggest a better way of utilising private sector opinion and knowledge; seminars, face to face talks and sometimes through electronic contacts. This way it would be possible to know their reaction to the draft version of any decisions intended to be taken by the government. However, the minority do not agree that the provision of these demands is the best way to attract investment, excluding those already provided by the government through the Industrial Estates and/or Free Zones.

System 3* of the System in focus: Policymaking collaboration (VSM- Monitoring)

Formally, there is already availability of auditors within the system in focus who can articulate System 3* such as; The State Financial and Administrative Audit Institution (SFAI), and The Public Authority for Consumers Protection (PACP) as formal institutions. Informal (sporadic), audit of PIs activity to the investors and citizen was mentioned during FG1 discussions and this is happing at the national level though the

yearly meetings of the Sultan with the people's representatives during his regional camping and visiting tour. The Council of Oman's (CO) critical, wicked questions and observations about the PIs activities is a sporadic auditing function, as this is the main role of System 3* to all S1s. other irregular and non-formal audits enquire into different aspects of S1s, such as staff surveys.

System 4 of the System in focus: Institutional Development

The lack of information and knowledge sharing meant that there was poor intelligence for policy and decision making and a lack of experience and knowledge sharing (as mentioned by respondents of the non-hydrocarbon sectors). PIs collect feedback from the environment such as operating difficulties and potential opportunities and also provide a mechanism to build an 'inside and now' view to give a self-awareness perspective.

In S4 the decision-making process seems to be unilateral (in the government's hands). Respondents mentioned that decisions are made without accessing the sectors' opinion or even without the collection of any information. Respondent from agriculture and fishing and also from quarrying and mining, the community and investors all agree: this suggests an ineffective environment loop for S4.information and thus transaction costs are high in most of the non-hydrocarbon sectors.

Within the homeostat between S3 and S4, the coordination -related difficulties are seen by focus groups as follows (Homeostat S3/S4: Public Private Difficulties).

Difficulties / FGs	FG 1	FG2
Difficulties in cooperation on the horizontal level	Occasional lack of coordination between organisations on the same level, there should be electronic connection between their databases.	- Providing employees with a clear cut Job Description, as there is no role clarity; the responsibilities are not made clear. - There is no inter-government interaction. Colleagues from two different Ministries have no interaction or coordination at all. - employees need to be made to feel empowered to freely interact with their colleagues in other Ministries.
Difficulties related to (financial resources & time)	Financial difficulties can be overcome through rationalisation & re-allocation, and time difficulties by re-organisation	Budget constraints: can be overcome with in time budgeting in advance
Difficulties related to competency (language, speaking about generalities, technology & communications)	Documents in Arabic language from foreign companies which originally do not deal with Arabic language in their countries. Decisions are made with no in-depth discussion, thereby adversely affecting the quality of decisions. The problem related to communications & IT. To overcome these difficulties, improvements should be made and systems updated.	The need for language and communication skills. As regarding the difficulty related to language, the group does not think that it is important to translate the documents for the foreign investor, since he originally doesn't deal with Arabic language. In general, Language barriers must be erased.
Difficulties in the organisational specialisations and mandate (economic, social)	The government organisations should be integral and not overlapping or duplicated.	The Government must provide clear cut instruction through their website or any other information booths about the requirements and criteria for the Investors.
Procedural Difficulties and work steps (time delay, cost of dealings)	Procedures difficulties should be solved by using the Singaporean experience of (inter-government) according to which the procedures & work steps are re-studied, and it should be based on the System, not on the employee's personal discretion or on favouritism.	They do not believe that using the Singaporean experience for solving the (inter-government) problem is the best solution, and they see that for solving this problem consideration should be made as per the country's culture, but they agree with the point that procedures & work steps should be based on the System, not on the employee's personal discretion or on favouritism.

Table 6.5: Cooperation difficulties from FGs perspectives

Both FGs felt that the OCCI role is not clear. S2 need to be upgraded to include institutional and private sector coordination and collaboration**.** FGs think that PIs need to help sectors to become less susceptible to economic and institutional determinants. They discussed the formal constraints such as laws and procedures and triangulated the opinions of investors. FG1 think that there should be group problem solving, particularly within the ports, customs & industry cluster. The solution lies, not in the laws and systems themselves, but in the application and implementation of such laws

and systems, (such as labour law), and in the knowledge of a clear vision for the sector itself. FG2: With regards to the proper application of laws, the public sector must change their working culture to become more of a service-oriented industry. The government sector must reflect the attributes of being public servants: acting as service providers more than coming across as the final authority. The two sectors (private and public) have to be synchronised and bridge the wide gaps between them. In the absence of those few key people, decisions remain pending until the decision maker is available to take a call. This culture must change and authority needs to flow downwards in a proper hierarchy and not stay at the top with a very limited number of decision makers.

The FGs also affirmed the importance of coordination. As reported by FG1, institutions are not electronically inter-connected. They recommend that the decision and policy making process in public institutions needs to be done in the form of clusters, e.g. an economic cluster including the MCI, MMP, MECA, Customs, the Oman Royal Police, Ports, Free Zones & Industrial Estates. FG2 also emphasised the need to reduce the red tape phenomenon, which makes procedures long and laborious for the public and private sector. They suggest that institutional development needs to understand the significance of the Omani Ports, as Oman is known historically for its maritime commercial activity, (see chapter two - appendix 2.1).

FG2 focused on this cultural heritage as Oman holds a unique geographical location (see chapter two); they mentioned that it needs to look at providing the infrastructure and logistic services for the ports sector, that will qualify Oman as a major hub, since it is now, at least, providing the local requirements of the country for containers, and there is adequate capacity for transhipment and cargo. This issue triangulates the investors request for special ports infrastructure, tourism, and trade export and import, industrial, mineral, fishing ports, (although such speciality of sea ports is available in Muscat, Sohar and Salalah). Investors tend to ask for more seaports and free zones; this should work by attracting all investors through these kinds of developments.

The traditional hierarchy of power and authority delegations is dominant, and the law and regulations in all local management are isomorphic (similar) in all public institutions and organisations. This may have caused a silo mentality in policy and decision-making to some extent, where coordination and collaboration is underdeveloped: in a systemic approach each institution would take its own decisions that fit within its own competence and duties, even when it conflicts with another

institution's competencies. It is therefore found that there is weak cohesion and collaboration (S2 & S3) in most of sectors due to inadequate policymaking and decision-making. Coordination (S2) includes the pre-arrangement when a government institution intends to issue any of its policies or decisions that concern investment. This research suggests the modification of investment regulation and promotion to meet investors' needs, and the sharing of their knowledge and experience by implementing knowledge management systems such as GDSS

System 5 of the System in focus: Policymaking collaboration

The lack of a fully functioning meta-system means that many have not seen the benefits of a cohesive, coordinated system where collaboration and the realisation of synergies would be beneficial not only for their business, but for the sector as whole. A number of individuals see no need to collaborate or even share knowledge with each other, but affirmed that they need to share knowledge with the government. The decision makers from PIs had a difference of opinion as to whether they need to collaborate and share experience with investors. It was found that S5 is doing its role and responsibilities (it is happening with CM at the national level), but systems S4, S3 and S2 are not adequately performing their roles and responsibilities: they function as one system which is ineffective.

An S5 analysis at this level does consider; policy responsibility and how the investor sectors leaders interact with the CM, CO, and SCP. It also analyses how the ethos[2] setting affects the perception of S4 and affects the relationships between S2, S3 and S4 as it also has the characteristic of heterostasis (a tendency for change, learning evolution creativity, improvement, and innovation). S5 encourages ambitious planning for socioeconomic development, and considers these tendencies in these systems. The S5 considers modification of the policies and investors' interactions through the proper channels.

During this diagnostic stage little information was found concerning the meta-system as there are a number of public institutions that have separate rules and regulations for

[2] For the purpose of this research 'ethos' used either as set of beliefs, ideas about the behaviour and relationships of a person or group 'corporate ethos', or the characteristic spirit of Omani culture and public and private community as manifested in its beliefs and aspirations within socioeconomic atmospheres.

investment in both regulatory and investment promotion. This complexity can be further unfolded to reach to sectors and sub sectors. During the data collection, it was found that both industry and services sectors are not viable enough as separate systemic entities and are unable to enjoy the full benefits of collaboration. Not one of the five sectors was deemed viable in terms of its own sector performance, and thus the non-hydrocarbon sector as a whole was also clearly not viable. They operate as separate sectors and are currently unable to work in a collaborative manner.

The necessity to modify policies, laws and regulation was one of the outcome of the research (see chapter five). A number of investors described the policy characteristics such as A&F/D2:

"*I think the policy needs to be straightforward, simple and understandable, and to be of a nature where free trade is encouraged whether the role of law is prevalent and investment is easy transparent and quickly realisable*." A&F/D11 also said: "*we need for liberal policies and procedures for domestic investors like helping to identify the category about sectors in which foreign investment is required for the benefit of the society/ country*". "*A proper guidance from the government can help the investors, especially small and medium type investors who will come forward once they are sure about the opportunities and benefits available for them*".

This was supported by the mining quarrying sector investors, where M&Q/D4 suggested:

"Efficient implementation of government guidance, e.g. clearance, incentives and infrastructure". M&Q/D15 responded "*We expect that the government makes the policies that encourage more investment through implementing infrastructure specially in easing the procedures of decision-making and crystallisation of the investment laws and regulations and find interaction and cooperation mechanism between government institutions those are meant for providing services to private sectors in order to submit the services friendly and easy way*".

B&C/D14 said "*A more open trade and investment policy, single counter solution coordination among Ministries in providing solution and encouragement to investors*", which was supported by MAN/D2 **"***More open, participatory transparent and objective policies free from bias and personal interests***".**

"*Government institutional decisions will not to attract domestic investors all the time, if the decisions are not transparent and understandable to the investor. Oman is a free market and the size/volume of any business is limited when compared to other countries with a larger population, and cannot compete with such countries the cost of production is high; mainly because of labour and Omanisation, etc*." A&F/D6.

N vivo could not give any indication of definitive analysis of primary activities and regulatory organisations, because of possible confusion. FGs and observational data were taken into account to strengthen the discussion. The policy-making improvement process intended to collect data to find out about the kind of policies that the investors would expect the government to improve. A key principle of the strategy however, was

stated as follows: the strategy would be implemented through public and private collaboration before a policy is made. The government does coordinate with private sector in general but not in an effective manner.

A further addition to the environmental complexity of the non-hydrocarbon economic sectors was noted; the investors and decision makers raised several challenges in issues such as Health and Education and Transport as well as social matters connected with natural resources. Figure 6.10 (below) depicts the GDP growth in general at market price (in black) and the non-hydrocarbon sector in particular for the period from 1996 to 2010. Each sector is shown in different colours which are followed throughout the thesis. The graph illustrates the struggle throughout the vision years in context of the global financial crisis and recession (1998-1999 and 2007-2008). This provide evidences that S4 needs to interact more effectively with the global environment, so it can be proactive and thus limit or minimise the impact of these crises by institutional development, and by developing a proper policy plan, which needs to go side by side with the socioeconomic vision and strategic investment plan.

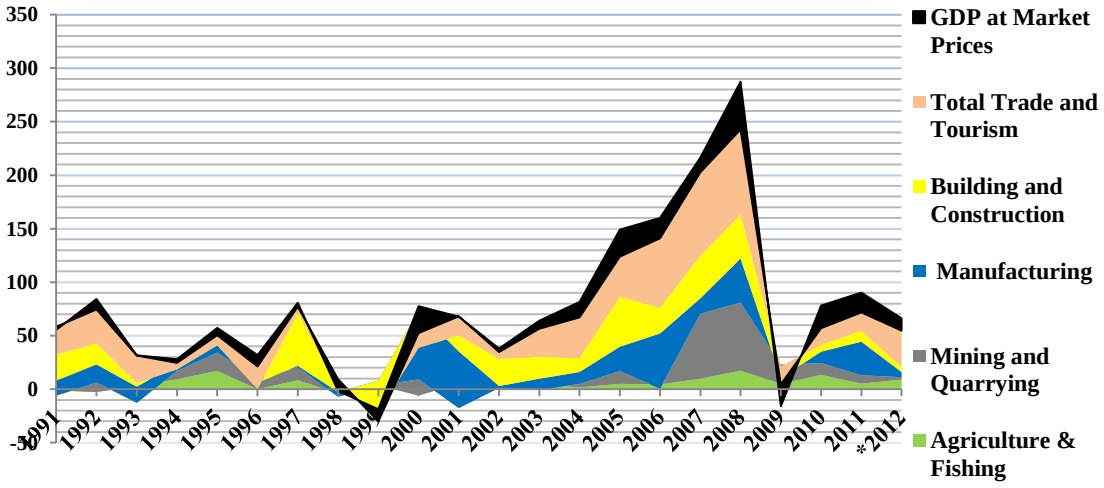


Figure 6.10: GDP's Non-hydrocarbon Sectors Annual Growth Rate 1991-2012..
Source: NCSI, 2001/2013

As the discussed vision 2020 is coming to its conclusion in a few years from now, the government announced in January 2014 by a royal order, that work would begin defining the Oman Vision 2040, and to draft plans ensuring wide community panel consultation and involvement. The private sector contribution in the next strategy is expected to be larger than in the strategic plan 2020, and will be used as a reference and manual for planning for the next two decades. Vision 2040, will address the future in an

objective manner taking into consideration the current status. This study may be of a help to vision 2040 (see Fig. 6.11).

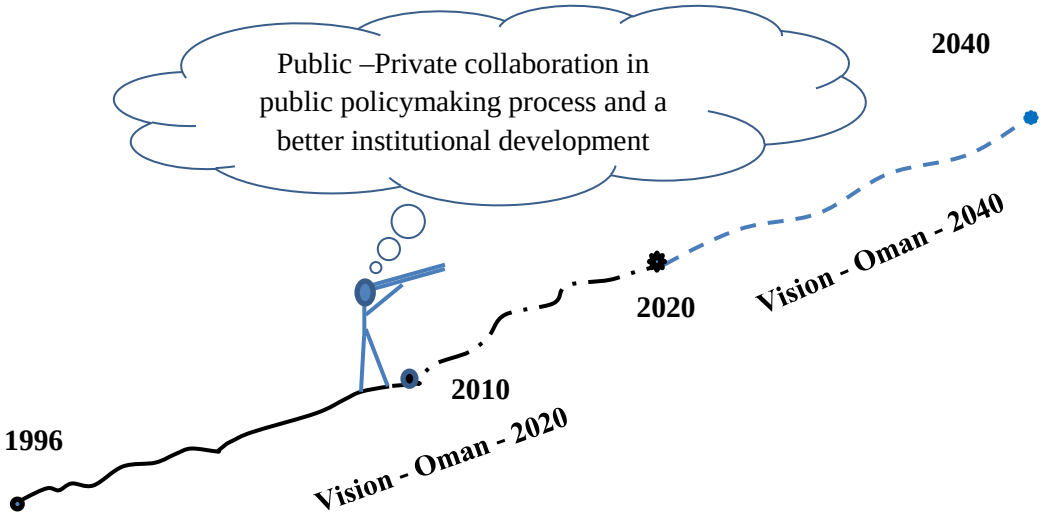


Figure 6.11: Predictive control. Vision 1996-2020-2040 adopted from Christopher, 2007 work

The CM is the main "brain" where public policy is made - the meta-system of the economy. It needs to interact with the external environment (via S4) to give and take feedback from private sector collaboration and focus upon the stakeholders of investment in the economic sectors. Investor and public institution satisfaction is the aim that may be expected when, by applying joined-up systemic thinking, regulation is balanced with investors' attraction. The lack of meta-systemic coherence functions has affected the operation of S4; for example, instance, the interaction with the international environment (what is new in the socioeconomic environment) or how should we periodically modernise the laws and regulations. This will reduce the investors demand for more incentives as PIs will regularly develop the institutional aspects, where laws and regulation are periodically revised and amended as per the suggestions of the investors and as per the socioeconomic environment updates which attenuate any excessive investors' requirements and needs.

6.6. Outputs of the exploratory phase two: Findings

1. VSM diagnosis exploring the *status quo* (the existing situation for the non-hydrocarbon sector)

   System 1: Inadequate variety absorption on the vertical channels with PIs and private-public interaction; power considerations are not handled adequately. The power imposed on S1s (the five sectors diagnosed in 6.4) is stringent and coherent, resulting in a lack of autonomy. Inadequate feedback loops between S1 and its sub-systems and international and local environment.

   System 2: Lack of effective coordination due to the lack of a clear focus for S2; coordination of S1 activities was poor in some sectors or even completely lacking and OCCI's role is seen as inadequate to act, coordinate and represent them from most investors' perspectives. Investors also seek to find a coordination platform to interact with the government decision makers. From FGs perspectives not all ideas and suggestions get incorporated into PIs, but a lot of investors' ideas are generated through the contacts between the investors and PIs when it comes to experience sharing in some cases, (e.g. technical issues) in specific areas in which there is a lack of knowledge and experience.

   System 3: No cohesive mechanisms for S3 with S1 and S2, and weak monitoring of some sectors (System 3*). Over stringent regulation felt by both domestic and foreign investors and agreed by the FGs. Weak improvement of institutional quality due to the poorly functioning S2, which is combined with poor coordination and weak accountability channels (investors and PIs criticism).

   System 4: Lack of a fully functioning S4, and no clear separation of S3, S4 and S5 or consideration of recursions; the gap on the boundary between the system-in-focus and its environment reveals that a lot of economic and institutional policies are underdeveloped, which raised investors' voices for their needs and more incentives. The weak S4 also causes a lack of adaption to environmental disturbances (e.g. worldwide competition), the environmental loops exhibit very little data collection and analysis.

System 5: Investors' interaction is not enough at present for private sector participation in government policymaking. Policies not fully matched to the vision 2020 strategies at the higher level of recursion; some initiatives in some sectors are being lost because of the problems faced by the lack of an effective homeostat between S3 and S4 (e.g. initiatives to expand the private sectors role and activities and developing better policies and mechanisms for the achievement of investment goals, including designing a sound policy regarding the approach to acquiring and developing information technology, upgrading and modernising laws and regulations regularly according to the international business requirements), It was also found that no clear identity was established with and thus no strong ethos at sector-specific level, although there is a clear vision 2020 and strategic investment vision. T able 6.6 (below) summarises the *status quo* in each sector in focus at the lower level of recursion through the data gathered expressed in VSM terms. This summary identifies the diagnostic points which impede strategic growth in the five non-hydrocarbon sectors. This research argues that there is a need for establishing economic sector associations (ESAs) and to implement co-optation element into its leadership to interface and collaborate with PI decision makers.

<table>
<tr><th>Issues</th><th>A&F</th><th>Q&M</th><th>B&C</th><th>MAN</th><th>T&T</th></tr>
<tr><td>A fully function meta-system for policy making collaboration</td><td colspan="5">Lacking; Traditional Hierarchy.</td></tr>
<tr><td>Information and knowledge response to policy from external environment</td><td colspan="5">Lacking; ID is needed in S4</td></tr>
<tr><td>Handling of investor's needs</td><td>Less-developed. ID is needed in S4</td><td colspan="2">Poor handling. ID is needed in S4</td><td colspan="2">Partially well-handled, a better ID is needed</td></tr>
<tr><td>Consistency of S1,S2 and S3</td><td colspan="5">Inconsistence Traditional: New structure is needed</td></tr>
<tr><td>Resolving the power issue for inter-organisational collaboration</td><td colspan="5">Silo decisions except for commercial registration there is OSS for six PIs</td></tr>
<tr><td>Private sector association's leadership to collaborate</td><td>Only one association. More associations recommended</td><td colspan="3">No sector associations. Associations are recommended</td><td>Only one association. More associations recommended</td></tr>
</table>

Table 6.6: The five sectors' diagnostic results of the *status quo*

2. The VSM diagnosis about the policymaking processes in Oman's non-hydrocarbon sectors could support the design of suitable transformation to embrace a viable and nonlinear structure: the system in focus should be redesigned to exhibit better governance and collaboration; and more effective policy structures to ensure joined up thinking between public and private sector. For this collaboration a better ID was recommended by exploring the issue of power and co-optation in the primary activities of the VSM. The VSM thus can offer suggestions as to how participation and democracy can actually be arranged between S1 and its sub-systems.

PHASE THREE

6.7 Institutional and Technology Development

6.7.1 Stage 5: comparison of models and real world

The findings of phase two were diagnosed through systems theory. These results highlight some practical and theoretical issues for more understanding, through themes identified, such as: viability, communication and control. The outcomes shows to what extend there are problems with viability and open up the possibility to implement the findings of the VSM diagnosis for Oman's existing situation. The VSM diagnosis exposed that there are not many of the elements required for viability in the inter-organisational network concerning public policy making process in the studied non-hydrocarbon sectors.

One of the findings is the possibility to use the private sector knowledge and experience in public policymaking through establishing an interface between public (political power) and private sector (co-opted leadership) through the use of a GDSS platform to encourage public-private communication. This enhances both the management (S1) and the meta-system of the VSM. It aims to maintain the balance between economic sectors through the same platform so that the Council of Ministers (CM), the Council of Oman (CO) and the Supreme Council for Planning (SCP) (the national level) will contribute to formulate coherent policy issues. This would be recommend for the policy system (S5) which means that these councils ensures policy issues to play a vital role to maintain the balance between ID (S4), adaptation to the external environment and the internal environment S3. These issues justify designing and implementing a VSM analysis of

Oman's investment policymaking governance. Thus, the findings of phase one and two of the SPPS have shown the possible viability of policymaking and ID in states and at corporate levels.

6.7.2 Stage 6: The Key Changes

This and the next stage should see accommodation developing among the concerned actors over those changes which are desirable in term of the VSM and feasible given the history of prevailing politics. The key changes identified are;

a) The practical actions and changes including i) the development of meta-systems for non-hydrocarbon sector, ii) Institutional and organisational development (OID), iii) designing improved PI management for the S1's and their sub-systems, iv) the creation of ESAs and v) improved S1s coordination through the creation of an effective S2.

b) Theoretical change which includes**,** the key practical changes and recommendations that are both desirable and feasible.

All of these will be explained in the following final stage (7) of the SPPS.

6.7.3 Stage 7: Action to improve the problem situation

The following are actions that can be put in place to improve public - private collaboration, which appears in two areas: as practical action and as theoretical actions.

FIRST: PRACTICAL ACTION

<u>Operation (primary activity of VSM in Oman): OID.</u>

1. **The PIs Management: S1 and Sub-systems development.**

   The PIs are required to rethink their policymaking processes, by taking into consideration their interaction with the proposed ESAs. Each PI management (within ICPIs) needs to have the capacity to interact effectively with its ESA (sub-system). PIs need to be responsible for accountability and performance: both are important. This interaction could ease constraints currently imposed by S1 authority upon the sub-systems.

Complementing the VSM with Williamson's (2000) four levels of social analysis of Economics of Institutions, level 2 formal rules of the game such as; polity, judiciary and bureaucracy which get the institutional environment right, and institutions of level 3 where governance plays the game through aligning governance structure with transactions in order to get the governance structure right (transaction costs economics).

Nonetheless, it was clear from the VSM diagnosis that the informal institutions (level 1 institutions) which are non-calculative and spontaneous often impose constraints on formal institutions (level 2) enforcing legal and corporate laws and rules which play a significant role during the transactions between the PIs and its sub-systems ESAs and the interaction with its particular environment. The formal institutions subsequently, impose constraints on level 3 where institutions of governance are located. Level 3 also imposes constraints on level 4 where resource allocation and employment (incentive alignment), in order to get the marginal conditions right (neoclassical economics/agency theory). Thus, it is recommended, that the PIs and ESAs will be governed through rules (level 2 institution) and surrounded with a boundary of norms (level 1) and business beliefs during the interacting with each other and their environment.

Firms' leadership development is another significant issue that this research considered. The research proposed to the development of ESAs forming their own leadership through a co-opted type of leadership; this element is to complement VSM design to embed it between S1 and its sub-system. The findings of phase two confirmed that the leadership of the private sectors need to be reorganised to interface with PIs; the co-optation element will give the ESA a more powerful voice. Through the co-optation, the ESA (such as fishing ESA, agriculture ESA, or mining ESAs) will be represented in a more systematic manor before the policies are concluded and issued.

Development of the Meta-system within the non-hydrocarbon sector.

2. **Collaborative development (S2)**

PI management has also learned from collaboration governance theory, regarding collaboration between PIs and ESAs. From the empirical analysis (phase one) it can be inductively observed, that 'Institutions' and 'Organisations', are the main pillars of this research, (These observations benefit from NIE and collaboration governance theory concerning the concepts of 'collaboration' and 'coordination'). These theories contributed to a supplementary understanding of ID in "inter-governmental" organisations; this term has been adopted with a broader meaning of governments working with government or with non-governmental and private organisations (corporate firms) either horizontally or vertically. Following Ansell and Gash (2007, p.3), collaboration or coordination is a type of governance in which public and private sectors work collectively to establish laws and rules for the provision of the public good, which evolves over time.

ESAs therefore, need to be allowed to participate and this can be enhanced by providing human and technological support through the suggested electronic platform. ICT support was suggested by a number of foreign and domestic investors and FGs discussions), and the researcher found the DSS (Mitroff and Linstone 1993), and the GDSS (Laudon and Laudon, 1996) to be most electronic systems which could be recommended to support the complex, judgemental or political decision-making that depends on a degree of certainty and agreement among the stakeholder (see Stacey's diagram Fig. 3.8 in chapter three).

Under a non-collaborative scheme, the information catching increase the transaction costs which arise because information is costly and unequally held by the parties, and also because the actors develop institutions to structure human interaction, (North 1990). The unavailability of information was emphasised by foreign and domestic investors of mining and quarrying in particular (e.g. the government institutions withholding the natural resources and technical data from investors); Implementing a more robust data collection channel between ICPIs and ESAs would decreases the information and knowledge costs, thus lowering transaction costs (see Williamson 2000, and

North 1990 views within the NIE perspective, that the information cost has a direct impact on transaction cost).

For the inter-organisational collaboration the aforementioned GDSS was proposed as a platform in S2 for knowledge sharing and interacting, as the ICPIs need to be linked horizontally. As argued previously, this will prevent the silo mentality, autocratic and/or isolated roles dominating the policymaking processes. There is a pressing need to implement new policy processes to develop a balance between PIs themselves and PIs and private interests, to stimulate ID.

To sum up; this PIs management development idea, the new structure of the PI's management (primary operation or S1) will present the performance of private-public sector interactions for policymaking at the national level (Recursion 0 in the VSM analysis). The research –as previously mentioned - suggests embedding co-optation into S1 to interact with PIs. The usefulness of co-optation is to avoid threats to ESAs stability or viability, in order to function effectively representing investors' affairs in each sector. Both power and co-optation function as variety amplifiers and attenuators.

The coordination (S2) between operations management and the Meta-system needs to be supplemented by new conflict resolution processes in public and private collaboration, where GDSS is suggested as an interaction platform which needs to be embedded in the CM secretariat database to enhance coordination. Learning from the Egyptian experience, a suggestion of implementing the GDSS was raised that the system could generate capability by addressing decision maker's needs and support, and this can be flexible and responsive to new situations by using data and analytic models to work through the consequences of decisions and assumptions (to avoid silo mentality) among PIs. The updated customised GDSS can thus be considered a S2 mechanism.

The following diagram illustrates the proposed Oman-GDSS (Fig. 6.12).

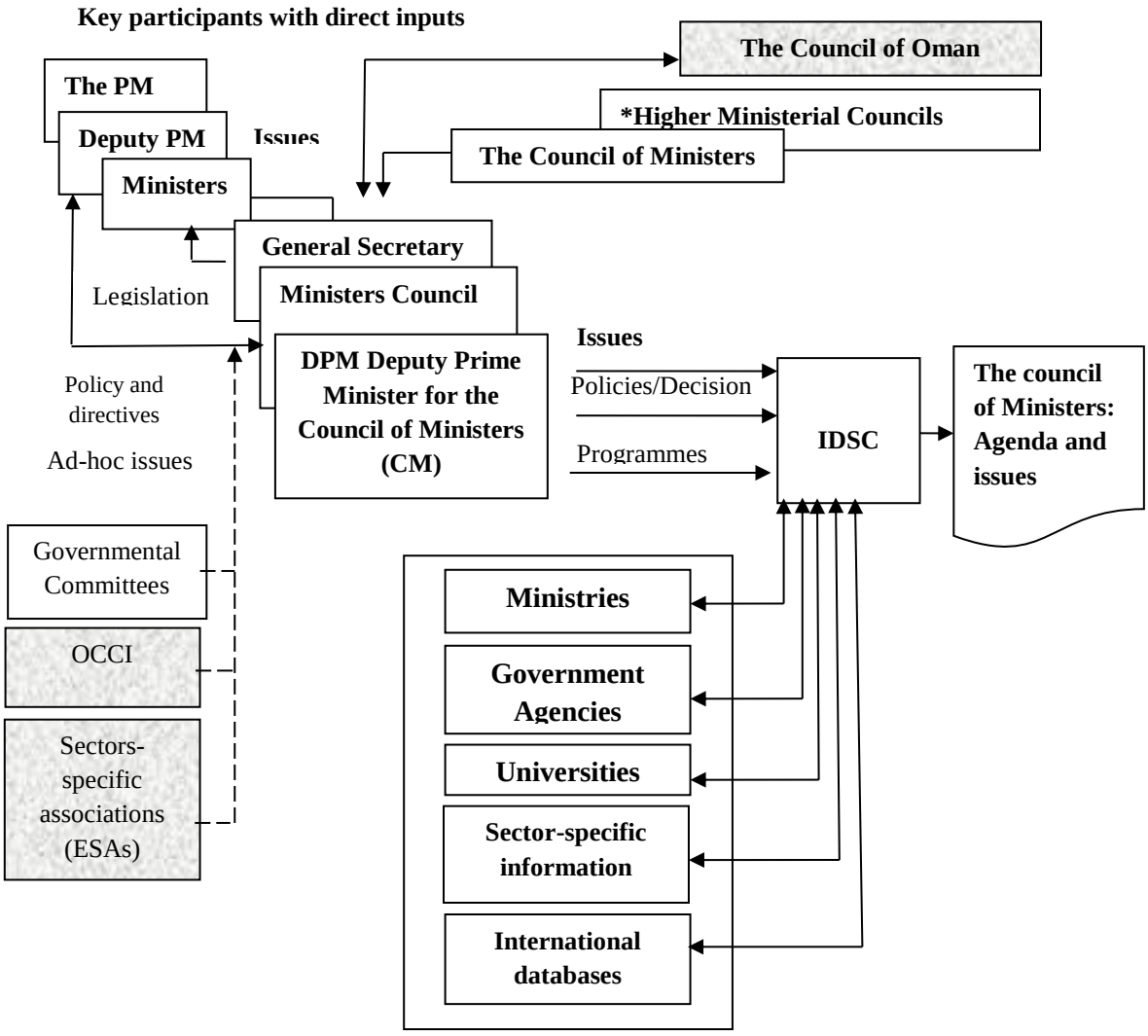


Figure: 6.12: Suggested GDSS- Oman based on Egyptian experience.

As of 2015, the Council of Ministries (CM) is composed of the Deputy Prime Minster and 29 ministers who looks after their ministries along with 19 public authorities (PAs) and a number of other government agencies and a number of higher councils and committees (which act as 3*), as well as the universities that systematically interact with the CM General Secretariat. Alongside those public institutions and organisations there is OCCI, and the proposed ESA of each private sector.

Policy and decision-making here is, by its very nature, complex, judgmental or political and economically strategic because it involves questions of survival; such as: balance of payments, deficit management, public sector performance, economic growth, and national defence. Other national level policies and

decisions at these high levels of governments, or corporations, are often portrayed as being the result of a rational decisions process (see economic and institutional determinants that has been discussed in chapter five), but in fact, decision-making involves managing issues that are forced on decision-makers with varying and ever-changing priorities. This electronic, information and communication technology device allows idea to circulate continuously; the enter and exit through participants and are resolved in the sense that they dissolve or go away or are overtaken by other issues. Those issues are complex, poorly defined, interdependent, and related to many features of society. There is uncertainty concerning the level of agreement among S1s and its sub-systems and the impact on PIs' power imposed on corporate firms, for policy and decision-making and whether the policies are rational, political, judgmental, or complex (see the differences discussed in chapter three: Stacey diagram 2002). Information is voluminous but unreliable and qualitative. The suggestion here is that the electronic mail system is bilingual (Arabic/English) to overcome the language constraints.

For instance; the government would like to impose a new tariff policy structure to replace an inconsistent and complex existing structure that was thought to be impeding economic growth. The goal of the policy set forth by the CM is to create a simple tariff structure; increase revenues to the Oman treasury; and promote economic growth without harming investors. A microcomputer based GDSS model could be built of the proposed new tariff structure, using a prototyping methodology. The new policy could activate many opposing actors. MCI hopes to increase local production of some parts, supported new tariffs on imported parts. This will be supported as well by the Supreme Council of Planning (SCP) which supported local production, but the policy was opposed by MoF (Ministry of Finance) because it would reduce customs revenue. The GDSS would walk around, back and forth, from one ministry to another, making adjustments to the proposed tariffs, playing 'what if' games to see the tariff impact and changes on revenue, economic growth, foreign and domestic investment and local employment such as *Omanisation*. After a given time and intensive effort, agreement would be reached on the new tariff policy. GDSS could reduce conflict by clarifying the trade-offs and potential impacts of tariff changes. As we have seen in the literature review chapter, the Egyptian

experience and the example of El Sherif and El Sawy, 1988 (in Laudon and Laudon 1996) are relevant: while early estimates of increased revenues from higher tariffs was USD 250 million, the DSS predicted USD 52 Million. After sometime the actual increased revenue was actually USD 28 million.

GDSS does not simply involve a routine, steady flow of data, but instead can be flexibly alert to new situation by using data and analytic models to work through the consequences of decisions, expectations and assumptions. GDSS also can be used as a training instruments to teach managers how to make better decisions. GDSS database is therefore is a collection of current applications or groups, (Laudon and Laudon, 1996). Domestic investors could benefit as we have seen in phase one (chapter five) outputs, that suggests it is one of the domestic investor's needs to strengthen their competence.

3. **Designing a New Meta-system**

The above section has explained that there is a need for creating an effective primary management of S1 and improved meta-systems for all viable systems at all levels of recursion. The meta-system will entail separate roles for S2, S3, S4, S5, and an effective S3/S4 homeostat, and well-designed patterns of relationships so that their activities and responsibilities function and interact properly as they develop their own tasks by working synergistically. Each organisation, which operates the policy/decision making processes, has its own objectives and targets, although at present with no holistic views so they cannot ensure effective governance. The resource bargaining enables S3 to create the synergies between the S1s; and S3 is also responsible for enforcing legal and corporate law and rules (formal institutions); and business beliefs, norms, customs, mores, tradition (informal institutions) which are S2 responsibilities, and for the accountability of all S1s to S3, as explained by Espinosa and Walker (2011) (see chapter three). Currently, investment information does not flow from all PIs to the investors in the system and therefore S4 does not have full self-awareness of the system as a whole. Without these connections in place, S4 cannot interact with S3, and thus function effectively, and consequently the system cannot be viable.

In S4 and S5, the intelligence and cohesion policymaking processes are unilateral as PIs decision are made without consulting the concerned sector (except in some minor case shown in FGs statements) although some of these policies and decisions are discussed through joint PIs committees, but with minor awareness of the concerned sector's knowledge and experience. Some information is restricted by data protection, and thus some investors are not able to get fundamental data for their business from PIs such as general industry data.

This would increase information and transaction costs (North 1990; Klein 1999; Furubotn and Richter, 2005). For many investors this low variety situation caused by a lack of useful digital data means that informed decisions could not be made with confidence which could lead to inappropriate actions (threatening system viability). The new collaboration would help to lower transaction costs in S4 through lowering information and knowledge costs to both investors and PIs. Every group of investors and PIs needs to see themselves as belonging to an overall system (a larger whole or considering Oman as a large organisation); S5 was operating in a very informal way, as was the case with other meta-systemic functions in *the status quo*. .

Attention must be given to the design of variety amplifiers and attenuators. The separation of S5 from S4 and S3 need to be addressed: every system needs to define its role and responsibilities. It was noticed during analysis of the five systems that many of the problems of the sectors resulted from the lack of a fully functioning meta-system. Central to the meta-systemic understanding of decision-making is the need for an "environment for decision" bringing together external and internal information, knowledge and experience: a location where the S3, S4, S5 relationships can unfold. In this case information received from System 3 is brought together with information about the organisation's total environment thus facilitating decision making, and inspiring Beer's proposition for an 'operations room', (Jackson, 2003, P. 95), There is a strong case for such an environment: an operation room specifically designed for policy and decision-making. External information arrives through S4 from a variety of sources: OCCI needs to have simultaneous online connectivity with MCI and suggested investors' sector-specific ESAs also needs awareness of signed memorandum of understanding (MoUs) with other countries to enhance ID (S4).

FGs entered the financial environment within S4, harmonising it with transaction cost (funds, property rights, time and efforts).

Fig. 6.13 (below) is the proposed structure for the VSM of the non-hydrocarbon sector of Oman. The figure shows how the adaptation of co-optation (through investors' representatives) can develop into collaborative governance. Results from interviews and FGs suggest that S2 is weak. PIs usually do not consult with investors prior to the policy and decision-making process and there is little coordination among the PIs, which explains why at present S2 is poor or sometimes non-existent: it suffers from inadequate variety absorption on the vertical channels resulting in little of the residual variety from the S1s being dealt with, leading to ineffective functioning of the cohesive meta-systemic mechanisms, including S3's synergy enhancement. These challenges are addressed by redesign in order to amplify the variety and enable a more valuable evaluation of environment situations and thereby improve the quality of operational decisions. This redesigned situation includes provision for more robust data collection and sharing of information and knowledge with awareness of where collaboration will be necessary. S2 and S3 channels are for routine coordination and decision making and 3* for sporadic monitoring; by considering these channels in the VSM diagnosis efficiency can be improved, and thus Oman's ranking may improve.

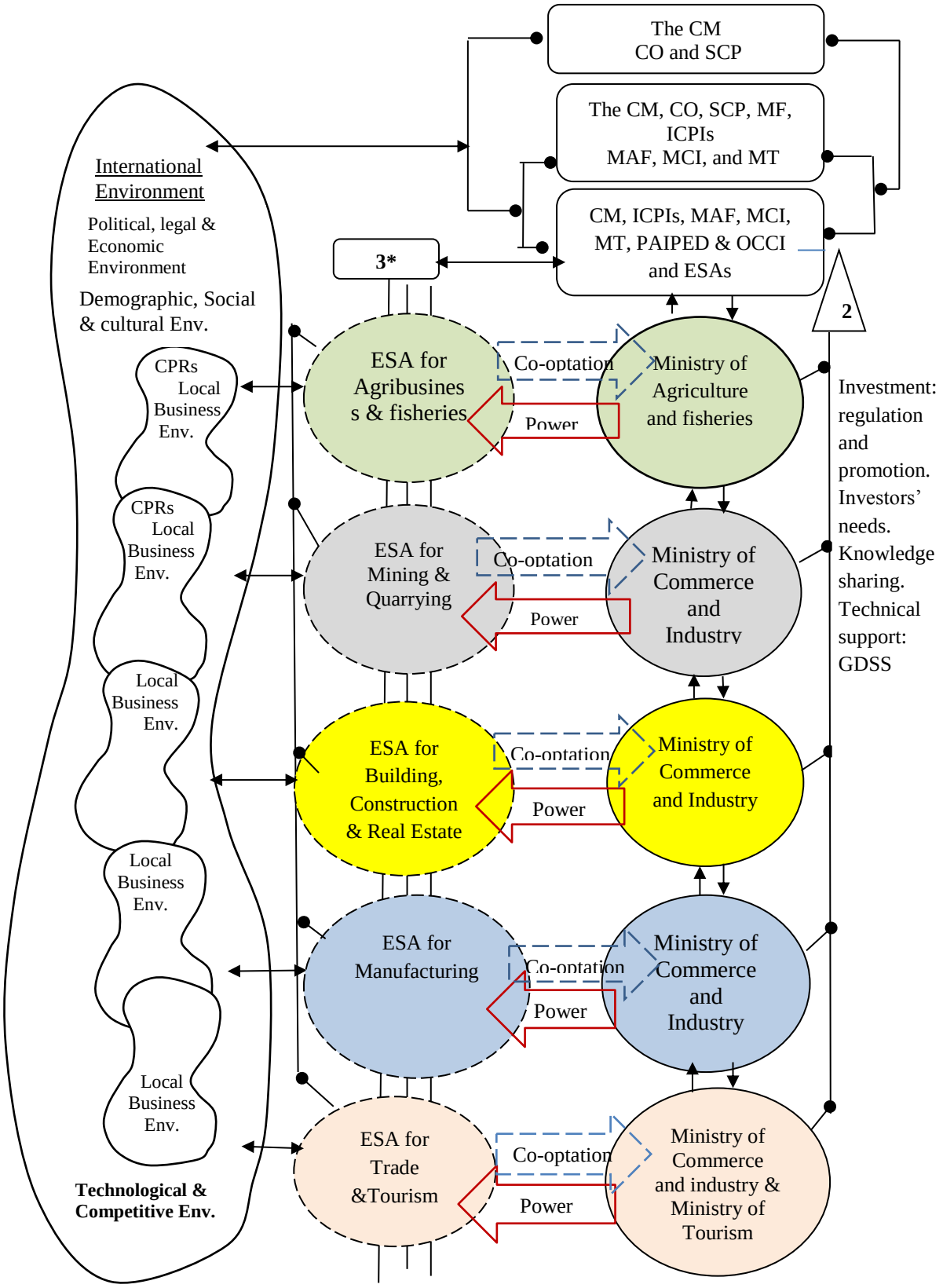


Figure 6.13: VSM-Oman Institutional Development (Power and Co-optation interaction)

Collaboration is an emergent process of private and public sector joint thinking which involves solving differences, identifying inter-dependencies and building ownership of decisions; it plays a key role in this research. This is also

advocated by Mulgan (2001), who argued that management of complexity in a policymaking process should use systems thinking rather than traditional mechanistic approaches with non-linearity, complexity and environmental concerns in terms of the growing economic activity. This involves changing the traditional hierarchy structure of the government policymaking process to a complex (non-linear) structure. The traditional approach to the policymaking process (hierarchical approach) illustrated in Fig. 2.25 could be looked at through complex non-linear approach (Fig. 6.14).

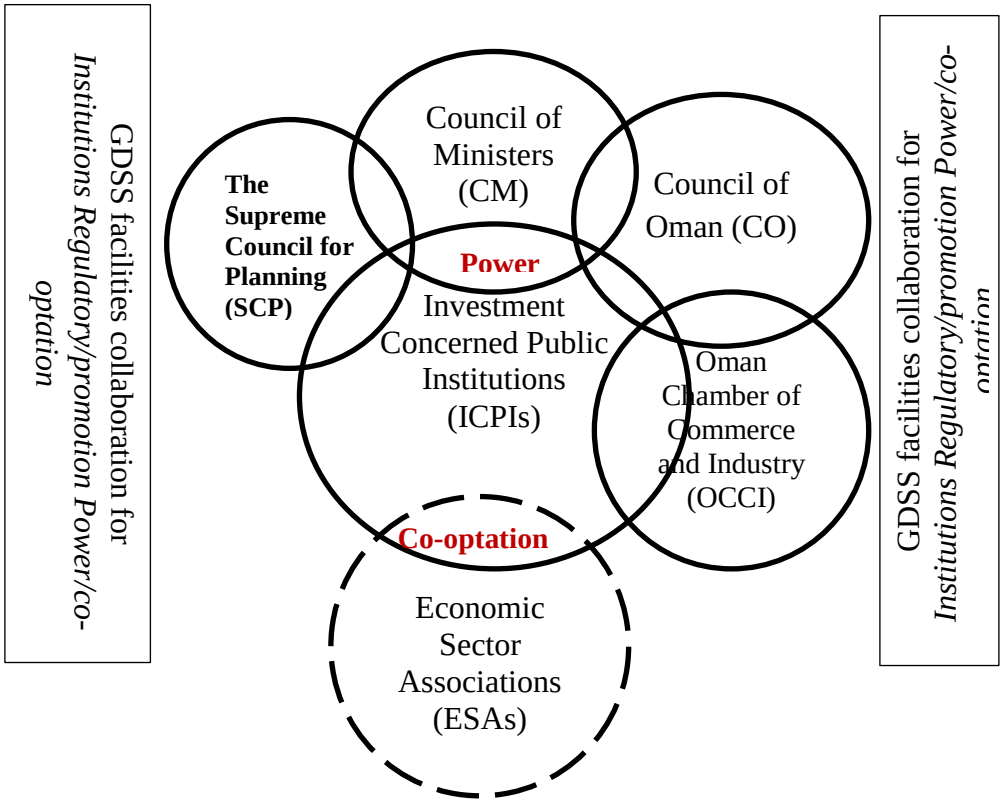


Figure: 6.14: Public-Private Policymaking Collaboration Complexity: A Non-linear Creative Model

The complexity of policymaking processes; generally speaking within S1, S2, and S3 the proposal is for a non-linear approach to the public policymaking processes in terms of designing meta-systemic role for public and private collaboration: this complexity needs to be managed from the economic growth point of view for this systems in focus, especially for (A&F, M&Q, B&C, MAN and T&T sectors);\. Each one of them has different policy issues and one of the main complaints and criticism made by investors was against the Ministry of Manpower, mainly in recruitment regulations and labour law: This was seen as

the biggest challenge to ID. There was no consideration of the organisation of S4s activities and the collaboration required for institutional development. S5, within the meta-system of Oman includes the country's investment strategy that we can recall from chapter two; the main investment vision is developing new source of national income alongside oil revenue, in the areas of industry, mining, agriculture and fisheries. Also the 2020 vision meets this target which requires the country's developmental policy to be based on providing the requirements necessary for the emergence of a national economy based on an efficient and competent private sector; whereby all human potential will have a role to play in an atmosphere of free competition and no monopoly.

In chapter two, the *status quo* described the traditional policymaking processes hierarchy of Oman as shown in Fig. 2.25 and as discussed in chapter two, policy processes and institutional development are extremely complex processes. A non-linear structure of public private policymaking collaboration could be useful. It involves multiple actors and agents (government organisations and institution, and investors) with different objectives and resources over varying periods of time. As the literature review shows, hierarchical top-down command and control practices have become common practice with the embedding of mechanistic and reductionist thinking (which assumes linear cause and effect relationships) in current methods in the fields of public sector, political economy, policy and decision-making development (Capra, 2003; Chapman, 2004). Institutions reduce uncertainty by providing structure to everyday life, they are a guide to human interaction and know-how to perform these interactions (North, 1990). Figure 6.14 explains this collaboration complexity among CM, CO and SCP and interrelation with ICPIs power issue and OCCI and ESAs co-optation in-built structure.

SECOND: THEORETICAL CHANGE ACTION

This research has provided an example of multi-methodology in systems research, by using the VSM as an analytical lens to understand organisational key problems, within the learning cycle of the 'SPPS' framework. Embedding the 'Power' and 'Co-optation' elements for public and private interaction by developing new forms of interaction between these two elements PIs (S1) and its ESA sub-systems) should create a more democratic interaction within

policymaking process (this arguments help to answer to the VSM criticism by Jackson (2003) about how participation and democracy can be addressed through VSM).

Embedding an electronic system for Group Decision Support System GDSS within the coordination S2 function will enhance viability and ID (S4), by allowing operations to have a more regular interaction with both internal and external environment. The complementary use of three theories; New Institutional Economics (NIE) theory, Collaboration Governance Theory and Systems Theory, produced a more complete and understanding of the processes involved in collaboration, coordination, communication and control in the context of ID and policymaking.

Finally, coming to the end of the SPPS framework it can be noticed that the conclusion of this methodology marks the end of a complete cycle, which heralds the emergence of another second cycle involving a different problem situation. Essentially, this provides a long-standing solution, a never ending process of learning and adapting to a changing environment. This will encourage further studies of these problem situations using the same cycle with its multi-stages for further research as will be exemplified in the next, and final chapter.

6.8 Theoretical Linking with the Findings of Phase Two

The methodological and learning cycle framework SPPS was structured by the combination of the learning cycle of the Soft Systems Methodology (SSM) of Checkland (1981) with the Viable System Model (VSM) of Beer (1985). It aims to provide learning about more useful structures at strategic and tactical levels for investment policy improvement in the Oman context. This approach also incorporated the to the Viplan Methodology (VM). Espejo et al. (1999) and Espejo and Harnden (1989) which argued that learning loops can benefit from systemic thinking grounded in organisational cybernetics. Complementing this view, Espejo and Reyes (2011), think it is necessary to make the organismal context of a problematic situation more effective: VM, therefore involves a learning loop related to all kinds of performative situations from public participation in policy process, educational failure, innovation breakthroughs, introduction of best practices in an industry, absorbing significant

climatic changes, to dealing with structural weaknesses. In Espejo and Reyes (2011, p.219) a figure is drawn showing how the VM can manage change processes. It was used as a problem solving methodology consisting of two loops, a cybernetic (organisational) loop which, in the case of this research, is phases one and two and a (situational) learning loop corresponding to phase three in this research, institutional development change and action. However, the mix of SSM and VSM (as applied in this research) was not used by Espejo as a methodology and learning cycle for public and private sectors' policymaking collaboration.

The findings were more relevant for the Omani government at strategic and tactic levels (the practical level) as well as at the academic level (in theoretical aspects). A cross-sectional/triangulation of qualitative data and quantitative data of each sector is shown in Appendix 6.1. Throughout the analysis of the findings; the investors emphasised that the private sector needs a mechanism for their participation in government policymaking process for investment issues, through having a mechanism for dialogue. The international business environment cannot interact with the public institutions effectively due to the inadequate role of OCCI to represent each sector. The investors also emphasised that PIs need a mechanism to interface with the private sector regularly. This provides a channel for those in the sectors, who wish to bring their views and ideas into the system from the internal and external environment, and thus to help with Oman's competitiveness with other countries in terms of creating a better investment environment for economic growth.

The interview informants advocate the global competitiveness index results that ID is among the most problematic factors for doing business in Oman. The convergence of opinion (within findings) not only among the five non-hydrocarbon sectors investors themselves but also among the PIRs, concerning policy areas, demonstrates these factors are highly important. This convergence of both group's opinions (investors and PIRs) indicates that the mentality of public institutions employees concurs with the private sector mentality towards the business environment, specifically, business beliefs, norms and values. They confirmed the need to implement better policy processes to develop a balance between public and private interests, in order to stimulate economic growth in the Omani non-hydrocarbon sector.

The findings also indicate that there was a significant positive relationship between the strategic vision and the ID through encouraging the investment environment to increase the private sector's contribution to GDP. A major reason behind taking a holistic approach was that the organisational system studied (public vs. private sector organisational interactions at the national level) is a highly complex system. Presenting a multiplicity of interactions and viewpoints was found many times to involve conflicting and contradictory issues; and it was acknowledged that a more traditional approach would not be able to cope with this level of uncertainty and complexity. The researcher also chooses to apply Beer's (1985) VSM because the VSM *per se* is found as an insightful and a powerful tool for managing complexity in organisations. The researcher thought the VSM could support diagnosing the research problems that organisations from the public and private sector have in interacting with each other. Therefore, learning from the VSM and NIE and other theories and methodologies influenced SPPS design. Espejo's TASCOI technique (Espejo & Reyes, 2011) was used to express and analyse identity for each of five sectors.

N vivo software has helped to sort out the relationships, but this software is not very useful for trying to understand the issues and problems, nor does it allow for any meaningful conclusions to be drawn about identity. There are a number of factors which have made this research rethink their implications in terms of viability, communication, control and coordination, which are among the VSM systems' essential functions. For instance, linking the qualitative data analysis and findings; this research suggested the need to establish ESAs for each sector, in light of the investors demand to interact with higher authorities without the OCCI an intermediary. The OCCI, on the other hand rejected this suggestion, as it is the OCCI's responsibility and role to interact with PIs. It was interesting to note that PIs were supportive of this investors' proposal. FGs expressed the importance of ESAs to lead each sector and agreed on the participation of the private sector in public policymaking processes that related to economic sector governance. This investors request could be implemented to interact, and with the PIs directly when there is a decision the government would like to study related to an individual sector. When it becomes clear that the government has to make a policy concerning the whole corporate sector, then OCCI could play its role of participation with the government.

The ‘co-optation’ element (from Selznick 1949) for ESAs leadership is to encourage face interaction with public institutions, as this element is a process of averting threats to the sector’s stability. It is an important element of collective experience and knowledge sharing, which reflects a state of tension between formal authority and social power, where the formal authority reflects real social power, its stability is assured, and involves commitment. This will allow the creation of an interlocking board of directors of the firms in the sector and the ability to elect a sector’ leader who can be co-opted in order to face and confront government institutional power and deliver their collective voice before government policy or decision is made.

One of the debates during the interview and FGs involves the issue of leadership of the private sector when they interact with PIs, where the communication and control, as well as collaboration and coordination issues were raised. Co-optation can be a tool that private sector investors use to interact with public sector power and authority. If we wish to control the actions of another human being we must communicate knowledge and information to that individual. The ‘co-optation’ element for ESAs leadership is to establish a more democratic communication interaction within policymaking processes between public and private sector, and also to confront PIs power.

The SPPS framework has brought to light the importance of a complex systems approach to Public Policymaking Processes: it showed that a holistic stance must be taken not just involving all of the actors within the field, but also considering environmental issues and observing the interactions between them through recursive analysis. Also it showed that knowledge management and the experience of the private sector need to be embedded in public policy making process. The outcomes also indicated that it is useful to use a combination of real world issues through systemic thinking: the SPPS framework has offered means to begin to more fully understand the mechanisms within the policy process including control and communication resulting in collaboration. Thus, it is recommendable to use this framework for deeper studies on how to improve performance in each of the economic sectors and sub-sectors.

For simplicity, a summary of what has been described in phases one, two and three of the SPPS, and what has been gained from the insights linking it with the literature, data and findings is elucidated in a cartoon-like rich picture. This was based on SSM logic, visualised by the researcher and presented in Appendix 6.2. The latest Oman OID was

accrued in 2013, see Appendix 6.3 where the coloured boxes are the public institutions affected by this recent development. It covered the most important organisations that were concerned with investment (ICPIs).

This rich picture is drawn according to the NIE theory institutions connotations, a concept translation (North's analogous) to the rules of the game in competitive team sport, and systemic collaboration performance. Within the rich picture, the combination of the literature and research objects are imagined, as a playground: organisations act as players (groups of individuals who work toward a common goal or objective and have common interests); and act as institutions which are the rule of the game (to define the way that the game is played) by enforcing the formal written rules. Informal constraints include those that human beings devise, and informal constraints: conventions and codes of behaviour as well as unwritten codes of conduct, that underlie and supplement formal rules, such as this analogy would not imply. The rules and informal codes are sometimes violated and punishment is enacted.

6.9 Conclusion

Through SPPS framework implementation, this chapter describe phase two where the VSM was used as a conceptual model capable of diagnosing the *status quo* of the system-in-focus. The data was analysed and interpreted at two levels (the non-hydrocarbon industrial and service sector, and the industries within this sector at the next level of recursion). It presented a series of VSM diagrams concerning Oman's ID. This was used to explore collaboration for policymaking processes at recursion levels (2 and 3) and then policymaking collaboration at the national level. This allowed diagnosis of complex and turbulent environments based upon collaborative structure and autonomy. Then the phase three of the SPPS was described, and the findings were summarise and linked with the other related theories. Triangulation of data was undertaken to identify the changes and the actions required to improve the problem situation. The following (final) chapter concludes this study reviewing its achievements in the light of its research aim and objectives.

CHAPTER SEVEN

CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

This final chapter concludes with the key findings emerging from this research on the usefulness of multi-stage analysis for institutional development. The thesis commenced in chapter one with an outline of the literature gap and an introduction to its aims, objectives and the key research questions. Chapters two and three reviewed the relevant literature, which was critically analysed in order to develop a better understanding of the research context. Following the development of the methodological framework in chapter four, the data (collected from face-to-face semi-structured interviews, focus groups, and secondary sources) was introduced, analysed, and discussed in chapters five and six. In chapter six, in particular, the systemic modelling of the problem situation as a complex viable system and the analysis of the results through the lens of the Viable System Model (VSM) contributed to an enhanced understanding of the dynamics of the relationship between private and public institutions. This served to suggest mechanisms for institutional development which would enhance collaboration, and the findings were linked to the insights gleaned from the systems-lens review of the literature (in chapter three). This final chapter will summarise the key findings clarifying the main contributions to knowledge and the practical implications of this research. This chapter also gives particular consideration to the limitations of the research, and highlights directions and recommendations for further work.

7.2 The key findings

The findings were used to explore the potential of collaborative mechanisms for improving institutional development and change, and more specifically to redesign the public institutions' policymaking processes in line with the VSM while also heeding insight from New Institutional Economics (NIE), collaborative governance and institutionalism for institutional development. The main research question of this thesis being: what kind of policy framework(s) could help institutional developments that foster the growth of the non-hydrocarbon sectors of Oman? With the supplementary question: are there any systems approaches that could aid the formulation of the aforementioned policy framework(s)?

The pursuit of the research aim and the above questions were structured using the following objectives:

<u>Objective A</u>. A critical review of the literature on:

A1. The growth dynamics of the non-hydrocarbon sectors in Oman

This research aims to help stimulate growth in the non-hydrocarbon sector: it requires raising its contribution (relative share) to the GDP in Vision 2020 of Oman, by formulating a policy framework to guide the requisite institutional development for investment, and to explore the application of a systems approach to support the accomplishment of this aim. It also aims to gain further insights into the process of implementing better institutional development for investment; and develop a methodological framework to provide suggestions for improving the design of more useful structures at strategic and tactical levels for investment in Oman. The analysis led to a significant positive relationship between the strategic vision performance and the level of institutional development supporting Vision 2020 targets:
"*...improving the level of quality and institutional development through increasing the private sector contribution*":

The findings suggested that by enhancing the investment environment, the private sector's contribution to GDP can increase. The findings also supported the need for action to deal with the most problematic factors for doing business. Key problems included restricted labour regulations, inefficient government bureaucracy and the need for institutional development, according to the global competitiveness index UN, 2003) (see Fig. 2.10).

A2. The role of foreign and domestic investors in economic growth

The literature critically reviewed the role of foreign and domestic investors in fostering economic growth; this objective led to a better understanding of the investment environment. In particular Foreign Direct Investment (FDI) was found to be fundamental to GDP growth. The government's need for developing better ways to attract investors was also examined.

A3. Institutional development and the evolution of collaboration

The research argued that it could be useful to complement collaborative governance theory with systems theory, in particular finding ways to enhance institutional development, to facilitate collaboration between the public institutions (inter-organisation) and the private sector firms. The term "collaboration" was used throughout the previous chapters as "joined-up working" or "joint thinking" interchangeably. The research found that in the context of inter-organisational collaboration, the use of information and communication technology (ICT) plays an important role in facilitating collaboration and transforming the ways in which the public institutions interact both among themselves (inter-organisational) and with economic sector associations. Prior to this research, there was no integrated framework to support analysis or the design of the required institutional mechanisms to deal with the complexity of public-private sector interaction, and ICT support, e.g. use of GDSS.

A4. The use of systems approaches in policy frameworks to support institutional development in the public sector

In chapter three a number of policy process frameworks were discussed (Sabatier 1991b), (see Appendix 3.3). The relevance of systems thinking to public policymaking processes was explained (Chapman (2004); and the use of systems and complexity approaches to obtain insights for dealing with organisational "complexity" was suggested, for example, the conception of organisations as "human activity systems". These were combined with NIE theoretical and empirical research implications for antitrust, regulation and other related aspects of public policy. The Ansell and Gash (2007), research on collaborative governance - in which the public and private sectors work collectively to establish laws and rules for the provision of public goods - was the final key influence that shaped the theoretical framework of this research.

Drawing upon this theoretical framework, it was concluded that a systemic and collaborative conceptual framework would be the one most suitable for supporting the design of a policy framework as well as a methodology that could guide the researcher's learning cycle. Such a framework aimed to

tackle complex problems. Therefore a complex system approach appeared necessary as elaborated in the following sections.

Objective B. To establish:

B1. The growth dynamics in the non-hydrocarbon sectors of Oman and to single out any underperforming sectors

Oman's economy was overviewed in chapter two and the hydrocarbon and non-hydrocarbon sector statistics were analysed. The analysis then focused on their activities, vision targets during the 1996-2010 (60%: threshold of vision 2020), and their growth. It was found that there have been some sectors (e.g. those relying more extensively and directly on common-pool resources) that appear not to have achieved their growth targets, whereas other sectors such as manufacturing appear to have almost reached their targets. Nonetheless, it is to be made explicit that the hydrocarbon sector's contribution to the GDP did not fall as targeted to 19% (against 81% for non-hydrocarbon); instead it soared (for reasons described in chapter two), which has a negative impact on the non-hydrocarbon sector's figures, implying these sectors have not achieved their vision targets. Looking to the non-hydrocarbon sectors yearly revenues, their income increased. This suggests that GDP growth ratios (relative share to the GDP) are not good proxies of their growth. Looking at the yearly revenues of all five non-hydrocarbon sectors income has either doubled, grown gradually as of 2010, or even tripled as of 2013 (see chapter two: figure 2.17a – hydrocarbon and non-hydrocarbon sectors contribution to Oman revenue 1985-2013, and the Appendix 2.4). This remarkable growth is obscured by the focus on ratios (relative share to the GDP).

B2. The domestic and foreign investors' perceptions of the institutional environment

a) Investors' individual perspectives: The findings showed a convergence of opinion and similarity of views on economic and institutional determinants between foreign and domestic investors which are critical to their business. Policy reform agendas considered the vast majority of economic and institutional determinants; very few of these were ranked by investors as less important to their business. In terms of economic

determinants these include: infrastructure, trade openness, incentives, and growth; whereas in terms of institutional determinants the most important are transparency, stability, and the rule of law. However, it was also found that domestic investors tend to rank the vast majority of determinants higher and find all policy areas to be important to their business, which should encourage further policy developments. However, as domestic investors also appear to rank most policy areas higher than their foreign counterparts, policy efforts should also be expanded in making domestic investors less dependent on government policy, while at the same time policy should place conscious effort in developing self-sustaining private sector dynamics.

b) Investors' sector-specific perspective: Assuming all investors were correct, the importance of the **economic determinants** varies (from 3.4 to 4.2) across the different sector-specialisations. The researcher argued that the importance of these economic determinants on domestic investment decisions in these sectors is stronger in comparison to their foreign counterparts. On the foreign direct investors side large sector-specific disparities are only encountered in 'information availability' that ranks from 5.0 (on the five point Likert scale) in mining and quarrying to 3.3 in trade and tourism. This last issue was triangulated with interview results and it was found that the mining and quarrying sector's investors explained that they suffer from unavailability of digital data from public institutions for exploration and business. It is therefore, the policy regarding 'need for information' which requires particular attention. Linking this with theories from the literature review chapter, insights emerged regarding the significance of information policies, and the respective increases in transaction costs posed by their inadequacy. The importance of the **institutional determinants** also varies (from 3.7 to 4.2) across the different sector specialisations. This could be interpreted as suggesting that the importance of institutional determinants is heightened across all sectoral specialisations.

Policy areas from sector-specific perspective rankings also vary (from 3.8 to 4.2), across the different sectors. It should be noted that this sector variation in the importance of policy areas to their business is almost

identical to that encountered in the importance of institutional determinants. Policy importance per sector also produces some additional insights in connection to their respective economic and institutional determinants. In some sectors like trade and tourism, or agriculture and fisheries, the differences between the two groups of investors disappear, where in other sectors like manufacturing they appear to be significant. This adds further support to the earlier recommendation for sector-specific policy developments, as well as providing a direction for delineating policy areas, in response to those areas that were ranked as most important in the economic determinants. The investors are more driven by these determinants, so this needs to be considered as part of policy reformation, and for further analysis during phase two (chapter six) using the VSM lens, (in System 4).

The higher rankings from domestic investors could be interpreted as suggesting that direct investment decisions by domestic investors are determined in comparison with foreign investors, by economic factors outside their control. This raises questions as to why domestic investors appear more susceptible to economic determinants: especially as the extent to which this is shared varies across industrial specialisations (discussed in chapter five). This finding was also confirmed by the qualitative data triangulation.

B3. The institutional representatives' opinions about the public-private interactions in the aforementioned sectors

These were researched by using the systemic framework, developed as part of this research, in order to integrate the multiple view points and narratives regarding the necessary policies for economic and institutional development. The fieldwork was developed to gain a better understanding of institutional development including obtaining feedback from a sample of foreign and domestic investors as well as institutional representatives. The inspiration for the nature of the questions came from reflecting on the vision for economic growth in these sectors. This was done by assessing the current status of the sectors under focus against their targets in the Vision 2020 and through qualitative analysis, guided by the systemic framework.

The attitude of the surveyed institutional representatives towards policy were similar to those of the investors; they indicated that there is a need for a mechanism for enhancing the participation of the private sector in the government's policymaking processes through direct dialogue in focus groups. There was also convergence of opinion between the investors and the institutional representatives concerning the economic and institutional determinants. In terms of policy in particular, it was suggested that the proposed synergy in the interaction between public and private joined-up thinking and working towards policy governance is a desirable possibility. This was further elaborated and triangulated through qualitative data (interviews) during the VSM diagnosis.

The 'rule of law' and 'labour recruitment' were of particular interest. Through these findings, it could be concluded that there are particular laws that need to be modernised in Oman, including Labour law, Investment Law, Commercial Law, and Mining Law, as policy and regulation areas are seen as significant to all investors in general and to domestic investors in particular. The degree of convergence as well as the high ranking in institutional determinants, can be noticed in several areas especially those related to institutions such as 'institutional quality' and the 'rule of law'. This could be interpreted as highlighting some minor differences between private and public sectors' thinking concerning the significance of rules and institutional development in investors' businesses, but when triangulated with qualitative data (from interview and focus groups) these differences disappear.

A Systemic Methodological Framework

B4. To identify, if one or more systems approaches could aid the development of the aforementioned framework, if more than one are identified then;

Objective C. Synthesise any systems approaches identified under B4, and;
Objective D. Develop a coherent framework capable of supporting policy making on the basis of C.

The researcher created a framework: "Systemic Policymaking Processes Structure" (SPPS) described in chapter four and applied in chapters five

(phase one) and six (phase two and three). The intention is to enable and represent the viewpoints of the multiplicity of actors and stakeholders involved in public policymaking. This methodological framework was structured by combining the learning cycle of the Soft Systems Methodology (SSM) of Checkland (1981) with the VSM of Beer (1985). Both helped in the formulation of this multi-stage SPPS. It aims to provide learning about more useful structures at strategic and tactical levels for investment policy improvement.

There were additional insights added to the original framework as the research proceeded, for instance the need to incorporate learning coming from NIE theory (Williamson 1975, 2000; North, 1990) to formulate patterns of economic and institutional determinants by the researcher, to produce a set of specific properties concerning collaborative governance, (Ansell and Gash 2008), and to consider the Institutionalism theory of Selznick (1949) for private sector leadership. These insights are discussed in the following sections.

Objective E. To demonstrate the use of the developed policy framework (under D) through the use of primary data collected from domestic and foreign investors and institutional representatives in the aforementioned sectors.

Chapters five and six argued that institutional development can be achieved by improving the collaboration between public and private sectors in terms of joined up thinking between public institutions and the proposed economic sectors' associations. This suggested reducing the high degree of control exercised by public institutions (due to their current powers) and increasing the private sector's low degree of influence through co-optation leadership. Institutional and organisational development can also provide valuable insights into public institutions' management by moving the debate from inter-organisational collaboration to public and private collaboration.

The application of the Systemic Policymaking Processes Structure commenced in chapter five (phase one) and the findings involved the convergent investors' and public institutions representatives' opinions relating to economic and institutional determinants, and to policy areas (as

in Borrás and Tsagdis 2008). Chapter six also focused on the VSM diagnosis of the various systems in focus; aiming to analyse the need for collaborative governance. The respondents in this phase were able to identify a list of their requirements (presented in sector coloured coded tables in chapter six) for institutional development in the System 4 of each viable system at each non-hydrocarbon sector recursion level. The VSM diagnosis of the interactions between Oman's public and private sectors confirmed that institutional development is a significant requirement in order to support economic growth, and that it could be implemented by public institutions and private firms through increased participation in the policymaking process. It also provided clear criteria to design the required new mechanisms and institutions. Thus, the use of the developed policy framework was demonstrated through the use of primary data collected from actual domestic and foreign investors and institutional representatives in the aforementioned underperforming sectors.

The convergence of both groups' opinions (investors and public institution representatives) indicated in turn that the commercial mentality of public institution policymakers concurs with the private sector's way of thinking, specifically regarding informal constraints such as; business beliefs, norms, culture and institutional values (informal institutions). Although these similar ways of thinking appear to be an extraordinary outcome, on reflection it is not surprising. Doing business in Oman is not restricted to investors but also involves civil service employees in public institutions, who are allowed by law to trade and even to own businesses. Thus, most of them are practicing commercial and industrial activities and doing business as the investors do, often owning enterprises in partnership with other Omanis or in corporate partnership with foreign investors. Civil employees are forbidden to participate in tenders or to have any type of business with the public institutions they work for. This is to protect public money and avoid conflicts of interest (the history of this unique system is described in chapter 5). Accordingly, this research argues that government employees have worked in the private sector in Oman since 1970, and thus understand its way of thinking.

7.3 Contributions and implications

<u>Objective F</u>. Draw the implications of E for practice (domestic and foreign investors), policy (institutional representatives), and research

7.3.1 Contributions to knowledge

The literature contains several applications of the VSM that aim to improve nation level performance (e.g. Beer, 1981; Espinosa, 1998), and corporate, business firms' performance (e.g. Espejo and Harnden, 1989) among others as detailed in chapter three. There are however, few studies where the VSM has been used to support policy in the public and the private sectors simultaneously. Further, it is underdeveloped when it comes to systems aiming to improve policy development, in particular regarding policies that enhance public and private sector collaboration. This was a major gap this research has been tackling. It suggested detailed ways to use the VSM for example in order to study the multi-level interactions between the public and private actors involved/affected by the policymaking processes. Thus, this thesis made an original contribution in the field of institutional development, regarding the necessary conditions for enhancing sector-specific collaboration, using investment policy formulation in economic growth at strategic and tactical levels, in the context of a developing economy.

The Systemic Policymaking Processes Structure framework which incorporates the researcher's suggestion of ways to combine the VSM diagnosis as part of the policymaking learning cycle, represents a methodological contribution to the literature. Turning to objective C, this framework synthesised two systems approaches - VSM and SSM -. Previous research also combed both approaches, but do not include public vs. private sector collaboration which has not previously been attempted within a public policymaking context. The Systemic Policymaking Processes Structure complements previous research by explaining how to use SSM as the learning framework where a VSM analysis of the system in focus is required; this has proven to be useful in the particular context of private vs. public policymaking.

In addition the researcher suggested the adoption of Selznick's (1949) co-optation element when applying the VSM for institutional development in this research context. As demonstrated, the idea of co-optation can be employed to avoid inconsistency in the

leadership of the Economic Sector Associations' interests, and for democratic policy implementation. This last aspect of the Systemic Policymaking Processes Structure also helps to overcome Jackson's, (2003) criticism of the VSM, as demonstrated by the findings, there is a range of innovative ways - such as the inter action between government power and co-optation of private sector associations - that addresses participation and democracy through VSM diagnosis and design (between System 1 and its sub-systems).

The following section will discuss the implications of the above contributions to knowledge starting from theory, research, policy, and proceeding to practice.

7.3.2 Implications

1. Implications for institutional and organisational development

This research has argued that it could be useful to complement NIE with systems theory. In particular, finding ways to enhance institutional development, to facilitate collaboration between the public institutions (inter-organisation) and the private sector firms' interaction. The research found that in the context of inter-organisational collaboration, North's demarcation between institutions and organisations and also formal and informal institutions and in general NIE theory, **(**North 1981, 1990, 1991), has contributed to achieve a deeper understanding of economic performance. Complementing such understanding with insights from systems theory has produced an even deeper understanding of the dynamic and complexity of public-private interactions in policymaking. Investigating ways to use these two theories in complementary ways is another contribution to knowledge from this research. NIE by incorporating institutional theory into economic institutions provides a framework within human support (knowledge and experience). The research considered institutions as the rules of the game in society. NIE pays special consideration to the importance of public-private interactions and suggests corresponding economic and institutional determinants. Informal institutions could act as the boundary for the interaction between internal and external environments of the various systems in focus. Key to the costs of transaction in this research is information and knowledge sharing and exchange.

2. Implications for private sector leadership and public Institutions' power

The idea of co-optation complementing a VSM design for economic sector associations explains a type of leadership (it could be an individual or group co-optation) that the researcher considers useful as criteria to design the interaction between public institutions and economic sectors associations. Essentially, it creates a better power balance between corporate firms and public institutions' roles. This suggests a rich path for further research: by complementing VSM application with insights from NIE, in particular for the design of power sharing mechanisms. This led to the proposal to establish a collaborative network, including the experience of investors and their tacit and explicit knowledge sharing with public institutions, with the help of the suggested electronic GDSS platform. It was found that the private sector's experience and knowledge sharing was poorly utilised, as there was no platform to interact between the private and public sectors on a regular basis. The VSM diagnosis of viability, communication and control among the various systems and sub-systems in focus, resulted in the suggestion for improved essential meta-systemic functions to be designed for each economic sector association to interact more effectively with higher authorities directly. The research argued that economic sector associations need leadership through 'co-optation' to avert threats to the sector's stability or existence. It is a key element of collective experience and knowledge sharing with public institutions and organisations.

3. Implications on collaboration and institutional development

This research developed an integrative, systemic framework for supporting the interaction in the context of foreign and domestic investment. It proved to be able to include and represent the viewpoints of a multiplicity of actors and stakeholders involved in policy decisions about foreign and domestic investment, to deal with the complexity of their interactions, to manage effectively the knowledge required to support policy decisions, and to provide a robust context for collaborative policymaking in the public sector. Thus this research suggested a path for institutional development that included VSM analysis of the non-hydrocarbon sectors aiming to discover ways to improve their interaction with Omani governmental policy makers. In terms of co-ordination, the Systemic Policymaking Processes Structure framework allowed initial assessment of the cluster for 'starting conditions' as advised by Ansell and Gash (2008), but it could be added to their proposition of the knowledge concerning the current station within policy areas' coordination and systemic identity (holistic) as an essential

privilege for successful public policy making processes. They identified that the complexity of the policy implementation process is irresistible, but the use of the VSM through Systemic Policymaking Processes Structure has shown that managing this complexity is possible, and also answered Ansell and Gash's call for a common language to handle the complexity. Thus, the Systemic Policymaking Processes Structure was able to offer insights into institutional design as another aspect to the Model of Collaborative Governance described in the literature chapter. The group of autonomous stakeholders of a problem domain engage in an interactive process using shared rules, norms, and structures to act or decide on issues related to that domain. However, from NIE perspectives, collaboration between institutions and organisations could also be affected by the transaction costs, introduces them to new bilateral and multilateral relationships to which they must attend, requires them to develop new skills and abandon or reshape old ones, and makes them more explicitly and perhaps uncomfortably aware of the relationships among stakeholders that do not include them but may affect them.

4. Implications for systemic identity

The Systemic Policymaking Processes Structure framework has brought to light the importance of a complex systems approach to public policymaking processes: it showed that a holistic stance must be taken not just involving all of the actors within the field, but also considering environmental issues and observing the interactions between them through recursive analysis. The Systemic Policymaking Processes Structure framework also illustrated that knowledge management and the experience of the private sector need to be embedded in the public policymaking process. The framework has helped to mirror the real world from a systems thinking perspective. It also suggested that knowledge and the experience of the private sector need to be embedded in the public policymaking process. In short the Systemic Policymaking Processes Structure supported the accomplishment of the research aim.

The Systemic Policymaking Processes Structure application produced insights into both the process of implementing better institutional development and of enhancing the identity of economic non-hydrocarbon sectors: agriculture and fisheries, mining and quarrying, building and construction, manufacturing, trade and tourism. Applying the VSM to enhance the policymaking process in Oman has been valuable in improving

collaboration and coordination, between public and private sectors, through the suggested innovative communication functions. The study shows the need for optimising operational management by providing synergy through collaboration between the operational levels (Public Institutions and Economic Sector Associations) in agreement with the upper strategic level (meta-system), i.e. the Council of Minister and the Council of Oman and the Supreme Council for Planning. The external environment also includes the international commitments (agreements and treaties) through institutional development in System 4 of the VSM that affect the internal operational environment.

The recommendation is thus to improve both the operational and the meta-systemic levels. The Council of Ministers needs to oversee, balance, and monitor the performance of the non-hydrocarbon sectors in the country. The research outcomes also demonstrate the usefulness of systemic thinking and the Systemic Policymaking Processes Structure framework in particular, by enhancing the understanding of the mechanisms required to manage the complexity of the policy process. Further research, following the Systemic Policymaking Processes Structure path of the VSM analysis developed in this thesis could examine how to performance in each of the economic sector associations could be improved. Similarly, further research could be pursued in lower recursions: e.g. at the level of sub-sectors which, as the findings indicate, tend to have additional novel demands for their sub-sector specific institutional development.

7.4 Recommendations

Objective G. To make recommendations (on the basis of E) for institutional development.

The recommendations are presented according to the sequence of the objectives (from A to F):

> **Recommendation A1:** There is a pressing need for new policy processes to develop a balance between public and private interests, in order to stimulate economic growth. The data led to a recognition of the weakness of the public vs private sectors' collaboration in Oman. This research aimed to enhance the collaboration process between the public and private sectors in order to achieve stronger economic growth.

Recommendation A2: To invite investors to share their knowledge and experience when developing public policies for foreign investment: this will enhance the public policymaking processes.

Recommendation A3: For institutional development and the evolution of collaboration, the investment concerned Public Institutions need to communicate, and to collaborate amongst themselves and with economic sector associations through ICT facilities (for example GDSS) prior to any policy decision being made concerning any economic sector.

Recommendation A4: Due to the complexity of the institutional development and policymaking processes, it is recommended systems approaches are used to design a collaborative policy framework and to support institutional development in the public sector.

Recommendation B1: The growth dynamics indicate that the non-hydrocarbon sectors of Oman, particularly the sectors that rely on common-pool resources, need to develop their institutions. The relative share of GDP as an indicator does not capture adequately the growth as inflated oil price during the study period skew the results. To that effect it is recommended that sector growth is monitored and assessed by absolute or relative growth measures of their size (e.g. expressed in monetary terms or share thereof).

Recommendation B2:

- The need for remedial actions, and a stronger focus on policy development for domestic investors in information diffusion and requirements from public to private sector.
- The need for enhancing the institutional development in the non-hydrocarbon sectors especially the sectors that deal with common-pool resources, through taking advantage of the internal and external environment to support policy development.
- Modernising laws, rules and regulations that related to investment. An additional expedient effort should be placed towards this policy direction in the relevant institutional areas.

- Attention needs to be paid to the development of domestic investors' competences, as it was suggested earlier through the NIE perspective that domestic investors need to be involved in international business training programme to gain better skills and knowledge.

Recommendation B3: Exchanges experiences need to be exchanged between investors and public institutions, to gain from the private sector experience and knowledge, to develop more flexible policies while implementing public-private sector collaboration.

Recommendation B4, C and D: To create and utilise a systems approach "Systemic Policymaking Processes Structure" which is recommended to help to tackle complex situations and to be used as a methodology and to develop a learning cycle. This systemic approach synthesised (combined) the VSM with SSM for public policymaking processes and this coherent framework, capable of supporting policymaking was developed.

Recommendation E: The outcomes also indicated that it is useful to use a combination of real world issues through systemic thinking: the Systemic Policymaking Processes Structure framework has offered means to begin to more fully understand the mechanisms within the policy process including control and communication resulting in collaboration. Thus, it is recommended to use this framework for further studies on how to improve performance in each of the economic sectors and sub-sectors. The recommendation is thus to improve both the operational and the meta-systemic levels. The Council of Ministers needs to oversee, balance, and monitor the performance of non-hydrocarbon sectors in the country through application of VSM and Group Decision Support Systems (within System 2). Thus, this electronic system needs to be embedded in its Information and Decision Support Centre (IDSC) of the Council of Ministers, (see Fig.6.12).

7.5 Trustworthiness of the findings

As was seen in chapter four, Interpretivist criteria of quality meet those of positivists (shown in brackets) as follows: trustworthiness (validity), credibility (internal validity), transferability or generalizability (external validity). This section therefore examines

whether the findings are valid from the standpoint of the researcher, the participant, and the reader. Creswell (2003) recommend one or more strategies to check the trustworthiness of the findings. The researcher has chosen:

i) The method triangulating through multi methods and different data sources of information and building a coherent justification for themes (see chapter six and Appendix 6.1: qualitative data cross-sectional: interview and focus group). Using rich and thick description to convey trustworthiness of the findings;

ii) Data triangulation: High validity and experienced informants are the attributed characteristic, taking into account the experience of the respondents in each field. This may produce a response bias, as further discussed within the threats in the next section.

iii) Clarifying the bias the researcher brings to the study, this self-reflection creates an open and honest narrative that will resonate well with the readers. The researcher bias is reduced through reflexivity (constantly thinking about the research potential biases). Moreover, the researcher has a personal experience of the research area (investigator triangulation); and was able to triangulate responses from the aforementioned, 44 participant (30 investors and 14 public institutions representatives), and to find out how data reflects the reality of the phenomena investigated above. In general the quality of data is high as it comes from experienced investors and decision makers (public institutions representatives).

7.5.1 Credibility

This research highlights the credibility (internal validity) of the research, which is concerned with whether the findings are really about what they appear to be about. The credibility is the extent to which findings can be attributed to interventions rather than any flaws in the research (Saunders et al. 2009). Thus, it evaluates the consistency of mechanism in order to confirm that it demonstrates the results of this research.

For this qualitative research, it is noteworthy that the translations from English into Arabic and vice versa, were sent to all LSE and SME investors, as well as to focus group members. Although there were many bilingual respondents, it was sent as a courtesy aiming to clarify the meanings of some words/expressions as per the researcher's understanding, so the responses would be clearer. The quality of the translation during interviews and focus groups with some of respondents was tested and found to be satisfactory (consulting interpreters in issues such as conventions and expressions). Manually, the researcher kept written records of all interviews (when recording was declined by an interviewee) and a short hand secretary was used during the focus groups. The researcher also portrayed the meaning given by participants to what was being studied to translate and interpret to achieve description validity.

Regarding the threats to the reliability or to validity that have been addressed, there were three threats related to the quality of the results produced in this research which can be measured; two history threats, and one instrumentation threat.

1. **History threats:**

    a) There was a comment raised by one of the two focus groups on the achievement figures of Trade and Tourism (1996 - 2010). They wished to see each subsector, monitored separately, as they thought that incorporating the figures of tourism with trade, obscure a clear picture about each of the two sub-sectors, and said it is possible that the trade sector might have achieved the required targeted figure as of 2010, whereas tourism did not. This comment was addressed by the justification that this categorisation was based on Vision 2020 (used by the Ministry of National Economy statistics system categorisation) which did not separate the two sectors and after the research and findings were assessed, this threat did not affect the findings.

    b) Chapter five illustrated the start-up list of five sectors investors from which it can be noticed that the experiences of those interviewed investors being in 1870 (family business accumulated experience) and continued until 2007. This variety of experience period had a significant impact on the internal validity and ultimately on interview findings with

high internal validity. A very small number of investors started up their business recently, and their limited experience may have created some threats, but explaining the idea behind the semi-structured questions, eased and eliminated this threat.

2. **Instrumentation threats:** N vivo as an electronic tool was used for sorting out qualitative data and building relationships among data in terms of themes and codes. The statistical software tool SPSS - which was adopted for exploratory data analysis, and helped to analyse the quantitative data such as economic and institutional and policy patterns - calculated the average, mean and standard deviation. Word and other Microsoft products were used for writing up. A few data entry errors were identified (e.g. answers related to other questions were revised and positioned at the right question); these overlap errors were corrected during the telephone contacts. This may be considered as causing instrumentation threats during the coding of the themes of the interviews. The other possibility of overlap had been expected to a certain extent as, after all, they are alternative perspectives of the same overall performance construct.

7.5.2 Transferability

The transferability concerns the extent to which the research results from a particular study are generalizable to relevant contexts (Saunders et al. 2009). The current research demonstrates the use of the developed policy framework through the use of primary data collected from actual domestic and foreign investors and the public institutional representatives. As the Systemic Policymaking Processes Structure framework is also a learning cycle, the conclusion of this methodology is more likely to lead to the emergence of another, different problem situation. This will encourage further studies to be done on those emerging problem situations using the same cycle with its multi-stages for further research. Having said that, the research results are not claimed to be transferable outside its population, though the results may be valid elsewhere through naturalistic generalisation (based on similarity). No replication and work has been carried out on this research to measure the limits or even the error to its generalisation. This is delineated as an area of further researches.

7.5.3 Reliability and dependability

This section concerns the reliability and dependability (quality criteria). The Oman government's institutional development goes in parallel with what the current research has suggested which provides some evidence as to the validity of these findings and recommendations:

1. The state organisations in Oman witnessed some institutional changes and developments during the research period, (as described in chapter two and illustrated in Appendix 6.3). The reform encompassed the most important organisations concerned with investment concerned public institutions.

2. Investors and public institutions' representatives were critical about the role of the Oman Chamber of Commerce and Industry. The turbulence of the relationships between investors and the Chamber prompted them to question its role. The government used to appoint the Oman Chamber of Commerce's board of directors (12 members) including its chairman, while the others were elected, and the governorates elected one member per governorate. This system fundamentally changed in February 2014 (during this research's writing up period), and now all members are elected by firms. At the time of writing there were 150,000 firms, (each casting one vote regardless of its size, sector, or other characteristics). They elect 15 chamber board members who in-turn elect their chairman.

3. Labour Law was seen as a controversial issue during data collection and was one of the main issues raised during the interview and focus group discussions. In 2014, the government invited the three production parties (stakeholders) namely: a) the public sector (Government representatives), b) the private sector, investors, business owners or employers (represented by Oman Chamber of Commerce and Industry), and c) the workforce (represented by the labour union) to modernise the existing and prepare a new labour law in 2014-2015. In this research it was found that the labour law was a major concern among domestic investors, but foreign investors think that some public institutions were found not be clear in their policy and decisions (see chapter five, section 5.3.4). Foreign investment law in

Oman was another issue concern which emerged during the interviews and focus groups. When the BITs and FTAs were discussed the demand, was to modernise the existing law in key areas to contribute to a competitive investment environment, and that Foreign Investment Law would ensure compliance with the strategic vision at the national level. Although the Oman judicial system was also ranked as being among the world's twenty best judicial systems (chapter two), in some cases foreign investors do not trust the local judicial system when it comes to disputes with the state *per se* or state authorities and organisations, in which case the option is to access an international dispute mechanism which is often preferred. Some articles and dispute clauses in the judicial system therefore need to be amended. The government is currently working on modernising the foreign investment law.

4. During 2014, the government signed an agreement with an international developer to implement stage three of the One Stop Shop, for online service provision to investors. It includes registration and licensing processes of government approvals (this was also one of the major concerns of domestic and foreign investors during the interviews). The researcher is a member of the steering committee which follow-up the progress of implementing this system, which is expected to be handed over to the Ministry of Commerce and Industry during the second half of 2015.

7.6 Limitations and areas of further research

7.6.1 Limitations

As discussed in the previous sections, this research aims to contribute to a number of fields in the literature and body of knowledge including institutional development and systems approaches. It offers insights into cybernetic practice though the exploration of the VSM in public-private sector collaboration, in contemporary Oman. Nonetheless, there are some limitations. This research was conducted in Oman and although there are similarities with other countries (e.g. GCC and MENA regions), there could also be significant differences which should be recognised if applying the Systemic

Policymaking Processes Structure framework in different context countries. First of all the language and conventions used in Oman may not be appropriate in different contexts due to the cultural, social and economic differences. This limitation could be counteracted by the fact that the VSM offers a generic approach (language and conventions) to analyse viability independent of context: it is based on mathematical foundations and on identifying invariances within systems; and it has been applied in many different contracts through its systems language. Nevertheless, further design of specific questions and instruments for data collection and analyses in other contexts may still be desirable.

Common-pool resource sectors such as Minerals, Agriculture and Fisheries still need to grow at a higher rate to reach to the Vision 2020 target. There are limitations here due to the fact that the researcher conducted 30 face-to-face interviews with investors (15 foreign and 15 domestic), so there may have been issues that received limited representation; the same is also true for the two focus groups comprising public institutional representatives. Therefore, further variety in number/type of members/interviewees would open this research limitation to broader understanding of the issues found for deeper discussions and findings.

In spite of the aforementioned limitations, these limitations do not affect the trustworthiness (validity) and reliability of the research findings. There is also a cross-section limitation; e.g. had the researcher studied each sector longitudinally, perhaps different results might have occurred. There might had been some bias limitation due to the fact that single respondents from each institution were chosen; e.g. if choosing only one representative from an institution, it became apparent that the framework provided only the views of the current situation of the public policymaking processes, while the organisational and institutional development arenas are too wide and big for one person to summaries the variety of all the work that might be covered and the nature of the problems to be tackled.

Given more time and resources to conduct further research, this constraint may be removed by inviting larger and more diversified samples of participants from each institution involved. There were some related areas identified in this research that could not be further investigated due to lack of time. Perhaps the study's arrangements for interviews and focus group could be enhanced to provide the respondents more time to

think about the issues for both primary data collection instruments (viz. interviews and public institutions representatives) to proved deeper and more comprehensive answers.

There is a need for further studies to overcome these limitations. The suggested framework could be further developed regarding collaborative endorsement of Systemic Policymaking Processes Structure. There seems to be recognition that collaborative policy is desirable to develop in public policymaking processes by bringing public and private sector together.

7.6.2 Further research and reflection

This research focused on five economic non-hydrocarbon sectors through which the strategic vision aims to achieve a significant growth in the economy of Oman. There are, however, other sectors that should be studied (e.g. the transport sector which needs only to maintain the growth percentage of 1996 throughout the 25 year vision period), and Systemic Policymaking Processes Structure could be used to that effect. This framework could help to determine if the proposed framework is applicable elsewhere. Also further research is required to test whether the results of this research can be extended to other countries with similar socioeconomic structure such as GCC, and MENA region counties. The implications for further research apply to both the theoretical development and the methodology used.

Further research is also advised in some novel areas that emerged from this research. They could be summarised under the following main and supplementary research questions;

i. What is the role of economic sector associations (ESAs) to institutional development (ID)? And how could it be enhanced in order to promote sustainable growth?
ii. What are the relationships between the Chamber of Commerce and Industry and ESAs in the country? And how could they be enhanced in order to promote sustainable growth?

These questions can be considered in the context of collaboration between public and private sectors; further research could also include assessing if certain processes involved in the formation of networked associations can bring improved viability, in order to enhance government services and policies for the private sector. Further

research should compare and contrast this study's findings on determinants with secondary data of respective proxies in Oman, and ideally undertake their econometric estimation to test if the reported rankings by the investors correspond to any statistically significant identifiable patterns in secondary data. Such further research should be contextualised in the wider literature of FDI determinants in the GCC countries and MENA. Moreover, the forthcoming analysis of the qualitative aspects of the primary data collected is expected to provide some additional insights concerning the rationale behind the reported rankings, what investors would like to see improved, and the kind of knowledge flows that they see as missing.

7.6.3 Practical implications for policy and research (reflection)

There are other implications of this work to policy and research; the reader will have seen that there is a fertile space to further study the sectors targeted in this study separately. The Systemic Policymaking Processes Structure may also be useful for studying each of the sectors individually (e.g. trade sector, fishing sector, tourism sector, and so on). The key findings of this thesis raised important 'policy implications' and provide useful insights for policymakers, practitioners, and researchers in Oman and possibly elsewhere.

a) **Policymakers**: the empirical results provided evidence to suggest that they should consider public policymaking processes incorporating private sector knowledge and experience in a much more effective manner;

b) **Practitioners**: the same results of this research suggest studying sector performance using insights from VSM theory; this is relevant when it comes to joined-up working between public and private sectors and policy implementation at both national and corporate levels. This could be focused upon public institutions across Oman by seeking to improve the policy process to enhance investments and ultimately national economic growth. This research recommends that in order to improve implementation of a more effective governance process there needs to be convergence in the public and private sectors intellectual thought; this also requires of investors to participate and learn about the policy making processes.

c) **Policymakers and Practitioners**: This study is expected to be one of the rare studies on this type: a combination of multi-stage theoretical and empirical methodology in the Oman context. A deeper understanding of the factors influencing policymakers in government to foster the required collaboration would contribute to institutional development; both policy makers and practitioners are now expected to contribute to current governmental efforts, by raising issues that might enhance the economic growth and the diversity of the country's resources, thus increasing their contributions to the national GDP and the strategic vision.

7.6 Summary of conclusions

This research exposed the lack of collective action bringing public and private sectors together in order to enhance policymaking processes for better public policymaking performance. This chapter elaborated a policy framework, developed by this research that could help develop institutions to enhance economic growth. It incorporated and harmonised analytical tools coming from systemic approaches through the suggested methodological framework (SPPS) that proved to be useful within the policymaking field in an emerging economy context. It also clarified the identity of the non-hydrocarbon (non-oil-gas) economic sectors. This was followed by a discussion of the main research findings, insights, and contribution to knowledge. Coming to the end of this thesis, institutional development has been assessed along with the validity of this research and its limitations. Further research that could overcome the identified limitations as well as novel research questions that emerged from this thesis were also discussed. This thesis has therefore, achieved its main research objective of investigating the process of implementing better institutional development for investment and economic growth and is leaving behind better research questions, if not answers, than those that gave rise to its birth.

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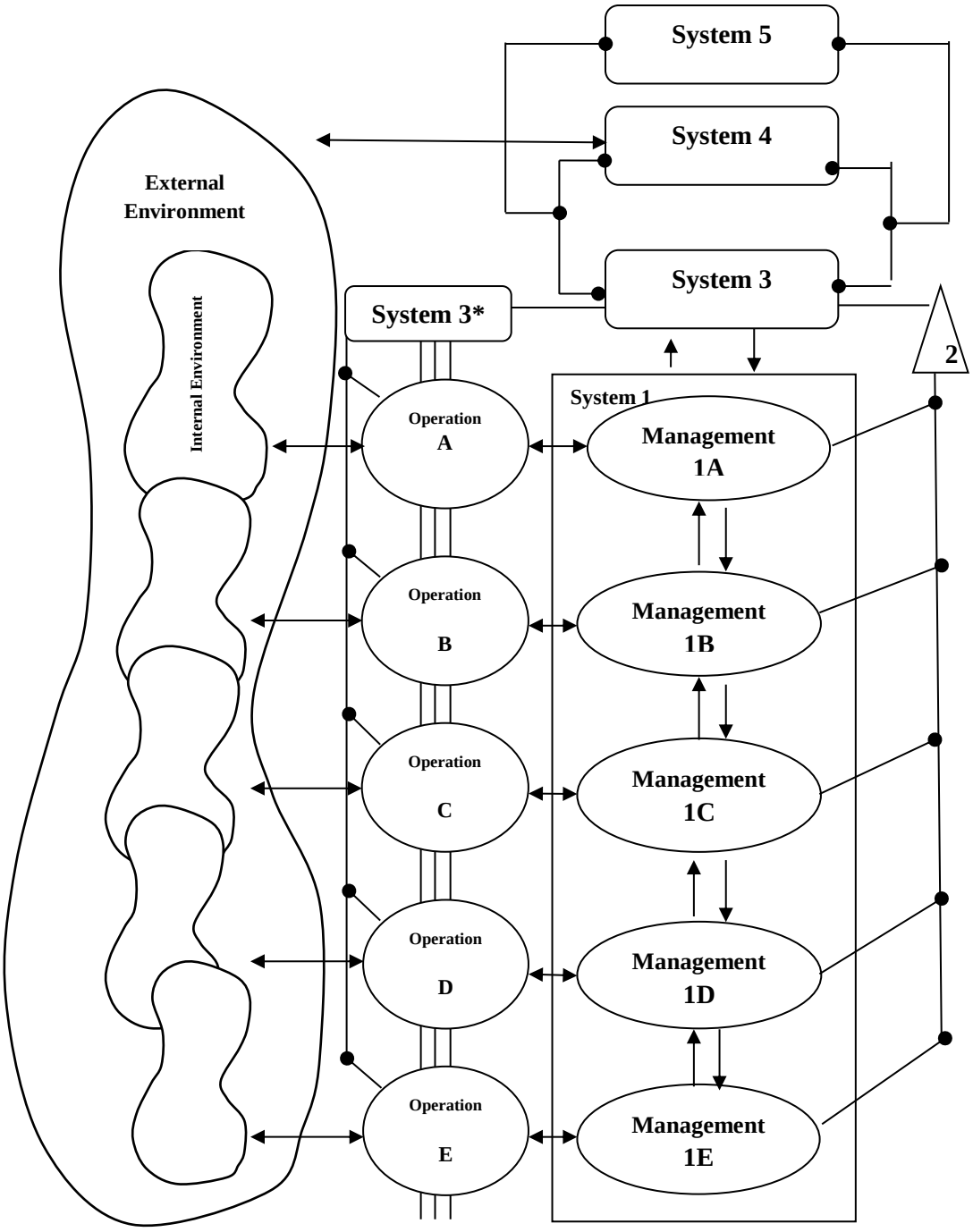
Appendix 1.1

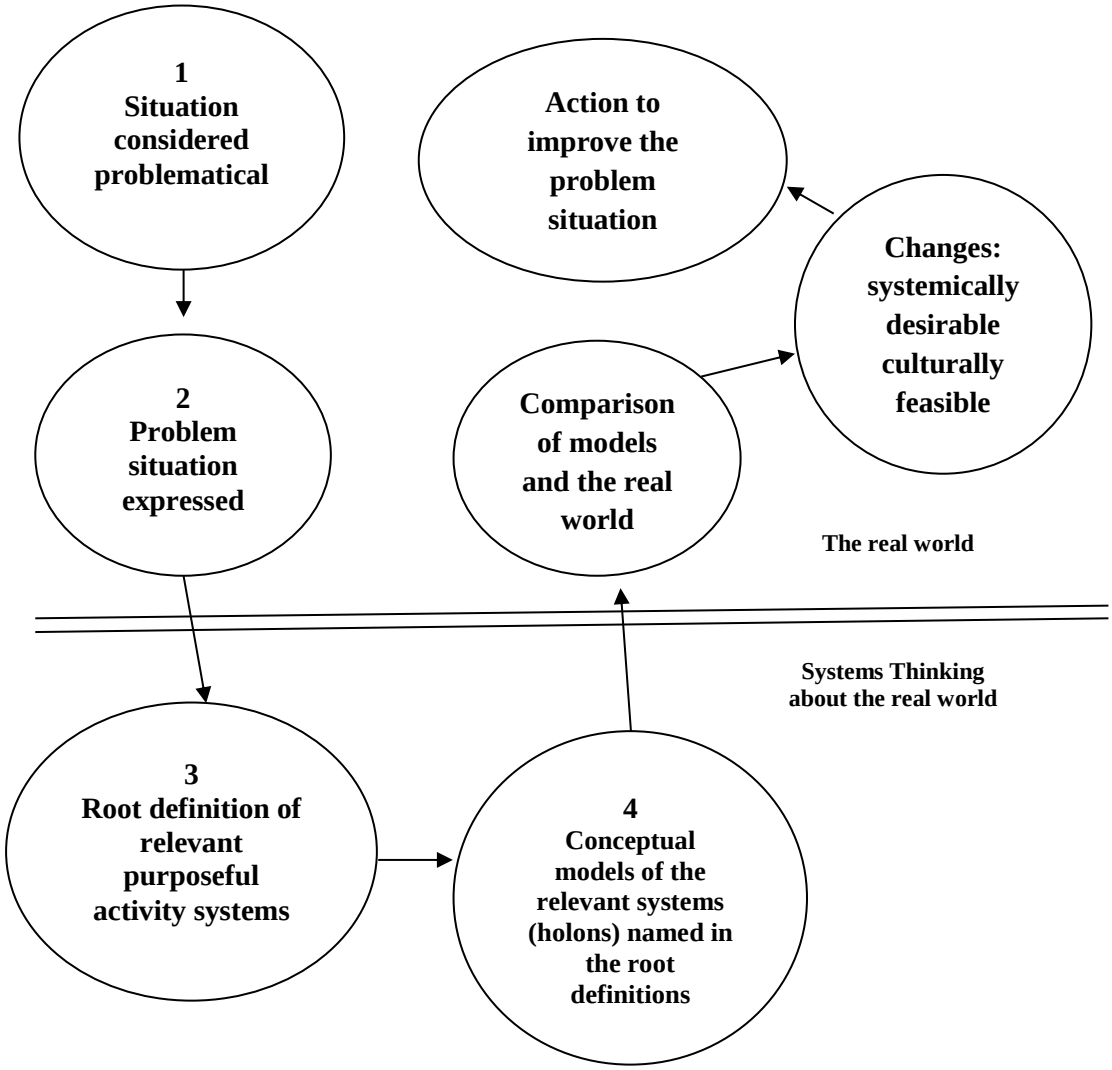
The Prototype Viable System Model (VSM)



The Viable System Model (VSM) Beer, 1985

Appendix 1.2

The Soft Systems Methodology Learning Cycle: Checkland (1981)



Appendix 2.1

A Glance at the History, Demography and Land of Oman

A) The history

Hawley ([1977] 2012) pointed out that it is not yet possible to trace the provenance of Oman back beyond about 12,000 B.C., the oldest human settlement dates back to the stone age, and by the second half of the third millennium B.C., the Gulf[1] witnessed extensive commercial activities, mainly between Oman, Persia, India and Mesopotamia. Archaeological excavations discovered *Babylonian* and *Sumerian* records and tablets which refer to Oman as the Land of *Majan*[2], they also referred to *Dalmoon*[3].

For thousands of years Oman lay along the "sea trade routes" between East and West and benefitted from links between Arabia, Africa, India and China, and was known to the world's 'sailors and merchants', but eventually Oman slipped into neglect. Then Oman's ancient reputation for the grace of its people and for its ports and towns began to spread anew, and once more ships queued at its ports. *Majan* (Oman) in the fourth and third millennia B.C. was already renowned as a seafaring and mercantile nation, and trade centred largely on copper from Sohar. The Greek geographer and historian Strabo (c. 63 B.C. to 21 A.D) wrote extensive accounts of the origin of nations and the relationships between them. He wrote that the ancient Arab tribes gave their names to some regions such as *Sohar* the tribe who lived in (*Batinah*[4]) named Sohar town. Sohar was an important station on the old East-West Silk Route for centuries, and today is one of the most important free zones; a seaport and industrial region, the area with copper mines and extraction facilities, and a centre for both Omani oil and non-oil products (ibid).

Oman was a prosperous trading and maritime centre in the Indian Ocean right up until the end of the 19th century. Omani trading ships regularly called at ports in Persia, India and South East Asia and also reached Canton in China as early as the eighth century, (MI, 2012). The Portuguese after discovery of the route round the southern tip of Africa, (The Cape of Good Hope, by *Vasco da Gama*[5] in 1498) reached Oman through the guidance of an Omani seaman Ahmed *bin*[6] Majid. It was his experience that provided the guidance for Vasco da Gama's voyages across the Indian Ocean from Mozambique

[1] The Gulf; known as 'Persian Gulf', while in Arab world known as 'Arabian Gulf'.
[2] *Majan* is what we know today as Oman, but which then included the Gulf coast.
[3] *Dalmoon* in modern day-Bahrain.
[4] The *Batina* is North East coast of Oman.
[5] Vasco da Gama (1460 or 1469 - 1524), (Wikipedia encyclopedia) accessed 3rd October 2013.
[6] *bin* or *Ibin* is an Arabic word means (son of).

to India between 1498 and1507, precisely from Malindi in East Africa to Calicut (India), (ibid).

This voyage revolutionised the trade of Europe. In 1506 *Alfonso*[7] *de Albuquerque* captured Socotra (Yemen) and Hormuz (Oman) which then controlled the lion's share of the Gulf trade. *Albuquerque* destroyed every Arab vessel he came across and committed atrocities in many coastal towns of Oman. *Imam*[8] Nasser *bin* Murshid *al Yarubi* the founder of (*al ya'rubah*) Dynasty who ruled Oman from 1624 to 1744 began to unify the country at that time to respond to the threat of the Portuguese who occupied the northern coast of Oman. He played a dominant role dealing with the Portuguese in both peace and war, and liberated some of the Omani eastern districts.

He made an agreement according to which the Portuguese allowed the Omanis to trade freely and refrain from all military actions: however, this agreement did not stop him from liberating the eastern part of Oman from the Portuguese. Later; in 1645 *Imam* Nassir wrote to the English East India Company[9] offering them trading facilities at Sohar.

A year later, a treaty was signed; the English had been giving the *Imam* discreet help against the Portuguese. At that time the Dutch had already established a factory in Bander Abbas (Iran) under the Dutch East India company[10] umbrella, and shortly after, they joined forces with the British against the Portuguese, and were able to gain their initial foothold in the Gulf. Dutch influence gradually disappeared after the British and French began to cooperate (French East India Company[11]), (Hawley, 2012).

When *Imam* Nasser died in 1649, his cousin *Imam* "*Sultan bin Saif*" was chosen to take his place and the first thing he did was to drive the Portuguese out of Muscat completing the liberation of Omani lands in 1650, He continued to attack the Portuguese even at sea and followed them to the shores of India. In 1669-1728 an Omani military campaign continued to follow the Portuguese, ending the Portuguese presence in East Africa which became later under the influence and rules of Oman, (MI, 1979). The Portuguese left a number of traces such as the two most famous forts in

[7] Also spelt as *Afonso* or *Aphonso d'Albuquerque* and also known as "*Afonso de Albuquerque* the Great" (1453-1515) (Wikipedia encyclopedia) accessed 3rd October 2013.

[8] The *Imam* is a religious ruler; assumed full or partial spiritual, political and military authority, as dictated by prevailing circumstances, and act as highest authority in all religious matters, which is also responsible for all civil affairs such as the collection of taxes within his domain, and commanded the army in time of war.

[9] Established in 1600.

[10] Established in 1625.

[11] Established in 1664.

Muscat (*Jalali* built in 1578 and *Mirani* built in 1588), (at present these are tourism attractions and landmarks). Oman never suffered another foreign occupation with the exception of the period between 1737 and 1747 when the Persians interfered in a local civil war and occupied part of the Omani north coast.

Peterson (2005), who described the impact of the Portuguese invasion to Oman, wrote: *''.... One could argue that the Portuguese conquest of Muscat and other Omani coastal towns and their subsequent occupation during the 15th and 16th Centuries contributed a strong impact on modernisation after the succeeding Al Yarubi dynasty, victorious in ousting the Portuguese unitized Portuguese military and technological principles and organisation in creating one of the largest naval fleets in the Western Indian Ocean and used it to follow the Portuguese down the coast of Africa, ousting them in turn from their strongholds as far as the reaches of Mozambique'',* (p. 2).

Later, the *al Busaid* Dynasty – was founded by *Imam* Ahmed *bin* Said, from whom the present Sultan descends. 1744 marked the start of a new era in Oman's history that has continued for more than 270 years to the present day. Oman as a traditional monarchy (*Sultanate*) represents one of the only four monarchies classified by Halliday, (2000 in Peterson, 2005) who points out that Oman and Morocco are 'Traditional Sultanates' turned into modern states. The *Sultani* 'the royal' monarchy is resilient and is unique because of the geographical and social diversity of the country compared to the other Gulf States, and because of the two and half century legacy of the *al Busaid* dynasty, Anderson (1991). One of the influential Sultans in the dynasty was Sultan Said[12] *bin Sultan* who was known as Great Said in some of European history books; he ruled Oman for fifty years (1807-1856), and his aspirations extended beyond Oman's borders towards India, Persia and Africa, (MI,1990). During his reign, the "Omani empire" included the Gulf region; southern Iran and Baluchistan (Pakistan); it became powerful, and encouraged trade in the area. Omani territory extended for over three thousand kilometres along the coast of Africa. Zanzibar became the capital of Oman's African territories, and after his death, one of his sons became the Sultan of Zanzibar[13], and the other son in Muscat declared himself as ruler of the entire Sultanate (Hawley 2012).

The *al Busaid* dynasty has ruled Oman since 1744 when *Ahmed bin Said* (the founder) was elected *Imam* he was able to drive out the Persians during 1747-8, and made *Rustaq* the capital of Oman(this is currently one of the main city of The Governorate of South

[12] It can be written as "*Saeed*" as well.
[13] Oman's dominance of Zanzibar ended in 1964

Batinah in Oman). His attention was directed towards the revival of Oman's maritime trade. In 1775 the Omani fleet became a regional and international force in the area and this allowed him to make a significant contribution to the stability of the region and the prosperity of its trade.[14] He also eliminated a number of piracy movements in the Gulf and Indian Ocean to secure international trade[15]. When Sultan Said died during a sea voyage from Muscat, his body was taken and buried in the garden of his residence in Zanzibar, two of his sons were with him (Majid and Barghash) Majid who was governor of Sohar became ruler of Zanzibar, while his third son Thuwaini who was governor of Muscat became Sultan of Sultanate Muscat and Oman[16] (ibid).

During the reign of the grandson of *Imam* Ahmed bin Said (the founder) known as *Sayyid*[17] Hamed bin Said bin Ahmed (1784 - 1792), who became *de facto* ruler of Oman, the capital was moved from Rustaq to Muscat in 1784 (MI, 1990; al Farsi 2010), where it remains to this day. Another change happened during the *al Busaid* dynasty: he abandoned the *al Imamah* system became *A'Sayyid*. Then *'A'Sayyid' Sultan bin Ahmed bin Said* became the first Sultan of Oman in 1792 (al Farsi, 2010), and was keen in international business and political insights and thoughts within his government. This development reflected upon Oman's relations with the larger powers which had been regulated by treaties of friendship and commerce and specific understandings, even the British Empire at its zenith. Oman although within the British zone of influence, retained its independence (Hawley, 2012). The leaders of *Al busaid* also developed leadership methods focusing on financial and administrative organisations and developed new political positions in the public sector such as Prime Minister, Minister, especial advisor, and especial secretary to the Sultan (al Farsi, 2010).

As mentioned in the aforementioned literature review of Oman's history, it seems that within modern history, the real institutional development and institutional transformation can be dated to 1792, Sultan *A'Sayyid Sultan bin* Ahmed *bin* Said's ruling days. His institutional evolution continued when his son Sultan *A'Sayyid* Said *bin* Sultan *bin* Ahmed *bin* Said 'Great Said' undertook further institutional developments.

[14] One example is when the Persians surrounded *Basra* in 1756 (Hawley 2012: p.58) in 1775 (MI 2010: p.40), the *Wali* (Governor) of Baghdad sought the help of the *Imam*. Omani army managed to end the siege and recognition of this great victory, the Ottoman Sultan allocated an annual fund to Oman till 1856, (Hawley 2012).

[15] Mogul Emperor; Shah Alam thanked Oman for eliminating piracy from Indian coast a treaty is signed during 1766, (Hawley 2012).

[16] This name was changed by H. M. Sultan "Qaboos" to Sultanate of Oman 1970.

[17] *Sayyid* is the title added to royal family means "Sir" probably derived from sovereignty.

During the early years of Islam, Omanis from the northern regions embraced the *Abadhi*[18] sect of Islam which adopts the principles of consultation (A'*Shura*)[19]. It established an independent state called the *Imamate* of Oman, while the south and other parts of Oman embraced the *Sunni* sect of Islam. Generally, Omanis tend to concentrate on Islam as the country's religion, without referring to its sects. Despite the dominance of *Ibadhism* the second largest sect is *Sunni*, and there is a minority of *Shi'as* in some limited costal parts of Oman. However, the basic law affirms and declares simply that 'the religion of the State is Islam in Oman with no reference of any Islamic sects, which mean that there is no sectarian discrimination or partisanship.

The *Al busaid* dynasty began minting coins in1890, beside trading in Indian Rupees, Maria Teresa Dollars and the English Golden Pound. This stimulated economic recovery in Oman which became the business centre for weapons and ammunition, supplies from Belgium, France, Germany and Britain and exports to Persia and Afghanistan. However, the *Imamat* system rose again between 1913 and 1919 which led to instability and impeded this economic development, until the focus changed to military empowerment and military services organisation, (ibid).

This gives a broad picture of the success of Oman leadership's and institutional strength throughout history. It led to the creation of an "Omani commercial empire" during the first half of the 19th century that included several areas of East Africa, was a powerful maritime presence on the Indian Ocean, and established balanced political relations with the great powers of that time, particularly Britain, France and the United States of America[20]. However, for political and economic reasons the status of Oman started to deteriorate as a result of the division of the two Sultanates (Oman and Zanzibar), and the loss of most of the vessels of its fleet, (MI 2012/2013; Common, 2008a, Common, 2008b).

The Sultan Said *bin* Taimur[21] (the father of the present Sultan who ruled from 1932 to 1970, inherited a debt-ridden state along with the throne, and Oman itself was unstable and experiencing sporadic civil unrest. The political compromise did nothing to bring the economy out of recession.

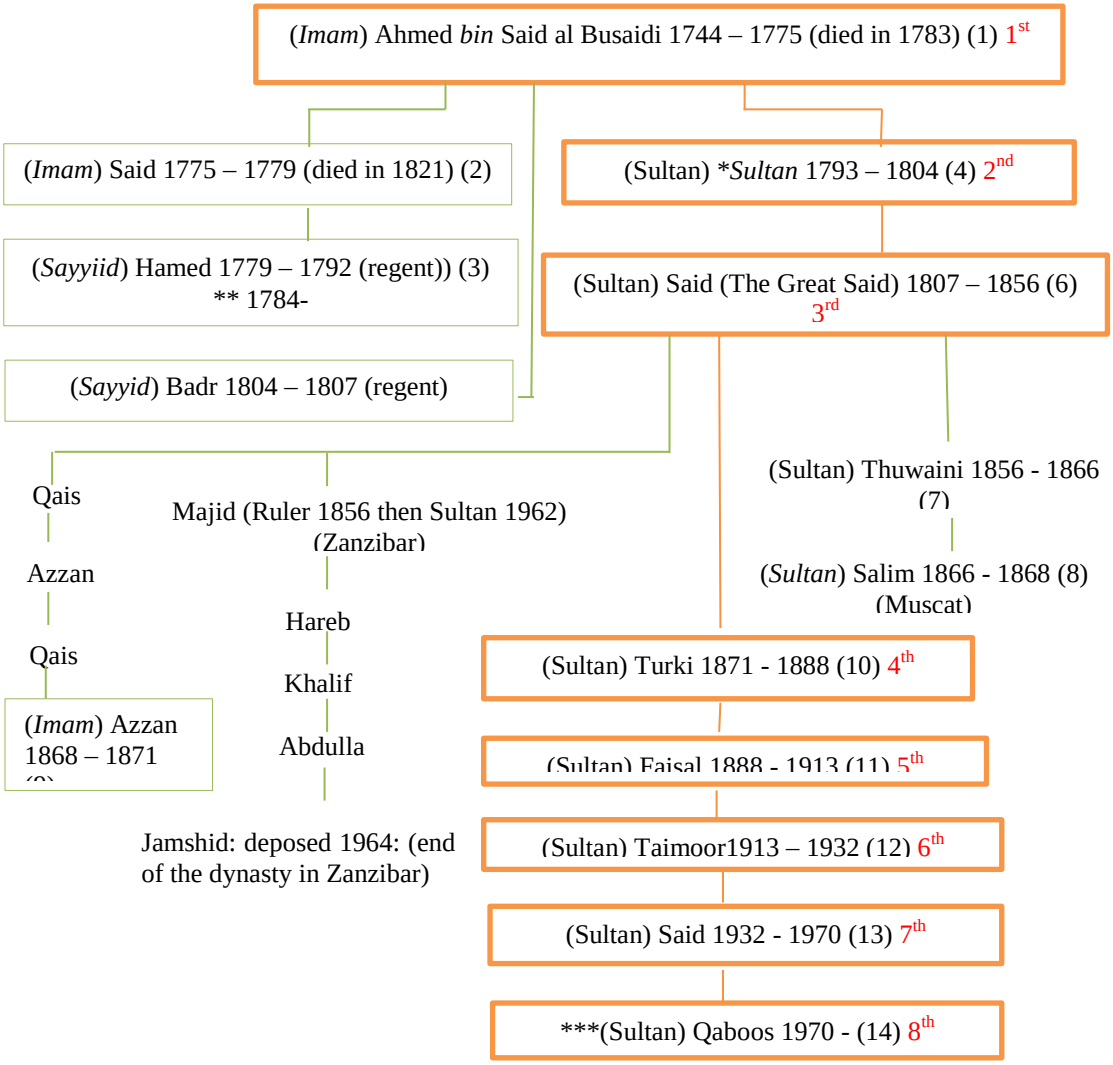
[18] *Abadhi sect* attributed to *Abdulla Ibin Ibadh.*

[19] *A'Shura* is an Arabic word means parliament or Consultation; in Arabic grammar (*Al*) or (*al*) or (*el*) means (The). The actual word is *Al shura* but (L) is not pronounced.

[20] Ahmed bin Nu'man al Ka'abi was first Arab ambassador to delivery massage from Sultan to USA president who travelled from Muscat-Zanzibar-one stop in Saint Helena- New York, in 1840.

[21] Or Taimoor.

He kept his country as closed off and inaccessible as possible and maintained his aloofness. He left Oman with three elementary schools with less than 800 students and three small medical clinics. His policy was based upon avoiding indebtedness to international funds or countries, so as not to be under the pressure of debt repayments, especially during the economic global recession crisis in 1930s, besides suffering an insurgency.



Notes:

Al Busaid dynasty's (*Imams*, *Sayyids* and Sultans) chronological sequence in Oman. The coloured line illustrates the grandchildren who descended from Sultan Said (The Great Said) to Sultan Qaboos. They are 'The royal Family' titled as '*Al Said*' while the rest of the Al Busaidi family titled as '*A'Sayyed*'.

*Sultan as a given name appears in Italic, Sultan as title appears in normal.

** Means the period where th institutional development commenced as per al Farsi, 2010.

*** Sultan Qaboos is fourteenth ruler in the Al Busaidi dynasty, and 8th in the '*Al Said'* family.

Sultan Qaboos as the 14th as *al busaid* dynasty and eighth in descending from his grandfather (*Imam*) Ahmed bin Said *Al busaidi*, came into the power, and ruled Oman on 23rd July 1970 after his father's Said *bin* Taimur abdicated. His educational background is in the United Kingdom (he graduated from Sandhurst), and he made a complete break with the past of his father. The year 1970 is seen as pivotal in the eyes of Omanis, as the accession of Sultan Qaboos marked the point at which the modernisation of the country began. In 1970, the title '*A'Syeed*' moved to members of Royal Family, The Sultan is called by his title of 'His Majesty The Sultan Qaboos *bin* Said, Sultan of Oman'. The pace of socioeconomic development began to quicken and the society grew more complex and heterogeneous: the new Sultan has steered the country through the difficult early years towards an era of unity, peace and prosperity, (Paterson 2005; Hawley, 2012).

One of his first declarations upon acceding as Sultan concerned his intention to develop the country[22] (and is still remembered today as an example of a promise and fulfilment in his early years) and he soon formed the first cabinet which was announced on 15th August 1970. He formed four Ministries; Education, Justices, Interior and Health and appointed his uncle as Prime Minister. However, his uncle only lasted about a year in the office before he resigned, and there has never been another prime minster. Thus, the Sultan commenced with the state structure building and establishing the necessary government institutions and organisations. He constituted the Council of Ministers, where structuring, and constructing development began.

Sunday, the 9th of February 1975, was a particular day in Oman's socioeconomic development; on this date, the Sultan presided over the first meeting of the newly established 'Development Council', which made a decision defining 'the objectives and policy of socioeconomic development in Oman' stating a number of social and economic principles which are still valid today. The decision, which was tantamount to an economic development charter, embraced five basic principles, three of which

[22] '*I promise you to dedicate myself to the speedy establishment of a modern government in no time. … O' My people, I shall work as promptly as possible to ensure a better life in a better future... My people and brothers, yesterday we were completely in the dark but with the aid of God, tomorrow a new dawn will raise....*'.

pertained to the strategy of economic development and two related to the social development. These principles, which are still valid, as follows[23];

1) *Oil resources are the property of all Omani generations and not of the present one alone, which means: Oil is as 'depletable' natural asset; therefore, it is not only for the present generation; it is an asset which must be invested for the benefit of present and future generations.*

2) The diversification of sources of National Income is the guarantee for the economic future of Oman; the decision stated the following; "At this stage, the prime goal of economic development plans must be the implementation of income-generating projects so that the economic structure of national income may improve and new sources of income, additional to oil revenues, may develop and guarantee the economic future of the country''.

3) The private sector is the backbone of a national economy which is 'Devoid of Monopoly', in the connection, the decision stated the following: "Our developmental policy must be based on providing the requirements necessary for the emergence of a national economy based on an efficient and competent private sector, whereby all the talented will have a role to play in an atmosphere of free competition and no monopoly''.

4) The goal of Social Development is bringing up an Omani citizen capable of undertaking economic and productive activities, the decision expressed this principle in the following words; "Due regard should be given to the deployment of domestic human resources in order to enable every individual to perform his economic role completely''. In this respect, educational and training programmes should be expanded and nutrition and public health should be improved, provided the objective of these programmes be enabling citizens to perform economic and productive activities and not merely meeting the requirements of the administrative machinery.

5) Investment should be distributed in a way that leads to the elimination of variations in living standards throughout the Sultanate, the decision provided for the above principle in the following words; "it is imperative to distribute investments to the various parts of the Sultanate in order to convey the fruits of economic prosperity to each and every citizen for the purpose of eliminating

[23] "The economy of Oman A decade of progress," a historical book issued by Ministry of Commerce and industry (MCI) about Oman economy during the period (July 1970 to July 1980), (pp33-35).

variation in living standards. Priority in this respect should be given to the less developed parts". Socioeconomic Principles, 1975 (SEP 1975).

B) Omani Land:

Omani land has a contrasting landscape. The plain overlooking the Oman Sea and the Arabian Sea has an area of about 3% of the total landmass. The mountain ranges occupy about 15% of the total area consisting of two deeply dissected narrow mountainous areas; one in the north of the country (*al Hajar* Mountain range), and the other in the south (Dhofar Mountains range). Le Métour et al. (1995) state that *al Hajar* Mountains (Sedimentary and Crystalline rocks 260-90 years *Ma*[24]) extend about 700 km along the edge of Sea of Oman[25] from *Ras*[26] Musandam by the Strait of Hormuz (the gateway to the Gulf in the north, where the mountains soar to around 1,800 metres above the Strait of Hormuz, which runs between the Omani and Iranian coasts with the navigable international shipping lanes lying on the Omani side, to (*Ras Al Jips*), in the southern east part in The *Sharqiyah*[27] (ibid).

In Northern Oman, the mountains descend steeply into the Sea of Oman[28]. These include massifs such as *Jabal al Akhdhar* (The Green Mountain] including *Jabal Shams*, the highest peak, 3,075 metre above sea level), and the Muscat and Musandam massifs.

Several *Wadis* (valleys) cut through the *Hajar* Mountains. The largest is *Wadi* of Samail that divides the *Hajar* Mountains into the western and eastern parts of the northern mountain chain. The eastern parts of Oman's northern mountains are formed from a block of Oceanic crust and upper mantle thrust upwards into the Arabian continent. The block has been tilted and eroded, so one can laterally walk down at least 20 km into the former interior of the earth (Columbia University, 2012). This opens an opportunity for the geological scientists for future geological studies. In contrast, in the softer Sedimentary rocks characteristic of the southern mountains – the "Dhofar Mountains range"- there can be found a large tilted slab of essential flat-bedded Mesozoic (120-65 Ma), and Tertiary limestone (60-5 *Ma*), which reaches an altitude of almost 2,000 meters, overlooking the *Salala* (in Dhofar) coastal plain (Le Métour et al., 1995). The Dhofar

[24] (*Ma*) equal to one million years.
[25] Previously known as Gulf of Oman.
[26] *Ras* is an Arabic word means Head or Cape; the end of a mountain in a sea.
[27] *The Sharqiya* it is an Arabic word means the eastern.
[28] In the coastal areas it is hot and humid in summer (May-September, but pleasant in winter (October-April).

Mountains dip gently into the north beneath the sands of the *Rub'a Al Khali* desert[29] (located between the Sultanate of Oman and the Kingdom of Saudi Arabia), The Dhofar range, long known for its production of frankincense, presents a striking contrast between the extensive northern desert, and the narrow, shrub-lined coastal belt swept by Monsoon[30] winds. These mountains overlook the Arabian Sea and form a natural barrier that makes access difficult, and forces the Monsoon winds to release their moisture.

C) Demographic Data

The population density (person/km$^{2)}$ is 9.0, here are some indications comparisons between census 2010 (the latest census),, 2003 and 1993, (OME, 2011):

- Below 15 years of total Omani population has decreased from 51.6% in 1993 to 40.6 % in 2003 to 35.2% in 2010.
- The age 15-64 consequently has increased from 56.2% in 2003 to 51.3 in 2010.
- National women labour force increased from 8.6% in 1993 to 22.2% in 2003 to 27% in 2010.
- Illiteracy rate has declined from 21.9% in 2003 to 12.2% in 2010.
- Computer users increased from 16.4% in 2003 to 52.8% in 2010, and those who use internet facilities increased from 7.1% in 2003 to 33.1% in 2010.
- Housing units increased from 431,000 units (2003) to 551,058 units (2010).

The population growth since first census in 1993 of Omani and expatriates population is evolved as it is shown in the following table:

Governorate	Population 2010
The Governorate of Muscat	775,878
The Governorate of Dhofar	249,729
The Governorate of Musandam	031,425
The Governorate of Buraymi	072,917
The Dhahirah Governorate	151,669
The North Batinah Governorate	483,582
The South Batinah Governorate	289,008
The Dakhiliyah Governorate	326,651
The South Sharqiyah Governorate	188,032
The North Sharqiyah Governorate	162,482
The Wusta Governorate	042,111

Oman has a number of Governorates; 1) The Governorate of Muscat. 2) The Governorate of Dhofar. 3) The Governorate of Musandam. 4) The Dakhiliyah[31]

[29] The *Rub' Al Khali* (Arabic): Means the Empty Quarter.

[30] Oman's rainfall is relatively low and irregular that the exception of the Southern part of Oman where heavy rains occurs during the Monsoon season (June-September).

[31] Means Interior.

Governorate, 5) The Governorate of North Batinah, and 6) The Governorate of South Batinah, 7) The Governorate North Sharqiyah and, 8) The Governorate of South Sharqiyah. 9) The Governorate of Buraymi and, 10) The Governorate of Dhahirah. 11) The Governorate of Wusta[32]. Administrative subordination of all governorates is under the Ministry of Interior[33] except the Governorate of Muscat and the Governorate of Dhofar which directly reports to the *Diwan* of the Royal Court and the Council of Ministers (CM). The following diagram (Fig. 2.1b) illustrates the location of those Governorates within Oman.

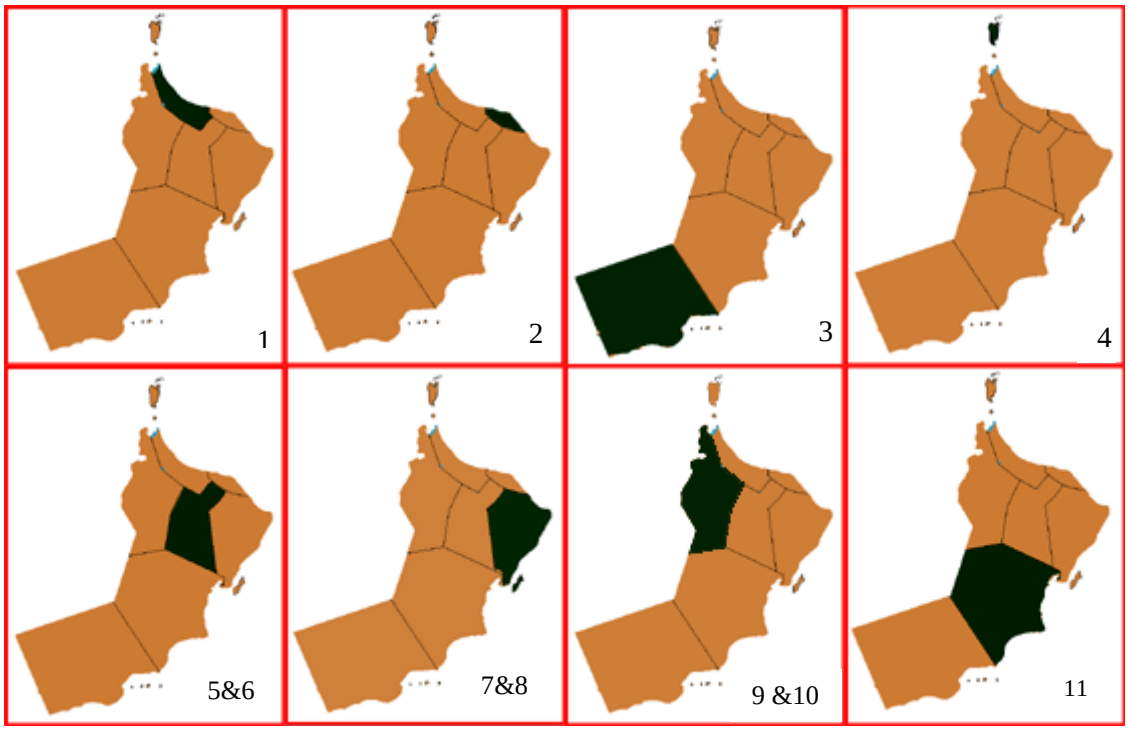


Figure 2.1 b: The Oman Governorates.
Source: Oman Royal Police.www.rop.gov.om/english/governoratemaps.asp.

[32] Means Midland.
[33] In Arab countries usually Ministry of Interior includes the police organisations and institutions headquarters, but in Oman case they are separate organisations.

Furthermore, the NCSI published recently the estimated population during 3014 as follows:

Year	Omani 000	Expatriates 000	Total Population 000
1993 *	1,465	535	2,000
1994	1,512	538	2,050
1995	1,557	574	2,131
1996	1,602	612	2,214
1997	1,642	613	2,255
1998	1,685	602	2,287
1999	1,729	596	2,325
2000	1,778	624	2,402
2001	1,826	652	2,478
2002	1,870	668	2,538
2003*	1,782	559	2,341
2004	1,803	613	2,416
2005	1,843	666	2,509
2006	1,884	693	2,577
2007	1,923	820	2,743
2008	1,967	900	2,867
2009	2,018	1,156	3,174
2010*	1,957	816	2,773
2011-2013	2,213	1,744	3,957

Oman population 1993-2013 (NCSI 2014); * Census Years

Year / Value	R.O	USD = (R.O 0.3847)	Year / Value	R.O	USD = (R.O 0.3847)
1980	1,979	5,147	1997	2700	7,022
1981	2,266	5,893	1998	2,269	5,901
1982	2,292	5,961	1999	2,460	6,398
1983	2,237	5,818	2000	2,989	7,773
1984	2,332	6,434	2001	3,871	10,067
1985	2,474	6,434	2002	2,905	7,556
1986	2,177	5,478	2003	3,464	9,010
1987	2,325	6,047	2004	3,879	10,088
1988	2,068	5,378	2005	4,607	11,981
1989	2,246	5,841	2006	5,453	14,183
1990	2,700	7,022	2007	5,787	15,050
1991	2,482	6,455	2008	7,798	20,281
1992	2,544	6,616	2009	5,508	14,324
1993	2,402	6,247	2010	7,635	19,856
1994	2,423	6,302	2011	7.445	19,363
1995	2,490	6,476	2012	7,628	19,840
1996	2,653	6,900	2013	7,475	19,440

GNI per Capita in Oman, the shaded years are prior to vision 2020.

Appendix 2.2

Separation of State Power Decree

In order to separate of the judicial, legislative, and executive authorities an important development was introduced in March 2012, when Royal Decree 9/2012, stated that the Supreme Judicial Council shall be constituted under the chair of the Sultan with the membership of:

- Chairman of the Supreme Court – deputy chairman;
- Chairman of the Administrative Judicial Court;
- the Attorney – General;
- the most senior deputy chairman of the Supreme Court;
- the chairman of the *Shari'ah* (Islamic) Court Circuit at the Supreme Court;
- deputy chairman of the Administrative Judiciary Court.

When one of the members is absent or has a hindrance, he shall be replaced by his immediate subordinate at the agency he is representing.

It was also declared that the Supreme Judicial Council aims to ensure the independence of judiciary, developing it, integrating the values, ethics and morals of judicial work and caring for its systems.

While seeking to achieve its objectives, by using all its jurisdiction and powers, article three states that the Supreme Judiciary Council may in particular do the following;

- Shape the general policy of the judiciary;
- Ensure smooth running of work at the courts, public prosecution and its development;

- Ensure facilitation of the litigation procedures and make litigation accessible to litigants.
- Look into the nominations raised by the respective authorities to fill the judicial positions, positions of the members of the judiciary Administrative Court, public prosecution positions either through appointment or promotion, as per the law provided that the filling of such positions should be according to a Royal Decree;
- propose draft laws related to the judiciary,
- give opinion about the draft laws raised by the respective authorities;
- give opinion about the draft agreements for the judicial cooperation between Oman and other countries;
- any other subjects that the Sultan may submit to the Council for study and comment.

The Supreme Judiciary Council shall meet under the chair of the Sultan. The council shall issue a decision about its work system. The supreme Judiciary Council shall have a Secretariat-General that will practice all the administrative and financial liabilities to ensure smooth running of work at the council. A decision about its formation and work system shall be issued.

Accordingly, the Royal Decree 10/2012 was issued for Regularising Management of Judiciary Affairs. The administrative Affairs Council stipulated in the judiciary law shall practice the jurisdictions of the Ministry of Justice. The chairman of the Council shall practice the jurisdictions and powers delegated to the Ministry of Justice, stipulated in the mentioned law, except for the jurisdictions stipulated in the Law. The affiliation of the court, public administration for judicial inspection, the Public Administration of Courts, their employees and financial allocations stipulated to them

from the Ministry of Justice to the chairman of the Administrative Affairs Council stipulated in the Judiciary Law without prejudice to the employment conditions for the said employees.

The chairman of the Council shall have the jurisdictions and powers of the Minister of Justice, as per the laws and Royal decrees in force, over the assets, rights, records and employees in these authorities. The Attorney-General shall practice the jurisdiction of Ministry of Justice, as per the provision of the judiciary Authority Law, as per a request from the Administrative Affairs Council stipulated in the same Law.

The chairman of the Inspection Administration at the Public Prosecution shall practice the jurisdiction stipulated in the law, as per the request of the administrative affairs Council stipulated in the judicial Authority Law. The chairman of the Administrative Judiciary Court shall practice the Jurisdictions and powers granted to the Minister of Justice as per the Administrative Judiciary Court Law. The deputy chairman of the court shall practice the jurisdictions of the chairman of the court as per the provision of the same Law. The chairman of the Technical Inspection Authority at the Administrative Judiciary Court shall practice the jurisdiction for the Minister as per the provision of article (88) of the aforesaid Administrative Judiciary court as per a request from the administrative affairs ;council stipulated in the same law. The chairman of the Supreme Court shall have the jurisdictions of the Ministry of Justice as per the provision of the conflict of Jurisdiction Authority Law, and the aforesaid provisions in coordination with the chairman of the Administrative Judiciary Court and the Ministry of Finance. He shall also practice the jurisdiction of the Ministry of Justice as per the same Law.

The state's organisational structure is as follows;

- The Sultan is the Head of State, its highest and final authority and the supreme commander of the Armed Forces. His person is inviolate, respect for him is obligatory and his command must be obeyed. He is the symbol of national unity

and its guardian and defender. Article 42 of the State Basic Law defines his functions.

- The Council of Oman (CO) consists of twenty nine Ministers as of 2013 and assists the Sultan in drawing up and implementing general state policy and is the authority responsible for ensuring that policy is implemented.
- The Council of Ministers (CM) submits recommendations to the Sultan on economic, political, social, executive and administrative matters of concern to the government including proposals for draft laws and decrees, ways of safeguarding the interests of citizens, guaranteeing the provision of essential services and improving the economic, health and cultural standards of the population. It also sets out the general goals and policies for economic, social and administrative development.

Appendix 2.3

Oman Strategic Vision (1996-2020) (GDP)

Sector	**1996**	**2020**	**Change %**
1. Petroleum activities:			
Oil	33.5	09.0	-24.5
Gas	01.5	10.0	8.5
Total	**35.0**	**19.0**	**-16**
2. Non-petroleum activities:			
2. 1 Agriculture & fisheries	**04.1**	**05.1**	**1.0**
2.2 Industry activity:			
2.2.1 Mining & Quarrying	00.6	02.0	1.4
2.2.2 Manufacturing	05.4	15.0	9.6
2.2.3 Electricity & Water	01.7	02.0	0.3
2.2.4 Building & Construction	03.2	10.0	6.8
2.2 Total Industry activities:	**10.9**	**29.0**	**18.1**
2.3 Services activities:			
2.3.1 Trade and Tourism	22.2	26.0	3.8
2.3.2 Transport & Communication	07.0	08.0	1.0
2.3.3 Government services; Public admin., Defence, Education, Health, other community, social and personal services Private Household with employed persons.	13.9	10.0	-3.9
Total services activities	**43.1**	**44.0**	**0.9**
Financial Intermediation Services indirectly measured	-0.2	00.0	00.2
Total Non-Petroleum Activities	**58.1**	**78.1**	**20.0**
GDP at Basic prices (oil + non-oil)	**93.1**	**97.1**	**04.0**
Other services taxes less subsidies on product	07.1	02.9	-4.2
GDP%	100	100	

Source: Ministry of National Economy OME,(1995)

Appendix 2.4: socioeconomic statistics

1a: GDP by Kind of Economic Activity at Current Price – Relative Share (%). 1991-2001 . Source: NCSI 2001

Economic Activity	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
1. Total Hydrocarbon Activities	**41.9**	**40.8**	**37.1**	**36.5**	**38.1**	**42.0**	**42.0**	**31.9**	**40.2**	**49.9**	**43.8**
1.1 Crud Petroleum.	40.7	39.6	35.8	35.2	37.2	41.1	39.2	30.7	39.1	48.6	41.8
1.2 Natural Gas	1.2	1.2	1.3	1.3	0.9	0.8	0.9	1.2	1.1	1.3	2.1
2. Total Non hydrocarbon activities	**59.4**	**60.2**	**63.9**	**64.8**	**63.5**	**59.5**	**61.7**	**68.3**	**60.0**	**51.5**	**57.3**
2.1 Agriculture & Fishing	**2.6**	**2.3**	**2.4**	**2.5**	**2.8**	**2.5**	**2.6**	**3.2**	**3.0**	**2.2**	**2.3**
a. Agriculture	2.1	1.8	1.8	1.9	1.8	1.7	1.8	2.3	2.1	1.6	1.7
b. Fishing	0.5	0.6	0.6	0.6	1.0	0.8	0.9	0.9	0.9	0.6	0.7
2.2 Industry Activities	**7.6**	**8.0**	**8.6**	**8.6**	**8.4**	**7.4**	**8.5**	**12.5**	**10.0**	**9.2**	**12.6**
c. Mining and Quarrying	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.3
d. Manufacturing	**3.4**	**3.7**	**4.2**	**4.3**	**4.7**	4.0	4.0	**4.7**	**4.4**	**5.7**	**8.8**
- Manufacturing of Refined petroleum Products	0.3	0.4	0.8	0.8	1.0	0.7	0.6	0.8	0.6	0.6	0.7
- Manufacturing of Chemicals and Chemical Products	-	-	-	-	-	-	-	0.3	0.3	2.0	4.7
- Other Manufacturing	3.1	3.2	3.4	3.6	3.6	3.4	3.4	3.6	3.4	3.2	3.4
e. Electricity and Water Supply	**0.9**	**0.9**	**0.9**	**1.0**	**0.9**	**0.9**	**1.1**	**1.3**	**1.2**	1.0	1.1
f. Building and Construction	**2.9**	**3.2**	**3.3**	**3.0**	**2.6**	**2.2**	**3.2**	6.2	4.0	2.1	2.4
2.2 Services Activities	**49.2**	**49.8**	**52.9**	**53.7**	**52.3**	**49.6**	**50.6**	**52.6**	**47.1**	**40.0**	**42.4**
g. Wholesale and Trades	11.8	12.2	12.9	12.5	12.8	12.3	12.7	10.4	8.7	7.6	8.1
h. Hotels and Restaurants	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	0.9	0.7	0.8
i. Transport, Storage and Communication	5.6	5.6	6.0	6.3	6.3	6.2	6.9	6.2	5.4	4.8	5.2
j. Financial Intermediation	2.5	2.5	2.7	2.8	3.1	3.1	4.5	5.6	5.1	3.9	4.3
k. Real Estate & Business Activities	8.3	8.5	9.3	9.1	7.9	7.1	6.9	7.6	6.8	5.5	5.9
l. Public Administration & Defence	12.7	12.9	13.1	13.9	13.3	12.1	11.2	12.0	11.1	9.4	9.7
m. Education	3.6	3.7	4.1	4.2	4.2	4.3	4.2	5.1	4.9	4.4	4.6
n. Health	1.6	1.6	1.8	1.8	1.7	1.8	1.7	2.1	2.0	1.7	1.8
o. Other Community, Social and Personal Services	1.8	1.8	1.9	2.0	1.9	1.6	1.5	1.9	1.8	1.5	1.5
p. Private household with Employed persons	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.5	0.5	0.4	0.5
Financial Intermediation Services Indirectly Measured	-2.1	-1.9	-1.9	-2.2	-2.4	-2.3	-2.6	-2.5	-2.6	-2.0	-2.2
GDP at Basic Prices	99.1	99.0	99.1	99.2	99.1	99.2	99.3	97.6	97.7	99.4	99.0
Plus: Taxes less subsidies on products	0.9	1.0	0.9	0.8	0.9	0.8	0.7	2.4	2.3	0.6	1.0
GDP at Market Prices	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

1b: GDP by Kind of Economic Activity at Current Price – Relative Share (%). 2002-2012 * provisional. NCSI 2013

Economic Activity	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	***2012**	**Av. 1996-2010**
1. Total Hydrocarbon Activities	**42.6**	**41.8**	**42.8**	**49.2**	**47.1**	**44.1**	**50.6**	**39.7**	**46.1**	**52.0**	**51.6**	**43.6**
1.1 Crud Petroleum.	40.5	39.3	40.2	45.5	43.0	40.4	46.9	36.1	42.3	48.2	47.8	41.0
1.2 Natural Gas	2.1	2.5	2.6	3.7	4.1	3.7	37	3.6	3.8	3.8	3.8	4.7
2. Total Non hydrocarbon activities	**58.8**	**59.6**	**58.4**	**53.1**	**54.6**	**57.4**	**50.4**	**62.5**	**56.0**	**53.6**	**53.7**	**57.9**
2.1 Agriculture & Fishing	**2.3**	**2.2**	**1.9**	**1.6**	**1.4**	**1.4**	**1.1**	**1.5**	**1.4**	**1.2**	**1.2**	**2.0**
a. Agriculture	1.6	1.5	1.2	1.0	0.9	0.9	0.7	0.9	0.9	0.8	0.7	1.4
b. Fishing	0.7	0.7	0.7	0.6	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.7
2.2 Industry Activities	**12.9**	**13.7**	**13.4**	**14.4**	**16.6**	**17.0**	**16.4**	**19.9**	**18.0**	**18.6**	**17.6**	**13.5**
c. Mining and Quarrying	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.3	0.3
d. Manufacturing	**8.6**	**8.9**	**8.6**	**8.6**	**11.3**	**10.8**	**10.5**	**11.6**	**10.6**	**11.7**	**11.0**	**8.1**
- Manufacturing of Refined petroleum Products	0.8	0.5	0.3	0.4	0.4	0.7	0.5	0.8	0.2	0.5	0.3	0.6
- Manufacturing of Chemicals and Chemical Products	3.9	4.7	4.8	5.0	7.8	6.5	6.8	5.8	5.7	7.0	6.7	4.5
- Other Manufacturing	3.9	3.7	3.5	3.2	3.1	3.6	3.2	5.0	4.6	4.2	3.9	3.6
e. Electricity and Water Supply	1.0	1.3	1.3	1.7	1.2	1.1	0.8	1.2	1.2	1.1	1.2	1.2
f. Building and Construction	2.9	3.3	3.3	3.8	4.0	4.9	4.8	6.7	5.8	5.4	5.1	4.0
2.2 Services Activities	**43.6**	**43.7**	**43.0**	**37.1**	**36.6**	**39.0**	**32.9**	**41.1**	**36.6**	**33.8**	**34.9**	**42.4**
g. Wholesale and Trades	7.9	8.2	8.7	7.4	7.9	9.2	8.9	8.9	7.4	6.9	7.2	9.0
h. Hotels and Restaurants	0.8	0.8	0.7	0.7	0.8	0.9	0.8	0.9	0.8	0.7	0.7	0.8
i. Transport, Storage and Communication	6.1	6.5	6.7	5.4	5.7	5.7	5.1	6.2	5.3	4.6	4.5	5.8
j. Financial Intermediation	4.5	4.5	4.5	3.9	3.8	4.6	3.7	5.1	4.4	4.1	4.0	4.4
k. Real Estate & Business Activities	5.8	6.0	5.4	4.6	4.2	4.3	3.5	4.9	4.4	3.9	3.6	5.5
l. Public Administration & Defence	9.8	9.1	8.9	7.6	7.4	7.4	5.5	7.4	7.1	7.2	8.1	9.0
m. Education	4.8	4.9	4.7	4.4	4.0	4.2	3.3	4.7	4.4	3.8	3.9	4.5
n. Health	1.8	1.8	1.7	1.6	1.4	1.5	1.2	1.6	1.6	1.4	1.5	1.7
o. Other Community, Social and Personal Services	1.5	1.4	1.3	1.2	1.0	1.0	1.8	1.1	1.1	1.0	1.0	1.4
p. Private household with Employed persons	0.5	0.5	0.5	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.4
Financial Intermediation Services Indirectly Measured	-2.4	-2.2	-2.0	-1.8	-1.7	-1.8	-1.5	-2.3	-2.1	-2.1	-1.9	-2.1
GDP at Basic Prices	99.0	99.2	99.3	100.5	100.0	99.7	99.4	99.9	100.0	103.5	103.4	99.3
Plus: Taxes less subsidies on products	1.0	0.8	0.7	-0.5	0.0	0.3	0.6	0.1	0.0	-3.5	-3.4	0.7
GDP at Market Prices	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

2a: GDP by Kind of Economic Activity at Current prices – Annual Growth (%) 1991-2001. Source: NCSI Year book 2001.

Economic Activity	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
1. Total Hydrocarbon Activities	**-14.9**	**7.0**	**-8.7**	**1.8**	**11.3**	**22.0**	**-0.9**	**-31.6**	**41.4**	**55.3**	**-12.4**
1.1 Crud Petroleum.	-15.3	6.9	-9.3	1.7	12.8	22.5	-1.2	-32.6	42.8	55.4	-14.3
1.2 Natural Gas	3.7	9.6	11.6	5.8	-28.3	3.3	16.3	11.7	5.9	50.2	56.6
2. Total Non-hydrocarbon activities	**7.6**	**11.3**	**6.6**	**4.9**	**4.6**	**3.8**	**7.5**	**2.7**	**-1.8**	**7.3**	**11.2**
2.1 Agriculture & Fishing	**-1.2**	**-2.6**	**2.9**	**9.3**	**17.1**	**-0.1**	**8.4**	**-3.9**	**3.7**	**-5.9**	**5.2**
a.Agriculture	5.2	-8.2	3.7	7.6	0.2	5.9	5.9	-4.1	4.2	-5.4	5.4
b. Fishing	-21.4	21.1	0.5	15.0	69.1	-11.1	13.9	-3.6	2.7	-7.0	4.8
2.2 Industry Activities	**15.2**	**16.6**	**7.6**	**3.1**	**4.9**	**-2.7**	**18.9**	**3.8**	**-8.6**	**15.8**	**35.7**
c.Mining and Quarrying	-4.8	8.9	-15.6	7.8	17.2	10.0	12.1	-3.2	-0.1	15.1	-22.8
d. Manufacturing	**14.1**	**16.9**	**15.0**	**6.8**	**14.7**	-4.1	1.4	4.5	4.4	63.6	52.9
- Manufacturing of Refined petroleum Products	-3.4	48.2	84.0	-1.0	41.8	-28.1	-14.8	8.4	-13.3	10.2	23.4
- Manufacturing of Chemicals and Chemical Products	-	-	-	-	-	-	-	-	-	773.1	134.0
- Other Manufacturing	16.3	13.7	5.5	8.6	8.7	2.8	4.6	3.8	7.4	15.0	7.4
e. Electricity and Water Supply	**1.5**	**7.7**	**-1.0**	**15.6**	**-1.1**	**9.6**	**25.2**	**1.8**	**5.2**	9.0	2.4
f. Building and Construction	**24.1**	**19.6**	**3.5**	**-5.4**	**-8.0**	**-5.7**	**49.1**	**4.2**	**-30.1**	-34.1	14.8
2.2 Services Activities	**7.0**	**11.2**	**6.6**	**4.9**	**4.0**	**5.1**	**5.7**	**2.8**	**-0.9**	**6.2**	**5.8**
g. Wholesale and Trades	12.6	13.2	6.2	0.3	9.7	6.0	7.0	8.7	-7.9	9.4	7.1
h. Hotels and Restaurants	0.0	6.2	10.7	4.2	7.4	15.4	-1.9	-1.8	-0.1	3.0	4.5
i. Transport, Storage and Communication	19.4	10.0	7.2	8.6	6.8	9.3	14.8	7.5	-2.9	11.1	8.4
j. Financial Intermediation	2.6	10.0	7.7	8.9	15.1	12.7	50.3	-7.5	0.3	-3.4	9.7
k. Real Estate & Business Activities	13.6	12.3	8.7	1.6	-7.6	-0.3	1.0	0.9	-0.1	1.3	6.4
l. Public Administration & Defence	-3.6	10.8	2.4	9.4	2.3	0.6	-4.2	-1.1	2.5	6.3	2.9
m. Education	5.1	11.3	11.8	7.1	5.7	14.4	0.0	3.4	9.6	12.4	5.4
n. Health	5.7	12.1	12.6	1.8	2.5	13.3	1.3	4.5	4.5	7.6	3.4
o. Other Community, Social and Personal Services	2.1	6.0	8.9	6.2	2.3	-4.2	-5.4	0.4	3.1	5.4	1.6
p. Private household with Employed persons	42.3	-8.2	3.5	-6.7	15.3	-4.8	2.4	5.6	1.7	5.3	6.9
Financial Intermediation Services Indirectly Measured	1.8	-0.1	0.7	17.0	16.2	7.5	15.1	13.7	9.6	-1.0	7.5
GDP at Basic Prices	**-3.1**	**9.7**	**0.4**	**3.5**	**6.8**	**10.7**	**3.8**	**-11.4**	**11.3**	**27.3**	**-0.6**
Plus: Taxes less subsidies on products	21.2	21.0	-8.8	-4.8	9.2	5.1	-8.0	4.9	30.1	-65.1	59.9
GDP at Market Prices	**-2.9**	**9.8**	**0.3**	**3.4**	**6.8**	**10.7**	**3.7**	**-11.1**	**11.5**	**25.2**	**-0.3**

2b: GDP by Kind of Economic Activity at Current prices – Annual Growth (%) 2002-2012. *Provisional. Source: NCSI Year book 2013

Economic Activity	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	***2012**
1. Total Hydrocarbon Activities	**0.6**	**5.5**	**17.1**	**44.1**	**14.7**	**5.9**	**65.9**	**-37.7**	**40.7**	**33.7**	**10.7**
1.1 Crud Petroleum.	0.4	4.3	17.1	41.8	13.3	6.2	68.0	-38.9	42.0	35.2	10.7
1.2 Natural Gas	5.9	27.0	17.3	79.3	31.7	3.1	43.2	-21.5	27.8	17.6	10.4
2. Total Non-hydrocarbon activities	**5.8**	**9.0**	**12.3**	**13.6**	**22.0**	**18.9**	**27.0**	**-1.4**	**8.6**	**13.5**	**11.6**
2.1 Agriculture & Fishing	**0.7**	**4.2**	**1.7**	**5.0**	**4.5**	**9.8**	**17.3**	**5.1**	**13.4**	**5.2**	**9.0**
a. Agriculture	-0.8	3.1	-6.0	-0.2	9.0	13.9	16.9	2.9	14.6	1.4	5.8
b. Fishing	4.1	6.6	17.4	13.4	-1.8	3.3	18.1	9.3	11.5	12.2	14.3
2.2 Industry Activities	**6.1**	**14.5**	**12.2**	**32.4**	**35.1**	**20.6**	**39.2**	**-3.3**	**9.6**	**22.7**	**5.5**
c.Mining and Quarrying	0.5	-4.8	3.2	12.0	-4.0	60.6	63.7	17.7	11.0	7.8	2.2
d. Manufacturing	1.8	10.4	11.2	22.7	51.6	14.5	41.1	-12.3	10.7	31.4	4.8
- Manufacturing of Refined petroleum Products	18.3	-28.5	-45.1	91.0	8.0	139.2	-5.3	35.7	-64.3	146.6	-26.8
- Manufacturing of Chemicals and Chemical Products	-12.4	27.5	17.8	24.6	79.4	2.6	52.0	-32.2	19.4	45.8	7.4
- Other Manufacturing	17.8	1.0	11.0	15.1	15.9	27.8	31.0	22.6	13.2	7.7	4.4
e.Electricity and Water Supply	-0.7	36.3	14.2	65.1	-16.5	4.2	7.2	22.6	17.0	11.4	17.1
f. Building and Construction	25.2	20.6	13.0	46.7	24.0	39.8	41.0	10.8	6.2	10.1	4.7
2.2 Services Activities	**6.0**	**7.6**	**12.8**	**8.0**	**17.6**	**20.7**	**22.0**	**-0.7**	**8.0**	**9.3**	**15.1**
g. Wholesale and Trades	0.6	12.2	21.2	5.0	26.7	36.8	39.5	-20.4	0.6	11.2	15.7
h. Hotels and Restaurants	3.8	3.4	13.3	25.1	29.7	24.7	22.7	-8.9	7.6	1.2	14.8
i. Transport, Storage and Communication	18.5	13.3	17.9	2.5	26.3	13.2	28.8	-3.1	4.1	2.0	9.6
j. Financial Intermediation	8.6	7.3	13.7	8.8	18.2	27.7	16.5	8.9	6.3	9.2	10.5
k. Real Estate & Business Activities	2.1	10.5	3.5	7.3	8.5	16.4	17.4	12.6	7.5	4.8	3.5
l. Public Administration & Defence	4.4	-0.6	12.1	7.7	16.8	12.2	7.5	7.4	16.5	20.5	25.6
m. Education	7.5	9.3	10.5	16.5	9.2	17.5	14.2	13.5	12.7	2.5	16.4
n. Health	8.3	6.8	7.4	14.7	7.5	17.6	14.2	8.7	16.7	7.9	18.1
o. Other Community, Social and Personal Services	2.6	2.4	4.8	10.6	3.5	16.9	17.9	6.7	13.2	9.6	12.4
p. Private household with Employed persons	6.8	6.9	7.8	4.7	4.2	-3.3	19.2	12.4	0.2	18.4	27.2
Financial Intermediation Services Indirectly Measured	15.0	-0.3	0.7	13.4	12.4	22.3	22.9	17.8	10.2	17.4	5.2
GDP at Basic Prices	**3.3**	**7.7**	**14.6**	**26.8**	**18.6**	**13.5**	**44.3**	**-20.2**	**21.3**	**22.7**	**11.3**
Plus: Taxes less subsidies on products	5.9	-15.7	4.0	-179.4	-92.1	-1,173.0	189.6	-86.6	-133.4	15,193.0	5.6
GDP at Market Prices	**3.3**	**7.5**	**14.5**	**25.3**	**19.1**	**13.8**	**44.7**	**-20.6**	**21.2**	**18.6**	**11.5**

3: GDP by Kind of Economic Activity at Current Prices (R.O) 1991-2001. Source: NCSI, 2001

Economic Activity	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**
1. Total Hydrocarbon Activities	**1,441.8**	**1,508.2**	**1,588.1**	**1,644.5**	**1,724.6**	**1,803.5**	**1,858.6**	**1,714.4**	**2,411.9**	**3,745.1**	**3,279.6**	**3,300.3**
1.1 Crud Petroleum.	1,391.1	1,452.7	1,526.0	1,578.8	1,658.9	1,735.6	1,779.8	1,651.3	2,345.5	3,645.3	3,123.3	3,134.8
1.2 Natural Gas	50.7	55.5	62.1	65.6	65.7	67.9	78.8	63.1	66.4	99.8	156.3	165.4
2. Total Non-hydrocarbon activities	**2,415.5**	**2,663.8**	**2,839.2**	**2,969.8**	**3,127.5**	**3,193.8**	**3,462.5**	**3,674.7**	**3,600.3**	**3,859.4**	**4,286.4**	**4,551.1**
2.1 Agriculture & Fishing	**120.6**	**129.2**	**131.6**	**143.3**	**163.2**	**162.0**	**176.7**	**172.6**	**177.0**	**168.2**	**174.6**	**179.7**
a. Agriculture	99.0	103.9	104.6	112.2	114.4	122.8	129.0	121.7	124.7	119.5	123.6	126.6
b. Fishing	21.6	25.3	27.0	31.1	48.8	39.2	47.8	50.9	52.3	48.7	51.0	53.1
2.2 Industry Activities	**339.8**	**392.3**	**426.4**	**425.9**	**455.5**	**436.6**	**510.8**	**673.8**	**597.4**	**692.0**	**938.8**	**996.1**
c. Mining and Quarrying	12.4	13.0	12.2	14.3	12.6	14.1	14.1	20.8	22.5	25.8	19.9	20.0
d. Manufacturing	**158.8**	**177.4**	**203.6**	**202.2**	**240.0**	**226.5**	**230.5**	**252.0**	**262.6**	429.5	656.9	668.7
- Manufacturing of Refined petroleum Products	31.7	36.8	56.0	41.0	68.3	56.8	52.7	42.6	38.8	42.8	52.7	62.4
- Manufacturing of Chemicals and Chemical Products	-	-	-	-	-	-	-	16.7	17.1	149.2	349.1	305.7
- Other Manufacturing	127.1	140.6	147.5	161.2	171.7	169.7	177.8	192.7	206.7	237.6	255.1	300.6
e. Electricity and Water Supply	**42.9**	**47.9**	**52.4**	**59.1**	**61.1**	**66.7**	**75.6**	**67.7**	**71.2**	77.6	79.5	78.9
f. Building and Construction	**125.8**	**154.1**	**158.3**	**150.3**	**141.8**	**129.3**	**190.6**	**33.3**	**241.1**	159.0	182.5	228.5
2.2 Services Activities	**1,955.0**	**2,142.3**	**2,281.2**	**2,400.6**	**2,508.8**	**2,595.2**	**2,774.9**	**2,828.3**	**2,825.8**	**2,999.2**	**3,172.9**	**3,375.4**
g. Wholesale and Trades	481.6	540.0	589.1	572.7	614.8	643.6	689.8	561.6	521.1	567.0	606.2	614.8
h. Hotels and Restaurants	33.7	36.8	38.7	41.4	49.4	55.7	54.8	55.0	54.1	55.8	58.3	60.5
i. Transport, Storage and Communication	217.8	255.1	282.6	294.0	312.6	335.3	380.1	334.5	325.1	361.3	392.0	472.1
j. Financial Intermediation	93.7	100.5	106.1	117.4	140.3	157.5	234.9	300.9	303.1	292.8	321.1	348.7
k. Real Estate & Business Activities	284.4	302.0	314.8	329.5	338.2	345.5	246.7	411.2	409.7	415.1	441.5	451.0
l. Public Administration & Defence	533.3	576.7	586.3	654.2	653.9	637.2	635.1	646.4	664.1	706.2	726.6	758.7
m. Education	151.4	164.7	182.3	197.4	202.5	221.8	241.4	272.0	292.2	328.4	346.0	372.0
n. Health	66.8	73.0	81.6	84.6	84.6	92.9	97.5	114.0	118.5	127.5	131.8	142.7
o. Other Community, Social and Personal Services	76.4	79.1	84.9	91.5	91.5	85.5	84.1	103.6	105.9	111.6	113.3	116.3
p. Private household with Employed persons	15.9	14.3	14.8	17.9	21.1	20.0	20.5	29.3	32.0	33.7	36.1	38.5
Financial Intermediation Services Indirectly Measured	-77.6	-75.3	-73.8	-88.0	-107.5	-115.8	-132.4	-136.4	-153.3	-151.7	-163.1	-187.5
GDP at Basic Prices	3,779.6	4,096.7	4,353.5	4,526.3	4,744.5	4,881.5	5,188.6	5,252.8	5,858.9	7,452.8	7,402.9	7,664.0
Plus: Taxes less subsidies on products	36.7	43.8	41.4	37.7	39.7	41.3	38.2	129.0	136.8	47.8	76.4	80.9
GDP at Market Prices	**3,816.3**	**3,816.3**	**4,140.5**	**4,394.9**	**4,563.9**	**4,922.8**	**5,226.9**	**5,381.8**	**5,995.7**	**7,500.6**	**7,479.3**	**7,744.9**

Cont.: GDP by Kind of Economic Activity at Current Prices (R.O) 2002-2012. * Provisional. Source: NCSI, 2013

Economic Activity	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	***2012**	2013
1.Total Hydrocarbon Activities	**3,481.1**	**4,077.7**	**5,875.8**	**6,739.9**	**7,139.0**	**11,844.2**	**7,383.5**	**10,388.4**	**13,888.8**	**15,369.5**	**15,205.8**
1.1 Crud Petroleum.	3,271.0	3,831.1	5,433.8	6,157.7	6,538.6	10,984.4	6,708.9	9,526.6	12875.2	14,250.1	14,047.0
1.2 Natural Gas	210.1	246.5	442.0	582.2	600.4	859.8	674.6	861.8	1,013.6	1,119.0	1,158.8
2. Total Non-hydrocarbon activities	**4,955.8**	**5,561.3**	**6,345.2**	**7,814.2**	**9,288.5**	**11,793.0**	**11,628.5**	**12,633.7**	**14,339.9**	**16,008.1**	**17.198.3**
2.1 Agriculture & Fishing	**183.5**	**184.4**	**193.2**	**200.6**	**222.9**	**261.4**	**274.7**	**311.7**	**327.9**	**357.3**	**371.2**
a. Agriculture	126.9	118.0	117.8	126.6	146.4	171.1	176.1	301.7	204.5	216.3	208.9
b.Fishing	56.6	66.5	75.4	74.0	76.5	90.3	98.7	110.0	123.4	141.0	162.3
2.2 Industry Activities	**1,140.1**	**1,279.6**	**1,717.3**	**2,375.4**	**2,751.1**	**3,830.9**	**3,706.0**	**4,061.6**	**4,982.4**	**5,254.9**	**5,496.7**
c. Mining and Quarrying	19.1	24.9	27.8	28.4	42.9	70.2	82.6	91.7	98.8	101.0	114.7
d. Manufacturing	738.0	820.7	1,030.2	1,612.2	1,740.2	2,455.3	2,154.2	2,385.2	3,135.0	3,285.3	3,138.8
- Manufacturing of Refined petroleum Products	44.6	24.5	46.8	50.5	12.9	114.6	155.5	55.4	136.7	100.2	77.8
- Manufacturing of Chemicals and Chemical Products	389.7	459.0	595.4	1,111.8	1,044.6	1,588.0	1,075.9	1,284.9	1,873.3	2,011.3	1,837.5
- Other Manufacturing	303.7	337.2	388.1	449.8	574.7	752.8	933.8	1,044.8	1,124.9	1,173.9	1,223.5
e. Electricity and Water Supply	107.4	122.7	202.4	168.5	176.2	188.9	231.6	271.0	301.9	353.5	346.2
f. Building and Construction	275.6	311.4	456.8	566.3	791.8	1,116.5	1,237.6	1,313.7	1,446.7	1,515.1	1,897.0
2.2 Services Activities	**3,632.2**	**4,097.3**	**4,434.7**	**5,238.1**	**6,314.5**	**7,703.7**	**7,647.8**	**8,260.4**	**9,029.5**	**10,395.9**	**11,330.4**
g. Wholesale and Trades	685.6	828.4	879.3	1,132.1	1,490.2	2,079.3	1,654.3	1,663.4	1,850.5	2,140.7	2,042.3
h. Hotels and Restaurants	62.5	70.8	88.7	115.0	143.4	175.9	160.3	172.5	174.5	200.4	238.2
i. Transport, Storage and Communication	538.3	634.8	650.4	817.8	925.3	1,191.7	1,155.0	1,201.9	1,226.2	1,344.2	1,469.2
j. Financial Intermediation	374.0	425.2	462.4	546.5	741.2	863.4	940.0	999.3	1,091.5	1,206.3	1,383.4
k. Real Estate & Business Activities	498.4	510.7	548.0	594.8	692.4	812.5	915.5	983.5	1,030.5	1,066.5	1,155.1
l. Public Administration & Defence	753.8	845.1	910.1	1,062.6	1,192.2	1,282.1	1,376.8	1,604.5	1,933.7	2,428.2	2,764.6
m. Education	406.8	449.3	523.3	571.7	671.9	767.2	870.5	981.2	1,006.1	1,271.2	1,305.6
n. Health	152.5	163.8	188.0	206.3	244.0	278.7	302.9	353.4	381.2	450.4	543.9
o. Other Community, Social and Personal Services	119.1	124.8	138.1	143.0	167.1	197.0	210.2	237.9	260.8	293.2	320.7
p. Private household with Employed persons	41.1	44.3	46.4	48.4	46.8	55.8	62.7	62.9	74.4	94.7	107.4
Financial Intermediation Services Indirectly Measured	1187.0	-188.4	-213.6	-240.1	-293.6	-360.8	-425.1	-468.3	-549.6	-578.1	-612.6
GDP at Basic Prices Plus: Taxes less subsidies on products	8,249.9 68.2	9,450.6 71.0	12,007.4 -56.4	14,313.9 -4.5	16,133.9 48.0	23,279.3 138.8	18,586.8 18.5	22,553.8 -6.2	27,679.0 -947.8	30,799.1 -1,001.4	31,791.5 -1,730.2
GDP at Market Prices	**8,318.2**	**9,531.6**	**11,951.0**	**14,309.5**	**16,181.8**	**23,418.1**	**18,605.3**	**22,547.6**	**26,731.2**	**29,797.7**	**30,061.3**

4a: Public Finance Indicators 1980-2012. The shaded columns are prior to the vision 2020 years. Source: NCSI, 2013

	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Revenues:	**923.7**	**1,572.9**	**1,876.3**	**1,851.6**	**2,289.9**	**4,510.5**	**4,979.9**	**5,920.6**	**7,638.7**	**6,748.4**	**7,916.5**	**10,624.7**	**13,474.5**	**14,216.9**
Hydrocarbon Revenues	**845.4**	**1,343.5**	**1,588.3**	**1,433.3**	**1,794.4**	**3,555.5**	**3,839.4**	**4,489.1**	**6,003.0**	**5,221.8**	**6,400.0**	**8,971.3**	**11,415.0**	**12,234.2**
- Net Oil Revenues	831.2	1,306.8	1,538.0	1,372.7	1,721.0	3,161.9	3,225.9	3,678.2	5,093.1	4,490.5	5,470.1	7,798.4	9,831.3	10,738.9
- Natural Gas Revenues	14.2	36.7	50.3	60.6	73.4	393.6	613.5	810.9	909.9	731.3	929.9	1,172.9	1,583.7	1,495.3
Non-hydrocarbon	78.3	229.4	288.0	418.3	495.5	955.0	1,140.5	1,431.5	1,635.7	1,526.6	1,516.5	1,653.4	2,059.5	1,982.7
- Other Current Revenues	73.7	212.1	264.8	398.9	455.3	888.3	1,073.4	1,344.9	1,553.8	1,492.6	1,464.2	1,596.5	2,033.7	1,930.9
- Capital Reveries	4.6	4.2	5.6	11.1	7.6	35.0	49.0	66.2	68.3	24.0	29.9	17.6	13.0	30.2
- Capital repayment	-	13.1	17.6	8.3	32.6	31.7	18.1	20.4	13.6	10.0	22.4	39.3	12.8	21.6
Total Expenditure:	**949.8**	**1,928.4**	**1,887.4**	**2,331.0**	**2,656.2**	**4,207.6**	**4,936.1**	**5,880.4**	**7,560.3**	**7,428.7**	**7,965.3**	**10,737.9**	**13,555.1**	**13,949.5**
Current Expenditure	666.5	1,333.7	1,570.1	1,859.5	2,091.9	3,179.4	3,531.0	3,857.5	4,420.4	4,218.5	4,791.3	6,103.8	8,772.7	8,781.8
Investment Expenditure	258.2	550.9	285,8	456.9	491.7	966.5	1,199.5	1,697.3	2,280.9	2,690.9	2,596.8	9,959.5	2,886.5	3,119.5
- Development Exp.	247.0	533.7	265.7	438.3	476.0	940.5	1,171.1	1,659.0	2,233.7	2,646.1	2,548.3	2,905.6	2,828.3	3.059.3
- Capital Exp.	11.2	17.2	20.1	18.6	15.7	26.0	28.4	38.3	47.2	44.8	48.5	53.9	58.2	60.2
Participation & Support	25.1	43.8	31.5	14.6	72.6	61.7	205.6	325.6	859.0	519.3	577.2	1,674.6	1,895.9	2,048.2
Surplus (+) or Deficit (-)	**-26.1**	**-355.5**	**-11.1**	**-479.4**	**-361.8**	**-198.2**	**-561.0**	**-798.3**	**78.4**	**-680.3**	**-48.8**	**-113.2**	**-80.6**	**267.4**

4b: The latest key Socioeconomic Indicators. Source: Oman 2011, Oman 2014.

Key Indicators	2010	2011	2012	2013
GDP at current price (R.O million)	22,243.1	27,945.4	30,033.6	30,627.7
Total Government revenues (R.O million)	7,915.4	12,491.2	13,474.5	14,216.9
Total Government Expenditure (R.O million)	7,963.8	10,737.9	13,550.1	13,949.5
Average Daily Oil Production (1000 bbls)	864.6	884.9	918.5	942
Average price of oil over a year (USD per barrel)	76.6	102.9	109.6	105.5
Total Commodity Exports	14,073.2	18,106.8	20,047.1	21,697.1
Including Non-hydrocarbon exports of Omani Origin (R.O million)	2,448.2	3, 033.2	3,594.1	3,806.9
Total Commodity Imports (R.O million)	7,603.3	9,081.8	10,811.3	13,201.0
Total Electric Production (Gaga watts/Hour)	19,823	21,354	24,444	25,661.1
Net Electric Distribution (Gaga watts/Hour)	16,133	18,512	20,958	22,791
Water production (1,000 Cubic Meters)/Million Gallons	48,464	54,464	59,613	62,749
Hospitals	62	65	65	66
Hospitals Beds	5,821	5,958	6,179	6,373
Patients per Doctor per Day Doctors	1.5	2.10	2.10	2.10
Nurse (s)/10,000 of patients	12,865	14,238	154,624	16,,942
Schools	1,040	1,040	1,043	1,042
Students	523,00	517	515,000	517,000
Government civil services employees	128,415	144,605	153,783	166,707
Total Manpower in private sector	1,133,000	1,289,000	1,489,000	1,700,000
Private sector employees (Omani)	177,716	174,441	172,066	181,860
Manpower of private sector expatriates	955,630	1,114,590	1,316,182	1,527,241
Asphalted Roads (Km)	28,093	29,685	31,365	32,605
Internet subscribers	73,908	89,063	119,398	158,678
Hotels/accommodation	226	235	248	266
Fertility rate (census of 2003 rate: 3.5)	3.7	3.7	3.7	3.9
Omani family members (census of 2003: 9)	7.5			
Illiteracy Male (census of 2003 rate: 11.7)	7.7			
Illiteracy Female (census of 2003 rate: 23.7)	16.7			

5a: Mineral Indicators 2000- 2012. Source: NCSI, 2012.

Minerals Sales	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
Cooper Cathode (Ton)	-	14,014	12,400	1,100	24,400	24,543	20,710	13,940	11,906	11,830	8,815	7,515	721
Gold (Kg)	-	59	54	1,578	1,029	323	358	248	118	93	82	40	19
Silver (Kg)	-	2,000	3,000	4,490	4,594	3,328	4,404	3,863	2,140	2,162	1,290	1,979	486
Exp. Of Cooper Cathode (Ton)	-	-	12,200	1,100	24,400	24,543	20,710	9,443	6,120	11,830	8,815	7,515	721

5b: Mineral Production and Value 2004-2008 NCSI, 2013

	2004		2005		2006		2007		2008	
	Production Metric Tons (000)	Value R.O (000)	Production Metric Tons (000)	Value R.O (000)	Production Metric Tons (000)	Value R.O (000)	Production Metric Tons (000)	Value R.O (000)	Production Metric Tons (000)	Value R.O (000)
Marble	163.8	2,756.7	220.9	3,907	270.8	4,676.6	311.9	5,570.9	457.2	7,334.1
Limestone	2,935.2	5,870.3	2,887.3	5,774.5	2,732.6	4,245.3	3,098.3	4,439.5	2,391.5	3,962.7
Gypsum	103	888.4	133.1	233.6	254	388	183.2	366.4	179.8	359.5
Salt	12.4	652.1	10.9	539.3	26.3	376.2	10.4	344.3	10.4	326.4
Chromite	28.7	1,179.8	34	1,343.6	276.3	2,958.7	407.8	15,891.6	784.1	32,580.4
Laterite	202.1	606.4	174	522.1	271.2	813.7	295	885	301.1	903.4
Building Materials	36,664.1	25,614.9	36,510	27,668.2	51,714.7	47,021.8	30,437.9	35,607.3	49,434.4	59,648.8
Gold (Ounces)	6,798	890	12,348	2,057.7	6,008.6	1,412.4	4,017	1,116.7	1,381	476.8
Silver (Ounces)	2,848	6.8	3,915	10.7	7,590.1	19.7	1,626	8.6	282	109
Mud	69.8	418.8	46.1	276.6	92.5	554.9	76.7	460.5	183.3	631.8
Sands dunes	15.8	39.5	17.8	44.4	24.9	62.2	22	55.1	19.5	48.7
Quartzphilde	228.5	914.3	200.9	803.6	181.5	667.6	211.9	847.5	176.5	706.1
Cooper	-	-	-	-	-	-	40.3	23,707.5	49.8	25,298.6
Kaolin	-	-	-	-	-	-	-	-	-	-
Manganese	-	-	-	-	-	-	-	-	-	-
Total		39,838		42,181.3		63,207		89,300.9	-	132,279.3

Cont.: Production of Minerals 2009-2012 Source: Statistical Year Book 2013 issue 41, Data 2012.

	2009		2010		2011		2012	
	Production Metric Tons (000)	Value R.O (000)	Production Metric Tons (000)	Value R.O (000)	Production Metric Tons (000)	Value R.O (000)	Production Metric Tons (000)	Value R.O (000)
Marble	587.9	9,082.2	695.1	10,344.6	949.8	12,204.6	1,164.7	13,870.8
Limestone	7,947.6	9,791.9	4,638.0	8,021.2	4,995.3	7,474.5	6,487.9	9,468
Gypsum	333.4	532.5	653.2	918.0	1,278.5	1,718.3	1,913.9	2,883.3
Salt	30.6	2,856.9	12.3	368.0	12.3	387.6	12.8	422.6
Chromite	636.5	25,942.7	865.4	35,129.3	634.2	21,573.7	603.2	18,516.4
Laterite	366.8	1,100.4	375.0	1,125.1	721.6	2,034.9	701.7	2,258.1
Building Materials	63,928.7	77,107.7	70,685.7	76,285.3	72,575.1	61,237.3	71,814.6	56,678.6
Gold (Ounces)	888.0	102.7	874.0	372.4	-	-	-	-
Silver (Ounces)	479.0	59.5	306.0	2.1	-	-	-	-
Mud	248.9	939.2	155.6	933.5	170.0	992.9	194.5	1,056.6
Sands dunes	30.0	74.9	34.5	86.1	38.2	95.5	47.0	117.4
Quartzphilde	197.8	791.3	186.8	747.1	216.6	476	343.0	1,371.9
Cooper	75.1	22,887.7	87.0	39,161.6	111.4	61,183.8	103.6	51,691.3
Kaolin	-	-	46.7	223.8	142.6	427.8	139.5	418.4
Manganese	-	-	-	-	43.1	992.0	37.5	1,005.9
Total	-	151,269.6	-	173,718.2	-	170,797.9	-	159,759.2

6: Export and Import of Oman during the Strategic Vision Years

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Merchandise Imports	**1,818.0**	**1,995.8**	**2,240.0**	**1,846.0**	**1,972.8**	**2,281.3**	**2,420.8**	**2,615.0**	**3,383.0**	**3,449.8**	**4,244.7**	**6,163.8**	**8,896.3**	**6,896.4**	**7,679.5**	**9,235.2**	**11,010.4**	**13,679.5**
Merchandise Exports	**2,835.0**	**2,944.0**	**2,122.4**	**2,783.3**	**4,351.8**	**4,258.0**	**4,295.5**	**4,486.6**	**5,145.1**	**7,187.1**	**8,299.7**	**9,494.1**	**14,503.0**	**10,632.2**	**14,073.2**	**18,106.8**	**20,047.1**	**21,696.9**
Total Trade exchange	**4,653.0**	**4,939.8**	**4,362.4**	**4,629.3**	**6,324.6**	**6,539.3**	**6,716.3**	**7,101.6**	**8,528.1**	**10,636.9**	**12,544.4**	**15,657.9**	**23,399.3**	**17,528.6**	**21,752.7**	**27,342.0**	**31,057.5**	**35,376.4**
Trade Balance	**1,017.0**	**948.2**	**-117.6**	**937.3**	**2,379.0**	**1,976.7**	**1,874.7**	**1,871.6**	**1,762.1**	**3,737.3**	**4,055.0**	**3,330.3**	**5,606.7**	**3,735.8**	**6,393.7**	**8,871.6**	**9,036.7**	**8,017.4**

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Merchandise Exports	**2,835.0**	**2,944.0**	**2,122.4**	**2783.3**	**4351.8**	**4258**	**4295.5**	**4486.6**	**5145.1**	**7187.1**	**8299.7**	**9494.1**	**14503**	**10632.2**	**14073.2**	**18106.8**	**20047.1**	**21,696.9**
Crude oil	**2,227.7**	**2,181.4**	**1,379.2**	**2,070.3**	**1,355.6**	**2,934.8**	**2,858.3**	**2,984.5**	**3,490.9**	**5,071.1**	**5,528.3**	**5,553.5**	**8,415.9**	**5,359.5**	**8,007.7**	**10,659.6**	**11,795.0**	**12,337.5**
Refined Oil	**47.1**	**52.5**	**50.6**	**56.3**	**70.7**	**28.5**	**38.3**	**61.4**	**61.5**	**88.3**	**47.4**	**466.0**	**1,007.0**	**618.9**	**519.4**	**697.1**	**557.1**	**340.8**
Liquified Natural Gas	**0.0**	**0.0**	**0.0**	**0**	**179.1**	**451.2**	**410.7**	**535.9**	**634.0**	**888.4**	**1,144.6**	**1,180.4**	**1,601.3**	**969.5**	**1,176.2**	**1,469.3**	**1,614.7**	**1,670.3**
Non-hydrocarbon	**173.3**	**203.3**	**199.3**	**201.4**	**247.8**	**265.8**	**261.6**	**304.1**	**420.3**	**555.3**	**812.5**	**1,290.7**	**1,962.9**	**1,849.5**	**2,448.2**	**3,033.2**	**3,594.1**	**3,807.9**
Re-export	**387.0**	**506.8**	**493.3**	**455.3**	**498.6**	**577.6**	**726.7**	**600.8**	**538.3**	**583.9**	**766.9**	**1,003.5**	**1,515.8**	**1,834.8**	**1,921.7**	**2,247.6**	**2,486.3**	**3,541.4**
% of non-hydrocarbon to Exports	**6.1**	**6.9**	**9.4**	**7.2**	**5.7**	**6.2**	**6.1**	**6.8**	**8.2**	**7.7**	**9.8**	**13.6**	**13.5**	**17.4**	**17.4**	**16.8**	**17.9**	**17.6**

7a: A comparison Oman with other GCC Countries GDP yearly growth rate %. Source: IMF and NCSI, 2009

	2002	2003	2004	2005	2006
UAE	4.1	11.3	8.5	5.6	4.2
Bahrain	5.2	7.2	5.4	7.1	5.2
KSA	0.1	7.7	5.2	6.0	4.6
Qatar	7.3	8.6	9.3	5.5	7.1
Kuwait	-0.5	9.7	7.2	3.2	3.2
Oman	3.3	7.5	14.5	25.3	19.1

7b: GCC FDI (in Million USD) (UNCTAD 2013)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bahrain	620	869	-275	208	431	2 048	329	-275	454	364	80	217	517	865	1 049	2 915	1 756	1 794	257	156	781	891
Oman	135	104	142	76	46	61	65	101	39	83	5	122	25	111	1 538	1 597	3 332	2 952	1 485	1 782	1 563	1 040
Qatar	43	40	72	132	94	339	418	347	113	252	296	624	625	1 199	2 500	3 500	4 700	3 779	8 125	4 670	-87	327
KSA	165	250	180	690	578	64	57	94	123	183	504	453	778	1 942	12 097	18 293	24 319	39 456	36 458	29 233	16 308	12 182
UAE	26	130	401	62	400	301	232	258	-985	-506	1 184	95	4 256	10 004	10 900	12 806	14 187	13 724	4 003	5 500	7 679	9 602
Kuwait	1	35	13	0	7	347	20	59	72	16	-112	4	-67	24	234	121	111	-6	1 114	1 304	3 260	3 931

7c: A comparison Oman Manufacturing figures with other GCC Countries Source: MCI, 2013.

	Oman	Bahrain	Kuwait	Qatar	KSA	UAE	Average
2002	8.7	12	7.8	7.1	10.3	13.1	9.8
2003	8.9	11.5	7.9	5.7	10.7	12.3	9.5
2004	8	10.8	8.3	11.5	10.3	11.5	10.1
2005	8.3	12.1	7.3	9.9	9.5	10.6	9.6
2006	10.8	13.2	5.5	9.3	9.6	9.7	9.7
2007	10.9	14.5	5.5	9.2	9.9	9	9.8
2008	10.6	15.1	4.4	10.7	9	8.6	9.7
2009	11.8	14	5.1	9.4	10.9	9.1	10.1
2010	10.7	14.5	5.6	9	11	9	10.0
2011	11	14.9	5.1	9.1	10	8.8	9.8
2012	10.1	15	5.4	9.1	10.1	9	9.8

8a: General Indicators of Foreign Investment Survey

Oman FDI indicators (GDP/FI/FDI) 2006-2012	2006	2007	2008	2009	2010	2011	2012
GDP (R.O)	14,151.2	16,110.3	23,351.5	18,559.1	22,773.0	26,604.2	29,797.7
Foreign investment (FI) RO	6,167.7	9,912.8	11,315.7	11,346.0	11,518.7	12,717.2	13,887.7
Foreign Direct Investment (FDI) RO	2,199.4	3,518.8	4,491.0	5,053.1	5,505.7	5,909.6	6,480.0
GDP Yearly Growth%		13.1	44.0	-20.5	22.7	16.8	12.0
Foreign investment (FI) Yearly Growth%		60.7	14.2	0.3	1.5	10.4	9.3
Foreign Direct Investment (FDI) Yearly Growth%		60.0	27.6	12.5	9.0	7.3	6.4

FDI Percentage of GDP and FI	2006	2007	2008	2009	2010	2011	2012
FDI as a percentage (%) of FI	35.7	35.5	39.7	44.5	47.8	46.5	46.7
Foreign Investment as a Percentage (%) of GDP	43.6	61.5	48.5	61.1	50.6	47.8	46.6
FDI as a percentage (%) of GDP	15.5	21.8	19.2	27.2	24.2	22.2	21.7

Oman FDI Flows, Dividends and Reinvested Earning (2006-2012)	2006	2007	2008	2009	2010	2011	2012
Flows of Foreign Investments (R.O)	2,206.9	3,745.1	1,402.9	30.3	172.7	1,198.5	1,184.1
Dividends on FDI (R.O)	648.2	542.3	863.9	653.7	851.5	1,169.1	1,248.2
Reinvested Earning of FDI (R.O)	98.4	309.3	433.9	180.1	574.0	490.6	509.2
Flows of Foreign Investments (Growth %)		69.7	-62.5	-97.8	470.0	594.0	-0.1
Dividends on FDI (Growth %)		-16.3	59.3	-24.3	30.3	37.3	6.7
Reinvested Earning of FDI (Growth %)		214.2	40.3	-58.5	218.7	-14.5	3.5

8b: General Indicators of Foreign Investment Survey

Oman Investment Abroad and Growth 2006-2012	2006	2007	2008	2009	2010	2011	2012
Oman Investment Abroad (R.O)	3,144.4	3,541.0	4,062.6	3,550.2	4,017.2	5,485.3	6,173.4
Oman Direct Investment Abroad (R.O)	497.5	524.6	709.6	748.6	1,381.6	1,861.9	2,218.7
Oman Investment Abroad (Growth %)		12.6	14.7	-12.6	13.2	36.5	14.5
Oman Direct Investment Abroad (Growth %)		5.4	35.3	5.5	84.6	34.8	18.6

No. of Employees in Foreign Investment Enterprises and Growth (2005-2012	2006	2007	2008	2009	2010	2011	2012
No. of Employees in Foreign Investment Enterprises	133,305	182,541	211,530	203,742	217,645	224,384	229,911
No. of Employees in Foreign Investment Enterprises (Growth %)		36.9	15.9	-3.7	6.8	3.1	2.4

Wages & Salaries in Foreign Investment Enterprises	2006	2007	2008	2009	2010	2011	2012
Wages & Salaries in Foreign Investment Enterprises (RO)	715.1	1,017.5	1,391.6	1,501.8	1,596.3	1,849.2	2,081.3
Wages & Salaries in Foreign Investment Enterprises (Growth %)		42.3	36.8	7.9	6.3	15.8	10.8

9: Oil Indicators 1980-2012. Source NCSI, 3012, 2013

Crude Oil	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
Production - Daily average (000 BBL) - Annual (Mn. BBL)	283 104	498 182	685 250	852 313	955 350	774 283	738 269	710 259	757 277	812.5 297	864.6 316	884.9 323	918.5 336.2
Producing Wells (No.)	289	676	1,363	2,059	2,525	3,018	3,234	3,388	3,836	4,173	4,624	4,918	5,505
Exports (Mn. BBL)	102	165	229	287	327	262	233	222	217	244	272	269.4	279.8
Average Daily Exp. (000 BBL)	279	451	628	785	895	718	638	608	594	688	745	738.1	764.5
Crude Oil Prod. Companies (No.)	4	4	4	5	5	6	6	7	7	7	8	9	9
Annual Average Price of Crude Oil (USD/BBL)	37	27	21	16	27	50	62	65	101	56.67	76.64	102.95	109.6
Oman Refinery Co. : - Production (000 BBL). - Sales (000 BBL).	 - -	 18,092 2,820	 23,325 3,015	 26,540 19,515	 28,648 29,510	 31,863 33,587	 31,307 32,021	 26,164 33,920	 40,820 24,100.0	 37,480.3 26,747.2	 31,459.6 27,777.6	 33,530.8 26,025.7	 76,121.2 44,620.0
Total Sales of Petroleum Products (000 BBL)	6,204	9,516	9,820	11,773	14,553	17,371	20,328	24,751	28,226	28,043	31,547.8	35,847.8	39,866.9
Filling Stations (No.)	60	105	157	192	249	329	352	373	401	416	432	449	472

10: Gas Indicators 1980-2012. Source NCSI, 2001, 2013

Natural Gas	1980	1985	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
Production (MNSCF):	92,964	141,985	186,880	242,266	539,531	917,746	1,068,888	1,070,737	1,069,630	1,097,661	1,176,803	1,228,521	1,271,731
- Associated	62,952	95,265	133,590	160,695	249,688	270,562	243,052	218,652	221,335	208,112	218,427	216,730	224,174
- Non-Associated	30,012	46,720	53,290	81,571	289,843	647,184	825,836	852,085	848,295	889,549	958,376	1,011,791	1,047,557
Users:													
- Gov. System (MNSCF)	13,608	39,689	61,777	85,390	114,020	172,381	186,781	271,484	212,058	235,409	247,359	-	-
- OLNG (MNSCF)	-	-	-	-	140,052	365,030	359,105	352,424	339,822	312,333	298,814	290,822	285,559
- Oil Fields (MNSCF)		66,138	85,410	102,268	168,823	148,110	172,133	171,499	169,461	171,775	173,446	275,748	259,328
- Flared (MNSCF)	-	105,827	25,185	12,704	34,229	50,885	57,282	49,605	49,602	50,971	45,694	32,414	45,809
- Purchases of Gas Co. L.P.G (Ton)	-	28,025	44,402	53,703	90,080	-	-	-	-	-	-	-	-

Appendix 2.5

World Economic Forum: competitiveness index

The Global Competitiveness Index Ranking 2013-2014

Rank	Economy	Score	Rank	Economy	Score
1	Switzerland	5.7	21	Australia	5.1
2	Singapore	5.6	25	Korea, Rep.	5.0
3	Finland	5.5	29	China	4.8
4	Germany	5.5	33	Oman	4.6
5	United States	5.5	35	Spain	4.6
6	Sweden	5.5	38	Indonesia	4.5
7	Hong Kong SAR	5.5	45	Mauritius	4.4
8	Netherlands	5.4	53	South Africa	4.4
9	Japan	5.4	55	Mexico	4.3
10	United Kingdom	5.4	56	Brazil	4.3
11	Norway	5.3	60	India	4.3
12	Taiwan, China	5.3	64	Russian Federation	4.2
13	Qatar	5.2	69	Colombia	4.2
14	Canada	5.2	91	Greece	3.9
15	Denmark	5.2	96	Kenya	3.8
16	Austria	5.2	120	Nigeria	3.6
17	Belgium	5.1	133	Pakistan	3.4
18	New Zealand	5.1	137	Mozambique	3.3
19	UAE	5.1	143	Haiti	3.1
20	Saudi Arabia	5.1	148	Chad	2.9

Table 2.5: The global competitiveness Index Ranking 2013-2014: source world Economic forum.

In terms of MINA regions comparison (the global competiveness index ranking MINA region 2013 -2014:

The Global Competitiveness Index Ranking MENA Region 2013-2014

Rank	Economy	Score	Rank	Economy	Score
13	Qatar	5.2	83	Tunisia	4.1
19	United Arab Emirates	5.1	100	Algeria	3.8
20	Saudi Arabia	5.1	103	Lebanon	3.8
33	Oman	4.6	108	Libya	3.7
36	Kuwait	4.6	118	Egypt	3.6
43	Bahrain	4.5	133	Pakistan	3.4
68	Jordan	4.2	141	Mauritania	3.2
77	Morocco	4.1	145	Yemen	3.0
82	Iran, Islamic Rep.	4.1			

The forum has shown three comparison between Oman and Asian Tigers and Oman's competitiveness comparison with Asian Tigers, with OECD and with Norway shown in Fig. (2.6a,b and c):

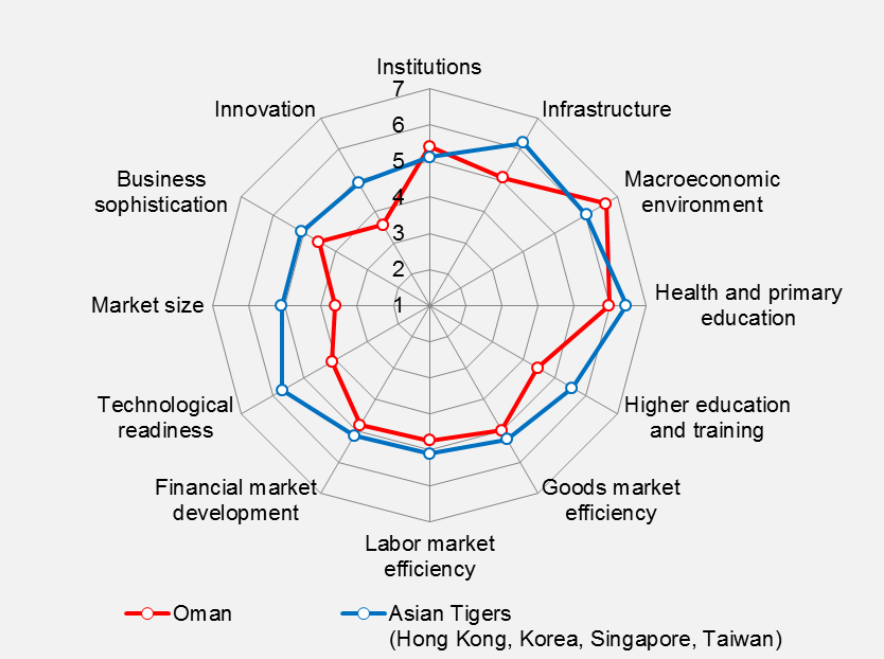


Fig (2.6a): Oman vs. Tiger countries. Resource: world Economic form

While Oman's competitiveness comparison with OECD (Fig. 2.):

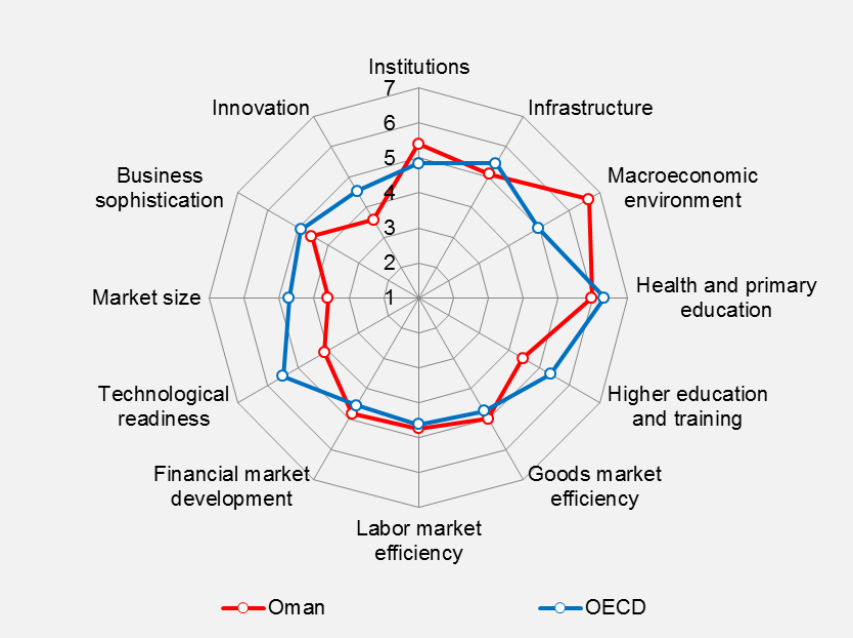


Fig (2.6b): Oman vs. OECD. Resource: world Economic form

The study also comparison also shows Oman's competiveness with Norway as per (Fig 2.)

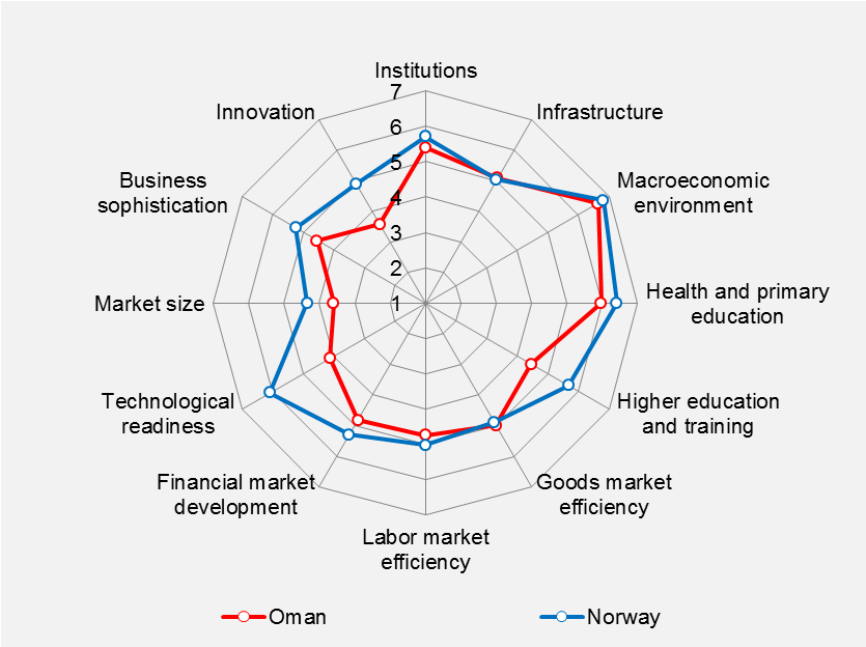
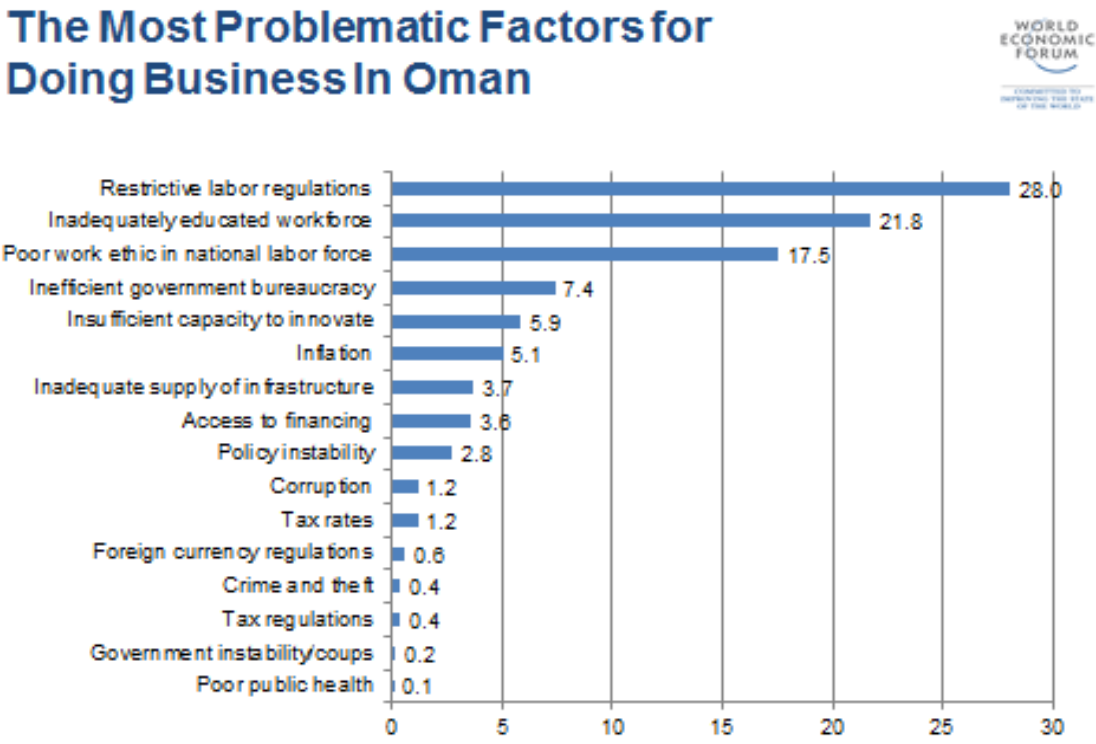


Fig (2.6c): Oman vs. Norway. Resource: world Economic forum



Appendix 3.1

SEEKING A RATIONALE THROUGH THE LITERATURE REVIEW & CONCEPTUAL FRAMEWORK MATCHING THE RESEARCH OBJECTIVES

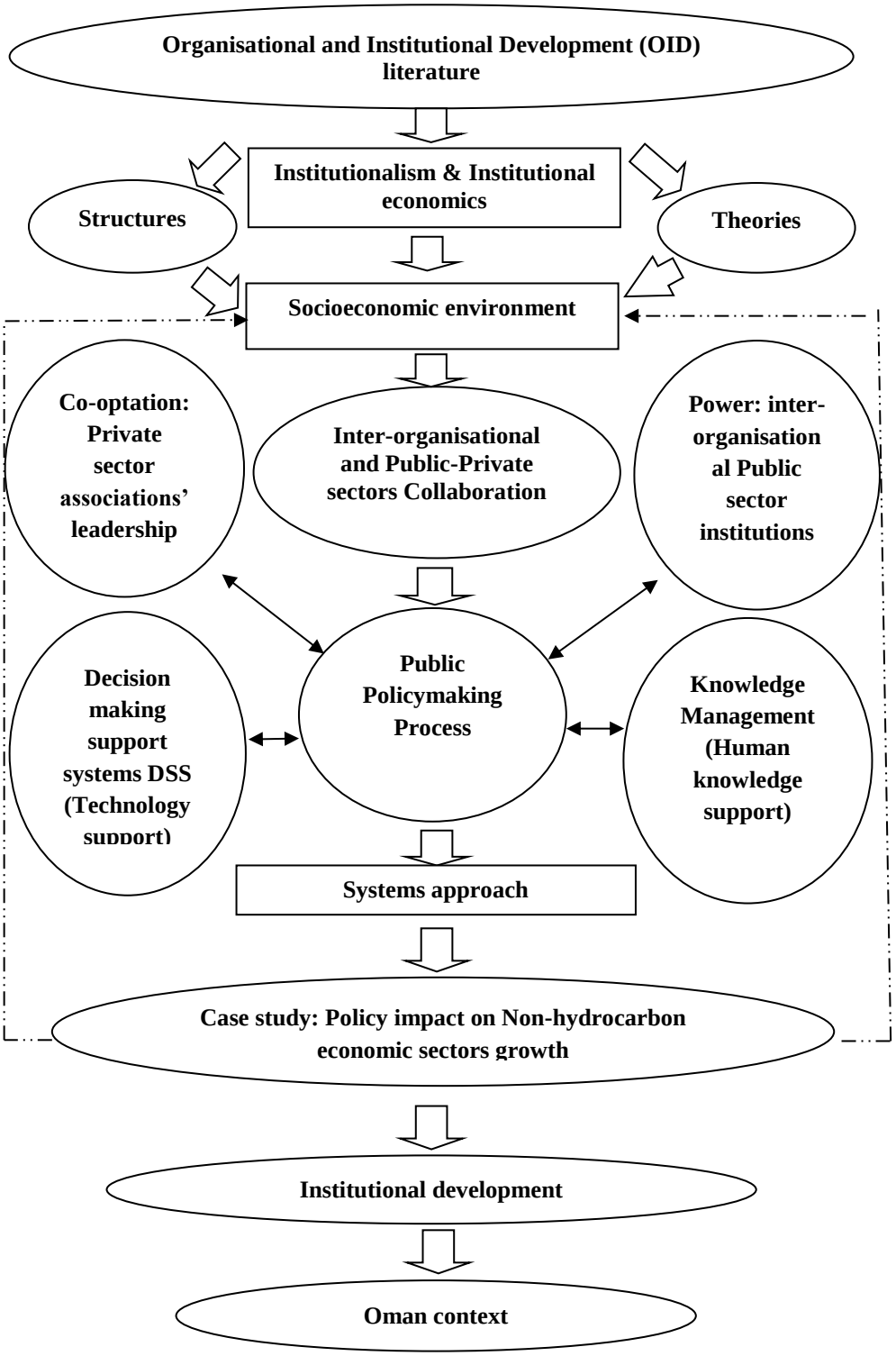


Figure: 3.1: Seeking rationale through literature

Research aim and objectives	Employed Questions	The field	Theoretical Framework	Key authors
A: To critically review the literature on: - Economic growth (The role of FDI and DI). - Institutional development and the evolution of collaboration. B: to establish, the growth dynamics in the non-hydrocarbon sectors of Oman and to single out any underperforming sectors.	Main question: What kind of policy framework could help develop institutions to grow the non-hydrocarbon sectors of Oman?	**Sociology/Political Science**: - Institutional Development; Policymaking collaboration. - Multi-level governance. - Institutional and organisational development	- Collaboration governance. - Inter-organisational theory. - Policymaking process	March & Simon, March & Olson, Ostrom, North, Gray, Wood & Gray, Uphoff & Buck, Sabatier, Scott.
			- Co-optation/ power	Selznick
			-Organisational theories. - institutional theories. -Institutionalism	Selznick Davis & North North,
			- Game theory and commons	Ostrom, Hardin Axelrod & Dion
		Management: Knowledge management and Electronic systems	- Knowledge Management (Systems). - Decision-making Support Systems - (DSS)	Polanyi, Churchman, Simon, Clarke & Finlay, Courtney, Finlay & Marples, Davis and Olson, Nonaka & Takeuchi, Davenport & Prusak, Laudon & Laudon, Davenport et al, Alavi & Leidner, Yang & Yen.
		Economics/ International Business: Economic theory prospective and international business and Oman issues	New Institutional Economics (NIE). Regulatory vs. promotion.	Coase, Williamson, North
			International business/Oman	Moran , World Bank Group, Borrás & Tsagdis, Hawley, Peterson.

Table 3: Matching Conceptual Framework with Research Objectives and Literature.

Research aim and objectives	Employed Questions	The field	Theoretical Framework	Key authors
C: Synthesise any systems approaches established under B4. To explore and use of systems thinking and the application of a Complex Systems Approach (CSA) to institutional development and develop a more useful framework for policy, Designing mechanisms to deal more effectively with the complexity of interactions between the public sector and investors in the chosen sectors. D: Develop a harmonious framework capable of supporting policy making on the basis of C. Harmonising Viable System Model (VSM) and Soft Systems Methodology (SSM) as part of the methodological framework and as the recursive nature of the model considered to be useful for examining policy making processes.	Supplementary question: Are there any systems approaches that could aid the formulation of the aforementioned framework?	**Systems Thinking/ Holistic Management**. **Cybernetics**, **Complexity management**	General Systems theory, Complexity Theory: Complex Systems Approach (CSA), Viable System Model (VSM), Soft System Methodology (SSM).	Wiener, Ashby, Bertalanffy, Checkland, Beer, Ackoff, Gleick, Stacey, Jackson, Espejo, Espejo &Reyes, Espejo & Gill, Espejo et. al., Espinosa & Walker. Christopher.

Table 1: Conceptual Framework of System Thinking Methodological Perspectives and Literature.

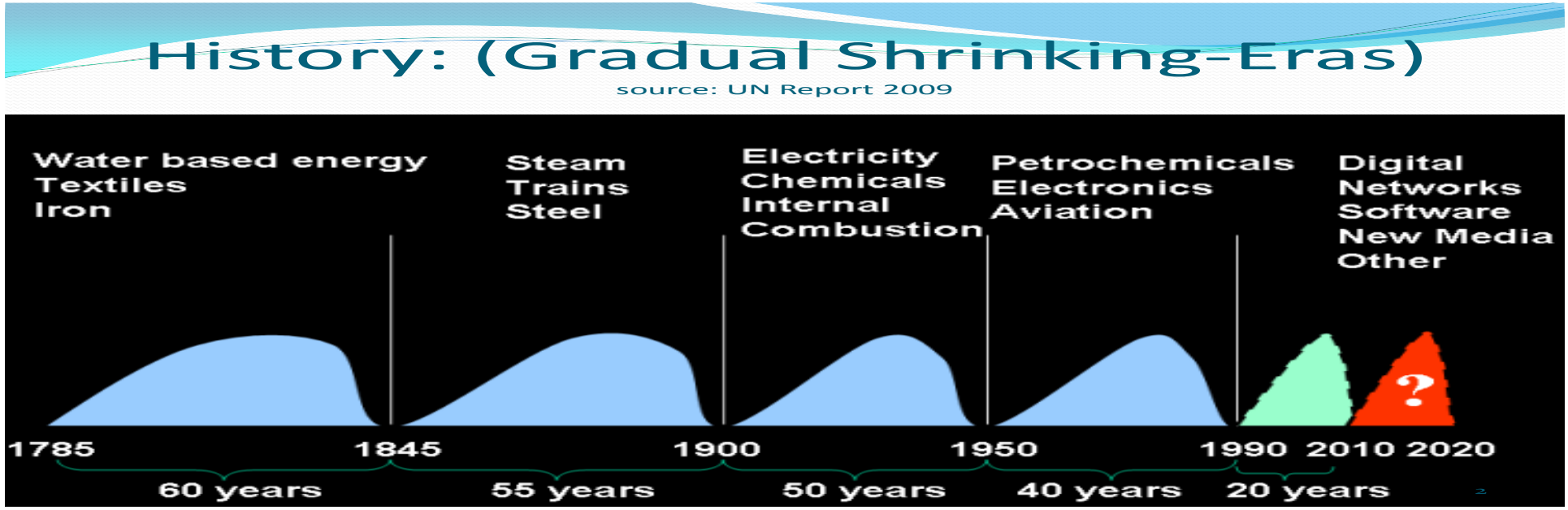
Research aim and objectives	Employed Questions	The field	Theoretical Framework	Key authors
E: Demonstrate the use of the developed policy framework (under D) through the use of primary data collected from actual domestic and foreign investors and institutional representatives in the aforementioned underperforming sectors. F: Draw the implications of E for practice (domestic and foreign investors), policy (institutional representatives), and research. G: Make recommendations (on the basis of E) for institutional development.	Main and supplementary questions	**Institutional development:** -Management. - Systems thinking. - International business. - Economics - Political Science. - Sociology.	- Institutional theory, - Holistic and Complexity theories. -New Institutional Economics (theories of Organisations)	Most aforementioned authors.

Table 2: General Conceptual Framework and Methodological Perspectives and Literature.

Appendix 3.2

History: Gradual Shrinking Eras. Source: (UN Report, 2009)

The figure below shows that water based energy, textiles and iron to 60 years and steam trains and steel era to took 55 years until electricity chemicals internal combustion, which took 50 years followed by Petrochemicals, electronics aviation took 40 years then digital networks, software and new media commenced from 1990 till 2010 took only 20 years, now what stage we are in from 2010 to 2020, which going to take only ten years or so.



Appendix 3.3

Frameworks for policy process development

Sabatier (1991b) presents a number of frameworks for policy process that has been developed:

1. The open-systems framework of Richard Hofferbert who developed a conceptual framework of the policy process with governmental decisions as the dependent variable of four boxes diagram; historical-geographic conditions, socioeconomic conditions, mass political behaviour and governmental institutions and most elite behaviour, but its 'black box' approach is being criticised to governmental institutions and elite behaviour for its neglect of an "intergovernmental" dimension. Resolving these problems, Mazmanian and Sabatier (1980, p. 441) developed a new model. Hofferbert assumed that socioeconomic conditions and mass political behaviour drove policy decisions, a view that runs counter to a fair amount of research about ability of governmental leaders to manipulate popular opinion (Dey and Zeigler, 1975; Cobb et al, 1976 cited in Sabatier, 1991b).
2. Institutional Rational Choice (IRC): in contrast to the open systems approach of Hofferbert, a group of IRC scholars (e.g. Moe, 1984), over a number of years have started with "individual actors" as the basic of analysis have examined how institutional rules can affect behaviour rational actors within institutions developed. IRC and in particular the "Institutional Analysis Development" (IAD) framework that has been promoted since the eighties by Ostrom and other scholars associated with her workshop colleagues such as Kiser in "Political Theory" and Policy Analysis at Indiana University, (Ostrom 2005; 2007). This development combined actor-based perspective with attention to institutional rules, "intergovernmental" relations, and policy decisions. It focuses mainly the problem identification, policy formulation, and policy evaluation stages, (Schlager and Blomquist, 1996).

   Game theory is consistent with the institutional analysis and development (IAD) framework, and understanding institutional diversity, (Ostrom, 2005). It's basic approach views individual actions as a function of values and resources attributes of the individual and the attributes of the decision situation, which

focus on the Institutional Analysis and Development (IAD) framework, (Kiser & Ostrom, 1982), and also Moe's political theory of bureaucracy, which he calls it the politics of Structural Choice Framework, (Sabatier 1991b, p. 145; 2007). The decision situation -in turn- a product of institutional rules, the nature of the relevant good, and the attributes of the community (which could include Hofferbert's socioeconomic conditions and community opinion), (Sabatier, 1991b). Ostrom (1986) empirical and theoretical work has demonstrated how changes in a specific rule can significantly affect behaviour.

Sabetier (1991b) picked up two fundamental insights; a) the decisions of a given level basically set the institutional rules of the next lower level; b) the decisions of the operational level that directly affect citizens primarily the decisions of higher levels are guidance to lower levels. A framework drawn upon the 'garbage can model' of organisational choice (Cohen et al, 1972), known as a Policy Streams Framework of Kingdon (1984) who has developed an approach of policy formulation where in his view, policy making can be conceptualised as three largely unrelated streams :

a) A problem stream consisting of information about " real world problems" and the effects of past governmental interventions and;
b) A policy stream or community composed of researchers, advocates, and other specialist who analyse problems and formulate possible alternatives; and;
c) A political stream, consisting of elections, legislative leadership contests, etc. According to him major policy reforms result when an opportunity joins the three streams.

In Sabatier (1988) opinion, it is too political neglecting the role of advocacy analysis and putting a large distance between the policy and political streams, if the framework is to be expanded to include the entire policy process, than more attention needs to be given to bureaucracies in implementing those reforms, and more recognition needs to be accorded the "intergovernmental" dimension in both formulation and implementation.

3. The Advocacy Coalition (AC) framework developed by Sabatier, which focuses upon the role of this framework as the key units of internal structures and their belief systems (Sabatier, 1998: p.158). The policy process that synthesises many

features, which views policy change over time as a function of three sets of factors;

a) The interaction of competing advocacy coalitions within a policy subsystem or community. An AC consists of actors from public and private organisations at all levels of government who share a set of basic beliefs (such as policy goals) knowledge and experience and seeking to influence the rules of various governmental institutions to achieve them.
b) Changes external to the subsystem in socioeconomic conditions, and decisions from other policy subsystems. Sabatier (1991b) has fetched an example of US air pollution policy of (1970) has been affected by changes in petroleum prices, by republican electoral victories in 1980, and by decisions from the tax and energy subsystems.
c) The effects of stable system constraints; such as basic social structure and constitutional rules, on the constraints and resources of various actors. The strategies available to advocacy coalitions in air pollution policy are for example obviously constrained by federalism.

This framework distinguishes between core and supportive elements; coalitions are assumed to organise around common core beliefs, such as the proper scope of governmental vs. Market activity and the proper distribution of authority among levels of government. Coalitions seek to learn about how the world operates and the effects of various governmental interventions in order to realize their goals over time..

Appendix 3.4

Investment Promotion Intermediaries (IPIs) at MENA

MIGA[1] survey of 2012 shown that information and knowledge are key to reducing perceptions of risk that the provision of information to support and influence investor decision-making investment facilitation is crucial to stimulate potential investor interest and lower perceived country risk. Global FDI inflows after declining in 2008-2009, increased in 2010 and 2011 (USD1.5 trillion), and further estimated in 2012 (about USD 1.6 trillion), however, where in 2010 and 2011, FDI into MENA FDI inflows declined further by 44% from (USD 77 billion) to less than (USD 43 billion) and in 2012, the number of investment projects announced has dropped further by one fifth. Learning from World Bank Group (WBG), investment Climate Department, Whyte (2013), the existing of investment environment in MENA reports the following can be added to the literature comparing with Global FDI inflows, Regional GDP grew 6.4 per cent in 2012, up from 3.1 per cent in 2011, when political turmoil dampened growth. The projected slowdown in growth to 3.8 per cent in 2013 largely reflects a return to more sustainable growth in some oil-exporting countries, whose growth surged in 2012, offsetting a similar drop the previous year (World bank annual report [Middle East and North Africa], 2013).

World Bank Group investors interviewed in 2011 and 2012 anticipated positive prospects such as; economic factors (GDP per capital of some USD 5,500) and demographic factors (a combined MENA population of about 370 million people). Expected greater governmental transparency and less weighted business environment, the so-called "Arab Spring" has the potential to act as a vehicle for economic expansion in the long term, but as stability is critical for persuading investors to resume investments, a quick return to political stability is critical.

The decision-making process commonly followed by foreign companies evaluates the two most important sources of Investment Promoters Intermediaries (IPIs) information provision; "Web sites" (how IPIs present country and sector information to prospective foreign investors online), and "Inquiry handling" (how effectively IPIs respond to inquiries from potential foreign inventors submitted through a mystery shopper

[1] Multilateral Investment Guarantee Agency (MIGA) survey presented in in Muscat FDI conference (Oman) 6-8 February 2013

approach agribusiness and tourism). FDI inflows from 2000 to 2010 in 156 countries, although almost every country in MENA has an IPI, and Web sites, but information available on IPI web sites varies greatly very poor.

The International Business (IB) reports (e.g. WBG, 2013) paid attention to Investment Promotion Agencies (IPAs) of MENA developing countries and found that there is imbalance in some MENA region countries between the regulatory role of public sector institutions, which focuses mostly on regulations more than on investor's needs and attraction, this result have a negative impact on the growth targets of some economic sectors.

Regulatory vs. Investment Promotion

Characteristics of an effective "National Investment Promotion" (NIP) framework;

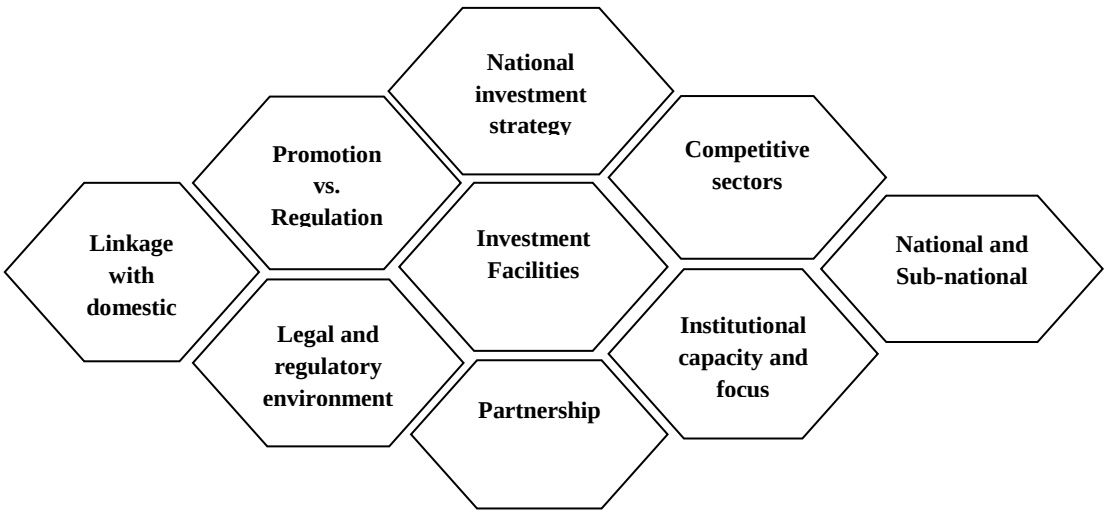
a) Transparency, equity and dynamic stability; consistent and transparent structures, rules and regulations; requirements and conditions; and incentives, equitable treatment of investors, stability and predictability for investors and at the same time flexibility to adapt to changing market circumstances.
b) Recognise and engage multiple participants and stakeholders; lead NIP body clearly mandated, key relevant public and private sector organisations need to be involved in the development and delivery of an effective framework, the most effective frameworks worldwide operate through networks of formal and informal partnerships.
c) responsive to investors' business needs; successful NIP frameworks have a culture of customer service, recognising the importance of the investor, ensuring that user-friendly procedures are in place, responding in timely and helpful fashion to requests, making available useful investor-related information.
d) a coherent and well-defined strategic direction; a clear NIP strategy, Linked to national economic development priorities and adopted by the government as a whole on behalf of all stakeholders involved in investment promotion, ability to monitor and evaluate progress in order to ensure that adjustments can be make as necessary when market or policy circumstances change, Encompassing a clear approach to undertaking a policy advocacy.
e) To cover national, sub-national and sector promotion needs; pull in the same direction, competition between regions should be avoided; best practice should offer sufficient flexibility to allow sector and sub-national levels to focus on priorities that reflect their regional competitive positions.

f) Link strategic direction to institutional arrangements; overall coordination through a nationally-mandated lead body, set up a clear structure that identifies which institutions are expected to take the lead on which issues.

g) Distinguish between regulation and investment generation; different functions require different enabling frameworks, organisational skills and behaviours, and positing vis-à-vis investors.

h) Effective implementation at a strategic level; organisations or institutions charged with the implementation of different components of the framework – unambiguous mandates/transparent roles, institutional structure needs to have a clear hierarchy of responsibility, focus on competitive sectors for FDI, and at an operational level; each agency must have the powers, resources, systems and procedures, skills and competencies for the effective implementation of its designated roles.

The WBG's (2013) study outcomes also advised a national strategy for more attraction of FDI including; IPIs should never pick sectors in isolation of a national economic development plan as IPIs are tools for the effective implementation of a national investment strategy. Countries should pick sectors where they have the best chance of attracting FDI and which encourage the kind of industries and jobs they want to attract. The following diagram from World Bank Group is related to investment facilities of a country:



National investment promotion Framework cited from World Bank Group (2013).

A recent Oxford University study reveals that sectors explicitly targeted by IPIs receive more FDI than non-priority sectors during the same time period, attracting the investors you need is another way of maximising FDI attraction. While the majority of FDI received in MENA between 2003 and 2011 flowed into the real estate and mining sectors, most of the FDI related jobs in the region (55%) are generated in the manufacturing sector, which attracted only about one-fifth of total FDI. Balancing investment promotion and investment regulation; one-body model (promoter and regulator); or two-body model (Dedicated promoter and dedicated regulator):

In terms of	**Investment promotion**	**Investment regulation**
organisation culture and staff skill	Customer-oriented	compliance-oriented
	Private sector focus	administrative focus
	Concerned with priority	concerned will all FDI
	Marketing and sales	Administration
	Project and customer relationship management	precision and thoroughness
knowledge	Laws, regulation, and procedures	laws, regulations and procedures
	FDI data	FDI data
	Business practices	
	Sector expertise and competitiveness	
	Marketing and sales	
	Foreign languages and business culture	
enabling environment & internal systems	Flexibility within set parameters	Fixed procedures and approval mechanisms
	Fast approvals and delegated authorities to permit rapid responses to investor needs	Supervision and audit
	Outcome-driven	Process-driven
	Tailored approaches (using defined methodologies	Standardised systems
	Quick, flexible responses to investor need	Investor requests are met at the speed of 'the system'
	Follow-up until investor is satisfied	Follow-up with investor only as required.

Promotion vs. Regulatory of FDI

The study of WBG (2013) presents some outcomes on whether incentives increase investment; the group reported the following;

1. For many developing countries fiscal incentives do not effectively counterbalance unattractive investment climate conditions such as poor infrastructure, macroeconomic instability, and weak governance and markets.

2. OECD studies conclude that a low tax burden cannot compensate for a generally weak or unattractive FDI environment, and higher taxes reduce FDI; the size of this effect depends on the investment climate.
3. For investors: tax incentives are one of the least important factors in investment decisions; among most important factors that impact investment decision; Investment incentives can be effective when investment assets available to general public (e.g. road, school), this is just another way to pay for public goods, investments generate positive externalities; infrastructure investments, upgrading skills of workers, encouraging Green Technologies.
4. There have been claims for use of incentives for 'transformational investments'; its efficacy is not proved; next stage investors would also ask for the same deal, adds to discretion in policy making, it is best to define the qualities that make up such investments rather than leave the definition vague.
5. Developing countries must rather focus on improving their investment environment. If used; investment incentives should be used, mainly to address key market failures. Incentives should be awarded with as little discretion and as much transparency as possible, using automatic legal criteria.
6. Evidence suggests that tax incentives that affect investment in general and FDI in particular do not have nearly as much effect in developing countries. Investment in developed countries responds significantly more strongly to incentives than in developing countries (negligible impact).
7. Incentives should be linked to investment growth (that is based on performance), and automatic tax holidays should be avoided. Only the tax administration should administer tax incentives.
8. Rolfe and White, (1991 cited WBG) found that tax holidays had a small effect on FDI; they concluded that tax holidays and import duty exemptions were unlikely to attract FDI if non-tax factors were unfavourable., while Morisset and Pirnia (1991 cited in WBG, 2012) state that 'incentives will generally neither make up for serious deficiencies in the investment environment nor generate the desired externalities.
9. Regional cooperation should be encouraged to prevent harmful tax competition between countries. Governments should regularly prepare tax expenditure statements to measure and monitor the cost of tax incentives. In addition, incentive policies should be reviewed periodically to assess their effectiveness in

helping meet desired goals. (In short; fiscal incentives appear not to be a good policy substitute for poor investment climate and lack of investor information.

10. Changes in incentive policy are generally made at the same time as other changes that affect investment behaviour (e.g. macroeconomic restructuring) so effects are difficult to single out, but by a carefully selecting the incentive reforms studied, it is possible to address some of these issues.
11. A significant problem for econometric studied particularly in developing countries is often a lack of good data on investment. Gross domestic capital formation is especially poorly measured, but though FDI is measured better.
12. Investment incentives are measurable economic advantages that government provide to specific enterprises or groups of enterprises, with the goal of steering investment into favoured sectors or regions or of influencing the character of such investments. Incentives can be fiscal as with (tax concessions) or non-fiscal as with (grants, loans, or rebates to support business development or enhance competitiveness). Incentives reduce the effective taxes rates paid by companies.

Appendix 3.5

Knowledge and Knowledge Management Literature Review

A) Knowledge

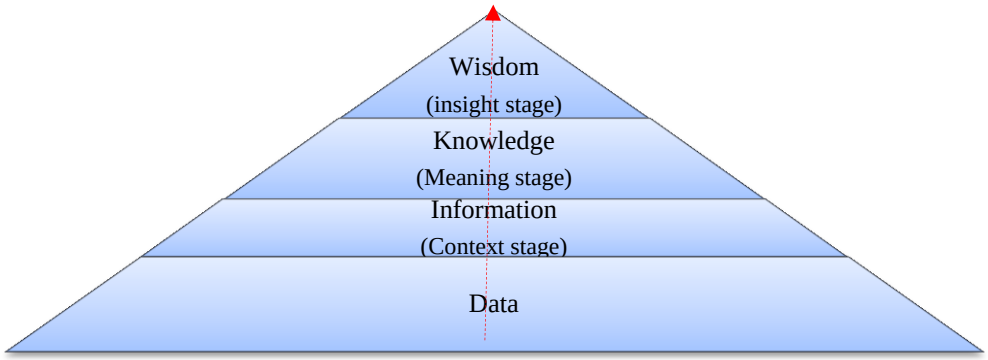
Knowledge has been recognised by European Knowledge Management forum, (2002), as a potential contributor to the extent to which knowledge can be collectively shared. One type of definitions is known through the distinction between "data", "information" and "knowledge", where data is considered as raw facts and figures, although the terms 'information and knowledge; are often used interchangeably. Information is data that has been interpreted or as an organised set of data, and knowledge as data and information combined with the personal contribution of the knower, or perceived as meaningful information, (Davis and Botkin 1994; Drucker, 1988; Grover and Davenport, 2001; Zack 1999).

Knowledge in Davenport and Prusak's (1998) perspective is "a fluid mix of framed experience, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experience and information," Marakas (1999) described knowledge as a "meaning" made by mind and knowledge, and is context dependent, since "meaning" is interpreted in reference to a particular paradigm. In the same direction, Vance (1997) defined information as data interpreted into a meaningful framework whereas knowledge is information that has been authenticated and thought to be true. From this classifications and definitions it can be seen that the problem appears to be the presumption of a bottom up hierarchy from data to "wisdom". Knowledge is the information possessed in the mind of individual; it is personalised or subjective information related to facts, procedures, concepts, interpretations, ideas, observations and judgments, although there are researchers who consider that knowledge is not a radically different concept than information, but rather that information becomes knowledge once it is processed in the mind of an individual 'tacit' knowledge (Polanyi, [1958]1962). Bhatt (2001) on the other hand argued that defining data, information and knowledge is difficult, and the distinction between the three depends on the users' perspectives, where data and information are distinguished based on their "organisation", and information and knowledge are differentiated based on "interpretation". Without meaning, knowledge is information that finds life and becomes knowledge. Bhatt, also thinks Organisational knowledge, is formed through

unique patterns of interactions between technologies techniques (processes) and people, which cannot be easily imitated by other organisations, because these interactions are shaped by the organisation's unique history and culture.

Knowledge is also looked at as an "inquiry system" through the work of Churchman (1971). There are five influential western philosophers (Leibniz, Locke, Kant, Hegel and Singer) who work from the perspective of systems theory; these five schools of inquiring systems constitute different approaches to the creation of knowledge. This is consistent with Churchman's (1971), conceptualisation of knowledge and his statement that "knowledge resides in the user's mind and not in the collection of information".

From the literature is can be seen that knowledge is a stage of meaning. It commences from data and ends up with the insight stage of wisdom and can be illustrated as the following figure:



The researcher understanding path of Knowledge from the literature review

Tacit knowledge e.g. learning by doing, in the case of repeated team play; communicable knowledge is that which can be transmitted from one person to another. Tacit knowledge is acquired in part by practice and can be only partially communicated; different individuals have different innate abilities for acquiring tacit knowledge. Nonaka and Takeuchi (1995) classified four modes of knowledge conversions through the SECI model mentioned below.

Davenport et al, (1998) advocate the creation of knowledge repositories for capturing and making available explicit knowledge either to groups within an organisation or to the organisation as a whole, but in addition, they add the initiatives of improving knowledge access and enhancing knowledge environment and managing knowledge as an assets. Finally, the researcher adopted the following working definition of the term 'knowledge' as "information that is combined with experience, context, interpretation,

and reflection", but the history of philosophy since the classical Greek period can be regarded as never-ending research into the meaning of knowledge (Nonaka, 1994).

SECI model (Modes)

Socialisation mode; (from Tacit to Tacit), it is the process of sharing experience and creating tacit knowledge between the individuals more than at the group or organisational level, such as shared mental and technical skills. Socialisations are the direct interactions with stakeholder who are the investors in this study in one hand, and public institutions individuals on the other hand.

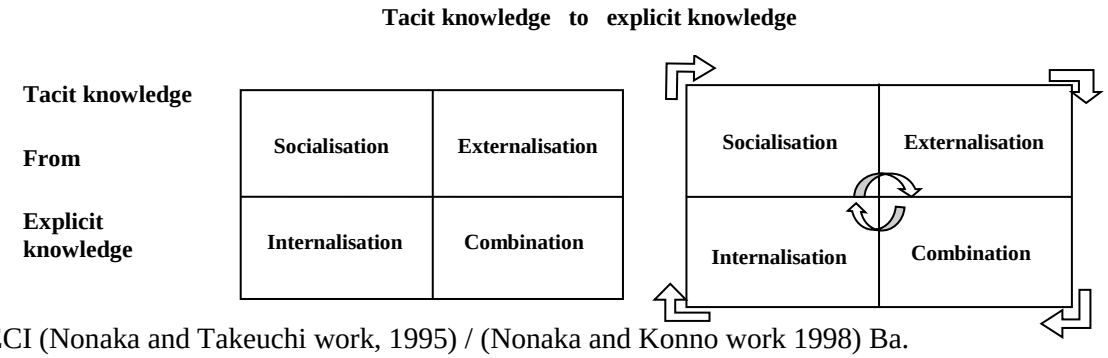
- **Externalisation mode**; (from Tacit to Explicit), a process of articulating tacit knowledge into explicit concepts. It is a quintessential (heart or soul) knowledge-creation process as tacit knowledge becomes explicit, taking the shapes of metaphors, analogies, concepts, hypotheses, narratives, and visuals or models.
- **Combination mode**; (from explicit to explicit), the process of "systemising" concepts into more complex sets of explicit knowledge such as a knowledge system. This mode of knowledge conversion involves combining different bodies of explicit knowledge; the key issues are communication and diffusion processes and the systemisation of knowledge.
- **Internalisation mode**; (from explicit to tacit), the process of embodying explicit knowledge into tacit knowledge. It is closely related to "learning by doing". (One cannot learn to ride or drive a bicycle or to play a good game of tennis solely form a book). Learning by doing in organisations, as the term implies, means that an organisation acquires coordination skills and develops routines that work as consequence of repeated interaction (Nelson and Winter, 1982 cited in North 1990). Then experiences through socialisation, externalisation, and combination are internalised into individuals' tacit knowledge bases in the form of shared mental models or technical know-how, they become valuable assets. Internalisation relies upon two dimensions; in the first is the process of internalising the explicit knowledge actualised concepts or methods process about strategy, tactics, innovation, or improvement. In the second, there is a process of embodying the explicit knowledge by using simulations or experiments to trigger learning by doing process.

The model:

Nonaka and Konno (1998) took the SECI model further. They identified two dimensions of tacit knowledge:

a) The technical dimension**;** consisting of informal personal skills or technique or know-how and; this can be benefited during public and private sectors collaboration.
b) The cognitive dimensions; beliefs, values, mental models, drawing attention to the fact that the cognitive element is very difficult to articulate but it shapes the way we see the world. This will help the collective and collaborative action in interact between investors and public institutions for investment promotion and regulatory.

They drew a parallel between the SECI mode in the following figure and four types emphasising the living nature of knowledge, where knowledge is seen more as a dynamic flow more than a static.



SECI (Nonaka and Takeuchi work, 1995) / (Nonaka and Konno work 1998) Ba.

B) Knowledge Management:

According to the British Standard Institution (BSI 2003a, b; 2004), KM is the adoption of new management theories or approaches and it is the creation and subsequent management of an environment, which encourages knowledge to be created, shared learnt, enhanced organised and utilised for the benefit of the organisation and its customer. Horvath (1999); and Stenmark (2001) affirmed that most of intellectual assets of a firm exist as knowledge in the minds of the organisation's employees. Organisational design is a complex process in integrating knowledge capabilities that focus on individual function or department is inadequate, while the traditional orthodox

organisational structure is inadequate for knowledge-based organisation, (Nonaka and Takeuchi, 1995).

KM is deliberate systematic business optimisation strategy that selects, filters, stores, organises, packages, and communicates information essential to the business of a firm in a manner that improves employee and corporate competitiveness, and involves the identification, optimisation, and active management of intellectual assets, either in the form of explicit knowledge held in artefacts or as tacit knowledge possessed by individuals or communities, (Snowden, 1999; Bergeron, 2003). In contemporary business environments, organisations are faced with competitive pressure: global issues combined with those of rapid technological change and the increased power of consumers, places demands on firms to remain flexible and open, (Drucker, 1988; Teece et al., 1977).

Yang and Yen (2007) proposed that a new organic organisation structure that encourages effective and efficient communication, required to foster knowledge creation and sharing. Systems thinking provide in a new sight into designing a new organic organisation. KM therefore, is defined as an approach to adding or creating value by actively leveraging the know-how, experience and judgment resident within, (and, in many cases, outside of) an organisation, Ruggles (1988), while Rumizen (2002) sees KM as the way that an organisation identifies, creates, captures, acquires, shares, and leverages knowledge.

Some public sector practitioners believe that what is currently termed KM is in fact what public servants have always done since time immemorial objectively and collectively quoting, analysing and deploying knowledge in an effort to inform, develop and enact the policies of the government of the day, while others believe that KM is a fad. Sinclair (2006) pointed out that, the problem with public sector is the lack of understanding of where KM might fit and a lack of appreciation as how best to apply it. There is little possibility of getting senior managers excited about the prospect of KM, it is not even worth the effort of trying to get anyone at the senior level onside with the concepts of KM, Sinclair (2006), who also wrote:

"…*seeing much intelligence, innovation, business orientation, hard work and ownership of the issues in public service as I ever witnessed in the private sector. So why is it seemingly so hard to make KM a success in the public sector?"*

This is because knowledge is power and in the public sector it is hierarchically controlled; whereas in the private sector even lowly-paid production workers have been empowered to stop a whole factory or at least a production line if they detect a problem. There is no such equivalent in the public sector. This is dictated by the language of decisions which is spoken in all bureaucracies.

He also mentioned that one of the problems seems to be that governments are fragmented, some governments have used this unified approach successfully, usually in response to some singular outcome such as 'moving government services on-line' and some have refined the approach to make progress towards some particular business objective. Finally, KM also deals with complexity, and exposes the uncertainty and organic growth, that calls for a new vocabulary which mangers are not used to (Nonaka, 1994).

The wide application of IT is the most important force to improve the transition of society (Drucker, 1968). Among knowledge-based systems there are Management Support Systems for individuals (MSS) and groups (GMSS). These systems have all contributed to individual and organisational improvements in varying degrees and continue to be important components of an organisation's information technology investment. An emerging line of systems targets professional and managerial activities by focusing on creating, gathering, organising, and disseminating an organisation's knowledge as opposed to information or data. These systems are referred to as knowledge management systems (KMS), they also refer to a class of information systems applied to managing organisational knowledge (Alavi and Leidner, 2001).

C) Knowledge Management System: Decision-making Support Systems (DSS) literature: An example of Egypt Cabinet Experience

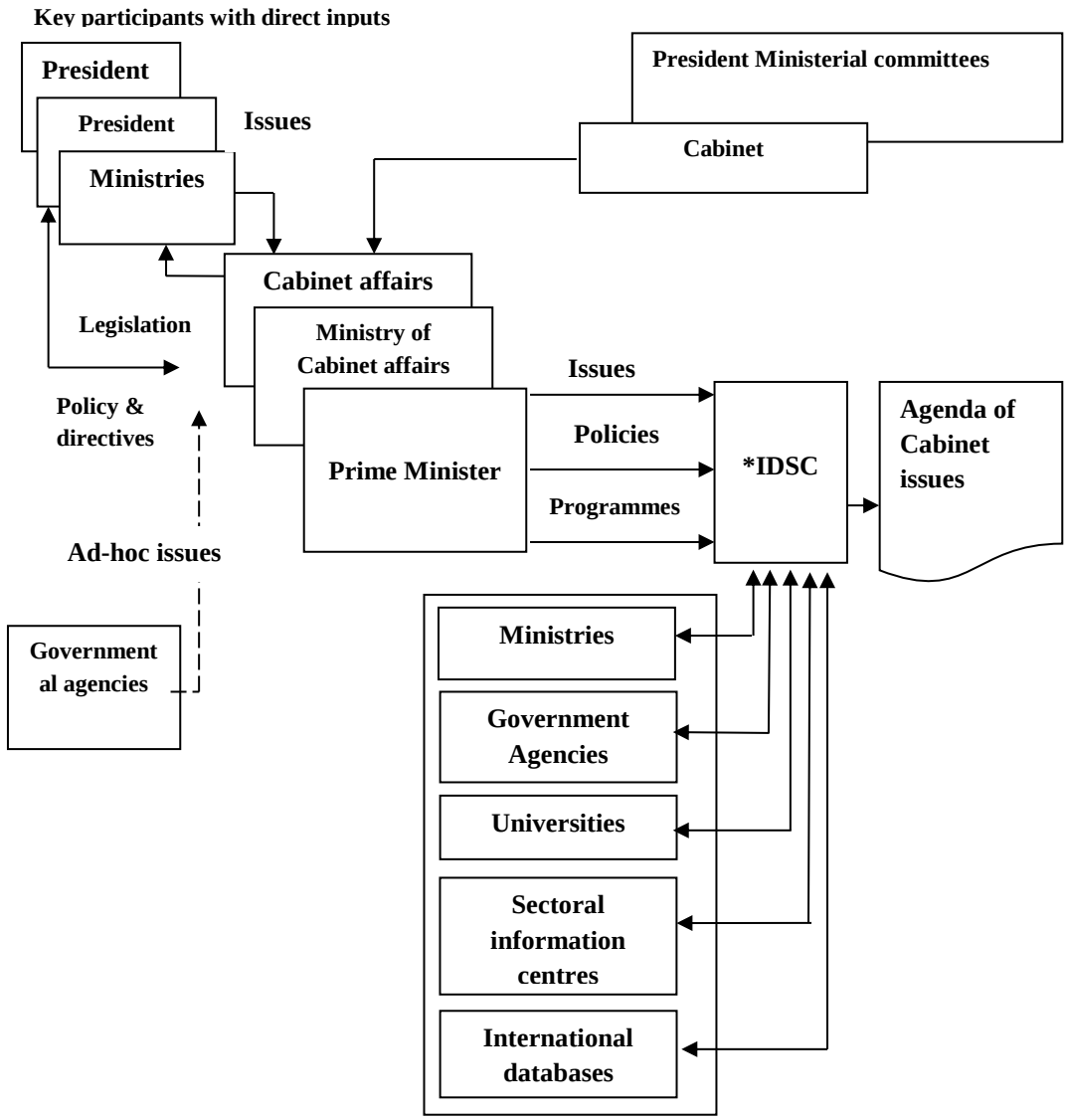
The original DSS concept and its evolution are today's concern with managing knowledge required for effective organisational decisions. It will then be argued that, while organisational decision environments have always been complex and ill-structured, the environments of the near future will be even more accordingly. DSS applications tend to require data from outside the organisation (environment), and this data may be in the form of trends or estimates. The ill-defined nature of information needs in DSS situations leads to the requirement for different kinds of databases than those for operational environments.

A significant amount of research has demonstrated that GDSS is successful in improving the efficiency, reliability and quality of the organisation work. DeSanctis and Gallupe (1987) describe GDSS as a set of software, hardware and language components and procedures that support a group of people engaged in a decision related meeting. Decision making in a 'cabinet' is about strategic because it involves questions of survival such as public sector performance, economic growth, balance of payments, deficit management and other strategic decisions. Decision making at high levels of governments or corporations, is often portrayed as a rational decision process, which involves managing issues that are forced on decision makers with varying and shifting priorities.

GDSS is defined by Laudon and Laudon (1996), and Wang and Fu (2007) as "an interactive computer-based system to facilitate the solutions to unstructured problems by a set of decision makers working together as a group". They also mentioned that 'collaborative GDSS' (electronic meeting system) that uses information technology to make group meetings more productive by facilitating communication as well as decision making.

Linking knowledge ultimately to the economy and the growth and sustainability, KS plays a prime role in the socioeconomic and political field within the international interest that has taken place over the last decades in the KM arena, (Davenport and Glaser, 2002). It is generally believed that most of intellectual assets of a firm exist as knowledge in the minds of organisation employees (Stenmark, 2001), the strategic use of KM for retaining competitive advantage is well recognised (Senge, 1990: Nonaka and Takeuchi, 1995).

Laudon and Laudon (1996), brought up Egyptian Cabinet experience with DSS, which commenced in 1985, with a three-person Information and Decision Support Centre (IDSC) to assists its own decision-making process. During 1990s became with 150 people work full time providing DSS services to the Cabinet on critical issues, through bilingual electronic system (Arabic/English). They mentioned *El* Sherif and *El* Sawy (1988) example of "tariff structure" to replace an inconsistent and complex structure that was thought to be impeding economic growth.



The Egyptian Cabinet Decision-Making Process: source: *El* Sherif and *El* Sawy cited in Laudon & Laudon, (1996 p. 615). *Information and Decision Support Centre.

Appendix 3.6

Holistic and Complexity Approach

Holistic and complexity approaches adapted from Espinosa and Walker, (2001 p. 9). The field concerning this study is highlighted.

Soft Systems Approach	**P. Checkland (1981)**	**Describes organisations as 'human activity systems'- a more humanistic and interpretivist view of organisations that enable analysts to understand multiplicity of viewpoints, conflict and coercion as natural elements of human social organisations.**
Evolutionary social Systems Design (SSD)	B.H. Banathy (2000); E. Laszlo (1972, 2006); A. Laszlo and K. Laszlo (2003)	Evolutionary Learning Societies and Communities (ELS). Societies (or communities aiming for sustainable paths for evolutionary development though synergistic process of evolutionary learning. Social Systems Design is the framework to support organisations and institutions that aim to contribute to such a self-guided evolutionary process.
Organisational Cybernetics	S. Beer (1979; 1981; 1985; 1994a); R. Espejo & Harden (1989); R. Espejo & Scwhaninger (1993); R. Espejo et al. (1996); A. Espinosa et al. (2005;2007;2008) A. Leonard (2008)	Develops a sound theory of a human social organisation as a neural network, with autonomous viable systems nested at different levels of recursion, still operating as a coherent and effective unit. The understanding of structural and communicative aspects of the nested viable systems is based on McCulloch's models of the brain as a neural work and Ashby's laws of variety management.
Second-order Cybernetics	H. von Foerster (1981); G. Bateson (1973; 1980); H. Maturana (1988); H. Maturana &F. Varela (1988).	Offers a biologically rooted understanding of cognition, also called 'cybernetics of the observer' or 'cybernetics of cybernetics'. It is an ontological position that recognises we inhabit a multiverse where we, as observers, enact the observed word.
Critical Systems Heuristics	W. Ulrich (1983; 1991); M. Jackson (2001; 2003); R. Flood (2001a; 2001b).	Focuses on ensuring fairness in the planning and decision-making process by promoting emancipation from oppressed individuals and groups in organisations and society.
Chaos Theory	D. Ruelle (1978; 1981); E. Lorentz (1993;2005); S. Smale (1998) Smale & F. Cucker (2007).	Explains the behaviour of nonlinear dynamic systems whose behaviours are highly sensitive to their initial conditions.
Complex Adaptive Systems	S. Kauffman (1995; 2000); M.M. Waldrop (1992); J. Holland (1998); E. McMillan (2008)	Understands a complex system as one composed by many elements interacting in a dynamic and nonlinear way; showing path dependence; having unpredictable behaviour; co-evolving with its environment; exhibiting emerging properties and being capable of self-organisation when it is far from equilibrium – at the edge of chaos.

Appendix 4.1

Philosophical Paradigms

A Paradigm is considered by Kuhn (1970) as ‘a cluster of beliefs and dictates, which for scientists in a particular discipline influence what should be studied, how research should be done, and how results should be interpreted’ (Bryman 1988; Bryman and Bell, 2007 p25). For business paradigm is way of examining of social phenomena from which particular understandings of it can be gained and explanations attempted (Saunders, et al., 2009, p. 597). Both paradigms and perspectives are human constructions. Perspectives are not as solidified or as unified as paradigms, although a perspective may share many elements with a paradigm: for example, a common set of methodological assumptions or a particular epistemology. These principles combine beliefs about ontology (what kind of being is the human being? What is the nature of reality?), epistemology (what is the relationship between the inquirer and the known?), and methodology (how do we know the world or gain knowledge of it?) (Denzin and Lincoln 2011, pp. 12-13).

These beliefs shape how the qualitative researcher sees the world and acts in it. The net of these beliefs may be termed a paradigm or interpretive framework, ‘a basic set of beliefs that guides action (Guba 1990). The interpretive research is guided by these set of beliefs and feedings about the world and how it should be understood and studied. So researchers make claims about what is knowledge (ontology), how we know that knowledge (epistemology), what values go into that knowledge (axiology), how we write about that knowledge (rhetoric), and processes for studying that knowledge (methodology) (Creswell 2003). The important question raised here is how reality is perceived. Thus we can see that a web of ontology, epistemology, axiology, rhetoric and methodologically premises may be termed a paradigm, or interpretive framework, (Guba 1990, p. 17).

Accordingly, ontology (concerning the assumptions about reality) is about defining what is real; assumptions are those giving something the status of being real, while disregarding others, like whether a particular phenomenon like power, control and culture actually exists or is merely an illusion. They lead to arguments between those who maintain different perspectives, and cause them to set up separate and sometimes conflicting research areas. Ontology is also concerned with subjectivity and objectivity; subjectivists stand at one end of the reality continuum in their belief that something

exists only when you experience and give meaning to it. From a subjectivist point of view, people create and experience realities in different ways because individuals and groups have their own assumptions, beliefs, and perceptions that lead them to do so. Objectivists stand on the other end: they believe reality exists independently of those who live in it. Seen from an objectivist point of view, people react to what is happening around them in predictable ways because their behaviour is part of the material world in which they live and is determined by causes, just as is the behaviour of matter.

Epistemology is concerned with knowledge of how you can know. Typical questions asked by those investigating epistemology include: how do humans generate knowledge, what are the criteria by which they discriminate good knowledge from bad, true, from false, valid from invalid, rational from irrational, or scientific from artificial and how the reality can be described. A strategy of inquiry refers to skills, assumptions, and practices that researchers employ as they move from their paradigm to the empirical world. Strategies of inquiry put paradigms of interpretation into motion, at the same time; strategies of inquiry also connect the researcher to specific methods of collecting and analysing empirical materials. For example, according to Denzin and Lincoln (2011), a case studied relies on research methods like interviewing, observing, and documenting analyses; it operates with a research strategy of making the case an object of study (by implementing and anchoring paradigms in specific empirical sites or in specific methodological practices).

A table prepared by the researcher based on works of Denzin, 1970; Lincoln and Guba, 1985, 2000; Ponterotto 2002, 2005; Tashakkori and Teddlie, 2003; Bryman and Bell, 2007; Saunders et al., 2009;; Denzin and Lincoln, 2011. This is a comparison between Positivists, Post-positivists, critical ideological and interpretivists (constructivists) philosophical paradigms, in terms of ontology, epistemology, axiology, rhetorical structure and methodology.

Positivists' paradigm and philosophical anchors; this paradigm brought here for the comparison Interpretivists/constructivists paradigm:

Ontology: The nature of reality and being	There is one true reality that is apprehendable, identifiable, and measurable (a position known as naïve realism). Conducting a study on counselling process and outcome in cross-racial dyads. Manipulating one variable (counsellor) while holding other variable constant (e.g., exact counselling script). The researcher randomly allocating a large sample of prospective clients to one of the race conditions. The study goal is ethic in that it attempts to identify one set of results (one true reality) that can be generalisable to a larger population.
Epistemology: The relationship between the knower (the research participant) and (The would-be knower the researcher)	Positivists emphasise dualism (the researcher and the research participant and topic are assumed to be independent of one another), by following rigorous, standard procedures, the participant and topic can be studied by the research without bias (objectivism). Positivists hold that the researcher can study her or his research participants without influencing them and vice-a-versa. If values and biases of the researcher influence the study in any way, the study becomes flawed. Replicated findings are considered 'true' and enhance theory verification evidence.
Axiology: The role of the researcher values in the researcher values in the scientific process	Positivist maintains that there is no place for values in the research process. Biasing: values are not relevant to the research process must be deleted from the equation, and by using research assistants and by not having close personal contact with the participant, there is little change of the lead researcher's values biasing the research.
Rhetorical Structure: Language used to present the procedures and results of research one's intended audience.	As objectivity and a detached emotionally neutral research, role prevails rhetoric is precise and scientific, presented in an objective manner.
Methodology: The process and procedures of the research	The process and procedures attempt to create as closely as possible, strict scientific methods and procedures where variables are carefully controlled or manipulated, and where the researcher's emotional or expectant stance on the problem under study is irrelevant. The aim of this position is to unfold and explain relationships among variable that will eventually lead to universal or ethic laws that from the foundation for prediction and control of phenomena.

Post-positivists paradigm and philosophical anchors; this paradigm brought here for the comparison Interpretivists/constructivists paradigm**:**

Ontology: The nature of reality and being	This is one true reality but it can only be apprehended and measured imperfectly, (a position known as critical realism). The research may use semi-structured, brief interviews of clients after the cross-cultural session and may use multiple raters in an attempt to identify a single a proximal reality of collective client experience, either through the use of interrater reliability or consensual agreement upon identified themes.
Epistemology: The relationship between the knower (the research participant) and (The would-be knower the researcher)	They advocate a modified dualism/objectivism acknowledging that the researcher may have some influence on threat being researched, but objectivity and researcher-subject independence remain important guidelines for the research process.
Axiology: The role of the researcher values in the researcher values in the scientific process	They maintain that there is no place for values in the research process. The researcher tries to contain her or his biases as much as possible but realises that they are present and may come into play in the study in one form or another. Bias; if the researcher is using interviews with farm workers, the research expectations may be (bracketed) by explicating them prior to the study.
Rhetorical Structure: Language used to present the procedures and results of research one's intended audience.	As objectivity and a detached emotionally neutral research role prevails; rhetoric is precise and scientific, presented in an objective manner.
Methodology: The process and procedures of the research	They attempt to create as closely as possible, strict scientific methods and procedures where variable are carefully controlled or manipulated, and where the researchers' emotional or expectant stance on the problem under stud is irrelevant. The goal of this position is to unfold and explain relationships among variables that will eventually lead to universal ethic laws that from the foundation for prediction and control of phenomena.

Critical ideological paradigm and philosophical anchors; this paradigm brought here for the comparison Interpretivists/constructivists paradigm

Ontology: The nature of reality and being	Realities that are mediated by power relations that are socially and historically constituted. Acknowledges a reality shaped by ethnic, cultural, gender, social, and political values.
Epistemology: The relationship between the knower (the research participant) and (The would-be knower the researcher)	The relationship between researcher and participant is transactional and subjective. The relationship is also dialectic in nature, with the goal of inciting transformation in the participants that leads to group empowerment and emancipation from oppression.
Axiology: The role of the researcher values in the researcher values in the scientific process	They take values a step further than constructivists in that they admittedly hope and expect their value biases to influence the research process and outcome, because critical theory concerns itself with unequal distributions of power.
Rhetorical Structure: Language used to present the procedures and results of research one's intended audience.	The subjective and interactive researcher role prevails, the rhetoric of the final research report is in the first person and is often personalised. The researcher's own experience, expectation, bias and values are detailed comprehensively. The impact of the research process on the emotional and intellectual life of the research is reflected upon and discussed openly.
Methodology: The process and procedures of the research	Given their stance on the centrality of intense research-participant interaction and on the need to be immersed over longer periods of time in the participants' world, more often embrace naturalist design (e.g. Lincoln and Guba, 1985) in which the researcher is ensconced in the community and day today of her or his research participants. Naturalistic inquiry leads to qualitative research methods such as in depth face to face interviewing and participant observation.

Interpretivists/constructivists paradigm and philosophical anchors:

Ontology: The nature of reality and being	There is multiple, constructed realities known as relativist position, rather than a single true reality, is subjective reality and influenced by the context of the situation, namely the individual's experience and perceptions, the social environment and the interaction between the individual and the researcher. The researcher may interview only a handful of clients for longer periods of time and when analysing the transcript data will not seek other researcher consensus on identified themes. Multiple meaning of a phenomenon in the minds of people who experience it as well as multiple interpretations of the data (multiple realities). The researcher neither attempts to unearth (be discovered) a single 'truth' from the realities of participants nor tries to achieve outside verification of the researcher analysis. The reader should judge (as the cases of this research) the rigor of the research on basis of its thick description.
Epistemology: The relationship between the knower (the research participant) and (The would-be knower the researcher)	They advocate a transactional and subjectivist stance that maintains that reality is socially constructed and therefore the dynamic interaction between researcher and participant is central to capturing and describing the 'lived experience' of the participant.
Axiology: The role of the researcher values in the researcher values in the scientific process	Maintain the researcher's values and lived experience cannot be separated from the research process. The researcher should knowledge, describe, and bracket. Biasing: values, but not eliminate them. A constructivist position requires close, prolonged interpersonal contact with the participants in order to facilitate their construction and expression of the 'lived experience' being studied. It is a fallacy to even think that one could eliminate value biases in such an inter-dependent researcher-participant interaction. The researchers also bracket their biases, but they see their biases more than do post-positivists.
Rhetorical Structure: Language used to present the procedures and results of research one's intended audience.	As in Critical ideological paradigm, the subjective and interactive researcher role prevails, the rhetoric of the final research report is in the first person and is often personalised in Interpretivists/constructivists paradigm. The researcher's own experience, expectation, bias and values are detailed comprehensively. The impact of the research process on the emotional and intellectual life of the researcher is reflected upon and disused openly.
Methodology: The process and procedures of the research	Also as in Critical ideological paradigm; given their stance on the centrality of intense research- participant interaction and on the need to be immersed over longer periods of time in the participants' world, more often embrace naturalist design (e.g. Lincoln and Guba, 1985) in which the research is ensconced in the community and day-to-day of her or his research participants. Naturalistic inquiry leads to qualitative research methods such as in depth face to face interviewing and participant observation.

Appendix 4.2a Q1-15:

Semi-structured interviews with

Investors

Foreign investor's profile:

Q1: What is the profile and scope of your firm's activities e.g.:

a. Mandate, Objectives, Range of activities
b. Senior management team profile (e.g. Mix of foreign and home national)
c. Number of workers (home/foreign %mix), turnover, number of offices/factories in Oman,
d. Relationship with headquarters (where are the HQs located, how frequently do you interact with the HQs, do the HQs get involved in resolving your local difficulties with Oman institutions …)
e. Do you have offices/operations in other GCCs? If yes how (and how frequently) do you interact with them?
f. Interaction with other investors in Oman or elsewhere.

Q2: a) When did your firm first invest in Oman?

b) Why Oman in particular and not some other GCC countries?

c) Size of your investment was it below or above 150,000 Omani Rials

Q3: a) Was your firm's investment in a Joint Venture (JV) or a wholly owned subsidiary/investment?

b) If in a JV did you have an Oman or GCC partner? What was their role (e.g. did they resume responsibility in dealing with Oman public sector organisations?)

Q4: a) Did you invest through a closed/public joint stock companies as a founder?

b) Did you invest through initial public offering (IPOs) and became a shareholder?

Knowledge of and role in developing government policy (e.g. 2020) and non-oil sector foreign direct investment:

Q5: Are you aware of the Oman growth and development policy? (e.g. strategic vision 2020) if not (Please see below a brief paragraph summarising it).

a. What was your role in it (e.g. contributor, provided feedback, implementer
b. What do you think of it? How would you redefine it in terms of what you think?
c. What do you think has been, is, or will be your firm's role in the Oman's development/plans?

Oman Vision 2020

Sector	1996	2020
Oil	33.5	09.0
Gas	01.5	10.0
Agriculture and fisheries	04.1	05.1
Mining and Quarrying	00.6	02.0
Manufacturing	05.4	15.0
Electricity and Water	01.7	02.0
Building, Construction and Real State	03.2	10.0
Trade and Tourism	14.1	18.0
Transport and communication	07.0	08.0
Banks, insurance and services	07.9	08.0
Government services	13.9	10.0
Other services	07.1	02.9
GDP	100%	100%

Q6: Are you aware of any specific non-oil sector foreign direct investment (FDI) attraction policies? Of any non-oil sector FDI attraction policies in general?

Q7: What kind of policies/decisions do you expect the government to make in order to help you and/or other foreign investor(s)?

Q8: Could you describe how the public sector/government/institutional decisions attract or repel, help or obstruct you and/or other foreign investors?

Q9: Describe how knowledge sharing between government institutions, public and private sector organisations can help in attracting foreign investors to Oman?

Q10: What kind of knowledge sharing between the above could benefit you and/or other foreign investors?

Q11: If there were three things that you would like to see improved in the Oman government decision making that could have made it easier to invest? What are they

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Q12: If there were three things that you would like to see improved in Oman to make your firm's FDI/operation easier what would they be?

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Q13: Which of your needs are fulfilled by public institutions? What kind of needs are not fulfilled or only partly fulfilled?

Q14: a) What kind of knowledge do you share with other foreign investors?

b) What kind of knowledge do you share with Domestic investors?

c) What kind of knowledge do you share with public institutions?

Q 15: What type of incentives and facilities you have gained from government offers? What other incentives and facilities you expected to have and you did not? Or which you would like to have it from the government?

Appendix 4.2a (Ar.)

أسئلة المقابلة مع المستثمرين

معلومات عن المستثمرين الأجانب

س ١: ما هي المعلومات ومجال أنشطة مؤسستكم ، مثلا :

أ: المهام والأهداف ، والأنشطة

ب: معلومات عن فريق كبار مسؤولي المؤسسة ، (مثال: وضح الأيدي العاملة الوطنية والوافدة المختلطة)

جـ: عدد العاملين (نسبة العاملين الوطنية إلى الوافدين)، حجم الأعمال، عدد المكاتب، عدد المصانع في عمان

د: العلاقة مع الشركة الأم (المقر الرئيسي للشركة) أين المقر الرئيسي ، ما مدى التفاعل مع المقر الرئيسي ، هل يتدخل المقر الرئيسي في حل مصاعب المحلية مع مؤسسات في عمان؟

هـ: هل لديكم مكاتب في دول مجلس التعاون ؟ إذا كانت الإجابة بنعم ، فما مدى تكرار التفاعل معها؟

و: ما هو مدى تفاعلكم مع المستثمرين الآخرين في عمان أو في الأماكن الأخرى ؟

س ٢:

أ : متى استثمرت مؤسستكم في عمان؟

ب: لماذا الاستثمار في عمان وليس في دول مجلس التعاون الأخرى

جـ: ما هو حجم استثماراتك هل أكثر أو أقل من مائة وخمسون ألف ريال عماني

س٣:

أ: هل كان استثمار مؤسستكم في شراكة مع الغير أم كان في استثمار مؤسسة مملوكة بالكامل

ب: إذا كان الاستثمار بالشراكة فهل لديك شريك عماني أو شريك من دول مجلس التعاون؟ ماذا كان دورهم (أعني هل باشروا المسؤوليات في التعامل مع مؤسسات القطاع الحكومي العماني؟

س٤:

أ: هل استثمرت من خلال الشركات المساهمة العامة أو المقفلة كمؤسس؟

ب: هل استثمرت من خلال الاكتتاب وأصبحت مالك أسهم؟

المعرفة بسياسات الحكومة (مثل: الرؤية المستقبلية ٢٠٢٠) والاستثمار الأجنبي المباشر في القطاعات غير النفطية

س ٥: هل لديك المعرفة بسياسة التنمية والتطوير التي تنتهجها عمان أي إستراتيجية الرؤية المستقبلية ٢٠٢٠ ؟ يرجى النظر في ايجاز عنها ؟

أ: إذا كانت الإجابة بنعم : ماذا كان دورك في ذلك (مشترك، مبدي الرأي، منفذ)

ب: ما رأيك في الرؤية ؟ كيف يمكنك إعادة تعريفه وفق رأيك؟

جـ: وفق رأيك ماذا كان أو يكون أو سوف يكون دور مؤسستك في تنمية عمان وخططها؟

الرؤية المستقبلية ٢٠٢٠

القطاع	١٩٩٦	٢٠٢٠
النفط	٣٣ر٥	٠٩ر٠
الغاز	٠١ر٥	١٠ر٠
الزراعة والأسماك	٠٤ر١	٠٥ر١
المعادن والمحاجر	٠٠ر٦	٠٢ر٠
الصناعة التحويلية	٠٥ر٤	١٥ر٠
الكهرباء والمياه	٠١ر٧	٠٢ر٠
الإنشاءات والعقار	٠٣ر٢	١٠ر٠
التجارة والسياحة	١٤ر١	١٨ر٠
النقل والاتصالات	٠٧ر٠	٠٨ر٠
المصارف والتأمين والخدمات	٠٧ر٩	٠٨ر٠
الخدمات الحكومية	١٣ر٩	١٠ر٠
الخدمات الآخرى	٧ر١.	٠٢ر٩
الناتج المحلي	%١٠٠	%١٠٠

س ٦: هل لديك معرفة عن أية سياسات محددة لجذب استثمار اجنبي مباشر في قطاع غير نفطي ؟ أو أية سياسات لجذب الاستثمارات بشكل عام؟

س ٧: ما هي أنواع السياسات أو القرارت التي تتوقع أن تتخذها الحكومة من أجل مساعدتك و / أو المستثمر / المستثمرون الآخرون؟

س ٨: هل لك أن تصف كيف لقرارات القطاع الحكومي /المؤسسات الحكومية تعمل على جذبك أو إبعادك، مساعدتك أو إعاقتك و / أو المستثمرون الآخرون ؟

س ٩: صف كيف أن المشاركة المعرفية بين المؤسسات القطاع العام والخاص سوف تساعد في جذب الاستثمار الأجنبي إلى عمان؟

س١٠: ما أنواع المشاركة المعرفية بين الجهات المشار إليها أعلاه بإمكانها أن تساعدكم و/ أو المستثمرون الآخرون؟

س١١: إن كانت هناك ثلاثة أمور ترغب أن يتم تحسينها في علمية اتخاذ القرار الحكومية العمانية التي من شأنها أن تسهل أكثر للاستثمار؟ فما هي:

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س ١٢ : إن كانت هناك ثلاثة أمور ترغب أن يتم تحسينها في عمان لتجعل تشغيل استثمارات مؤسستك المباشرة أسهل فماذا ستكون ؟

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س ١٣: ما هي احتياجاتك التي استوفيت من قبل مؤسسات القطاع الحكومي؟ ما هي أنواع الاحتياجات التي لم تستوف أو أنها استوفيت جزئيا؟

س ١٤:

أ: ما أنواع المعرفة التي تتقاسمها أو تتشارك بها مع المستثمرين الأجانب الآخرين؟

ب: ما أنواع المعرفة التي تتقاسمها أو تتشارك بها مع المستثمرين المحليين؟

ج: ما أنواع المعرفة التي تتقاسمها أو تتشارك بها مع مؤسسات القطاع العام؟

س١٥: ما أنواع الحوافز و المزايا التي حصلت عليها من ضمن ما قدمته الحكومة لكم ؟ وما هي الحوافز التي كنتم تتوقعونها ولم تحصلوها أو تلك التي ترغبون الحصول عليها؟

Appendix 4.2b:
Question 16 and 17

Q16A:

Please rank the importance of the following FDI economic determinants for your firm's FDI (from 1=not important, to 5=most important) as well as any relative changes in their importance (↑ increase, ↓ decrease) since your firm's initial FDI.

FDI Economic determinants	**Importance**						**Change**
	1	2	3	4	5	N/A	**(↑/↓)**
1. Population							
2. Gross Domestic Product							
3. Growth							
4. Infrastructure							
5. Deposits, loans, Venture capital							
6. Openness (Trade)							
7. FDI stocks (sectors)							
8. Exchange Rates							
9. Wages							
10. Inflation							
11. Taxation							
12. Competition (production, distribution)							
13. Incentives							
14. Other Please specify:							

Q16 B:

Please rank the importance of the following FDI institutional determinants for your firm's FDI (from 1=not important, to 5=most important) as well as any relative changes in their importance (↑ increase, ↓ decrease) since your firm's initial FDI.

FDI Institutional determinants	**Importance**						**Change**
	1	2	3	4	5	N/A	**(↑/↓)**
1. Country risk							
2. Corruption							
3. Transparency							
4. Stability							
5. Institutional quality							
6. Cultural proximity							
7. Law existence & enforcement (e.g. contractual property rights, labour, and bankruptcy)							
8. Bi/Multi-lateral (investment) treaties							
9. Company Formation							
10. Patent registration							
11. Bond/share issues							
12. Availability of Information							
13. Income disparities							
14. Education							
15. Support for R&D innovation							
16. Government contract denunciation							
17. Other Please specify:							

Q 17: Please rank the relevance of the following policies areas for FDI in terms of your own experience:

	Range of policy areas (1 not relevant – 5 most relevant)	**Rank 1-5**
1	**Policies attracting new foreign firms to locate in Oman/your region (e.g. tax breaks, land provision)**	
2	**Policies encouraging firms in Oman to locate in other Oman regions and/or to Internationalise**	
3	**Physical infrastructure development (especially: telecommunication, transport, energy, environmental infrastructures)**	
4	**Education and training within the firm (individual acquisition of knowledge)**	
5	**Research and technological development (collective production and acquisition of knowledge)**	
6	**Information diffusion and accessibility for firms (databases, web-sites, information centres, all of them of general, non-customised nature)**	
7	**Policies providing customised services to firms (e.g. environmental services, labelling, participation in exhibitions, logistics, design or new production techniques)**	
8	**Policies helping labour recruitment for firms**	
9	**Policies for the establishment of firms' networks in the region/Oman**	
10	**Policy for improving quality development in firms**	
11	**Policies for start-up, incubators of small firms**	
12	**Policies improving availability of venture or risk capital**	
13	**Environmental policies**	
14	**Other policies; please specify**	

Appendix: 4.2b Q 16-17 (Ar.)

س ١٦: انظر إلى القائمتين التاليتين حول الاقتصاد الاستثماري والمحددات المؤسسية

أ - يرجى تصنيف أهمية المحددات الاقتصادية للاستثمار الأجنبي المباشر لشركتك **(من 1= غير مهم، إلى 5= مهم جدا)** والتغيرات المرتبطة بها وبذات مستوى الأهمية. (↑ = الاتجاه نحو الازدياد، ↓ = الاتجاه نحو الانخفاض) منذ بدء الاستثمار الأجنبي المباشر بمؤسستك.

المحددات الاقتصادية للاستثمار الأجنبي المباشر	الأهمية						التغيرات (↓/↑)
	1	2	3	4	5	لا ينطبق	
1. عدد السكان							
2. إجمالي الناتج المحلي							
3. النمو							
4. البنية الأساسية							
٥. الإيداعات، القروض، رأس المال							
6. انفتاح (التجارة)							
7. الاستثمار الأجنبي المباشر بمختلف القطاعات							
8. أسعار الصرف							
9. الأجور							
10. التضخم							
11. الضرائب							
12. المنافسة (الإنتاج، والتوزيع)							
13. الحوافز							
14. أخرى، الرجاء تحديده							

ب: يرجى تصنيف أهمية المحددات مؤسسية للاستثمار الأجنبي المباشر لشركتك **(من 1= غير مهم، إلى 5= مهم جدا)** والتغيرات المرتبطة بها وبذات مستوى الأهمية. **(↑ = اتجاه نحو الازدياد، ↓ = الاتجاه نحو الانخفاض)** منذ بدء الاستثمار الأجنبي المباشر بمؤسستك.

محددات المؤسسية للاستثمار الأجنبي المباشر	الأهمية						التغيرات (↓/↑)
	1	2	3	4	5	لا ينطبق	
1. مخاطر دولة							
2. الفساد							
٣. الشفافية							
4. الاستقرار							
5. الجودة المؤسسية							
6. التقارب الثقافي							
7. وجود و سريان نفاذ القوانين (الملكية التعاقدية والحقوقية والأيدي العاملة و الإفلاس)							
8. الاتفاقيات الاستثمارية الثنائية والمتعددة							
9. تأسيس الشركات							
10. تسجيل البراءات							
11. السندات/ الأسهم							
12. توافر المعلومات							
13. تفاوت مستوى الدخل							
14. التعليم							
15. دعم البحوث والتطوير والإبداعات							
16. إنهاء تعسفي لعقود حكومية							
17. عوامل أخرى ، يرجى توضيحها							

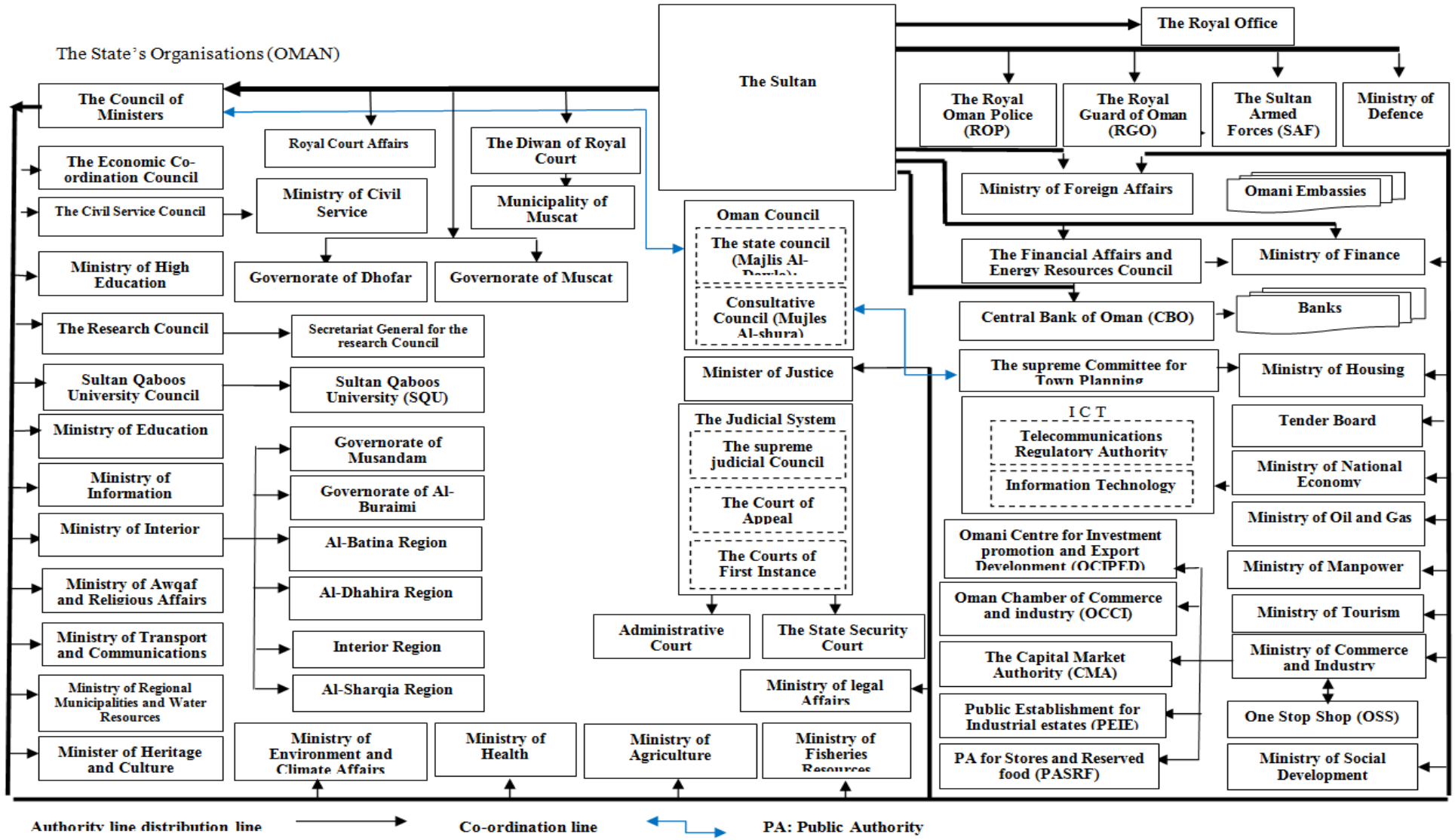
س ١٧: يمكن الاستعانة بالجدول التالي للإجابة على الأسئلة التالي. الرجاء تصنيف مجال السياسات.
(1= ليس ذو علاقة، 5= ذو علاقة وطيدة)

ت		(من1-إلى 5)
.1	سياسات تجذب شركات أجنبية جديدة للاستقرار في السلطنة/ في منطقتك (مثل: الإعفاء الضريبي، توفير الأراضي)	
.2	سياسات تشجيع الشركات في عمان على التوسع في مناطق السلطنة المختلفة أو/ والتوسع عالمياً.	
.3	تطوير البنية الأساسية (خاصة: الاتصالات، النقل، الطاقة، البنية البيئية الأساسية)	
.4	سياسات التعليم والتدريب	
.5	سياسات التطور البحثي والتقني (الإنتاج الجماعي وإكتساب المعرفة)	
.6	نشر المعلومات وسهولة وصول الشركات لـ (قواعد البيانات، والمواقع الإلكترونية، مراكز المعلومات، جميعها التي ذات الطبيعة الغير قابلة للتكييف)	
.7	السياسات الخاصة بالخدمات القابلة للتكييف وفق الشركات (مثل: الخدمات البيئية، توفير الملصقات التعريفية (labeling)، المشاركة في المعارض، الخدمات اللوجستية، التصميم أو تقنيات الإنتاج الجديدة)	
.8	السياسات التي تساعد الشركات على توظيف الأيدي العاملة.	
.9	سياسات لإنشاء شبكة فروع للشركات في المنطقة/ في عمان.	
.10	سياسات لتحسين تطوير الجودة في الشركات	
.11	سياسات بدء التشغيل و حضانات المؤسسات الصغيرة	
.12	سياسات لتحسين توافر رؤوس الأموال أو رؤوس أموال ذات احتمالية خطر الخسارة	
.13	السياسات البيئية	
.١٤	سياسات أخرى، يرجى تحديدها	

Appendix 4.2c (Q18):

Q18: Please see Oman institutions as per the attached government structure; what are those institutions which make the largest difference in your firm's operation?

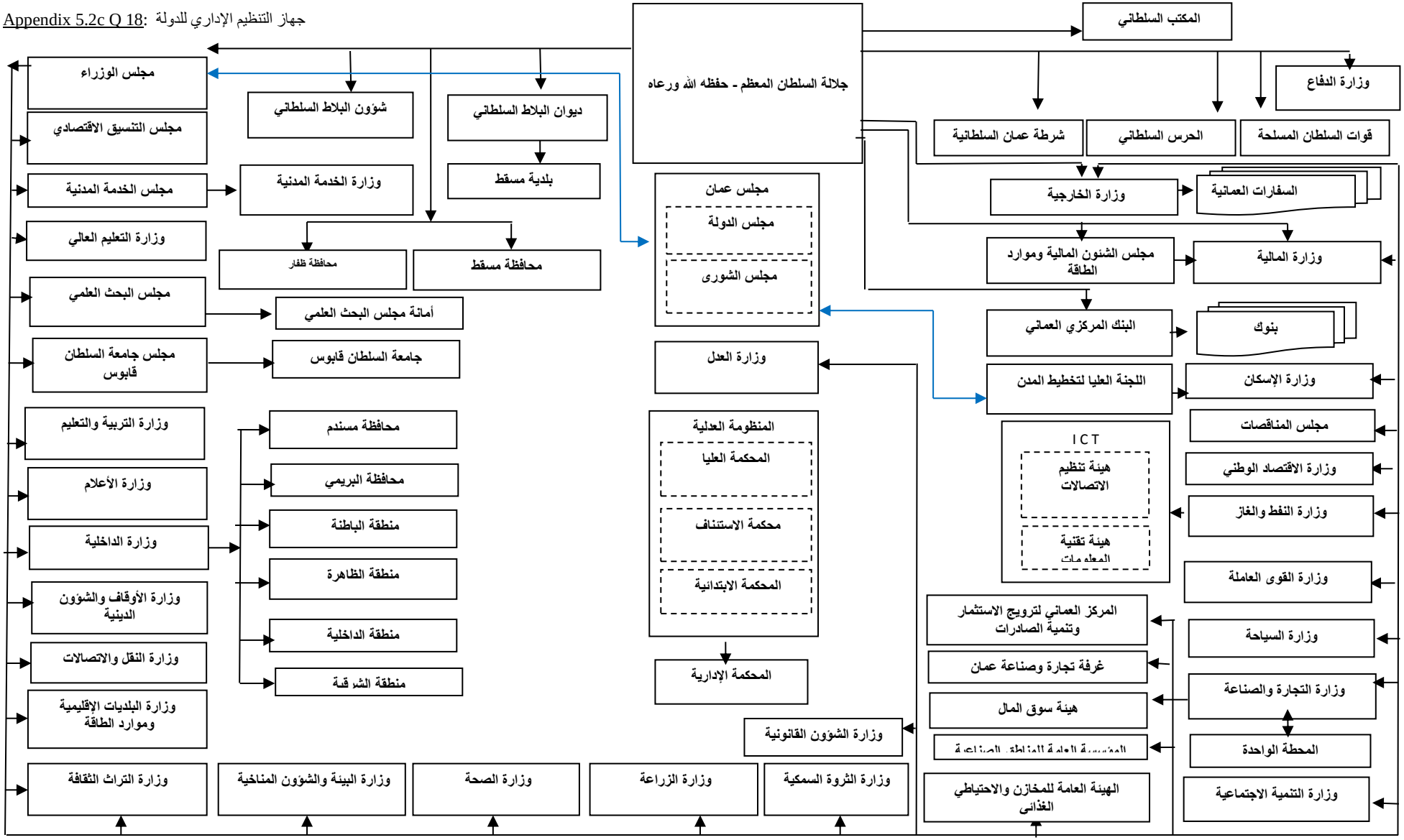
Tick the relevant institutions and mentioned their services, Comparing the different kinds of help you received and why you appreciated some more than others?


The State's Organisations (OMAN)
The Sultan
The Royal Office
The Council of Ministers
The Royal Oman Police (ROP)
The Royal Guard of Oman (RGO)
The Sultan Armed Forces (SAF)
Ministry of Defence
The Economic Co-ordination Council
Royal Court Affairs
The Diwan of Royal Court
Ministry of Foreign Affairs
Omani Embassies
The Civil Service Council
Ministry of Civil Service
Municipality of Muscat
Oman Council
The state council (Majlis Al-
Consultative Council (Mujles Al-shura)
The Financial Affairs and Energy Resources Council
Ministry of Finance
Ministry of High Education
Governorate of Dhofar
Governorate of Muscat
Central Bank of Oman (CBO)
Banks
The Research Council
Secretariat General for the research Council
Minister of Justice
The supreme Committee for Town Planning
Ministry of Housing
Sultan Qaboos University Council
Sultan Qaboos University (SQU)
The Judicial System
ICT
Tender Board
Ministry of Education
Governorate of Musandam
The supreme judicial Council
Telecommunications Regulatory Authority
Ministry of National Economy
Ministry of Information
Governorate of Al-Buraimi
The Court of Appeal
Information Technology
Ministry of Oil and Gas
Ministry of Interior
Al-Batina Region
The Courts of First Instance
Omani Centre for Investment promotion and Export Development (OCIPED)
Ministry of Manpower
Ministry of Awqaf and Religious Affairs
Al-Dhahira Region
Oman Chamber of Commerce and industry (OCCI)
Ministry of Tourism
Ministry of Transport and Communications
Interior Region
Administrative Court
The State Security Court
The Capital Market Authority (CMA)
Ministry of Commerce and Industry
Ministry of Regional Municipalities and Water Resources
Al-Sharqia Region
Ministry of legal Affairs
Public Establishment for Industrial estates (PEIE)
One Stop Shop (OSS)
Minister of Heritage and Culture
Ministry of Environment and Climate Affairs
Ministry of Health
Ministry of Agriculture
Ministry of Fisheries Resources
PA for Stores and Reserved food (PASRF)
Ministry of Social Development
Authority line distribution line
Co-ordination line
PA: Public Authority

Appendix 4.2c: Q 18 (Ar.)

س18 : يرجى الإطلاع على المؤسسات القطاع العام وفق تنظيم الجهاز الإداري للدولة المرفق، ما هي مؤسسات القطاع العام التي لعبت دورا كبيرا في تشغيل مؤسستك ، أشر على المؤسسات ذات العلاقة وإلى خدماتها، ومقارنة أنواع خدمة المساعدة التي حصلت عليها منها، ولماذا تفضل بعض المؤسسات على البعض الآخر؟

Appendix 5.2c Q 18: جهاز التنظيم الإداري للدولة



Appendix 4.2d

A: DIs Respondents. (FB) stands for Family Business.

Res.	Gend.	Nty.	Sect.	Activity	size	Place	Time	Date	Method	Firm type
D1	Male	Omani	MAN	Industrial	Large	Hotel	8:30 PM	26.4. 2010	audio	JV
D2	Male	Omani	MAN	Industrial	Large	Inv. office	7:00 PM	3.10. 2010	Short hand	wholly owned (F.B)
D3	Male	Omani	A&F	Services	Large	Hotel	11:00 AM	6.5. 2010	audio	Wholly owned (F.B)
D4	Male	Omani	M&Q	Industrial	Large	Inv. office	9:00 AM	30.5. 2010	Short hand	Wholly owned (Single)
D5	Male	Omani	T&T	services	Large	Hotel	08:00 PM	27.5. 2010	audio	Wholly owned (F.B)
D6	Male	Omani	A&F	Industrial	Large	Hotel	08:30 PM	6.6. 2010	Short hand	Wholly owned (F.B)
D7	Male	Omani	MAN	services	Large	Inv. office	6.00 Pm	7.6. 2010	Short hand	wholly owned (Small no. of owners)
D8	Male	Omani	B&C	services	SME	Inv. office	8:00 PM	28.8. 2010	Short hand	Wholly owned (F.B)
D9	Female	Omani	B&C	services	SME	Inv. office	5:00 PM	2.10. 2010	Short hand	wholly owned (Single)
D10	Male	Omani	M&Q	Industrial	Large	Hotel	10:00 PM	29.5. 2020	Short hand	JV
D11	Male	Omani	A&F	Industrial	Large	Hotel	8:45 PM	30.8. 2010	Short hand	Wholly owned (F.B)
D12	Female	Omani	T&T	services	SME	Inv. office	7:00 PM	1.9. 2010	Short hand	Wholly owned (F.B)
D13	Female	Omani	T&T	services	SME	Inv. office	06:00 PM	17.9. 2010	Short hand	wholly owned (Single)
D14	Female	Omani	B&C	services	Large	Inv. office	05:45 PM	1.10. 2010	Short hand	Wholly owned (F.B)
D15	Male	Omani	M&Q	services	Large	Inv. office	08:30 PM	1.9. 2010	Short hand	Wholly owned (Small no. of owners)

B: FDIs Respondent. (FB) stands for Family Business.

Res.	Gend.	Nty.	Sect	Activity	Size	place	Time	Date	Method	Firm type
F01	Male	Australian	M&Q	Industrial	Large	MIH	8:00 PM	29.5. 2010	audio	JV
F02	Male	Indian	A&F	Industrial	Large	Inv. office	5.00 PM	26.4. 2010	Short hand	Wholly owned (F.B)
F03	Male	Brazilian	MAN	Industrial	Large	Hotel	9:00 PM	31.5. 2010	Short hand	Small no. of owners
F04	Male	Indian	T&T	Services	Large	Hotel	10: AM	25.3. 2020	audio	JV
F05	Male	Egyptian	T&T	services	SME	Inv. office	3:00 PM	3.5. 2010	audio	Wholly owned Single
F06	Male	French	A&F	Industrial	SME	Inv. office	10:00 PM	1210.2	Short hand	JV
F07	Male	Pakistani	MAN	Industrial	Large	Invest office	8:00 PM	31.8. 2010	shorthand	JV
F08	Male	Korean	T&T	services	Large	Inv. office	8:00 PM	29.9. 2010	shorthand	JV
F09	Male	Indian	MAN	Industrial	Large	Inv. office	7:00 PM	26.4. 2010	Short hand	Wholly owned (F.B)
F10	Male	Canadian	M&Q	Industrial	large	Inv. office	8:00 PM	6.10. 2010	Short hand	JV
F11	Male	Bangladeshi	B&C	services	Large	Inv. office	8:15 PM	9.10. 2010	Short hand	JV
F12	Male	American	B&C	services	Large	Inv. office	10:00 AM	10.102	Short hand	JV
F13	Male	Cyprian	B&C	services	SME	Hotel	10:00 AM	2.5. 2010	audio	JV
F14	Male	Indian	A&F	Industrial	Large	Inv. office	10:00 AM	20.10.2010	Short hand	JV
F15	Male	New Zealand	M&Q	Industrial	Large	Inv. office	6:00 PM	20.10.2010	Short hand	JV

Start-up and Investment History (start-up **years** before the vision implementation are in bold)

Sector	Inv.	Year of entry	The investment history
A&F/DIs	D3	**1870**	This is a fifth general of family business, office in UEA.
	D6	**1932**	No investment in GCC. Mixed investment
	D11	1987	Commercial division commenced in 1988.
A&F/FDIs	F 2	1990	Having an office in GCC but governance from Oman
	F6	2005	No investment in GCC but export to UAE
	F14	1998	No investment in GCC but export to UAE

Sector	Inv.	Start-up year	The investment history
M&Q/DIs	D4	2006	Having investment in Qatar and UAE
	D10	1975	Trading business in USA and Australia
	D15	1998	No investment in GCC
M&Q/FDIs	F 1	2000	Having investment in UAE, USA America
	F10	2010	No investment in GCC
	F15	2007	No investment in GCC

Sector	**Inv.**	**Start-up year**	**The investment history**
B&C/DIs	D8	1971	Having investment in GCC (Saudi) and Turkey and Bahrain
	D9	1982	Have investment in GCC
	D14	1970	No investment in GCC
B&C/FDIs	F11	1980	Having investment in GCC
	F12	2010	No investment in GCC
	F13	2007	No investment in GCC

Sector	Inv.	Start-up year	The investment history
MAN/DIs	D1	1970	Inherited the experience from forth father (300 years), but we are in electric business for last 4 decades
	D2	1985	Having investment in UAE, KSA, Singapore, UK Bangladesh, India and Italy
	D7	1985	Planning for UAE after Oman
MAN/FDIs	F3	2007	Started as a commercial representative office for MENA region, in April 2009, then setting up complex project production started with 2011. They are in USD 1.3 billion business.
	F7	1997	Sales office in UAE, having investment in some of GCC countries
	F9	**1947**	RO 26 million size of business. Family business in UAE

Sector	Inv.	Start-up year	The investment story
T&T/DIs	D5	**1886**	Started investing in 1886 by his late grandfather of the investor Having investment in (UAE1958) and (Kuwait since 1946),. Size of investment RO 130 million.
	D12	1996	No investment elsewhere
	D13	2008	Below RO 150,000
T&T/FDIs	F4	1980	International co. JV with an Omani family company. Above R.O 150,000.
	F5	2006	We started-up business in UAE.
	F8	2009	Having two projects in Oman and non in GCC

Sector's objectives, mandates and activities which focused upon are as follows:

The participants firms characteristic of activities mandate and objectives were as follows

- Agribusiness and Fishing investors are in Agricultural products manufacturing and in fish process business, and food trading dealing in consumables and commodities like rice, sugar coffee beans and spices; they have a range of supermarket chains (the friendly neighbourhood stores), also there fast food stores. They are also in food and consumer products distribution logistic and supply chain and frozen food business.
- Minerals sectors participants mandate includes the exploration, construction and operation. They use geochemical and geophysical data to determine the prospective of the Northern *Samail* ophiolite-belt for copper-gold mineralisation. Mining and pressing of marbles, chromate mining and quarrying factory, mineral exploration and development.
- Building & Constructing sectors participant's activities mainly in building commercial residential industrial projects.
- Manufacturing sectors investors activities includes manufacturing: palletising plant, a ceramic tile manufacturing. Including manufacturing ceramic tile using local raw materials and distribute the products primarily in the GCC and other neighbouring markets. They are also manufactures high voltage, medium voltage, low voltage and specialty cables meeting international specifications and servicing local and export markets. Food industry and Trade.
- Trade and Tourism sectors participants mostly are in family business of trade and tourism. They trade in building materials, paints, and food manufacturing including fast food,. They are also in automobile (car) agents, shipping, printing press and computers, furniture and linen, Real estate, and other wide range of business. They are also in IT innovation in service sectors dealing with knowledge and the knowledge repository.

Appendix 4.2e: important public institutions – frequents: investors sees most PIs important to their business: Q 18: (F and D Investors) (Note: After ticking the results of frequents are shown below which used for composition to identify Most important and relevant public institutions to the investors to constitute FGS)

Government institutions	Helpful D	More helpful D	Total Votes D	helpful F	More helpful F	Total Votes F	Total Votes D+F
The Diwan of Royal Court	0	0	0	2	2	4	4
The Royal Court Affairs	1	0	1	3	0	3	4
Ministry of Defence	3	2	5	2	0	2	7
The Sultan Armed Forces	3	0	3	1	0	1	4
The Royal Guard of Oman	4	0	4	0	0	0	4
Muscat Governorate	1	2	3	0	0	0	3
Ministry of Foreign Affairs - Omani Embassies	5	2	7	1	0	1	8
Ministry of High Education	1	2	3	1	0	1	4
Ministry of Education	2	2	4	1	0	1	5
The Sultan Qaboos University Council	1	2	3	0	0	0	3
The Research Council	1	0	1	0	0	0	1
Ministry of Interior-regions	1	0	1	4	4	8	9
Ministry of Heritage and Culture	0	0	0	0	2	2	2
Ministry of Awqaf and Religious Affairs	0	2	2	0	0	0	2
Ministry of Health	1	2	3	4	0	4	7
The Financial Affairs and Energy Res. Council	1	2	3	0	0	0	3
The Economic Co-operation Council	1	2	3	0	0	0	3
Ministry of Legal Affairs	1	0	1	2	0	2	3
The Civil Service Council	1	0	1	0	0	0	1
Ministry of Oil and Gas	1	2	3	3	0	3	6

Ministry of Agriculture Fisheries Resources	6	0	6	2	0	2	8
Government institutions	**Helpful D**	**More helpful D**	**Total Votes D**	**helpful F**	**More helpful F**	**Total Votes F**	**Total Votes D+F**
Ministry of Information	2	0	2	1	0	1	3
Ministry of Social Development	0	2	2	1	0	1	3
Ministry of Justice	1	0	1	0	0	0	1
The supreme Judicial Council	2	2	4	0	0	0	4
The Supreme Committee for Town Planning	2	0	2	0	0	0	2
Ministry of Housing	5	0	5	1	0	1	6
Ministry of Tourism	3	0	3	0	0	0	3
Telecommunication regulatory Authority	1	2	3	0	0	0	3
Information Technology Authority	1	0	1	0	0	0	1
Administrative Court	2	0	2	0	0	0	2
The Court of Appeal	1	0	1	0	0	0	1
The court of first instance	2	0	2	0	0	0	2
Tender Board Committee	1	6	7	2	0	2	9
Muscat Municipality	2	6	8	1	0	1	9
Sultan Qaboos university (SQU)	2	2	4	4	0	4	8
The public Authority for Stores and Reserve Food	4	2	6	0	0	0	6
The Capital Market Authority	2	2	4	1	0	1	5
Public authority for investment promotion and export development (PAIPED)	1	4	5	1	0	1	6
Central Bank of Oman	3	2	5	2	0	2	7
Total points	72	52	124	40	8	48	172

Appendix 4.3

Consent Form

The HUBS RESEARCH ETHICS COMMITTEE

CONSENT FORM: SURVEYS, QUESTIONNAIRES

I, of

Hereby agree to participate in this study to be undertaken, **by** Ahmed Sulaiman al Maimani and I understand that the purpose of the research concerns *the development of a public sector knowledge management and decision support system for foreign and domestic investors in the Sultanate of Oman.*

This field work (interview) is about knowledge sharing for government policy and decision making to attract investors in Sultanate of Oman.

I understand that

1. Upon receipt, my questionnaire will be coded and my name and address kept separately from it.
2. Any information that I provide will not be made public in any form that could reveal my identity to an outside party i.e. that I will remain fully anonymous.
3. Aggregated results will be used for research purposes and may be reported in scientific and academic journals.
4. Individual results **will not** be released to any person except at my request and on my authorisation.
5. That I am free to withdraw my consent at any time during the study in which event my participation in the research study will immediately cease and any information obtained from me will not be used.

Signature: Date:

The contact details of the researcher are:

The contact details of the secretary to the HUBS Research Ethics Committee are Karen Walton, Hull University Business School, University of Hull, Cottingham Road, Hull, HU6 7RX. Email: k.a.walton@hull.ac.uk tel. 01482-463646.

Appendix 4.3 (Ar.)

استمارة قبول

لجنة قواعد الأخلاقيات المهنية بكلية إدارة الأعمال بجامعة هل

استمارة قبول

للمسوحات والاستبيانات

أنا

من

أوافق على المشاركة في الدراسة التي يقوم بها أحمد بن سليمان الميمني ومتفهم بأن الغرض من الدراسة متعلق بإدارة المعرفة بالقطاع العام و نظام دعم القرارات للمستثمرين المحليين والمستثمرين الأجانب في سلطنة عمان. وأن هذه الدراسة الميدانية عن تقاسم أو تشارك المعرفة للسياسات الحكومية واتخاذ القرارات لجذب المستثمرين لسلطنة عمان.

ومتفهم بأن:

١- عند الانتهاء، فإن استبياناتي سترمز وأن إسمي وعنواني سوف يحتفظ بها بالسرية التامة و عن معزل عنها.
٢- اي معلومات أدليت بها لا يتم نشرها علنا و بأي صورة من الممكن ان تظهر شخصيتي لأي جهة أخرى بمعنى سأكون غير معروفا تماما.
٣- مجمل النتائج المستوحاه سوف تستخدم لأغراض البحث ويمكن أن تستخدم في الدوريات العلمية
٤- النتائج الفردية سوف لن تصدر لأي شخص إلا حسب طلبي وحسب تفويضي.
٥- لدى حرية الانسحاب طواعية في أي وقت خلال الدراسة و يتم إيقاف مشاركتي فورا وأية معلومات أدليت بها سوف لن تستخدم بعد الانسحاب.

التوقيع : التاريخ:

تفاصيل الاتصال بجهة الباحث:

تفاصيل الاتصال بمنسق لجنة قواعد الأخلاقيات المهنية بكلية إدارة الأعمال بجامعة هل هي كالتالي:

Walton, Hull University Business School, University of Hull, Cottingham Road, Hull, HU6 7RX. Email: k.a.walton@hull.ac.uk tel. 01482-463646.

Appendix 5.1
(N vivo interview report)
Summary of Interviews

Code A&F 1: Knowledge sharing & Collaboration

DIs	A&F: Knowledge sharing & collaboration	FDIs	A&F: knowledge sharing &collaboration
D3	*"I wish they come to us and ask us of what we think and what we need and how should we work together and ….in the end of the day that two hands clap rather than one hand waving and other hand not responding".*	F2	*"Heavy publications and delay on Inter-government agencies causes' heartburn" we need to explain this to every government agency". "Current delays can push investments away from Oman we need experience shared.*
D6	*"The PIs need to work with private sector style, manner, method and as sovereign authority, which work as the decision making authority, realising the impact of their decision on the social life"*	F6	*"The OCCI is holding such kind of meetings but with too many people and discussions are mainly in Arabic thus not allowing foreign investors to fully participate"*
D11	*"PIs should encourage DIs to investment in the business, liberalisation can encourage for more investors"*	F 14	*"We need to share information; Import/Export figures, Number of on-going & future Projects, some financial projections and plans".*

Code A&F 2: The strategic vision

DIs	A&F: The strategic vision	FDIs	A&F: The strategic vision
D3	*"I am fully aware I was instrumentally present when this policy was formed in 1995, I was there when it was launched to the public. It is not just a policy related to government but it is a policy related to the corporate sector as well", "Our role is to secure food which is a significant role, and as a company working in the food Security field I think that we will have lots of opportunities, because we refer to the mentioned vision in agriculture and livestock products including milk and meat fields. I feel very much of part and intrinsic member. We are also contributor towards realising this 2020 dream"*	F2	"*Yes, Our role is to achieve the government's set goals; It is a very energetic plan, rightly needed for growth of this country", "We will provide employment opportunities to local population and upgrade skills set by continue training"*
D6	*"It is a good strategic vision as a target, but it needs implementing mechanism and review each five years and the involvement of private sector which is does not exist at the moment".*	F6	*"I am aware, the aim to bring more diversification in Omani economy is wise as well as to reduce the dependency on oil" "We also believe that it is essential to preserve the future and thus industrial fishing shall be properly monitored. If our industry could attract more of the existing volumes in order to add value then the overall revenues of the country would grow accordingly and then the objective of the 2020 strategic vision for this sector of activity could be achieved more easily"*
D 11	*"Vision 2020 will benefit the country if implemented in its true sense. Not depending on income from oil only"*		

Code M&Q 1: Knowledge sharing & Collaboration

DIs	M&Q: Knowledge sharing & collaboration	FDIs	M&Q: Knowledge sharing and collaboration
D10	*"Statutes & policies of the government should be clear to the investors. This will help them to decide on the type of industry, quantum and period of investment". "Every investor would like to know how safe his investment is (political risk, economic risk) and how he can repatriate the benefits earned,*	F1	"*We shared knowledge for long-time and a lot of time and many was spent to collect data that we can get freely from the entire place.* *"Until very recently and still, the ability to get data from the government has been nearly impossible*"
D1	*"Knowledge sharing between government institutions and private sector will lead to depth in needs of private sector and enhance the mutual relationship between the two parties to achieve the joint goals"*	F 10	"*It is only recently that we have been given access to the MCI Archives which contain significant exploration materials from past explorers. For mineral exploration companies, access to historical data in computerised format Geographical Information System (GIS) format is crucial to exploration and discovery*" . "*Sharing previous exploration results benefit the government and Omani people in so far as exploration work is not repeated*"
D 15	*"Mineral data and information and knowledge exchange is important for strengthening the relationship with the other investors especially the investment opportunities. Participation in the conferences and workshops and seminars that concerns the investment which are organised by the government, and to know what the government has reviewed and changed in policies, laws, regulations and processes that encourage the investors to invest".*	F 15	*"Government holds extensive historic mining data that will help develop new projects. This data is archived by government in a way that it is not easy to use and in some cases is deliberately withheld*". "*Mining history, geological data and history and current information on who holds mining concessions".*

Code M&Q 2: The strategic vision

DIs	M&Q: The strategic vision	FDIs	M&Q: The strategic vision
D 10	"*In Mining sector, our firm has an important role to play by roping in FDI with technical expertise and financial soundness*"	F10	"*We are very supportive of the diversification away from Oman's reliance on oil & gas – development of Oman's copper industry is benefitting from this strategy. We are keen to assist the Omani government to build a privately driven mineral exploration and mining industry over the coming years*"
D15	"*We are implementers to achieve the percentage of the GDP mentioned in 2020*".	F15	"*We see for our company is helping to develop the mining and renewable energy and could help in achieving the targets listed in 2020 vision.*

Code B&C 1: Knowledge sharing & Collaboration

DIs	B&C: Knowledge sharing & collaboration	FDIs	B&C: Knowledge sharing & collaboration
D8	*More conferences and meetings we need*"	F11	"*The knowledge sharing platform between government institutions, public and private sector organisation will help achieve Oman 2020 growth and development policy on a more stable and sure success manner".*
D9	"*Transparent information will be available if knowledge is shared. Public/Private sector can share views and experiences to help provide information for government decisions*"	F12	*"Our experience in Oman has been one of the best among the 100 countries in which we operate*"
D14	"*Knowledge sharing is no longer a need. It should be in place amongst government bodies, between public and private sector to attract domestic investors, it is mandatory*".	F13	"*Knowledge sharing can help with understanding regulations and the various procedures in government that need to be followed correctly. Knowledge sharing can also help government to see where these can be improved. Further, the government may also have done some initial investigations that can be helpful for any investor to decide whether they will invest or not*"

Code B&C 2: The strategic vision

DIs	B&C: The strategic vision	FDIs	B&C: The strategic vision
D9	"*It is a realistic plan, and we have indirect role, we are contributors*"	F11	"*The Oman 2020 growth and development policy is very realistic based on the reserves available in the country as on date. Based on the future requirements and our dear HM's future vision the 2020 policy looks viable for a stupendous success.*
D14	*"Strategic vision 2020 is well conceived and implementation is going on in right direction although the speed is moderately slower.*	F13	*"Very good to diversify the economy, I believe the targets are achievable.*

Code MAN 1: Knowledge sharing & Collaboration

DIs	MAN: Knowledge sharing & collaboration	FDIs	MAN: Knowledge sharing & collaboration
D1	*"The best thing to dialogue with the private sector through the different channels such as OCCI, extra, to the direct dialogue with the private sector necessarily to be linked by sharing views with government side and asking the private sectors and business sectors in the country to give some thoughts or to give some opinion and give some new ideas also. By this way it will be good exchange in the theories, practice experience"* "*Knowledge and experience builds a confident, when it comes between two sectors government and private sector. Lack of confidence means no investment.*	F3	"*FDI usually have a long history in dealing in different jurisdictions and can contribute in terms of efficient solutions given to similar projects. The sector leaders' positive experiences are seen as an important reference for smaller companies*". "*It would be very useful if we could have access to more detailed statistics in terms of the national economy's main figures and a more clear understanding of the role assigned to the different industries in the breakdown of the main guidelines of the vision 2020"*
D2	*"This is a critical question … Sharing of knowledge between Governmental agencies can help investors and can help eliminate contradictions between them that often discourages domestic investors from Investing.*	F7	"*We would reiterate the need to share information on the nation's Energy plans, since this is vital to most manufacturing businesses*"
D7	"*It is necessary to open dialogues between public and investors*"	F9	"*Knowledge sharing can save time and speed up decisions*"

Code MAN 2: The strategic vision

DIs	MAN: The strategic vision	FDIs	MAN: The strategic vision
D1	*"It is a good tool, and long term plan but we need two plans one is long term and second should be medium term. Manufacturing growth from 5% of the GDP means we do have responsibility and obligations to play in the economic vision"*	F3	"*The vision 2020 shows the maturity of the Sultanate of Oman and is perfectly aligned with the economic trends perceived by our strategic planning areas and if fully implemented can ensure a bright and prosperous future for the Sultanate's and economy and people. Influencing not only in the manufacturing sector but it needed in many other sectors. Manufacturing sector has the highest weight in Oman 2020 vision and the mining sector needs to grow tremendously to reach the target set to it*".
D2	"*I am Aware of it, prudent and desirable but many challenges lies ahead. My firm has a role to play certainly. No firm role in contributing, providing feedback or implementing; not sought or requested but has a role indirectly*"	F7	"*We think that it is a well thought plan, placing emphasis on manufacturing, trading and tourism to fuel growth while reducing the dependence on oil*". "*We are a significant presence in manufacturing today. We have built a strong competitive position in the market place and we are optimistic about our prospects for growth. We hope to play a role in achieving Oman Vision of manufacturing contributing 15% of the nation's GDP by 2020*"
D7	"*Yes I am aware of the strategic plan and it is a good one. Yes in the electrical infrastructure of the plan. We are implementers*"	F9	"*It is a very energetic and ambitious plan very much needed for Oman's growth. "Yes we have an important part to play in our countries growth*"

Code T&T 1: Knowledge sharing & Collaboration

DIs	T&T: knowledge sharing & collaboration	FDIs	T&T: knowledge sharing & collaboration
D5	"*This is a very vital point, because the more understanding between public sector and between the private sector the more productivity, I can see more productivity specially full understanding comes to the picture then there will be a lot productivity*"	F4	"*Knowledge sharing between government institutions is happening in the ICT sector through ITA being informed; there is common element in large tenders and a deal in the ICT sector does help to homogenise the standards. The process that has been adapted and made in the government, but I think it will be good if there is a forum to formed which can work with the industry closely so that both of us can understand each once pain points and work as partners rather than vender and customer I think Public Private Partnership (PPP) will be very important element at the end of the day we are partners together*."
D12	"*By knowledge sharing the government entities will recognise the public sectors requirements from which the government will form, model or shape the polices that ease for the serious investors, such as forming a special committee that look after the investor's needs*."	F5	"*The main delay in starting the business and even continuous activities in business is moving from one ministry to another to get the approvals to process the transactions without having one organisation or one place to finish this transaction from. Sharing the information is very important where we can not only to accelerate the transaction time but also we can insure that there are very clear information and instruction and how we complete transactions without missing information that cause the delay*"
D13	"*The government will be able to consider taking the points of view from public and private sectors then it will try to do changes to attract investors*."		

Code T&T 2: The strategic vision

DIs	T&T: Strategic vision	FDIs	T&T: Strategic vision
D12	"*I cannot predict; but as much as I know that a lot has been achieved from strategic plan. If I understood the question; I think every establishment and company has a role to play in the strategic plan*.	F4	"*Yes we are aware of Government policies regarding Manufacturing, agriculture and tourism to enhance the GDP in terms of villages and tourism and ecosystems around the tourism projects. It is a realistic plan. Our role in attracting non-oil foreign direct investment*".
D13	"*I see that in the future will be largely depending on Gas so I don't expect that Oil and Gas to reach down to 19% of GDP in 2020*".	F5	"*I think actually the refinement of this plan should focus more on non-traditional industries, it is very important to encourage high-tech industries either the manufacturing or the services"*
		F8	"*Vision achievement could be possible, but it really depends on the world economy*"

Appendix 5.2

Focus Groups (FGs)
Public Institutions (PIs)

Introduction

Ahmed Al-Maimani, The University of Hull PhD student (The moderator) has invited the public institutions in two focus groups (FGs) to attend, as participants; First group constitutes of (9) respondents attended on 1st October 2012, and the second constitutes of 8 participants on 2nd October 2012, and both groups' participants were of two levels; policy and decision makers and services providers.

Forming the Groups:

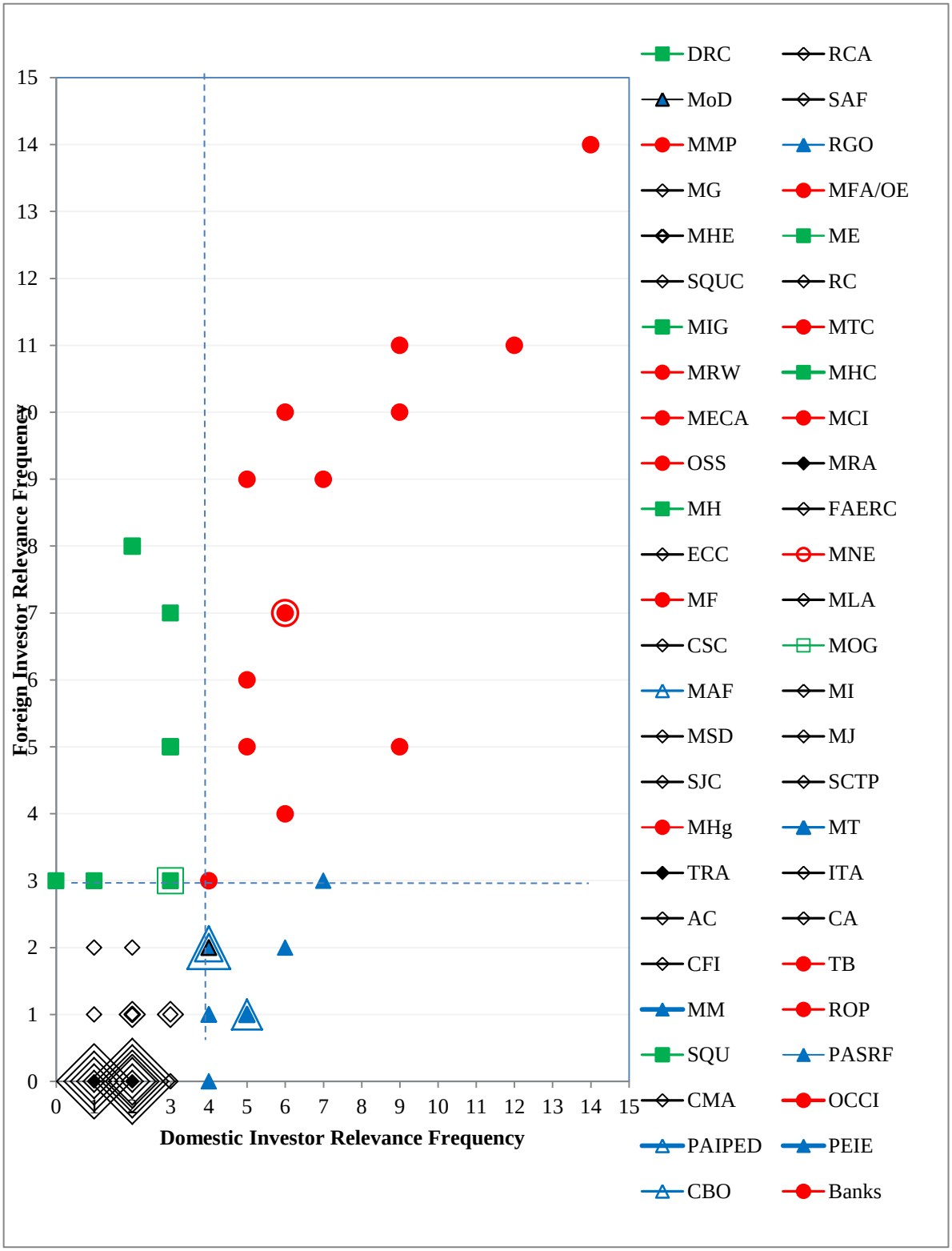
FGs composition should reflect the institutions relevant to targeted economic sectors. Therefore, it was decided to employ some selection criterion to decide which of the 52 institutions involved in the first stage of the fieldwork (investor interviews) would participate in this second stage. The criterion was one of relevance to foreign and domestic institutions. According to the first stage of the fieldwork some 30 (Maximum) of them were identified by fifteen foreign investors (FI) and fifteen by domestic investors (DI) during the interview conducted by the researcher in early 2010 as important and relevant to their business. Figure (1) illustrates four groups of public institutions (52) institutions, first three groups consisting 30 institutions thus, the researcher considers these institutions as a *rim* to form two focuses groups within it, to seek institutions opinion following methodological advice on FG max size.

i) First group of institutions (14 institutions) that is seen important and relevant to FI and DI simultaneously.

ii) Second group of institutions (7 institutions) that has been seen important and relevant to FI more that DI.

iii) Third group of institutions (9 institutions) that has been seen important and relevant to (DI) more than FI.

iv) Fourth group are the rest of institutions (22 institutions) that has not been seen important and relevant to neither FI nor DI's business, there for are not considered within the rim.


Foreign Investor Relevance Frequency
Domestic Investor Relevance Frequency
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
DRC
MoD
MMP
MG
MHE
SQUC
MIG
MRW
MECA
OSS
MH
ECC
MF
CSC
MAF
MSD
SJC
MHg
TRA
AC
CFI
MM
SQU
CMA
PAIPED
CBO
RCA
SAF
RGO
MFA/OE
ME
RC
MTC
MHC
MCI
MRA
FAERC
MNE
MLA
MOG
MI
MJ
SCTP
MT
ITA
CA
TB
ROP
PASRF
OCCI
PEIE
Banks

The implementation:

HiF+HiD	TVD	TVF	FGp
MCI	14	14	3
MMP	12	11	1
Banks	9	11	1
ROP	9	10	2
OCCI	9	5	1
MF	7	9	1
MECA	6	10	1
OSS	6	7	1
MNE	6	7	*
MHg	6	4	A
MRW	5	9	A
TB	5	6	1
MTC	5	5	1
MFA/OE	4	3	A
Total	14	14	13

No more

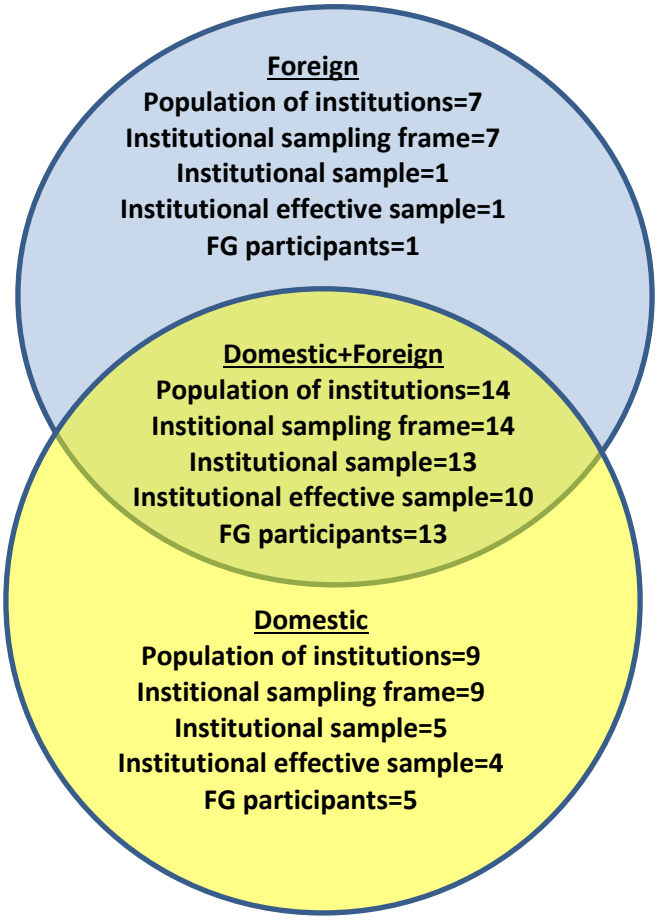
HiD	TVD	TVF	FGp
PEIE	7	3	1
MM	6	2	A
MT	5	1	2
PAIPED	5	1	A
MoD	*4*	*2*	
MAF	*4*	*2*	*1*
CBO	*4*	*2*	
RGO	*4*	*1*	
PASRF	*4*	*0*	*1*
Total	9	9	5

HiF	TVD	TVF	FGp
MIG	2	8	A
MH	3	7	1
SQC	*3*	*5*	
ME	*3*	*3*	
MOG	*3*	*3*	
DRC	*1*	*3*	
MHC	*0*	*3*	
Total	7	7	1

LowD+F	TVD	TVF	FGp
SAF	3	1	
CMA	3	1	
SCTP	3	0	
RCA	2	2	
MHE	2	1	
MI	2	1	
MG	2	0	
SQUC	2	0	
RC	2	0	
ECC	2	0	
SJC	2	0	
TRA	2	0	
AC	2	0	
CFI	2	0	
MLA	1	2	
MSD	1	1	
MRA	1	0	
FAERC	1	0	
CSC	1	0	
MJ	1	0	
ITA	1	0	
CA	1	0	
Total	22	22	

The composition of Focus Groups (figures illustrate the frequency of foreign and Domestic opinion.

All (30) institutions were thus invited through telephone conversations, albeit some declined or were unable to participate. In total 10 institutions relevant to both types of investors participated. However, as these institutions involve a number of sub-units (e.g. MCI having an industry, commerce, and mining divisions or ROP having a customs and in Port services divisions) relevant to each FG the total number of participants from this group of institutions was elevated to 13. The aforementioned three groups are illustrated in Fig. (2) shows the interlock of the three groups to summarises the composition of the 2 FGs



Attempts were then made to recruit the remaining FG participants from institutions that are either domestic or foreign (but not both) investors found to be relevant bringing the total number of FG participants to 19. It is therefore, the first focus group (hereinafter called FG1) represents the institutions that serve and related to the sectors that met their vision 2020 targets (by 2010) viz. MAN, T&T, B&C, whereas the second focus group (hereinafter called FG2) represents institutions that serve and related to the sectors that did not achieved until (2010) their targets viz. A&F and M&Q. Table below illustrate those institutions representatives.

FG1		FG2	
Institution	**Participant title**	**Institution**	**Representative**
MCI (Industry Div)		**MCI (Minerals Div)**	
MCI (Commerce Div)		**OSS**	
MF (Taxation Dev.)		MECA	Environment
		MAF	Director General of Fisheries
		MH	Private Health Enterprises
Banks	**ODB**	PASFR	CEO
MMP	**Manpower regulations**	OCCI	Board member
PEIE	**Investors relation**	TB	Director General
ROP (Customs Div.)		MTC	Ports
ROP (ports)	**Sultan Qaboos Port**		
T&T	**Advisor of Tourism Minister**		

Questions structure:

There are two types of questions prepared; a) arrival questions, b) a list of questions consisting of opening question Key questions and Closing question. It also includes an additional question that came from the mining sector investors brought to test the agreement/disagreement between investors and institutions view.

Type of Question	FG 1	FG2
Opening Question	How do your institutions generate the ideas in terms that your institutions policies of that related to the investors? How do you monitor their feedback?	There is a "One-Stop Shop" (OSS) system for commercial registration applications represents six public institutions, would you prefer that a one-stop-shop for all government permits mirroring the same purpose of registration OSS? If the answer is 'yes' which are the institutions you think need to be integrated to enable the investor to obtain the permits from a single window?
Key Question 1	Is there any necessity to include the private sector, particularly investors, in making the governmental policies & decisions? (Opinion by majority or by consensus) and does the Oman Chamber of Commerce and industry play a proper role in this context?	
Key Question 2	Discuss your institutions way of interacting with manufacturing investors and how you monitor the feedback?	
Key Question 3	What are the other government authorities having complementary relationships with your organisation in supporting the policy & decision-making process practiced by your organisation? (In individual or in group)	
Key Question 4	What kind of additional support (such as: decision-making tools, cooperation, human & knowledge resources, etc.) which you prefer for developing your organization's decisions related to local & foreign investors?	
Key Question 5	a) Why do you think that the Industry Sector has achieved the target rate up to date, while the other two sectors failed to reach their target rate? b) How can the two sectors be helped to achieve the target rates (in brief)?	
Key Question 6	What are the coordination and cooperation-related difficulties that face you while practicing your institutional duties?	
Key Question 7	How to improve investor-facing public sector organisations in Oman?	
Key Question 8	How to help the various sectors become more sensitive but less susceptible to economic determinants and institutional determinants?	
Closing Question	What would be the best way or a platform by which investors can participate making the governmental policies & decisions related to investors (can this be done through forming a private association for each sector, through Oman Chamber of Commerce & Industry (OCCI) or by any other means allowing dialogue and knowledge sharing?)	

Focus group arrangement and general observation

a) Prearrangements:

1) The FGs discussion took place in the meeting room "Liwa" at Radisson Hotel where the necessary arrangement has been made, by providing the stationary such as pens, notebook, flowchart board with pens and other stationary, The room is well prepared as meeting and lecture room with electronic devices to connect the PC to the screen which the moderator used it to show some statistics and consent form content. A variety of beverages, tea, coffee & snacks were provided for the attendees within the meeting room.
2) The seating was arranged on a round table.
3) FGs had received an agenda based on arrival questions and key questions that distributed for both groups along with some statistical figures, rates and values demonstrated on the electronic screen to eliminate some facts and figures.
4) Due to the absence of recording systems, the moderator provide a secretary for double/cross checking of the subjects approached by the researcher**,** in order to assure that all will speak with freedom and transparency.

b) The function:

1. No delay has been registered in the arrival of the two groups. So all invited members have attended, apart from those who sent apologies to attend from first approach to them.
2. On arrival, the group participants answered the arrival questions.
3. After welcoming by the moderator it took few minutes which was visualised through presentation facilities available at the meeting room.
4. Some investors' points of view were explained to each group, without defining persons, and the researcher was playing the role of The Enlightened Novice, most of the time to avoid bias situations. Controversial subjects were avoided by the moderator during the two meetings.
5. The moderator explained few points before groups discussion:
   - Consent form is distributed to be acknowledged and signed for the acceptance.
   - Time frame was explained;
     FG 1 starts from 17:00 and closing at 18:30 (on 1st October 2012).
     FG 2 starting 18:30 and closing at 20:00 (on 2nd October 2012).
6. Due to the nature of the key Question 5 which was a broad question; it took 44 minutes of group 1 time, and 38 minutes of group 2, and in order to manage the time, the moderator fixed the points to be listed should not exceed 20 points within a three topics such as; comments on the presented data, diagnose the sectors, and suggestions or solutions to help. In spite of this note the discussion took a longer time, exceeding original time limit by 20 minutes with FG1 and 12 minutes with FG 2.
7. The group avoided to record the discussion to give the group freedom to talk as the political and economical matters are sensitive issues to them. It also proved difficult to structure the discussion following the questions in a strict method. The discussion evolved quite spontaneously and kept fluent all the time, and all questions are covered.

8. Two members of Group (1) were at first Shy Participants, but they participated effectively after the questions were addressed by the moderator to them directly.
9. Members were not bias or defensive, and some of them even proposed making institutional development in their own institutions such as re-engineering the process for policy-decision-making.

c) FG participants' composition:

1. There were some of PhD holders among the participants of both groups, and they participated effectively.
2. Concerning the gender issue; among the FG1 there were two ladies, while the other group was all men.
3. As there were some of Arabic speakers the group discussions were bi-lingual (English and Arabic). The forms and documents where in English and Arabic as well (Pre-translated by the moderator)
4. A friend was invited to attend to helped in reception, coordination & farewell procedures, as well as the follow up (distribution and collect) of documents, forms, etc.

Focus Group1 Summary Report

Introductory Questions Mechanism of feedback/ideas generation and monitor. VSM (System 2)	The discussion resulted that not all ideas and suggestion get incorporated but a lot of ideas get generated by the interaction between the Investors and public institutions. Good suggestions do come in. Besides, when Investors submit their proposals, it gets reviewed and based on the projects credibility and promise decisions are taken. Manufacturing tools are available the investors gains a lot of benefits from the government infrastructure. ICT is one of the good communication environment tool enable the private sector deal with our institutions easily. Institutions generate the investors ideas that come through electronic systems and meetings, and discussed in advisory panels and decision will be taken through committees. The group distinct between public good and private good ideas when the policy and decision made. The need to form a (formal) focal point single window acts on behalf of the public institutions work as counterpart with an (informal) body acts the economic sectors (association of the sector) to discuss each sector issues separately.
Transition questions to both groups: **Key Question 1:** The necessity of Public Private Participation (PPP) in Policy and Decision-making process – related to economic sectors. Oman Chamber of Commerce and Industry role? VSM (System 1)	There was a basic common understanding of the necessity of developing a public-Private-participation (PPP) network of coordination and cooperation within a general context of policy making and decision making process. The majority of the group members have no objection that the private sector shall be allowed to participate in the process of laying the governmental policies & decision-making in general. Most of the group members agreed that Investors participation in Government Policy and decision making is important. The minority is of the opinion that the role of the private sector in the process of making the governmental policies & decisions, should be not necessarily adopting all their opinions, especially those contradicting with public interests, whether economic or social. It was also indicated that there is an exaggeration in the investors' demands of incentives and tax holidays and exemptions. If the private sector needs to participate in this then it should *not be exaggerated*, in order that this process should not be a *unilateral* process directed only by the private sector. Presently there is no other means more suitable than this. The consensus is that Oman Chamber of Commerce & Industry (OCCI) should play a better role in the process of laying the governmental policies & decisions related to the private sector.
Transition Question 2: Channel of communicate, cooperate or coordinate with the investors/private sector. VSM (System 3)	Investor's attraction leads to improve the sectors shares in the economy and international market. Many of group members said interaction with the manufacturing investors happened through Web based Polls, Social Networking sites where general public opinions can be collected and reviewed. In a country like Oman where web based polls may not hold much credibility, face-to-face interaction with customers is a good source of monitoring customer's feedback. They suggest a better way of having private sectors opinion and knowledge. It is therefore, the majority of the group members believe that interaction with the investors comes through sitting with them face to face talk and sometimes through electronically contacts and knowing their reaction towards the draft version of any decisions intended to be taken by the government. Seminars addressed to investors should be held from time to time to make use of their opinions in laying the governmental policies & decisions. Data, information and knowledge sharing between public institutions and private sectors is essential to both. The minority do not agree that the provision of these demands is the best way to attract investment, excluding those already provided by the government through the Industrial Estates & Free Zones.
Key Question 3: Complementary relationships with organisation in supporting the policy & decision-making	At the moment the invited institutions are all has complementary relationships as workflow, but (not electronically inter-connected) there are other institutions as well need to be interconnected with their institutions. However the one stop shop involving six government agencies that are inter linked for the commercial registration only they are (Ministry of Commerce and industry, Ministry of Manpower, Ministry of Environment and Climate affairs, Royal Oman Policy, Muscat Municipality and Oman Chamber of Commerce and Industry), but their

process VSM System 4	database is not yet electronically linked. They recommend that the decision and policy making process in public institutions need to be done in the form of clusters, e.g. an economic cluster including Ministry of Commerce and Industry and Ministry of Manpower, Ministry of Environment and Climate affairs, Customs, Ports, Free Zones & Industrial Estates, etc, which will guarantee two things: 1) Quick decision-making & 2) Unification of the database of these authorities.
Key Question 4: Additional support for developing public institutional decisions related to local & foreign investors VSM (System 3)	The group agreed - in the terms of additional support - that financial resources are a main factor, but not the only factor, in developing public administration organisations' decisions related to both local and foreign investors, since there are other similarly important factors, the main issue is being the cooperation and coordination of the govt. authorities between themselves, and then between private sector and the govt. authorities. Most agreed that to achieve these public institutions coordination would need a Qualitative approach instead of Quantitative. Some of the departments in the government institutions a better communication must prevail between inter-government bodies. E-Government was one of the suggestions that could help to achieve the above. The group thinks that they need for Government to Government (G2G) connectivity and Government to Business connectivity (G2B).
Key Question 5: Why the Industry Sector has achieved the target rate up to date, while the other two sectors failed to reach their target rate How can the two sectors be helped to achieve the target rates? VSM (system 5)	**Comments on the Data:** 1. The data on the tourism sector, for instance, might not be accurate in giving a picture showing its achievement of its target rates, and this might also be true with the other sectors, since the in-accuracy of the tourism indicators might be a reason for making tourism apparently look as achieving its target rates, particularly that the previous (old) data might be exaggerated or misclassification. There is also no clear strategy regarding adequate govt. concern about this sector, in addition to the absence of a proper agricultural database. 2. The researcher has incorporated the statistics of Trading and Tourism, some of the group member think that Trade has achieved its goals so far but they doubt if the Tourism has achieved, if we depends on old statistics they may be not categorised in early years of the vision, so in terms of accuracy they may not give the right picture in case we want to assess each sub sector. 3. Mining and Agriculture & Fisheries; there might be a problem related to the absence of a proper database, making it difficult to make a comparison between the Industry sector and these sectors. Some of the group members believe that the fisheries section is in a better situation than the agricultural section. Some are of the opinion that the mining sector has a good database, but the problem lies in the absence of a proper substructure to enable investors make use of this database (Data Management problem). Therefore, the private companies think the absence of data about mining areas. 4. There is not much credibility to the statistics available; therefore the figures may be different in reality. A proper system for survey and statistics needs to be put in place. **Diagnosed the three sectors as follows:** 1. Some of the possibilities of this prevailing phenomenon could be that people are not aware of the opportunities lying in this sector. Absence of adequate awareness about the two sectors (Agriculture & Fisheries and Minerals) projects in addition to the nature of these two sectors, being related to the environmental effects and local community impacts and the high transport cost, resulting in their being in-attractive to investment. The failure of investment in these Agriculture and Fisheries and Mining and Quarrying sectors is also attributed to the interference of non-governmental authorities, as well as to the fact that these sectors are not attractive to international companies due to the

	sectors connection with the resources related to local communities, as it is the case with fisheries and minerals resources. Fisheries is a part of the Family Business for example as well as Mining and Quarrying and agriculture are dealing with common resources widely and is trusted as a reliable source of income therefore local people are more aware of the sector resources. 2. The absence of a sole authority responsible for issuing licenses in these sectors, i.e: the presence of multiple authorities doing this does not encourage either foreign or local investment. Fisheries is a part of the Family Business widely and is trusted as a reliable source of income therefore people are more aware of the sector. 3. Non-existence, or shortage, of conveyance of foreign knowledge & technology about these sectors to the Sultanate. 4. Absence of a good and clear investment plan showing the investment areas as related to minerals, as compared to industry, for which the government has provided all the tools for achieving advanced rates. 5. Absence of private sector establishments in partnership with the government, since the presence of such establishments will activate the other sectors such as construction, contracting & tourism sectors. Oman Fisheries Company, for instance, cannot be considered as a good example of such partnership. There should be gigantic joint companies between the public and private sectors in the fields of fisheries, fish implantation, food manufacturing & mining. 6. The Industry Sector (Manufacturing) might have achieved its their target in the GDP of the country, and there are some tools which the government continued to provide to both the local & foreign investors, but here it is worth mentioning that we do not witness heavy industries in actual terms, and that the good results are calculated based only on medium and small industries. It has added no value to the country, *(Observation: One participant did not agree, but the maturity agreed on his statement).* Comparing Mining and Agriculture with Manufacturing sector, it does necessarily mean that these two sectors did not achieve a lot. Also the fact is that a percentage of Mining and Fisheries is counted as Manufacturing sector achievement, and could increase the rate in the manufacturing section. **Solutions/Suggestions** 1. Connecting the govt. authorities through the e-government, and the Ministry of Commerce & Industry should be the One-stop station for commercial registration, as well as for govt. licensing including permission of these two sectors. 2. There are also some other organisations, such as banks, especially Oman Development Bank, which can be connected with the govt. procedures & systems related to financial support (at the moment there are no electronic connectivity of the procedures workflow or electronic applications connected with commercial banks and especially Oman Development Bank). 3. There should be ability to convert from the agricultural and fisheries' crops stage to the production stage, and concentration on agricultural & food manufacture, contribution to food security & execution of the recommendations made during the seminars held about fisheries

	wealth and fish farming and implantation. 4. The group hopes the Mining and Quarrying and Agriculture and Fisheries are related to manufacturing in terms of mineral manufacturing and food manufacturing.
Key Question 6: The coordination and cooperation-related difficulties VSM (System 3)	**Difficulties in cooperation on the horizontal level:** Occasional lack of coordination between organisations on the same level, although such coordination should exist, and there should be electronic connection between their database. **Difficulties related to (financial resources & time), and how to overcome them:** Financial difficulties can be overcome through rationalisation & re-allocation, and time difficulties by re-organisation. **Difficulties related to competency (language, speaking about generalities, technology & communications), and how to overcome them:** Competency difficulties in language are a real problem, to the extent that some authorities ask for the translation of subjects or ask for documents in Arabic language from foreign companies which originally do not deal with Arabic language in their countries. Also there is the problem of some decisions which are taken based on discussions about generalities, without any in-depth discussion of subjects, thereby adversely affecting the quality of decisions. Additionally, there is the problem related to communications & IT. To overcome these difficulties, improvements should be made and systems updated. **Difficulties in the organisational specialisations and mandate (economic, social), and how to overcome them**: To overcome these difficulties, it is required that govt. organisations should have specialisations conformable with their plans, and such specialisations should be integral and not overlapping or duplicated. If this point raised by the investors they agreed that they were perfectly raised this issues. **Procedural Difficulties and work steps (time delay, cost of dealings), how to avoid inter-government delays? And how to overcome them:** The problem of procedures should be solved by using the Singaporean experience of (inter-government) according to which the procedures & work steps are re-studied, and it should be based on the System, not on the employee's personal discretion or on favouritism.
Key Question 7: Investor-facing public sector organisations improvement in Oman VSM (System 4)	1. New and productive initiatives will be required. 2. Efficiency of utilisation of Financial Resources. 3. Most of the time work gets delayed due to no clarity in the procedures to be followed. 4. Different Enquiring systems will be needed; Call Centres for example. 5. Internal communication within OCCI should be wide spread. Inter department coordination is a must, as agreed my most group members. 6. Difficulties of Competencies can be overcome by Staff Training & development, encouragement, incentives etc.
Key Question 8: Helping sectors to become more sensitive but less susceptible to economic and institutional determinants VSM (System 3)	The most important factor in helping sectors in being affected by the economic and institutional limitations is represented in easing procedures and developing govt. performance. In all cases, sectors are not usually less affected by the economic limitations (such as growth, increasing direct foreign investment, taxes, incentives, etc.) and institutional limitations (such as transparency, presence and execution of laws and bilateral and multilateral agreements, like exemptions and tax dualism, research & studies support, etc.). The group's problem, particularly that of the Ports, Customs & Industry Cluster, lies, not in the laws and systems themselves, but in the application and implementation of such laws and systems, such as Oman Labour Law, and, sometimes, the absence of a clear vision of the sector itself.

Closing Question: **<u>Sharing platform</u>** investors can participate Public institutions Policy and decision making (related to investors) and dialogue and knowledge share - a private association for each sector, or - Through (OCCI) or, Other means VSM (system 2)	This group agrees that the best way to encourage the investors to look for ***in kind*** incentives more accurate and précised services easing their approach to the government institutions through associations of each sector. They think they need to have programmes that allow government agencies to reach to the investors and do some kind of road shows. We need at first step to link government economic institutions with the banks and especially with the Oman Development Bank, to ease the investment of SMEs. All agreed that there should be an alternative means for the private sector's participation in laying govt. policies & decisions related to the private sector, and they see that the idea of forming a separate association represent each sector is acceptable, but the question is: can the work of these associations be conducted with, or without, participation from OCCI. Some members propose that this can be done in both ways, and others see that it can be done without OCCI participation.
Additional FG1 emerging themes	1. There are no recipe or panaceas of how to make policies and decisions collaborations to make the system workout beyond situations. 2. Non-oil sectors need to establish association within each sector. 3. Investors do matter. 4. Financial matters are crucial, but the organisational resources can be helpful (Human and financial and technology resources)

Final Remarks:

At the end of the discussion all participants expressed their interest in repeating such a focus group in certain gaps, and happy with the time management.

Focus Group2 Summary Report

Introductory Questions The institutions need to be integrated to enable the investor to obtain the permits from a single window. VSM (System 2)	This group thinks that permits to be issued electronically and data base to be clustered (Industrial Institutions, Commercial institutions, Social institutions and so on) and integrated through e. government projects and Information Technology Authority (ITA).
Transition questions to both groups: **Key Question 1:** The necessity of Public Private Participation (PPP) in Policy and Decision-making process –related to economic sectors. Oman Chamber of Commerce and Industry role? VSM (System 1)	The majority of the group believes of the necessity of the private sector's participation in laying the governmental policies & decisions related to the private sector per economic sectors. Then minority even believe that such participation should be directly by stakeholders and not necessarily through OCCI, (i.e. by the society), so that there should be freedom of opinion. Most of the Group members thought that the Investors must be consulted but the final decision must be taken by the Government independently. The Government and the Private sector both will have their interests and in the process small stakeholders might get affected, therefore a broader circle of stakeholders must be identified and considered for opinion. Different opinion from different walks will provide for a broader spectrum of ideas and suggestions which can then be refined and hence better services.
Transition Question 2: Channel of communicate, cooperate or coordinate with the investors/private sector. VSM (System 3)	The majority of the group was of the opinion that interaction with the investors can be effective through creating Social Networks, Municipalities councils & Decision-Support bodies and Electronic Systems, first between the government authorities themselves, then between the government authorities & stakeholders. The group thinks of the need to define the word 'interaction' and 'stakeholders', as 'Interaction' understood as proposal approvals process when Investors submit their proposals, so it gets reviewed and based on the projects credibility and promise decisions are taken**,** or can be understood of coordination and public/private participation (PPP). A lot of ideas get generated by the interaction with the Investors and public institutions, but not all,
Key Question 3: Complementary relationships with organisation in supporting the policy & decision-making process VSM (System 4)	The complementary relationships not with other institutions but with private sector. There should be integration with all institutions. There should be prior coordination with the other concerned institutions (as per the subject), this method guarantees transparency and unified procedures, instead of unilateral procedures adopted separately by each authority
Key Question 4: Additional support for developing public institutional decisions related to local & foreign investors VSM (System 3)	The group is of the opinion that human capital, including their knowledge and skills capacity, comes as first priority to support, then financial resources and other additional support. The presence of the necessary human capital is most important support.
Key Question 5: Why the Industry Sector has achieved the target rate up to	Comments on the data 1. We have no doubt that the statistical system in Oman is one of the best known in the GCC countries, in terms of accuracy the systems is always under the development since 1970, but we wished to see each

date, while the other two sectors failed to reach their target rate How can the two sectors be helped to achieve the target rates? VSM (system 5)	subsectors such as Agriculture sector Fisheries sector, Tourism sector Trade sectors. This makes the discussion more focused; although we know what the researcher followed the (previous) Ministry of National Economy statistic system. The group thinks that incorporating the rates of tourism with the trade rate, indicates that such incorporation does not give a clear picture about each of the two sectors Trade and Tourism. Trade might have achieved the required rates, whereas tourism did not, thereby making the theory that trade and tourism have achieved the target rate in 2010 is not clear. 2. One of the group members who made a study on tourism indicated that the problem of the database is a general problem in Oman statistics, not limited only to a certain sector, explaining that as far as the tourist sector is concerned, it was depending on a selected tourism policy, causing us to believe that data has been focused on this aspect**.** **Diagnosed the three sectors as follows:** 1. "The quantity of fish in the Sultanate's regional waters has been depleted and has decreased", but this is not true. We should bear in mind that such rumours will adversely affect the foreign investors and make them abstain from applying for establishing fisheries projects in the country, in spite of the presence of adequate fish quantities. This statement might be true only with some kinds of migrating fish species. It is also true that the Sultanate is self-sustainable of fish quantities. 2. The problem with the Agriculture & Fisheries sector is not like the other sectors, it is connected with the common natural resources, and here lies the problem due to the fact that the social aspect prevails over the economic aspect. For example: Traditional fishing sites and mineral-rich locations near populated areas are difficult to be utilized commercially without getting approval of the local people, or, at least, their participation. Similarly, in agriculture there is what is known as *Falaj* (spring) Irrigation System and the traditional water distribution systems, though scarcity of water is no more a major problem nowadays in view of the presence of modern technologies to overcome this obstacle. **<u>Solutions/suggestions</u>** 1. Providing the infrastructure and logistic services for the ports sector will qualify the Sultanate for a major (hub) role, since it is now, at least, providing the local requirements of the country from containers, and also there is adequate capacity for transhipment and cargo. But the problem lays in the mechanism related to procedures and incentives, and the absence of a database, hence, the inability to compete with Dubai ports, for instance. 2. The productive sectors should be managed in a better manner. 3. There is a good model for fish implantation in the Ministry of Agriculture & fisheries the idea of which can be applied, and after assuring this and getting their approvals; the investor will not need to get the approval of each govt. authority individually. So the investor will be reached by the govt. authorities instead of vice versa. 4. Developing the customs duties work, so as to make it an independent authority within a cluster constituted of customs, ports & free zones, as well as developing customs systems in sea, air and land ports, including port clearance systems, the protective fees which have not been changed for a long period. We should work on attracting all investors by this kind of development. 5. Concentrated on the Investment Map, which should be fulfilling the observations of all authorities, such as the Ministry of Commerce & Industry, Ministry of Environment & Climatic Affairs, Ministry of housing, Ministry of Municipalities & Water resources, Ministry of Heritage & Culture, etc.

	6. Oman Development Bank should increase the level of financing these two sectors, and the method of financing such projects should be re-considered, and they should not be treated as the same as the other projects, with the aim of increasing their share in the GDP. 7. Water scarcity is no more a problem, and the Ministry of Agriculture should overcome this aspect and establish productive farms through partnerships with both the local & foreign private sector, and form Joint Ventures (JVs) or Joint Stock companies, such as the Public Authority of Agricultural Marketing, which have been quite beneficial for farmers for long years before it was dissolved. 8. The financial entities should free themselves from their self-imposed restrictions. 9. Transparency in procedures of some institutions 10. Marketing both sectors. 11. Re-considering the decisions about the protective fees related to fisheries & agricultural wealth. 12. Developing the institutional work from the individual stage to include the whole organisation. 13. A clear vision with respect to the mineral and agriculture & fisheries sectors' plans, and proper bases for systems' application and development of the use of modern technologies in the two sectors. 14. Establishing central markets for agricultural products, fisheries & animal wealth. 15. Establishment of a Central Authority in the country responsible for making researches about the optimum use of the agricultural crops, fisheries & mineral wealth. 16. Oman Chamber of Commerce & Industry should have a role to play, appropriating part of its resources for agriculture and fisheries & mining wealth. 17. Control over researches & studies on these two sectors, and how they can be used optimally.
Key Question 6: The coordination and cooperation-related difficulties VSM (System 3)	**<u>Difficulties in cooperation on the horizontal level:</u>** 1. Other important practices to overcome these difficulties is by providing employees with a clear cut Job Description. 2. There is no Role clarity; the responsibilities are not made clear. 3. There is no inter-government interaction. Colleagues from two different Ministries have no interaction or coordination at all. 4. People working in the Government Bodies need to be made to feel empowered to freely interact with their colleagues in other Ministries. **<u>Difficulties related to (financial resources & time), and how to overcome them:</u>** Budget constraints As for the financial difficulties, that can be overcome with in time budgeting in advance **<u>Difficulties related to competency (language, speaking about generalities, technology & communications), and how to overcome them</u>:** 1. There was a suggestion by the group members that the forms provided at various Government offices must be bi-lingual to make it easy for investors and the public. To this there was another opinion that even if the forms were kept bilingual as is the case already, the person collecting them at the window is not bi-lingual himself which dissolves the purpose of having the forms in two languages. This again can be helped with staff training and development. 2. Overcoming language and communication skills. As regarding the difficulty related to language, the group does not think that it is important to translate the documents for the foreign investor, since he originally doesn't deal with Arabic language. In general, Language barriers must be erased. **<u>Difficulties in the organisational specialisations and mandate (economic, social), and how to overcome them</u>**

	Another idea was that the Government must provide clear cut instruction through their website or any other information booths about the requirements and criteria for the Investors. It is also the responsibility of the Investors then to have their documents complete and fulfil the mentioned criteria before coming to the Government Office. This will work with efforts from sides, the government and the investors. **Procedural Difficulties and work steps (time delay, cost of dealings), how to avoid inter-government delays? And how to overcome them:** 1. Another thought was that the Government must provide clear cut instruction through their website or any other information booths about the requirements and criteria for the Investors. It is also the responsibility of the Investors then to have their documents complete and fulfill the mentioned criteria before coming to the Government Office. This will work with efforts from sides, the government and the investors. 2. There is a stiff competition between various Ministries as everyone is fighting for the same investors. One has to be well equipped to fight the competition by providing better services and making procedures easy. 3. Government bodies must be complementing each other instead of contradicting. They must work as one single entity and not separate institutions. 4. They do not believe that using the Singaporean experience for solving the (inter-government) problem is the best solution, and they see that for solving this problem consideration should be made to the suitable aspects of the country's culture, but they agree with the point that procedures & work steps should be based on the System, not on the employee's personal discretion or on favouritism. 7. OCCI role is not clear. 8. Cooperation need to be upgraded to institutional and private sector coordination
Key Question 7: Investor-facing public sector organisations improvement in Oman VSM (System 4)	The majority said they needed to have 1. A clear cut KPI and job descriptions for public administration employees not only for investor's services employee but for all who come under the civil services law umbrella. 2. An Authority Matrix 3. It must be clear as to what an individual's responsibility is and how long a certain procedure must take in normal circumstances. 4. It must also be made clear about the procedures. 5. Red Tapeism –This phenomenon makes procedures long and laborious for the Public and Investors. Pending cases due to decision makers being unavailable or for no one taking responsibility leads to red tapeism.
Key Question 8: Helping sectors to become more sensitive but less susceptible to economic and institutional determinants VSM (System 3)	We are in agreement with respect to the proper application of laws, e.g.: Oman Labour Law, and with respect to the fact that the tax return does not affect the investment decision. This has to begin from a Culture change in the Public Sector. The Public Sector and the Government must change their working culture to more of a Service Oriented Industry. The Government sector must reflect the attributes of being Public Servants, service providers more than coming across as the Final Authority. There is a huge gap between the understanding of Public Sector and Private Sector. The two sectors have to be in sync with each other and bridge the wide gaps between the private and public sector. The other problem in the Public sector is the Decision making and the distribution of Authority. With Bureaucracy is prevailing widely in the Public Sector, there are only a few people who are key persons in taking decisions. In the absence of those few key people, decisions remain pending until the decision maker is available to take a call. This culture must change and authority distribution needs to flow in a proper hierarchy and not stay at the top with a very limited number. ***(Observation:** They are the opinion that there should be clarity of roles & responsibilities in public administration).*

Closing Question: Sharing platform investors can participate Public institutions Policy and decision making (related to investors) and dialogue and knowledge share - a private association for each sector, or - Through (OCCI) or, - Other means VSM (system 2)	The majority of this group member does not agree to the idea of a separate association for each sector, with direct access to the government. Instead, they think that access should be through OCCI or a separate association (A union of sectors) constitutes of different type of sectors, since such association knows about the concerned sector more than OCCI who speaks with the govt. authorities only on generalities. Minority of Group Members felt that the interaction should be routed through a single channel and that must be the Oman Chamber of Commerce & Industry (OCCI). As and when the Government is launching a project, it must be announced to the public via Electronic Media such as the newspapers, Social Networking Sites, pamphlets etc. Alternatively there could also be presentations held from time to time at the OCCI where new projects can be announced and questions addressed. As regards a Union for Investors, the group members did not recommend it but agreed that the final call on that would be from the Investors and the decision would be theirs too. Investors are needed to give OCCI their feedback on the experience of being associated with the OCCI and may give suggestion that the OCCI could review. This would help OCCI in reviewing their policy for a specific project or generally. ***(Observation**: the group supports the idea of establishing private association for each sector so they can freely interact with government institutions because they understand their problem more than OCCI which plays a general roles).*
Additional FG2 emerging themes	1. Non-oil sectors need to establish an association representing all subsectors for specific issues while OCCI plays a general role. 2. Identifying 'interaction' and stakeholders do matter. 3. Policy/decision making process to be re-engineered. 4. Human capital first then financial resources are most important.

Final Remarks:
Most of the group members hoped to have another opportunity to be invited to such a discussion.

A. <u>Focus group of public institutions: Arrival Qs</u>

1) Are you a policy maker? In which level (e.g. high; medium; bottom).
2) Are you policymaker/decision maker? If yes; In which level.
    - Strategic level
    - Managerial level
3) Are there any documents that I could have that provide information concerning your institutions related to the investors services issues?
    - Yes (will be provided later).
    - No

1) Would you be interested to receive a copy of the findings?
    - Yes, any particular details
    - No
2) Would you be interested to participate in a follow up interview if needed?
    - Yes
    - No
3) Which investors type your institutions usually serve?
    - Large Size Enterprises (LSEs) investors
    - Small and Medium Enterprises (SMEs) investors
    - Both
4) Which sectors do your institutions deals with mostly? Please tick
    - Agriculture and Fisheries
    - Manufacturing
    - Building and Construction
    - Trade and Tourism
    - Mining and Quarrying
5) What is your institutional role in the vision 2020?
    - Implementer
    - contributor
    - providing feedback
6) Do you or your institution systematically monitor or you are informed?
    - Systematically monitor
    - Informed

7) Please find below a table to answer the following questions? Please rank the relevance of policies areas below from institutions point of view.

8) Please find below a table to answer the following questions? Please rank the relevance of policies areas below from institutions point of view.

	Range of policy areas (1 not relevant – 5 most relevant)	Rank 1-5
1	Policies attracting new foreign firms to locate in Oman/your region (e.g. tax breaks, land provision)	
2	Policies encouraging firms in Oman to locate in other Oman regions and/or to Internationalise	
3	Physical infrastructure development (especially: telecommunication, transport, energy, environmental infrastructures)	
4	Education and training within the firm (individual acquisition of knowledge)	
5	Research and technological development (collective production and acquisition of knowledge)	
6	Information diffusion and accessibility for firms (databases, web-sites, information centres, all of them of general, non-customised nature)	
7	Policies providing customised services to firms (e.g. environmental services, labelling, participation in exhibitions, logistics, design or new production techniques)	
8	Policies helping labour recruitment for firms	
9	Policies for the establishment of firms' networks in the region/Oman	
10	Policy for improving quality development in firms	
11	Policies for start-up, incubators of small firms	
12	Policies improving availability of venture or risk capital	
13	Environmental policies	
14	Other policies; please specify	

FDI Economic determinants	Importance						Change (↑/↓)
	1	2	3	4	5	N/A	
1. Population							
2. Gross Domestic Product							
3. Growth							
4. Infrastructure							
5. Deposits, loans, Venture capital							
6. Openness (Trade)							
7. FDI stocks (sectors)							
8. Exchange Rates							
9. Wages							
10. Inflation							
11. Taxation							
12. Competition (production, distribution)							
13. Incentives							
14. Other Please specify:							

FDI Institutional determinants	Importance						Change (↑/↓)
	1	2	3	4	5	N/A	
1. Country risk							
2. Corruption							
3. Transparency							
4. Stability							
5. Institutional quality							
6. Cultural proximity							
7. Law existence & enforcement (e.g. contractual property rights, labour, and bankruptcy)							
8. Bi/Multi-lateral (investment) treaties							
9. Company Formation							
10. Patent registration							
11. Bond/share issues							
12. Availability of Information							
13. Income disparities							
14. Education							
15. Support for R&D innovation							
16. Government contract denunciation							
17. Other Please specify:							

Consent Form

The HUBS RESEARCH ETHICS COMMITTEE
CONSENT FORM: SURVEYS, QUESTIONNAIRES

I, of

Hereby agree to participate in this study to be undertaken, **by** Ahmed Sulaiman al Maimani and I understand that the purpose of the research concerns *the public institutions development and decision support system for foreign and domestic investors in the Sultanate of Oman*.

This field work (Focus Group) is about government policy and decision making to attract investors in Sultanate of Oman.

I understand that

1. Upon receipt, my questionnaire will be coded and my name and address kept separately from it.
2. Any information that I provide will not be made public in any form that could reveal my identity to an outside party i.e. that I will remain fully anonymous.
3. Aggregated results will be used for research purposes and may be reported in scientific and academic journals.
4. Individual results **will not** be released to any person except at my request and on my authorisation.
5. That I am free to withdraw my consent at any time during the study in which event my participation in the research study will immediately cease and any information obtained from me will not be used.

Signature: Date:

The contact details of the researcher are:

The contact details of the secretary to the HUBS Research Ethics Committee are Karen Walton, Hull University Business School, University of Hull, Cottingham Road, Hull, HU6 7RX. Email: k.a.walton@hull.ac.uk tel. 01482-463646.

Appendix 6.1: Qualitative data: Cross-sectional (interview and Focus group)

Cases	FGs	A&F	M&Q	B&C	MAN	T&T
collaboration	Both FGs mentioned that coordination and cooperation of the informal interaction with investors will.	Confirmation of collective public and privates sectors joined working.	Dialogue with government authority is necessary	Speed in decision making is necessary	Collaboration is Private sector is needed	Public and Private sectors collaboration
Inter-organisation	FG1: Advocate Singaporean experience for solving inter-governmental problems FG2: Do not believe in it, instead they think inter-organisational through consideration the local culture issues.	One stop shop (OSS) for both registration and licensing ICPIs need to integrate their policymaking process, using electronic service.	One stop shop (OSS) for both registration and licensing. ICPIs need to integrate their policymaking process, using electronic service	OSS For both registration and licensing. ICPIs need to integrate their policymaking process, using electronic service	OSS For both registration and licensing. ICPIs need to integrate their policymaking process, using electronic service	OSS For both registration and licensing. ICPIs need to integrate their policymaking process, using electronic service
Coordination /communication	FG1: -Communicate through ICT platform/e-government / Web polls/face to face interaction/ electronic connectivity between / clustered ICPIs complementary decisions/ one stop shop/Language difficulties. FG2: -Agreed with FGI Investors but need to give OCCI their feedback/ but they do agree to establish economic sector association (ESAs).	Using ICT to overcome of the bureaucracy/use of e-government/ less red taps/ knowledge and information systems	Communicating with M&Q investors regularly.	Better communication methods	Dialogue with private sector through different channels It is necessary to open dialogue with private sectors/	coordination/ communication and control. International business

Table 1

Cases	FGs	A&F	M&Q	B&C	MAN	T&T
Investment Regulatory	FG1: - Laws and bilateral and multilateral agreements, the emptions and tax dualism, R&D/Omani Labour law revision FG2: agreed with FG1,	Labour law and *Omanisation* policies need amendments. Transparent corporate laws/Liberal policies and procedures for DIs equal to FDI. DIs participation in government projects policy for free trade, Policies for attraction both FDIs and DIs	Amendment in Mining/investment law. Policies of openness and transparency. Establishment of an Oman Mining Warden Court/Clear policies in Mineral business. Not mentioned the *Omanisation* polices problems	Labour law and *Omanisation* policies to be revised and Open and fair policies. Easing the recruitment procedure/process	Labour law and *Omanisation* policies revision/ Tender policies. Need for manpower requirement, approvals and permits for investment. The stability of the regulations. Clarity in decisions and regulations	Deployment of policies periodically. Privatization policies Labour law and *Omanisation* policies revision Understanding the public sectors requirements. Tender board procedures
Investment attraction	FG1: Emphasised on investor's attraction to improve the sectors share in the economy/ Monitoring their feedback/government to know their needs. -Sectors affected by the economic limitations (growth, FDI attraction, taxes and incentives. Solving CPRs problem with the commons and family business such as fisheries and mining FG2: Should work on attracting all investors by institutional development.	Maintain investor's needs/R&D encouragement. More 5 year holidays/ Local products awareness and encourages locally	Incentives/solving energy related problems. Education Wavier custom duty the 5%. Limit the beadledom or personal inferences of decision makers' / Wavier custom duty the 5%. Friendly services provision.	R&D and training Quality services. Incentives Transparency Trade openness (more) BRICS countries FDI policies Local labour training	Local investors should not be ignored. Tax exemptions. Taxation is critical for the attraction of FDIs. Energy: availability. Financial support Incentives/ custom duty wavier More five year holidays	Easing Government premises for investments/ Prompt service provision and ease the procedures.

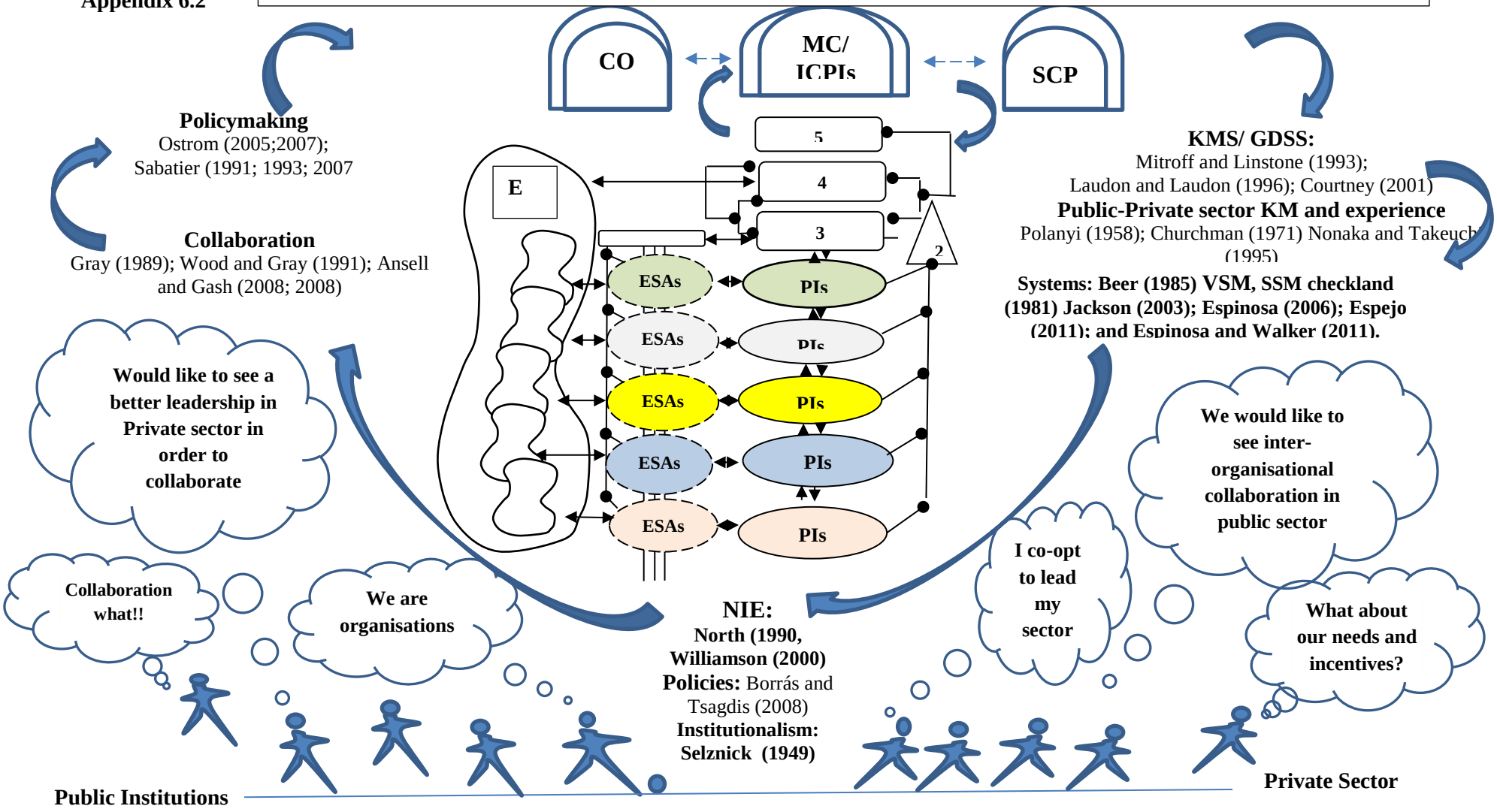
Table 2

	FGs	A&F	M&Q	B&C	MAN	T&T
knowledge and experience share	FG1: Knowledge sharing between public and private sector is essential to both. FG2: When there are no knowledge and information and experience dialogue the incorrect information may impede the sector's growth.	Mutual information and knowledge experience needed/ experience share and exchange	The need of the Knowledge sharing centre/sharing exploration experience/	The need for knowledge sharing platform/ use of new technology	The need of knowledge sharing for industries. Family business experience is important to the government decision making.	Knowledge sharing between public and private sector causes more understanding /new business.
Vision /growth	FG2: Clear vision with respect to CPRs and establishing central markets for it.	Strategic vision awareness they are implementers and contributors. Believing in Vision 2020.	They are implementer and feedback providers of the vision 2020	They are Implementers of the vision 2020	Access to more detailed statistics of the national economy. Believing in the strategic vision	Economic growth importance, they are feedback providers and implementers
Institutional development	FGs: agreed the bureaucracy and red tap in Policy making process	Easing bank soft loan procedures . PAIPED role need to be enhanced. Development of education quality. Proper guidance.	GIS services/ mineral data information and knowledge /mining history data. Easing bank loan procedures using Canada, Australia and New Zealand experience for Oman	Less the bureaucracy/less paperwork. Easing bank loan procedures	Easing bank loan procedures	Easiness of the process/ easy government procedures: licenses Easing bank loan procedures . waiver of the red tap.
Investors leadership	FGs agreed among investors and PIs that there is need for form economic.				The sector leaders' positive experiences are seen as an important reference for smaller companies	

Table 3

Appendix 6.2

OMAN- Policymaking Processes: Rich picture (Triangulation with the literature): Through SPPS framework



New Institutional Economics lenses: Institutions are rules of the game and organisations are they players (Literature: North 1990

Appendix: 6.3: The State's OID in Oman, 2013