

CHAPTER 1

INTRODUCTION

1.1 Background of the study

The end of World War II brought about a surge in globalisation fuelled by the exchange of goods and capital across borders. Trends in world economy have since, clearly shifted towards a knowledge economy. The engine of economic growth depends on the availability of factors of production such as land, labour, and capital (Al-Hawamdeh & Hart, 2002). Although such production activities will remain an important component of growth, this millennium will be powered not by traditional production of goods and services but by knowledge based initiatives (Al-Hawamdeh & Hart, 2002).

National economies are becoming more knowledge based where productivity and growth have become more dependent on knowledge (ADB, 2007). In this instance, economic development calls more upon intangibles, that is, brains, rather than tangibles, that is, muscles, and productivity calls upon ideas, information and adaptive thinking. Globalization and the information and communications technology (ICT) revolution are increasingly atomized, but ubiquitously networked (ADB, 2007). Because of the behaviour of information and knowledge as economic goods, and because of network externalities, dramatic changes, differentiations, and synergies are emerging in the modalities of creating value (ADB, 2007).

Technological innovations and the shift towards knowledge based economies have made human capital investment a prerequisite for sustained economic growth and central to the start-up, growth and productivity of firms

(UNDP, 2004). Human capital can determine the potential for a firm's growth and survival. It is very important to mention that, a firm's competitive advantage comes from its entrepreneurial capabilities; its management and technical know-how, including labour management relations; and the skills, education and adaptability of its employees (UNDP, 2004). The level of education matters and the skills of employees need to be continually upgraded through on-the-job training to increase the firm's productivity and its ability to absorb new technologies (UNDP, 2004). Many developing countries suffer from low levels of human capital investment, aggravated by the outward migration of highly skilled professionals (UNDP, 2004).

In view of this rising globalised knowledge economy, transnational migrants are playing an increasing role contributing to demographic changes and answering to the competition amongst nations for skilled knowledge nomads.

The UN Millennium Goals Project (2005) mentioned that globalizing forces such as connectivity, mobility, and interdependence have made it possible for Diaspora people to strengthen their research and business connections to their countries of origin. These three elements should thus also catalyse Diaspora's entrepreneurship, in particular techno-entrepreneurship which allows technical trans-national spill over and propagation of knowledge intensity.

Today, with the global knowledge based economy increasingly relying on science and technology (S&T) skills and generating their international flows more than ever before, the issue has become even more crucial (Meyer & Brown, 1999).

However the role of immigrants in contributing to technological developments in their country of origin is still poorly understood (Seguin, Singer, & Daar, 2006), and is particularly interesting when science and technology are given roles to improve the human condition and economic development (UNDP, 2001).

The debates regarding the transnational movement of skilled and highly skilled people are not confined to certain countries; International organisations such as the World Bank, the United Nations Development Program (UNDP), the International Labour Organization, and the Organization for Economic Cooperation and Development (OECD) have also promoted them.

Several countries have adopted various strategies to develop and exploit talent to advance their socio-economic goals (see OECD 2002, Kapur and McHale, 2005 and Solimano, 2006). These strategies have resulted in an uneven flow of talented people to the developed nations, many of whom are drawn from the developing world.

This skewed migration of talented people has in recent years generated much concern since such talented people are already in short supply in many of these developing countries. It is estimated that 30 to 50 per cent of the developing world's population of persons trained in science and technology live in the developed world (Meyer and Brown, 1999; Barre et al., 2003).

Skilled and talented individuals usually possess considerable influence at national and international levels as they are often well-connected, shape ideas, values and beliefs (Solimano, 2006). There has been an increasing awareness in recent years that there are several ways in which Diaspora can stimulate economic development in their homelands (Lowell & Gerova, 2004). The mobilization of knowledge and skills of these expatriate professionals can

play an even more effective role in facilitating economic development in their countries of origin (Lowell & Gerova, 2004).

Rizfi (2005) stated a recent report from the World Bank (2002), *Constructing Knowledge Societies: New Challenges for Tertiary Education*, has expressed concern at the rapidly increasing rates of emigration of knowledge workers from the developing countries, thus depriving them of conditions necessary to sustain their universities. The report fears the emergence of a global knowledge divide which, it suggests, will inevitably delay economic growth in the developing countries. The UNDP's Human Development Report (2001) has similarly documented the various negative effects on developing countries of highly skilled emigration, and has called for strong policy measures to arrest the worsening trend (Rizfi, 2005).

Entrepreneurs are seen as a driving force in today's globalized economy. They are the new knowledge nomads, creating pathways for innovation and new paradigms. UNDP (2005) noted that globalizing forces such as connectivity, mobility and interdependence have made it possible for Diaspora communities to strengthen their research and business connections with their countries of origin. These three elements should thus also catalyse Diaspora Entrepreneurship, in particular techno-entrepreneurship which allows technical trans-national spill over and propagation of knowledge intensity. By creating Entrepreneurs in the Diaspora, an International Entrepreneur is available to be connected with his or her country of origin, to open the boundaries and to start business anywhere worldwide.

This research is focusing on Diaspora's entrepreneur as a driving force for knowledge based economy. In fact, innovation and entrepreneurship may

be the most important factors that drive the process of economic development (Ulijn & Brown, 2004).

In spite of all difficulties that are facing the entrepreneur, entrepreneurship is presently the most effective method for bridging the gap between science and marketplace, creating new enterprise and bringing new products and services to the market (Hisrich et al., 2008). Entrepreneurs, be they local or Diaspora, have become a key element of economic development, success and sustainability.

An entrepreneur as Ming stated (2005) has become, in the new economic era that features advancement in technology, one element of economic development. Entrepreneurship is recognized as a major economic force, a major source of business and job development, and it has been identified as an effective tool for community and individual growth and change (Skrzeszewski, 2006). Many people believe that the lack of entrepreneurship is one of the main causes of poverty in developing countries (Chang, 2010). Entrepreneurs are usually the key actors in recognition, exploration and exploitation of new opportunities (Madsen & Fisker, 2004), guided by experience, knowledge, intuition, and a desire for freedom (Skrzeszewski, 2006).

1.1.1 Palestinian Situation

Palestine is a country with unstable political conditions related to the occupation, which has contributed to the migration of its people to outside Palestine and this has made Palestinian population as the world's largest refugees (Al-Zaytouna, 2010). A remarkable note is also that the Palestinian

population outside Palestine are more than they are inside Palestine (Al-Zaytouna, 2010).

The Palestinian Diaspora comprises of between 4 and 5 million people (Mavroudi, 2008; Hanafi, 2005; Shaml, 2001), settled for the most part in neighbouring countries, but also in the Gulf States, the USA, Canada, Latin America and Europe (Hanafi, 2005).

Today migrant workers from Palestine as mentioned by Fargues *et al.* 2005 are characterised by the diversity of their levels and types of occupational skills. These people are trained in the scientific, professional, and intellectual disciplines and include entrepreneurs, doctors, academics, highly-skilled technicians, engineers and intermediate and lower-level workers in the sectors of healthcare and education (Fargues *et al.*, 2005).

The magnitude of the migration of scientists and, more widely, professionals has been increasing on a global level in the last three decades (Hanafi, 2001). In the Palestinian case, such an outflow must be viewed in the context of the mass exodus of Palestinians since the creation of the Israeli State in 1948 (Hanafi, 2001). It would be unwise to give an estimate of the volume of Palestinian professionals since verifiable data is unfortunately unavailable (Hanafi, 2001), because there is a comprehensive lack of studies on the Palestinian Diaspora so far (Schulz, 2003; Shiblak, 2005; Baldwin-Edwards, 2005).

At the beginning of the study and based on what that has been mentioned, the study was aimed at creating the best network to enable the Palestinian Diaspora to be connected (bridging) with the development in Palestine through entrepreneurship, and the factors that may influence such a

strategy. By going deeply into the literature, many stages of the conceptual framework were developed.

1.1.2 Building Bridges

The process of linking Diaspora's experience to the development in the mother country requires a bridge. Some Diasporas have experience and skills in working across different sectors and with different parts of the development process. These are the 'bridge people' who can help to build entrepreneurship between the Diaspora people and development in their mother country. Bridge entrepreneurs help Diaspora people and policy makers (especially in S&T) in the mother country to access each other, to listen to each other's concerns, and to find common ground. A bridge entrepreneur may be someone who has worked in many different international organizations in the past, but now works in a government department – someone who understands a particular international community's experience and has knowledge of the entrepreneurship. Bridge entrepreneur understands the needs and realities of different sectors, and has the skills to build relationships and processes across sectors.

This study was aimed at building a framework for stronger relationships between Palestinian Diaspora entrepreneurs and the development in Palestine, based on a strong supporting platform of Science, Engineering, Technology & Innovation (SET&I). Within this context, Science and Technology are perceived as an enabling platform. However, before being so, this platform must be enabled. A theoretical model was proposed in order to enable the Palestinian Diaspora to contribute to the development in Palestine,

especially through the advancement of Science and Technology, based on entrepreneurship in the era of knowledge based economy.

The main objectives of the study were to identify the causes of the mobility of Palestinian Diaspora worldwide by identifying the push-pull factors and re-pull or re-attract Palestinian Diaspora. These factors were needed in order to highlight the main reasons behind the movement of the Palestinian Diaspora in creating the best model to provide solution for such situations. Capacity and capability of Palestinian Diaspora were also needed to be highlighted in this research, in addition to some elements extracted from the literature review, which was thought to be the main component of the needed model.

1.2 Statement of the problem

Palestine is a country with unstable political conditions, and its Diaspora population outnumbered that residing inside. Although important works on specific Palestinian refugee situations are available, there is a lack of comprehensive studies on the Palestinian Diaspora so far (Schulz, 2003; Shiblak, 2005; Baldwin-Edwards, 2005). Most studies on Palestinian society have focused on Palestinian Liberation Organization (PLO) politics, the conflict with Israeli and the Israeli occupation (Schulz, 2003; Shiblak, 2005). With some noteworthy exceptions, the people living the ordeal of Palestinian exile have been conspicuously absent from academic undertakings (Schulz, 2003; Baldwin-Edwards, 2005).

Palestinian Diaspora was described by the diversity of their levels and types of occupational skill. These people are trained in the scientific, professional and intellectual disciplines which include entrepreneurs, doctors,

academics, highly-skilled technicians, engineers and intermediate and lower-level workers in the sectors of healthcare and education (Fargues *et al.*, 2005). In addition, Palestinian Diaspora (whether refugees or not) are quite entrepreneurial, based on a study by Hanafi (2007), who depended on definition of entrepreneur from ILO (1998). Entrepreneurship concerns not only business people but entrepreneurs in general; including the self-employed and employers (ILO, 1998). The Palestinian tends to have more entrepreneur-family rather than entrepreneur-individual relationships (Hanafi, 2007).

As Chang (2010) emphasized that lacking of raw individual entrepreneurial energy in poor countries is not the issue, they in fact have in abundance. It is their inability to channel the individual entrepreneurial energy into collective entrepreneurship (Chang, 2010). The challenge that is facing Palestinian Diaspora is to bridge the Palestinian Diaspora entrepreneurs that are distributed around the world with the development inside Palestine through entrepreneurship.

Based on what that has been mentioned in this section, Palestinian Diaspora is characterized by the diversity of their levels and types of occupational skills (Fargues *et al.*, 2005), as a consequence of being distributed around the world. At the same time, there is a lack of comprehensive studies on the Palestinian Diaspora (Schulz, 2003; Shiblak, 2005; Baldwin-Edwards, 2005).

This research focuses on better understanding of how Palestinian Diaspora contributes to the economic growth in Palestine. By creating entrepreneurship among Palestinian Diaspora, an international entrepreneur is available to be connected to his or her origin country, to open the boundaries and to start bridging Palestine with people worldwide. This can be achieved

through developing a model tailored towards establishing an entrepreneurial network, where Palestinian Diaspora's entrepreneurs play a major role in fostering the development in Palestine.

Indeed, a review of the literature does not show any studies that provide insights into the strength of relationships among causes of mobility and capacity and capability of Palestinian Diaspora with a network that enable them to be connected with the mother country. Also, literature about Palestinian Diaspora does not show any studies that use Structural Equation Modeling as a tool to examine the relationship among the component of a network that enable the Palestinian Diaspora to be a part of development in Palestine.

The purpose of this study is to explore the relationships among different variables which seen as crucial elements in any connection among Palestinian Diaspora with Palestine. By exploring this relationship among a Palestinian network, this will enable the study to highlight the most important elements in entrepreneurial network among Palestinian Diaspora. Consequently, this study addresses the need for empirical information in exploring the entrepreneurial characteristics among Palestinian Diasporas

1.3 Purpose of the study

The main aim of this study is to contribute to the development of the Palestinian Diaspora people. This can be achieved through developing a model tailored towards establishing a network of Palestinian Diaspora Entrepreneurial Network (PDEN), where Palestinian Diaspora plays a major role. Through this participation, Palestinian Diaspora people are not only contributing to the development in Palestine, but are also connected to their homeland. This

connection is important in presenting their national identity or patriotism. In addition, the research would trigger further studies or research covering more issues and dimensions, related to Palestinian Diaspora's contribution and connectedness with Palestine.

1.4 Objectives

1. Identify the push, pull, re-pull, capacity, and capability factors affecting Palestinian Diaspora.
2. Explore the entrepreneurial characteristics among Palestinian Diaspora people.
3. Identify the components of a model for Palestinian Diaspora.
4. Examine the relationship of push, pull, re-pull, capacity and capability factors with the Palestinian Diaspora's network.
5. Propose and validate a model for Palestinian Diaspora Entrepreneurial Network (PDEN)

Based on the above objectives research questions are:

1.5 Research Questions

To achieve the objectives of the research, the following research questions were used.

1. How much Entrepreneurial characteristics do Palestinian Diaspora exhibit?
2. 2.1 what are the components comprising Palestinian Diaspora's network?

2.2 What are the push factors that are influencing Palestinian Diaspora's network?

2.3 What are the pullfactors that are influencing Palestinian Diaspora's network?

2.4 What are the re-pull factors that are influencing Palestinian Diaspora's network?

2.5 What are the capacity factors that are influencing Palestinian Diaspora's network?

2.6 What are the Capability factors that are influencing Palestinian Diaspora's network?

3. How strong is the relationship between factors and components of Palestinian Diaspora's network?

4. How could factors and entrepreneurial characteristics be integrated and validated with the component of Palestinian Diaspora's network to form a Palestinian Diaspora's Entrepreneurial network?

1.6 Scope of the study

The study has covered Palestinian Diaspora worldwide, concentrating mainly on the push, pull, and re-pull factors, and measuring the entrepreneurial characteristics among them. The aim was at studying or exploring their demographical characteristics, however it touched on these for the purpose of the serving the main objective of the study. The study did not attempt to come up with a solution to the issue with Palestinian Diaspora. At the same time, it focused on finding a model to connect Palestinian Diaspora to their homeland and utilizing their potentials to contribute to the development in Palestine.

1.7 Rationale of the study

Today, with a view on the global knowledge based economy, the world is increasingly relying on science and technology (S&T) skills and generating their international flows more than ever before, the issue has become even more crucial (Meyer & Brown, 1999). Skilled immigrants play a strong role in science and technology (Meyer & Brown, 1999; Saxenian, 1999) that will drive innovation and economic progress in developed countries and in developing countries as well by having what is called brain circulation (Saxenian, 1999).

In this context, the role of Palestinian Diaspora becomes all the more important as more than half of Palestinian population lives in Diaspora (Hanafi, 2007; Shiblak, 2005; Schulz, 2003; Mavroudi, 2008; Al-Zaytouna, 2010). These Palestinian Diaspora people as mentioned by Fargues *et al.*, 2005; MOP, 2005; Hanafi, 2007, are characterised by the diversity of their levels and types of occupational skill. These people are trained in the scientific, professional and intellectual disciplines which include entrepreneurs, doctors, academics, highly-skilled technicians, engineers and intermediate and lower-level workers in the sectors of healthcare and education (Fargues *et al.*, 2005; MOP, 2005; Hanafi, 2007). In addition, many have become leaders in science and technology in the countries where they live (MOP, 2005).

A large number of entrepreneurs among Palestinian Diaspora is wasted, due to the weak channels (networks) between Palestinian Diaspora people and Palestine. Narrowing this gap and reducing the waste of entrepreneurs would not only benefit those individuals whose creative potential is thereby realized, but global society as a whole, as the value that those individuals create spills over to the society at large.

With this research in mind, a model have been tailored to clarify the ways in which Palestinian Diaspora communities are, or could be, contributing to the development and economic growth in their country of origin.

1.8 Definition of terms

Capacity

Capacity has been defined as the abilities, skills, understandings, attitudes, values, relationships, behaviours, motivations, resources and conditions that enable individuals as well as institutions to carry out functions and identify and achieve their development objectives over time” (UNDP, 1995a,b).

Capability

capability is defined as the collective skill or attitude of an organisation or system to carry out a particular function or process either inside or outside the system. Capabilities enable an organisation to do things and to sustain itself (Baser & Morgan, 2008).

Diaspora

‘Diaspora’ is an elusive term (Schulz, 2003). It derived from the Greek, ‘diaspora’ is defined as ‘the breaking up and scattering of a people’ or those ‘settled far from their ancestral homelands’ (Séguin et al., 2006).

Diaspora: The spreading of people from one original country to other countries (Cambridge, 2005).

Diaspora: Refers to any people or ethnic population that leaves their traditional ethnic homelands, being dispersed throughout other parts of the world (IOM, 2004).

Diaspora: The term “Diasporas” refers to expatriate groups which, in contrast to “migrants”, apply to expatriate populations abroad and generations born abroad to foreign parents who are or may be citizens of their countries of residence (IOM, 2006).

Palestinian Diaspora

refers to all Palestinian who currently resides outside the territories of Mandatory Palestine, i.e. outside West Bank and Gaza Strip and Israel. It is important to stress that Palestinian Diaspora does not encompass all refugees, since over one third of all the UNRWA registered refugees reside in the West Bank and Gaza Strip (UNRWA, 2001).

Whether forced to leave their homes and become refugees, or displaced from their lands due to economic hardship under the Israeli occupation, millions of Palestinians live in Diaspora (MOP, 2005).

Push-pull factors

Push factors are the conditions in the home country that push the person to leave (Delicado, 2007), otherwise Pull factors are the conditions in the host countries that attract migrants to them (Delicado, 2007).

Development

“Development” was defined in its broad human, social and economic meaning. Development implies growth, advancement, empowerment and progress. The goal of development is to build human capabilities and enlarge human choices. Equity, sustainability, productivity, and empowerment are its essential components. (IOM, 2005)

Migrant

At the international level, no universally accepted definition of migrant exists. The term migrant is usually understood to cover all cases where the decision to migrate is taken freely by the individual concerned for reasons of “personal convenience” and without intervention of an external compelling factor. This term therefore applies to persons, and family members, moving to another country or region to better their material or social conditions and improve the prospect for themselves or their family (IOM, 2004).

If people migrate, they travel in large numbers to a new place to live temporarily (Cambridge, 2005)

Immigrant

A person who has come to a different country in order to live there permanently (Cambridge, 2005).

Emigrate

To leave a country permanently and go to live in another one.

Talent

Someone who has a natural ability to be good at something, especially without being taught (Cambridge, 2005).

Professional

A person who has the type of job that needs a high level of education and training (Cambridge, 2005).

Skilled emigration

Defined as emigration after the completion of tertiary education (Devane, 2006).

Entrepreneur

In colloquial speech the terms entrepreneurs, self-employed, and business people are often used as synonyms (Hofstede et al. 2004).

Today, an entrepreneur is an innovator or developer. He or she is an independent thinker who dares to be different in a background of common events (Kuratko & Hodgetts, 2007).

Entrepreneurs were the pioneer of today's business successes. Their sense of opportunity, their drive to innovate, and their capacity for accomplishment have become the standard by which free enterprise is now measured (Kuratko & Hodgetts, 2007).

Try to create value and to make a contribution (Drucker, 1985).

Shapero (1975), quoted in (Hisrich, Peters, & Shepherd, 2008); (Kuratko & Hodgetts, 2007), states that mostly all definitions of Entrepreneurship refers to behaviour that includes; (1) initiative taking, (2) the organizing and recognizing of social and economic mechanisms to turn resources and situations to practical account, (3) the acceptance of risk or failure.

1.9 Limitation of the study

This study may represent the first effort of studying Palestinian Diaspora from a scientific research perspective. Many limitations were faced while this reserach was conducted. These include;

Lack of literature and previous work. The researcher did not find sufficient studies on Palestinian Diaspora that were related to the theme and objectives of the study. As a consequence, the researcher had to resort to alternatives. One such alternative is to collect needed data directly through a

lengthy questionnaire to compensate for the lack of proper and appropriate data. Another issue was the lack of literature, data and significant studies on Science and Technology in Palestine.

Distribution of the questionnaire among Palestinian Diaspora was difficult. It was not possible for the researcher to reach all communities of the Palestinian Diaspora worldwide due to the lack of connections and cooperation among these communities. The researcher tried to directly contact key persons in some of these communities for assistance in the distribution of the questionnaire, but little or nil response was received. Communities where the researcher had contact persons who were ready to help in the distribution of the questionnaire were reached satisfactorily and had higher response rate. In other cases, the researcher had to travel to countries with high Diaspora population to distribute the questionnaire. Despite the use of the online version of the questionnaire, response rate from certain communities was very low if not approaching zero. This could be attributed in part to the lack of access to Internet.

In some cases, like Chile and Latin America in general, where the population of the Palestinian Diaspora is considerably high, no response was received. The researcher tried to contact some key persons there but was not successful. One reason for the lack of response in these communities might be the language, as the questionnaire was written in both Arabic and English, while these communities speak mainly other languages like Spanish or Portuguese.

The researcher tried to contact many successful people who may be considered as successful entrepreneurs among Palestinian Diasporas, but no

one responded. Their contribution was expected to strengthen the study significantly.

1.10 Structure of the thesis

This thesis consists of seven chapters. Chapter 2 reviews literature relevant to this study from global perspectives; while chapter 3 reviews literature related to the situation in Palestinian situation. Chapter 4 presents the research methodology carried out, Chapter 5 and chapter 6 present results and discussion of the study. Chapter 7 presents the conclusion of the study. These chapters are briefly reviewed as follows:

Chapter 1 generally introduces the thesis with a background about the study followed by the statement of the problem, and its main objectives; research questions; rationale of the study; scope; some definitions of some terms used in the study as well as structure of the thesis at the final part.

Chapter 2 reviews relevant literature to the themes of this study from a global view. It provides an overview on the terms and detailed definitions used, and relevant studies conducted by other scholars. The chapter starts with an introduction and then presents details about Diaspora; definition and causes of mobility in terms of push-pull factors; and how to re-attract the Diaspora to the mother country. Entrepreneur and entrepreneurship among Diaspora; the methods used to re-attract the Diaspora; incentives used from different countries to re-attract their Diaspora; and some other elements that helped in shaping the conceptual framework of the study were discussed.

Chapter 3 presents similar elements that have been discussed in chapter 2; but focusing on Palestinian situation. The elements include definitions of Palestinian Diaspora and their capacity and capability; the causes of mobility

(push-pull factors), entrepreneur, and entrepreneurship among Palestinian Diaspora people and Palestinian Diaspora networks.

Chapter 4 introduces a comprehensive view about the methodology that has been carried out in this study. After a small introduction about the chapter, the conceptual framework which was created based on the literature review was presented. Then the design of the study; sources of information; population of the study and data collection method were introduced. The questionnaire design (quantitative method) which consists of its contents; translation; validation; pilot test; reliability test; sampling; distribution process of the questionnaire and its response rate was discussed. Interviews (qualitative part) were presented followed by a general view about the data analysis used, followed by a summary about the chapter.

Chapter 5 shows the results of the questionnaire and results of the interviews that were conducted. Each section presents results of questionnaire as well as interviews based on research questions. The chapter describes the results for the variables (dependent and independent). The component of the model are presenting at the end of the chapter.

Chapter 6 shows results of the model and its components. The correlations among the components of the model are presented, and correlations among the model and the independent variables.

Finally, Chapter 7 concludes the discussion by summarizing main findings of the study. It then offers some recommendations to overcome the major weaknesses and to build on the key areas of strengths as the study aims at building a model to connect Palestinian Diaspora to the development in Palestine, based on entrepreneurship.

CHAPTER 2

LITERATURE REVIEW-PART I

(GLOBAL PERSPECTIVE)

“The most important wars of the 21st century will be fought no longer on the physical battlefield, but in corporate boardrooms, laboratories, stock exchanges, classrooms, and shop floors.”

*Fidel V. Ramos,
Former President of the Philippines*

2.1 Introduction

This chapter reviews the relevant literatures interrelated for the purpose of this study which deals with the knowledge based economy and Diaspora (and its capacity, capability and causes of mobility) as key factors affecting the formulation of a strategy and framework for entrepreneurship for the advancement of Science & Technology as an enabling force in the world, generally. In addition, this chapter introduces a comprehensive description about the entrepreneur and among of the questions namely who is the entrepreneur, what is entrepreneurship, what is the relationship between entrepreneur and economic development, will be answered. Finally, several examples from different countries are presented as success stories on Diaspora entrepreneurial networks, followed by a suggested framework for connecting Diaspora to the development in the mother country via entrepreneurship.

2.2 Knowledge based Economy

The global economy is changing, and along with it, the landscape of economies in Asia (ADB, 2007). Revolutions of globalization and the information and communication technology (ICT) are increasingly atomized, but ubiquitously networked due to the behaviour of information and knowledge as economic goods, network externalities, dramatic changes, differentiations, and synergies being emerged in the modalities of creating value. In short, national economies are becoming more knowledge based economies where productivity and growth have become more dependent on knowledge. It can be noted, though, that these global trends were largely unplanned. Nations, organizations, and individuals did not intentionally design the “knowledge era,” they were knowingly or unknowingly pushed into it (ADB, 2007).

Knowledge is recognized as a crucial element of economic growth in addition to physical capital and labour (Mueller, 2006). Also, Hansen and Lehmann (2006) argued that universities educate decision-makers of tomorrow in both public and private sectors. “Knowledge is information that changes something or somebody, either by becoming grounds for action, or by making an individual (or an institution) capable of different or more effective action (Drucker, 1985). Houghton and Sheehan (2000) clearly stated that knowledge has always played an important role in all economies, and this use of knowledge has been increasing since the Industrial Revolution. They go on to argue that, although there is nothing new about knowledge playing a role in economy, the degree of incorporation of knowledge and information into economic activity is now so great that it is inducing quite profound structural and qualitative changes in the operation of the economy and transforming the basis of competitive advantage.

Al-Hawamdeh and Hart (2002) stated that the essence of the knowledge based economy is the capacity to absorb, process, and apply knowledge or intellectual property and translate it into a key source of competitive advantage together with the basic factors of production, which continue to be important in this type of economy. They added that the emphasis is towards intellectual capital or knowledge as a source of value and wealth creation. Thus, the richer country will be the country with high numbers of intellectuals and educated people.

Hence, the basis of a knowledge economy is a learning society (Hargreaves and Shaw, 2004). Economic success and a culture of continuous innovation depend greatly on sustaining a continual education and innovation process. According to OECD publications (2000), successful knowledge economies rely on four sources of innovation namely scientific and technical knowledge, interactions and incentives to innovate among users and doers, decentralized modular patterns of innovation within a coordinated system and widespread application of information and communication technologies, including in education.

Today's most technologically advanced economies are truly knowledge based (World Development Report, 1999). As such, today's most technologically advanced economies are truly dependent on their knowledge nomads. Hargreaves and Shaw (2004) explained that knowledge economies work best when they are developed in conjunction with knowledge societies. These are societies that recognize their knowledge elites and uphold the emergence of potential elites, promoting mechanisms geared towards spin-off benefits and social dividends for the broader civil society (ADB, 2007). This is accomplished without 'burn-out' of the knowledge elite, or hindering his

process for continual exploration and expression. Diaspora techno-entrepreneur whether he is temporary or permanent, weaves themselves through transnational knowledge societies (ADB, 2007).

2.3 Economic development

“Development” has been defined in its broad human, social and economic meaning. Development implies growth, advancement, empowerment and progress (IOM, 2005). The goal of development is to build human capabilities and enlarge human choices (IOM, 2005). Equity, sustainability, productivity and empowerment are its essential components (IOM, 2005).

Actors in developing economies must have the capacity to acquire new knowledge, new ways of doing things, if they are to compete in the world economy (Kuznetsov & Sabel, 2006). Therefore, the engine of economic growth depends on the availability of factors of production such as land, labour, and capital. Although such production activities will remain an important component of growth, this millennium will be powered not by traditional production of goods and services, instead, by knowledge based initiatives. (Al-Hawamdeh & Hart, 2002)

2.4 Science and Technology

Science might be thought of as know-what and technology as know-how, while markets or business focus on know-where and know-how (Day & Schomaker, 2000). The term technology is used broadly in business and science to refer to the process of transforming basic knowledge into useful application (Day & Schomaker, 2000). Bridgstock (1998) mentioned that science-based technology has begun to transform the whole industries. Contemporary science is highly transnationalised (Delicado, 2007). Scientific

career which by definition seems to be boundary less and self-directed expatriation, is increasingly recognised as a common career choice (Hart, 2006).

2.4.1 The importance of Science and Technology

According to OECD in 2004, science and technology exert a growing influence on society and the economy. Science will play a major part in shaping our views of the universe and of ourselves (Bridgstock et al, 1998). Scientific achievements continue to expand the frontiers of knowledge and increasingly contribute to the technological progress that affects how people live and work (OECD, 2004). Scientific advances and technological change are important drivers of recent economic performance (OECD, 2000). The abilities to create, distribute and exploit knowledge have become major sources of competitive advantage, wealth creation and improvements in the quality of life (OECD, 2000). Moreover, human talent is a key economic resource and a source of creative power in science, technology, business, arts and culture and other activities (Solimano, 2006). Talent has a large economic value and its mobility has increased with globalization, the spread of new information technologies and lower transportation costs (Solimano, 2006).

Many people would agree that science and technology are great importance in the world today. Developed countries are now concentrating on how much to spend on these two great sources (Bridgstock et al, 1998). Countries like Sweden and Switzerland, as mentioned by Bridgstock et al, (1998) spend 2 or 3 per cent of their gross domestic product on science and technology because decision makers in government and industry are strongly convinced of the importance of developing science and technology.

Bridgstock et al, (1998) stated that science is always the product of human activity. Due to this, in a globally integrated knowledge economy, the circulation of skilled workers is due not only to the changing structure of economic activities but also to “the opportunities for high technology entrepreneurship, access to leading clusters of research and innovation, bottlenecks of employment opportunities in public and private research and the globalization of the R & D activities of national firms” (Rizvi, 2005).

2.4.2 Access to skills and knowledge

Technological innovations and the shift towards knowledge based economies have made human capital investment a prerequisite for sustained economic growth and central to the start-up, growth and productivity of firms (UNDP, 2004). Human capital can determine the potential for a firm’s growth and survival. It is very fundamental to mention that, a firm’s competitive advantage comes from its entrepreneurial capabilities; its management and technical know-how, including labour management relations; and the skills, education and adaptability of its employees (UNDP, 2004). The level of education matters and the skills of employees need to be continually upgraded through on-the-job training to increase the firm’s productivity and its ability to absorb new technologies (UNDP, 2004). Many developing countries suffer from low levels of human capital investment, aggravated by the outward migration of highly skilled professionals (UNDP, 2004). The question is how to re-attract these skilled, talented, and professional people to contribute to the development in the mother country?

2.4.3 Building Bridges

It has become increasingly clear over the last decade that immigrants now lead more transnational lives than ever before; that is, their social, political, and economic pursuits span the geographic boundaries of their countries of settlement and origin (Dade & Unheim, 2007). Transnationalism has emerged in the development literature as one of the dominant frameworks for understanding the activities of diaspora communities in both their countries of origin and settlement (Dade & Unheim, 2007).

Linking Diaspora's experience to the development in the mother country requires a bridge. Some Diasporas have experience and skills in working across different sectors and with different parts of the development process. These are the "bridge people" who can help to build entrepreneurship (Transnational entrepreneurship¹) between the Diaspora people and development in their mother country. Transnational entrepreneurship also can be viewed as both the consequence of, and partial solution to, the challenges faced by many skilled immigrants with regards to finding appropriate employment in their country of settlement (Dade & Unheim, 2007).

Bridge entrepreneurs help Diaspora people and policy makers (especially in S&T) in the mother country to access each other, to listen to each other's concerns, and to find common ground. A bridge entrepreneur may be someone who has worked in many different international organizations in the past, but now works in a government department – someone who understands a particular international community's experience and has knowledge of the entrepreneurship. Bridge entrepreneur understands the needs and realities of

¹ It is preferred by the researcher to use the term "Diaspora entrepreneurship" instead of "Transnational entrepreneurship".

different sectors, and has the skills to build relationships and processes across sectors.

A detailed view will be presented about Diaspora in the coming sections through some questions: Who is Diaspora? Why do we need Diaspora? What can Diaspora do to help in fostering development in the mother country?

2.5 Diaspora Worldwide

Before going in depth on Diaspora's issues, some terms need to be identified. 'Diaspora' term is an elusive term (Schulz, 2003). Derived from the Greek, 'Diaspora' is defined as the breaking up and scattering of a people or those settled far from their ancestral homelands (Séguin et al., 2006). It is in a general speak, the spreading of people from one original country to other countries (Cambridge, 2005). IOM (2004) referred it to any people or ethnic population that leaves their traditional ethnic homelands, being dispersed throughout other parts of the world. After that, IOM stated that, the term 'Diaspora' refers to expatriate groups which, in contrast to 'migrants', apply to expatriate populations abroad and generations born abroad to foreign parents who are or may be citizens of their countries of residence (IOM, 2006).

Migrant, generally, if people migrate, they travel in large numbers to a new place to live temporarily (Cambridge, 2005). At the international level, no universally accepted definition of migrant exists. The term migrant is usually understood to cover all cases where the decision to migrate is taken freely by the individual concerned for reasons of 'personal convenience' and without intervention of an external compelling factor (IOM, 2004). This term therefore applies to persons, and family members, moving to another country or region

to better their material or social conditions and improve the prospect for themselves or their family (IOM, 2004).

Immigrant is a person who has come to a different country in order to live there permanently (Cambridge, 2005). Contradictorily, 'emigrate' is to leave a country permanently and to go live in another one (Cambridge, 2005).

From here, many questions need to be answered in this study. Who concerns about Diaspora? Why do we need Diaspora? Why developed countries launched policies and studies to attract people from outside the country? What is the capacity and capability that Diaspora has? Why developing countries need Diaspora people? What are the mechanisms that have been taken to connect Diaspora to the mother country?

Prior to discussing these issues, two terms namely capacity and capability have to be clarified. 'Capacity' has been defined as the abilities, skills, understandings, attitudes, values, relationships, behaviours, motivations, resources and conditions that enable individuals as well as institutions to carry out functions and identify and achieve their development objectives over time (UNDP, 1995). Personal capacity is the ability to use personal resources to achieve goals. Personal capacity includes attitudes, skills and knowledge, including knowledge based in experience and interpersonal skills (Dodd & Boyd, 2000).

On the other hand, OECD used 'capability' to refer to human capital includes skills created by experience and firm-level training as well as formal education (OECD, 1987; Baser & Morgan, 2008). Capability enables an organisation to do things and to sustain itself (Baser & Morgan, 2008). Capability refers to skills (OECD, 1987) and skills could be measured by rates of enrolment in secondary and tertiary education (Fagerberg & Srholec, 2008).

Skilled emigration defined as emigration after the completion of tertiary education (Devane, 2006). Others defined it as highly skilled workers, having completed tertiary education (Lowell, 2001),

Based on what that has been mentioned previously, skilled and talented individuals usually possess considerable influence at national and international levels as they are often well-connected, shape ideas, values and beliefs (Solimano, 2006). There has been an increasing awareness in recent years that there are several ways in which Diaspora can stimulate economic development in their homelands (Lowell & Gerova, 2004). The mobilization of knowledge and skills of these expatriate professionals can play an even more effective role in facilitating economic development in their countries of origin (Lowell & Gerova, 2004). The mobilization of knowledge and skills of these expatriate professionals can play an even more effective role in facilitating economic development in their countries of origin (Lowell & Gerova, 2004). Building and maintaining a stock of researchers and scientists who are able to generate knowledge and innovate serve as key elements in increasing productivity and global competitiveness (Thorn & Holm-Nielsen, 2006). For this reason, countries at the innovation-stage of economic development commit significant resources to graduate education and compete intensely to attract top scientists and researchers.

2.6 The Role of Diaspora in Science and Technology

Skilled immigrants may play a strong role in science and technology (Meyer & Brown, 1999). Saxenian (1999), expressed in her paper this significant role in fostering science and technology driven innovation and economic progress in developed countries.

Today, with the global knowledge based economy increasingly relying on science and technology (S&T) skills and generating their international flows more than ever before, the issue has become even more crucial (Meyer & Brown, 1999). However the role of immigrants in contributing to technological developments in their country of origin is still poorly understood (Seguin, Singer, & Daar, 2006), and is particularly interesting when science and technology are given roles to improve the human condition and economic development (UNDP, 2001).

Meyer and Brown (1999) mentioned that many talented scientists or engineers being misused or under utilised when they go back to their country of origin where their abilities are disconnected from what used to make them powerful. This leads to an approach emphasizing connectivity and which departs from the traditional brain drain (Meyer & Brown, 1999).

2.6.1 Why Developed Countries need Diaspora?

It is not only the developing countries, however, which are concerned about the loss of highly skilled workers. A recent report by the OECD (2001) examined issues of skilled mobility with respect to its own member countries. The report noted that the role of immigration in human resource planning is high on the agenda of policy makers and business leaders throughout the OECD for a wide variety of reasons, including the growing recognition that knowledge based economies rely more heavily on workers with higher skill levels than ever before. Rizvi (2005) claimed that many OECD countries have been unable to meet their skilled human resource requirements, and thus face the conflicting demands of arresting the flow of their own skilled workers to the more advanced centres of research and development on the one hand, and developing policies to attract skilled workers from less developed countries on

the other. On the supply side, skilled workers in the developing countries continue to be interested in emigration for a wide variety of reasons, which relate both to the opportunities that individuals are able to pursue abroad and to the changing structure of the global economy (Rizvi, 2005).

Individuals from developing countries are increasingly meeting the global demand for talent (Solimano, 2006). Talent can be a productive resource for current production (e.g., information technology experts and engineers), or a source of wealth creation (entrepreneurs), a source of knowledge (scientists), a source of social service (nurses, physicians) or cultural work (artists) (Solimano, 2006).

Legrain (2006) mentioned in his book that:

“There is good reason to believe that the potential gains from freer migration could be huge. Rich countries have much more capital – machinery, buildings, and infrastructure and so on – and far better technology than poor ones. This makes workers in rich countries far more productive than their equivalents in poor countries. But when workers from poor countries move to rich ones, they too can make use of rich countries’ superior capital and technology, so they become much more productive. This makes them – and the world as whole – much better off.” (P.64)

Legrain supported his argument by some studies conducted by Joathon Moses and Bjorn Letnes. They found that potential gains from free migration were even greater than they had been twenty years earlier, because the wage gap between rich countries and poor ones has grown (Legrain, 2006).

In contrast, Legrain (2006) argued that, not only skilled or talented people are needed by developed countries; less skilled people do play a role as well. This argument was motioned by Legrain, (2006) in his book titled

“Immigrants: Your Country Needs Them”. Legrain, (2006) claimed that we are in need of each other. He categorized the migrants into three groups; the first group is the migrants that perform jobs people in rich countries no longer want to do, such as cleaning, waiting tables, and picking fruit. Other groups do jobs that not many people in rich countries can do: filling a shortage of nurses. Many migrants service the clusters of global professionals – and other residents – in places like London and Silicon Valley: preparing their lunch time sandwiches, chauffeuring them around by cab, coaching them at the gym, looking after their children, and so on.

Therefore, it is not only the skills or education that developed countries are looking for, Legrain (2006) compared between rich and poor countries from age perspective in order to highlight the need for migrants from poor countries. He mentioned that poorer countries much younger baby-boomers are just starting to enter the labour market, while rich countries’ baby-boomers generation are nearing retirement age.

2.6.2 Why developing countries need Diaspora?

Knowledge travels around the world fairly quickly, as opposed to capital (ADB, 2007). All countries have access to the same pool of knowledge, and nations differ mainly in the degree to which they take advantage of this free public good by investing in physical plan and human capability (ADB, 2007).

The exchanges between developed and developing countries are quite asymmetric (Delicado, 2007). Core countries produce most of the knowledge and receive most of the inflow of scientists from peripheral countries (Delicado, 2007). The available evidence tends to suggest that the origins of

highly skilled migration include many of the world's least developed countries (LDCs) (Kuptsch & Fong, 2006). This has justified concerns about 'brain drain' and reopened the debate about its consequences on the ability of LDCs to catch up (Kuptsch & Fong, 2006).

International mobility of talented and skilled people can have important development effects on the source nations, on the receiving countries and on the global economy and society. In the source countries, the emigration of talent is able to reduce their human capital base (Solimano, 2006). Developing countries that see their entrepreneurs, scientists, technology experts, medical doctors emigrate can experience a retard in their development potential (Solimano, 2006).

Mobility of skilled people is a major contributing factor to increased economic and social disparities in the developing world (Solimano, 2001) and leaves in its wake financial, technological and knowledge gaps (Lowell, 2001). Skilled immigrants play a significant role in fostering Science and Technology (S&T) driven innovation and economic progress in developed countries (Saxenian, 1999) but what about the gap that will be caused in their origin country after they have left?

However the role of immigrants in contributing to technological developments in their country of origin is still poorly understood (Seguin, Singer, & Daar, 2006), and is particularly interesting when science and technology are given roles to improve the human condition (UNDP, 2001) and in economic development (Daar et al., 2003; Juma and Yee Cheong, 2005a,b; UNDP, 2001). Séguin, State, Singer and Daar (2006) suggested that skilled immigrants could contribute to their countries of origin if their needs were

better understood and governments implemented appropriate policies to encourage Diasporas' efforts systematically.

2.6.3 Causes of Mobility

Emigrational trajectories can be characterised by diverse push factors and pull factors, respectively, from countries of origin and to recipient countries. The phenomenon of migration of people differs from a country to another, across the time, and from mechanism to mechanism. This international migration could thus profit developing nations through the economic network benefits created. The resource loss through brain drain could be converted into a long-term resource profit for the developing country.

According to the World Bank (2000), between 2 million and 3 million people emigrate each year and majority of them go to these four countries namely the United States, Germany, Canada, and Australia, in that order. The World Bank stated that a total of 130 million people are living outside their country of birth, a number that has been rising at the rate of 2% a year. In North America and Western Europe, the migrant stock grew at 2.5% a year between 1965 and 1990, far outstripping growth of indigenous populations (AFFORD, 2000).

Migration in globalizing world is on the increase, especially migration of highly skilled (Dunnewijk, 2008). It is quite natural that given certain possibilities, people look for opportunities and chances to improve their lives, especially when the better educated people leave their country in large quantities to try their chances abroad, which was labelled in 1960's as 'brain drain' (Dunnewijk, 2008). The drivers of international mobility are not only economic, they are also cultural and political (Rizvi, 2005).

Kuption & Fong (2006) claimed that the largest flows of the skilled appear to be between and among the developed countries, that is to say, among the EU countries and between the EU and North America. Although admittedly fragmentary, the available evidence tends to suggest that the origins of highly skilled migration include many of the world's least developed countries (LDCs) (Kuption & Fong, 2006). Kuption & Fong have justified concerns about "brain drain" and reopened of LDCs ability to catch up.

2.6.3.1 Push-Pull factors

Migration flows of highly qualified personnel are usually explained by a push-pull model (Baruch et al, 2007) quoted in (Delicado, 2007). No clear answers in the literature on the pull and push factors for return migration (Thorn & Holm-Nielsen, 2006). Push factors are the conditions in the home country that push the person to leave while, pull factors are the conditions in the host countries that attract migrants to them (Delicado, 2007).

Among frequently cited push factors for migration are such phenomena as an oppressive political system, lack of job opportunities and social problems such as crime, insufficient health care and low quality education. These are counter balanced by a number of factors that pull migrants back to their countries of origin. Among these are commitment to home, economic growth and increased demand for skills (Marks 2004).

Push-pull factors of globalisation and the pull factors of demographic changes in wealthier countries, conflict, human rights abuses and natural disasters also act as push factors further fuelling migration, as people flee from wars, persecution, drought, famine, and floods, and so on.

According to the United Nations Population Fund, populations in virtually all European countries will decline, while the average person will get

older. The 15 countries of the European Union account for more than 375 million people today, but this is likely to fall to 330 million by the middle of the century. In these circumstances, policy makers will have to choose between allowing in substantial numbers of immigrants or raising the age of retirement, perhaps raising the upper working limit to 75 years of age in order to maintain their present levels of pension and welfare support (AFFORD, 2000).

Students from developing countries, as an example for pull factors, are attracted to higher education in developed countries due to several factors: quality of life in these countries, quality of education and social and cultural factors (family ties, social networks) (Delicado, 2007). For developed countries, hosting foreign students was first seen as a contribution to the development of the Third World countries, but in later years has become a business venture and a source of income for universities (Delicado, 2007). In some cases, due to the lack of skilled workers, foreign students are encouraged to stay in the host country after their studies (Delicado, 2007).

Return migration is a multifaceted and heterogeneous phenomenon (Thorn & Holm-Nielsen, 2006). Despite a very large literature on brain drain and migration, surprisingly few facts have been established about the pull and push factors guiding the decisions of individuals going abroad or returning home (Thorn & Holm-Nielsen, 2006). The question is how to re-attract these people?

2.6.3.2 Re-pull factors

The exchanges between developed and developing countries are quite asymmetric (Delicado, 2007). Core countries produce most of the knowledge and receive most of the inflow of scientists from peripheral countries (Delicado, 2007). There are two ways to implement the brain gain strategy:

either through the return of the expatriates to the country of origin (return option) or through their remote mobilization and association to its development (Diaspora option) (Meyer & Brown, 1999). Kuznetsov (2006) mentioned that Diaspora can play a direct role to the mother country by implementing projects there, or indirect role by serving as bridges and antennae for the development of projects in the mother country. Kuznetsov (2006) classified the contribution to the mother country by direct and indirect contribution. The direct contribution is the engagement of Diaspora members in well-defined roles such as investors, consultant, lawyers, philanthropists, or business angels. While the indirect contributions, is the search role of the Diaspora and its function as bridge, translator, and midwife, is important.

Today's returning entrepreneurs have dramatically accelerated the adaptation of technology and institutions to local circumstances that are invariably different from those in the US. Transferring production to a new environment requires deep knowledge of the local context—the subtle as well as more apparent differences in social, cultural, and institutional settings (Saxenian, 2008). In a process more akin to 'brain circulation' than 'brain drain' engineers and entrepreneurs, aided by the lowered transaction costs associated with digitization, are transferring technical and institutional know-how between distant regional economies faster and more flexibly than most large corporations (Saxenian, 2008).

Any international system for managing human resource should be designed to facilitate knowledge spill over from the receiving countries back to the source countries (Hart, 2006). Such spill over may occur through return migration; educational, commercial and scientific relationships; and investment and entrepreneurship (Hart, 2006).

2.6.3.3 Approaches to attracting skills

International migration, historically a one-way process, has become a reversible choice, particularly for those with scarce technical skills, and it is now possible to collaborate in real time, even on complex tasks, with counterparts located at great distances (Saxenian, 2008). What is an optimal policy for a country seeking to use immigration as a means to meet supply deficits for the highly-skilled? Are some governments pursuing optimal policies by introducing employer-driven schemes for attracting the world's best trained professionals? (Abella, 2006)

Meyer & Brown (1999) introduced two ways to implement the brain gain strategy: either through the return of the expatriates to the country of origin (return option) or through their remote mobilization and association to its development (Diaspora's option).

Chinese Experience

As it is accepted that S&T development is a key to economic growth and development, other countries such as China are increasingly focusing on ways in which to forge linkages with the overseas scientists.

An example of a specific government policy is the commitment of US \$25 million over a 15-year period to set up a website and centre to assist permanently and temporarily returned overseas Chinese scholars. As well, the policies supporting R&D, including those focusing on the development and expansion of research centres and 'science parks', have been integral to the success of knowledge repatriation in China. Another example is China's 100 Scholar Plan, which aimed to attract 100 foreign educated returnees to work at the Chinese Academy of Science. Interestingly, the Chinese government also announced its intention to attract hundreds of overseas Chinese scientists with 'western style' salaries (Economist, 2002). Additionally, social policies such as increased accessibility to superior housing and education for their family are making overseas Chinese more amenable to the idea of returning home for temporary or even long-term stays. China's success in repatriation can be best observed in Shanghai, where more than 1700 firms (including health biotechnology firms) have been established by the expatriates (Zhenzhen et al., 2004). Similarly to India, China maintains connections to its Diaspora by hailing them as 'patriotic' and praising them for raising China's profile on the global stage.

Source: (Séguin, State, Singer, & Daar, 2006)

The increasingly globalised knowledge economy demands that there be circulation of knowledge workers, this is as important for the developed countries as it is for the developing economies (Rizvi, 2005). If this is so, then it is suggested by a number of policy scholars such as Meyer and Brown (2003) that, for the developing countries to benefit from the knowledge economy, the physical location of people is immaterial, so long as the developing economies are able to draw upon their expertise, regardless of where they live. Meyer and Brown (2003) called this the 'Diaspora's option', underlining the need to create links through which skilled emigrants could still be effectively and productively connected to their country of origin. They argued that a crucial advantage of the Diaspora's option is that it does not rely on a prior infrastructural massive investment, as it consists in capitalizing already existing resources. It is thus at hand for any country which is willing to make the social, political, organizational and technical effort to mobilize such a Diaspora (Rizvi, 2005).

Indian Government Experience

Indian government has made great strides in turning its brain drain into a brain gain. However, India's ability to attract its Diaspora back home should be partially credited to its booming ICT and biotechnology. Private sectors offer opportunities for skills of expatriates to be utilised, in addition to government's ability to coordinate the policies and programmes of multiple government ministries including that of the Ministry of Foreign Affairs, The Ministry of Overseas Indians, The Ministry of S&T and The Ministry of Education. Specific government policies that have aided in knowledge transfer include:

a Ministry of Overseas Indians 2005/2006 increasing their budget by 500%, the provision of dual citizenship, recognition of Persons of Indian Origin (PIO) through the creation of a special ministry, Pravasi Bharatiya Divas, an annual celebration/conference for PIO, and a Research Scientists Scheme which aims to bring back Indian nationals working overseas to teach in Indian universities. Interestingly, Pravasi Bharatiya Divas is also making diplomatic efforts to create or maintain connections with Indian overseas diaspora by celebrating their accomplishments abroad.

Source: (Séguin, State, Singer, & Daar, 2006).

Not all countries focus their primary policy attention on attracting talented non- nationals. A few countries have developed policies to encourage the return of their educated nationals with some success, especially if they are experiencing rapid economic growth fuelled by foreign investors seeking employees with international experience. China and India fit this profile, having been able to attract overseas nationals back to the native labour market. Global talent flows will likely expand for economic reasons, but may be slowed by politics. Coordination and cooperation among countries both at the regional and international levels, can produce a more equitable distribution of the benefits resulting from the migration of talent, a task that will be made easier with better and more timely data that contributes to a deeper understanding of global talent flows and their impacts (Kuptsch & Fong, 2006).

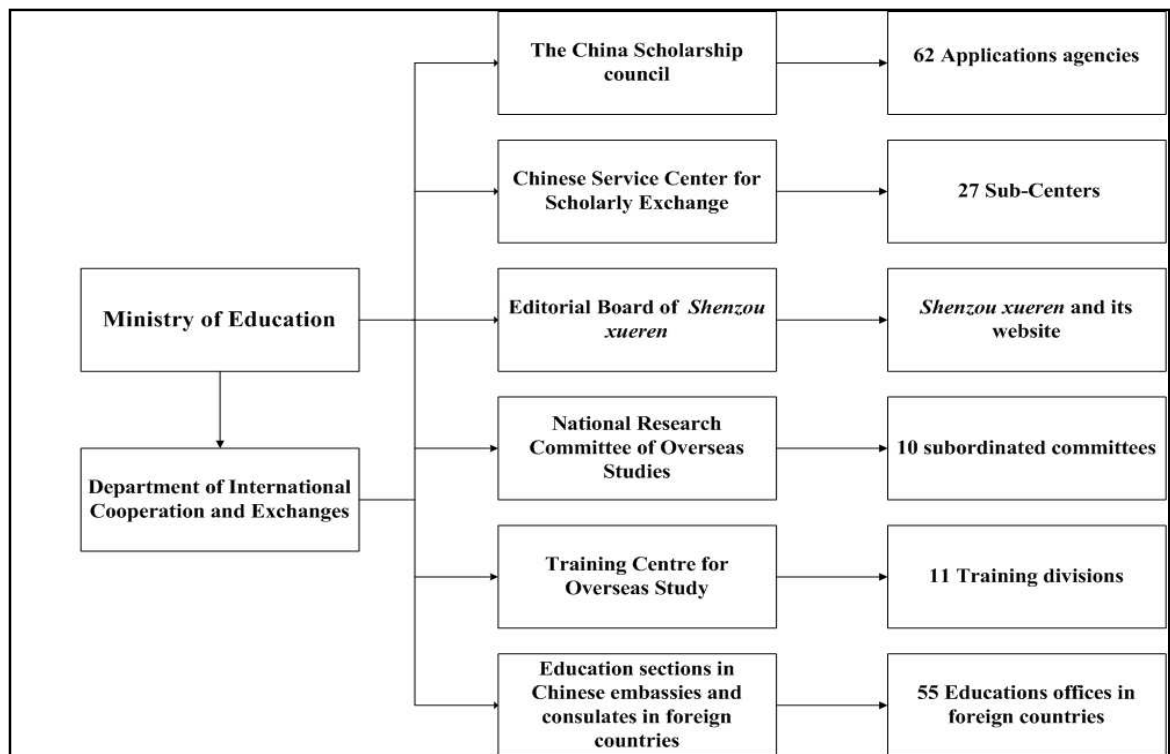


Figure 2.1: Structure of organizations in the Ministry of Education that facilitate returnees. Source: (Zweig, 2006)

The scientists and engineers abroad appears as human resources educated, trained through professional practice, and employed in much better conditions than those the country of origin could have provided to them (Meyer & Brown, 1999). If such a country is able to use these resources largely shaped through others investments, it would then gain a lot (Meyer & Brown, 1999).

2.6.4 Networks

The increased capacity of Diaspora's communities to communicate and interact between themselves at all levels, transfer funds, transport goods and raw materials, and transmit ideas between the various components of a Diaspora's network is considered to be a broadly positive step in the consolidation of Diaspora's cultures and their relationships with modern society (Petrova-Mitevaska, 2004).

Diaspora can help to establish robust institutions, including key state institutions, as they did in 19th century (Kuznetsov, 2006). Zionists from Europe wanted to change their 'home' country in Palestine. Edmond James de Rothschild, a French Jew, provided these exceptional individuals with funding on humanitarian grounds. This money helped set up a government in exile and initiate gradual colonization and development of Palestine (Kuznetsov, 2006).

By the end of the 1990s, over half of Silicon Valley, 200,000 scientists and engineers were foreign-born, primarily from Asia, and only a small proportion planned to return to their home countries (Saxenian, 2002). These immigrants did, however, quickly create ethnic social and professional networks that have supported career advancement and entrepreneurial success in Silicon Valley's open labour markets (Saxenian, 2002).

Asian-American networks linking the Silicon Valley with the Hsinchu region of Taiwan

One of the most studied examples in which transnational communities have had a strong impact on the development of their home country is found in the Asian-American networks linking the Silicon Valley with the Hsinchu region of Taiwan. Saxenian's study of this transnational community was seminal in showing that a large part of the success of Taiwan's information technology sector development in the 1980s and 1990s was due to Asian American engineers who built social and economic bridges linking the economies of the Silicon Valley and Hsinchu Park. This skilled immigrant community originated from a brain drain of Taiwanese engineering students seeking graduate training in the USA. A specific set of circumstances allowed them to contribute back to their home country, including: the explosive growth of a new technology sector in Silicon Valley that harnessed their skills the formation of professional associations which provided role models and assisted in the advancement of individuals within the community as a result of a sense of personal and professional exclusion within Silicon Valley a high spirit of entrepreneurship within this community and an active initiative by the Taiwanese government to promote the information technology sector and a proactive engagement of its overseas engineers in developing strategies to promote private sector growth in the Hsinchu region (Saxenian, 1999).

Source: (Séguin, State, Singer, & Daar, 2006)

Kuznetsov, (2006) emphasized that successful Diaspora's networks combine the following main features:

- Networks bring together people with strong intrinsic motivation.
- Members play both roles; direct (implementing projects in the home country) and indirect (serving as bridges and antennae for the development of projects in the home country). Successful initiatives move from discussions on how to get involved with the home country to transactions (tangible outcomes).

However, a network of technologists with strong ties to global markets and the linguistic and cultural skills to work in their home country is arguably the most efficient and compelling way to overcome these limitations. Cross-regional entrepreneurs and their communities can facilitate the diffusion of technical and institutional know-how, provide access to potential customers and partners, and help to overcome reputational as well as informational trade barriers for isolated economies (Saxenian, 2008).

Saxenian (2002) highlighted examples on the successes of high profile start-ups like Sabeer Bathia's Hotmail, Jerry Yang's Yahoo and Min Zhu's Webex which reflect the extent to which Silicon Valley's immigrant engineers had mastered the region's entrepreneurial business system.

The question is: Is there a perfect model that other countries may follow? Or each country has its own situation? The coming sections will discuss about the entrepreneur and entrepreneurship in detail and introduce entrepreneurship as a model that may be needed by other countries.

Red Caldas network

In that study, the authors described the Colombian *Red Caldas* network, one of the first networks to have emerged as an autonomously organised group of expatriate scientists (Meyer et al., 1997).

Red Caldas' mandate is to build the Colombian S&T communities and link them to international S&T communities through professional contacts, conferences, seminars and other knowledge-sharing strategies (Chaparro, 2004; Meyer et al., 1997). Since then, Meyer and Brown have reported the existence of 41 expatriate organisations with the internet sites meant as channels for the diaspora to identify and engage in development of their home country (Brown, 2000; Meyer and Brown, 1999; Vertovec, 2002). Moreover, in their in-depth survey published in 2003, Barre et al. concluded that "*the large and increasing number of highly skilled migrants, their tendency to organize spontaneously, and the development of ICT combine to produce a situation conducive to the formation of S&T diasporas*" (Barre et al., 2003). The ability of individuals and groups to connect globally with each other using the internet has increased interest and opportunities for expatriate scientists from 'the South' to develop professional linkages with their country of origin (Meyer and Brown, 1999; Meyer et al., 1997).

Source: (Séguin, State, Singer, & Daar, 2006)

2.7 Entrepreneur

An enormous collection of literature exists in the field of entrepreneurship. It has been dealt extensively by numerous scholars from various disciplines such as sociology, psychology, and economics (Abdullah, 2008).

The word is derived from the French *entreprendre*, meaning 'to undertake' (Kuratko & Hodgetts, 2007) or 'go-between' (Hisrich, Peters, & Shepherd, 2008). The term 'entrepreneur' was coined in 15th century France, but entrepreneurs have existed throughout history (NCOE, 2002). Entrepreneurship was introduced by the economists of the eighteenth century, and it continued to attract the interest of economists in the nineteenth century (Kuratko & Hodgetts, 2007). Many important historical figures, like Johannes

Gutenberg, the inventor of the printing press, ran entrepreneurial ventures (NCOE, 2002). While entrepreneurs, indeed, go back a long way, their economic importance today is unparalleled (NCOE, 2002). Today, an entrepreneur is an innovator or developer, he or she is an independent thinker who dares to be different in a background of common events (Kuratko & Hodgetts, 2007).

Drucker (1985) showed various disciplines for the definition of the Entrepreneur and entrepreneurship in different regions around the world:

'The entrepreneur,' said the French economist J. B. Say around 1800, 'shifts economic resources out of an area of lower and into an area of higher productivity and greater yield.' However, Say's definition does not tell us who this 'entrepreneur' is. In addition, since Say coined the term almost two hundred years ago, there has been total confusion over the definitions of 'entrepreneur' and 'entrepreneurship.'

Where the entrepreneur and entrepreneurship are used to business and business owner, as it was introduced in USA by Drucker (1985):

*'In the **United States**, for instance, the entrepreneur is often defined as one who starts his own, new and small business. Indeed, the courses in 'Entrepreneurship' that have become popular of late in American business schools are the linear descendants of the course in starting one's own small business that was offered thirty years ago, and in many cases, not very different. But not every new small business is entrepreneurial or represents entrepreneurship.'*

Whereas, Drucker (1985) continue discussing the Entrepreneur in Europe as follow:

“English speakers identify entrepreneurship with the new, small business, the Germans identify it with power and property, which is even more misleading. The Unternehmer—the literal translation into German of Say’s entrepreneur—is the person who both owns and runs a business (the English term would be “owner-manager”). And the word is used primarily to distinguish the “boss”, who also owns the business, from the “professional manager” and from “hired hands” altogether.”

In colloquial speech, the terms entrepreneurs, self-employed, and business people are often used as synonyms. In the management and economic literature, however, entrepreneurship is a behavioural characteristic related to perceiving and creating new economic opportunities (Hofstede et al., 2004).

Hisrich, Peters, & Shepherd, (2008); and Kuratko & Hodgetts (2007) stated that mostly all definitions of Entrepreneurship refers to characteristics which includes: (1) initiative taking, (2) the organizing and recognizing of social and economic mechanisms to turn resources and situations to practical account and (3) the acceptance of risk or failure.



Figure 2.2: The Models: From Problems to Opportunities

Adopted from (Skrzeszewski, 2006)

2.7.1 Entrepreneurs and Economic development

Economic development occurs when local leaders choose to identify their comparative advantages, choose to invest in these and choose to draw out clear and realistic timelines of development (Ming, 2005). This thus enables individuals and industries to compete better. In the new century, the comparative advantage of an economy lies in the abundance as well as the quality of entrepreneurs instead of merely traditional inputs, such as labour and capital (Ming, 2005). Entrepreneurship plays a significant role in the economic growth of a country (Ulijn & Brown, 2004; Madsen & Fisker, 2004; Hisrich, Peters, & Shepherd, 2008; Kuratko & Hodgetts, 2007; Drucker, 1985; Mueller and Thomas, 2000; Burt, 2000; Skrzyszewski, 2006; Ming, 2005).

Entrepreneurship is recognized as a major economic force (Skrzyszewski, 2006), a major source of business and job development, and it has been identified as an effective tool for community and individual growth and change (Skrzyszewski, 2006). Skrzyszewski (2006) referenced the Economist Lester Thurow (1999), that entrepreneurs 'are change agents capitalism' in that they 'are the individuals who bring new technologies and new concepts into active commercial use'. Entrepreneurs are usually the key actors in recognition, exploration and exploitation of new opportunities (Madsen & Fisker, 2004). 'The entrepreneur always searches for change, responds to it, and exploits it as an opportunity' (Drucker, 1985).

Ulijn & Brown 2004 stated that:

"In fact, innovation and entrepreneurship may be the most important factors that drive the process of economic development. However, while ultimately economic development is vital for the advancement of a country, we cannot confuse economic growth with social progress. Although both

economic growth and social progress vary across countries and are related to particular details such as national culture, history, tradition and so on, social progress is also affected by things such as wealth distribution, individual/human rights, and equalization of gender rights, which are not directly affected by economic growth.”

2.7.2 Entrepreneur and Economic growth

We are living in a new “Entrepreneurial Age” — in which entrepreneurs and their companies are transforming the economic landscape (NCOE, 2002). New and emerging entrepreneurial growth companies generate the vast majority of new jobs and innovations in our economy (NCOE, 2002).

Entrepreneurship is recognized as a major economic force, a major source of business and job development, and it has been identified as an effective tool for community and individual growth and change (Skrzeszewski, 2006). Entrepreneurs are the pioneer of today’s business successes, their sense of opportunity, their drive to innovate, and their capacity for accomplishment have become the standard by which free enterprise is now measured (Kuratko & Hodgetts, 2007).

Drucker (1985) introduced interpretations of entrepreneurship based on historical view. He mentioned that 'historical analysis forms the basis for some of the earliest and best-known comparative research on entrepreneurship and economic growth, including that of Weber (1904), Schumpeter (1934), McClelland (1976) and Wiener (1981). Drucker (1985) mentioned that theories of Weber (1904) which is the oldest among all of these theories, emphasize on personal responsibility for one’s actions, and in some sections, further interprets worldly success as a sign of grace.

Schumpeter (1934) also stressed the importance of the individual entrepreneur as a prime mover in economic growth, and speculates about the psychology of the entrepreneur. In particular, Schumpeter surmised that strong feelings of competitiveness are probably the principal motivation of entrepreneurs, consistently striving to prove themselves better than other people. Drucker (1985) mentioned that David McClelland (1976), who was also searching for a psychological basis for the entrepreneur's success, identified achievement motivation, that is, the motive to do a job well and to achieve a standard of excellence, as the main driving force of the entrepreneur (McClelland, 1976). He further proposed that strength of achievement motivation in the population as a major factor responsible for economic growth in a number of societies between the sixteenth and twentieth century.

Finally, Drucker (1985) introduced Wiener's view, who also proposed a link between status of the entrepreneur and economic growth. He argued that economic weakness in England during certain historical periods can be explained by the comparatively low status of making money and choosing a career in business rather than in a profession such as law or medicine, or of that of the country gentleman (Wiener, 1981).

Based on a study carried out by UNU-WIDER project, "entrepreneurs play an essential role in driving the structural transformation from a low-income and traditional economy to a modern economy" (NAudÉ, 2011). Entrepreneurs 'are change agents capitalism' in that they 'are the individuals who bring new technologies and new concepts into active commercial use' (Skrzeszewski, 2006).

Drucker (1985) emphasized on the role of the entrepreneur, as follows:

“Innovation is the specific tool of entrepreneurs, the means by which they exploit change as an opportunity for a different business or a different service. It is capable of being presented as a discipline, capable of being learned, capable of being practiced. Entrepreneurs need to search purposefully for the sources of innovation, the changes, and their symptoms that indicate opportunities for successful innovation. And they need to know and to apply the principles of successful innovation.”(p.30)

Despite many economists seeing entrepreneurship as a major economic force (Skrzeszewski, 2006; Kuratko & Hodgetts, 2007; Madsen & Fisker, 2004; Drucker, 1985).

NAudÉ (2011) mentioned that:

“Almost all existing empirical studies measure economic development by analyzing economic growth, per capita income, or productivity or employment growth. While these are important, economic development, and more broadly human development, is about more than just growth, or monetary measures of performance... human development covers more than just raising incomes, and that human development is the “'process of enlarging people’s choices’. People valued being entrepreneurs for many reasons other than just material gain. It can offer substantial non-pecuniary returns; provide independence; a positive change in lifestyle; a sense of achievement, of identity and of being accepted.” (P.4).

As Skrzyszewski (2006) stated about Entrepreneur, they 'are change agents of capitalism' in that they 'are the individuals who bring new technologies and new concepts into active commercial use'. Entrepreneurs are

usually the key actors in recognition, exploration and exploitation of new opportunities (Madsen & Fisker, 2004).

Kuratko & Hodgetts (2007) highlighted in their book about entrepreneur and its role on economic growth that:

“Entrepreneurial sector is poised to be an even more important factor in the United State’s future economic growth due to its adaptability to changing conditions and continued significant job creation. Entrepreneurs lead to economic growth in several different ways. Entrepreneurs enter to expand existing markets, thereby increasing competition and economic efficiency. Entrepreneurs also create entirely new markets by offering innovative products. The new markets also present profit opportunities to others, further spurring economic growth” (P. 6).

Kuratko & Hodgetts (2007) identified three entrepreneurial components that contributed to the U.S success. First, large firms that existed in mature industries have adopted, downsized, restructured, and reinvented themselves during the 1990s and are now thriving. Second, while these large companies have been transforming themselves, new entrepreneurial companies have been blossoming. Third, thousands of smaller firms have been founded, including many established by women, minorities, and immigrants.

One theory of economic growth depicts innovation as the key, not only in developing new products (or services) for the market but also in stimulating investment interest in the new ventures being created. This new investment works on both the demand and the supply sides of the growth equation; the new capital created expands the capacity for growth (supply side), and the resultant new spending utilizes the new capacity and output (demand side) (Hisrich, Peters, & Shepherd, 2008).

2.7.3 Entrepreneur and Innovation

The key characteristics of an entrepreneurial firm — often known as “gazelles” — are the interest in fast growth and the focus on innovation. This innovation need not be based on technology. It can be a new service, process, or marketing technique (NCOE, 2002). Entrepreneurship is the real core of the American economy (NCOE, 2002).

As mentioned before, the primary three things are: (i) the dream and the will to found a private kingdom; (ii) the will to conquer; and (iii) the joy of creating. While in the 'modern language' will be : (1) the desire for power and independence; (2) the will to succeed; and (3) the satisfaction of getting things done (Swedberg, 2000).

Entrepreneurs can be motivated by money and profit, or a desire to bring about social, organizational, or community change. This is because entrepreneurship is an attempt to fill human needs, it is a more dependable source of solutions to societal problems or issues than are government-driven solutions based on political or bureaucratic need (Skrzeszewski, 2006)

Several authors since Schumpeter (1934) have underlined a definition of innovation should always imply an entrepreneurial mindset: an innovation has to be implemented to lead to a marketable product; an entrepreneur is a person of ideas and actions who looks constantly for new product and market opportunities (Velde, 2004).

2.7.3.1 Why is innovative entrepreneurship so important around the world?

One answer is that it commercializes public knowledge and it contributes to productivity and employment growth (Ulijn & Brown, 2004). Inventions (as a type of innovation) are knowledge based; they are the product

of new thinking, new methods, and new knowledge (Kuratko & Hodgetts, 2007). Actors in developing economies must have the capacity to acquire new knowledge-new ways of doing things- if they are to compete in the world's economy (Kuznetsov & Sabel, 2006).

Kuznetsov and Sabel mentioned that development depends on learning and learning depends on searching. Development almost invariably depends on linking the domestic economy to the larger, outside world, because even the strongest economies quickly rediscover that they cannot generate all state-of-the-art ideas in isolation.

In assessing a new venture, entrepreneurs consider a number of different environments. Typically, they begin with the macro and then move on to the micro, focusing on data that help them decide how to establish the venture (Kuratko & Hodgetts, 2007).

Kuratko & Hodgetts (2007) mentioned that both types of innovation (radical and incremental innovation) require vision and support. This support requires an effort by the top management of the corporation to develop and educate employees concerning innovation and intrapreneurship.

The concept of entrepreneurship is not only limited to small business development (Ulijn & Brown, 2004). Ulijn & Brown (2004) concluded based upon previous studies, that business as usual would only lead to incremental innovations, but that radical technological innovations in a strongly R&D driven business require strategic corporate entrepreneurship in order to succeed. This would also include spin ins/acquisitions and, in our opinion also spin-outs/sales of companies/ start-ups (Ulijn & Brown, 2004).

To facilitate the development of innovation, corporations need to focus on the key factors of top management support, time, resources, and rewards.

Thus, commitment to and support of entrepreneurial activity are critical (Kuratko & Hodgetts, 2007).

Velde (2004) summarized the definitions of innovation mentioned in many sources like Drucker, 1985; Mueller and Thomas, 2000; Ulijn and Weggeman, 2001, as follows:

Innovating is a group process that is characterized by its multidisciplinary character and its (limited) controllability, and this process leads to an innovation, which is a new product, process or service or a part of those.

This definition indicates well the cooperation element of this process, which is also an evident in the concept of international entrepreneurship, although this is still seen too much as doing things abroad in marketing terms, than thinking and innovating through networking or strategic alliancing (Velde, 2004).

2.7.4 What drives Entrepreneur?

2.7.4.1 Entrepreneur and knowledge (Education)

Entrepreneurs have been defined as 'persons who are ingenious and creative in finding ways that add to their own wealth, power, and prestige' (NAudÉ, 2011). This is a definition that has encouraged scholars to consider the allocation of talent (e.g. ingenuity and creativity) between productive, non-productive and destructive uses (NAudÉ, 2011). Others concentrate on knowledge entrepreneur. A knowledge entrepreneur is someone who is skilled at creating and using intellectual assets for the development of new ventures or services that will lead to personal and community wealth creation or to

improve and enhance services. The knowledge entrepreneur must have sufficient personal knowledge capital to be able to create value and/or wealth through the use of the knowledge capital (Skrzeszewski, 2006).

Generally, entrepreneurs are guided by experience, knowledge, intuition, and a desire for freedom. They create and chase visions and take calculated risks. They do not allow their creativity and their confidence to be curtailed or shaken by naysayers, pessimistic attitudes, or over bureaucratized systems. They see problems as key opportunities and do not let any window of opportunity close without thorough consideration (Skrzeszewski, 2006).

Drucker (1985) introduced knowledge of entrepreneur in his book as:

“Entrepreneurship is neither a science nor an art. It is a practice. It has a knowledge base. Nevertheless, as in all practices, medicine, for instance, or engineering, knowledge in entrepreneurship is a means to an end. Indeed, what constitutes knowledge in a practice is largely defined by the ends, that is, by the practice” (P, 7)

Skrzeszewski (2006) stated that entrepreneurship in the non-profit sector is based on increasing the organizational capacity to achieve goals rather than to make a profit. Skrzszewski gave libraries as an example for non-profit sector.

2.7.5 Entrepreneurial Network

The fact that strong individualism fosters creativity and innovation in its first stage and that start-ups very often consist of smart individuals who have an idea ‘to create value’, might lead to the idea that sharing and teaming up with another person with complementary skills is the surest path to success

(Sharif & Chan, 2004). Swedberg (2000) wrote about Schumpeter's understanding to the meaning of the entrepreneur, and mentioned that:

“Schumpeter wrote ever the best when he mentioned that entrepreneur doesn't have to be a single person but can equally well be an organization, either a political or an economic one. What matters is the behaviour, not the actor.”

'The Network Entrepreneur' which was written by Ronald Burt in 2000 and introduced in 'Entrepreneurship: The Social Science View' which was edited by Swedberg, provides a whole picture about network theory with entrepreneurship perspectives. Burt mentioned that a player (entrepreneur) with a network rich in information benefits has: i) contacts established in the places where useful bits of information, ii) a reliable flow of information to and from those places (Burt, 2002; NCOE, 2002).

Based on numerous focus groups with entrepreneurs and projects in dozens of states, the following issues have consistently ranked at the top in terms of importance to new and growing businesses: access to talent; access to capital; networks and infrastructure (NCOE, 2002).

“Networks are essential because they are the links to potential sources of capital, new employees, strategic alliance partners, and service providers — such as lawyers, accountants, and consultants. They also allow entrepreneurs to share information and assessments of markets and technology as well as lessons learned from their own entrepreneurial experiences. These links are absolutely essential if a growing company is going to travel successfully at entrepreneurial speed.”

So, a greater number of entrepreneurs foster more opportunities to the network, i.e., the emergence of a regional cluster & a more open culture of information sharing and networking (NCOE, 2002). Skrzyszewski in 2006 quoted Thomas Stewart (1997) that intellectual assets are intellectual material – knowledge, information, intellectual property, experience- that can be put to use to create wealth. It is the sum of everything everybody in a company knows that gives it a competitive edge. These knowledge assets include skills, experience, expertise, culture, and awareness. However, to be useful in a practical sense, knowledge assts must also be formalized, organized, shared, and utilized in some productive way (Skrzyszewski, 2006).

The model and description in (Figure 2.3) provide a theoretical base for the knowledge of the entrepreneur.

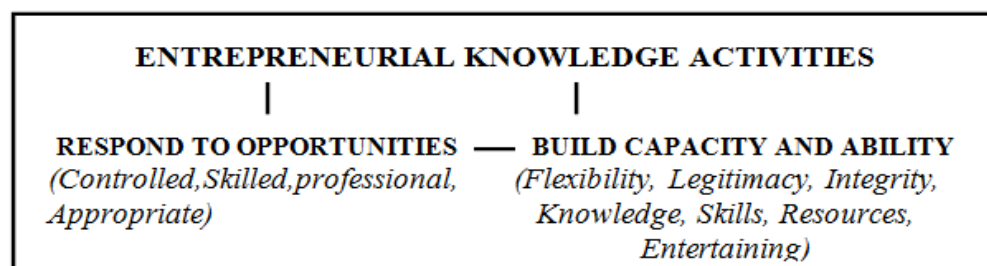


Figure 2.3: a theoretical base for the knowledge of the entrepreneur.
Source: (Skrzyszewski, 2006)

The latter reflects Mitchell's (1969) conceptualization of social networks encompassing both the structure of the network and the interaction that takes place within it (as described in O'Connel et al, 2001). Further, it is increasingly recognised that network relationships constitute one of the mechanisms playing a significant role in business development (Aldrich & Zimmer, 1986; Johannisson, 1988; Larson, 1991; Dubini & Aldrich, 1991). Over the last decade, however, entrepreneurship research has produced increasing evidence that personal and professional networks are crucial in both

founding and nurturing new ventures, hence entrepreneurs who can rely on a broad and diverse personal network tend to be more successful (Brüderl & Preisendörfer, 1998; Dubini & Aldrich, 1991). Both play an equally important role in the development of the entrepreneurial firm. The categorization is shown in Figure 2.3.

2.8 A Model for Other Countries

Today, with the global knowledge based economy increasingly relying on science and technology (S&T) skills and generating their international flows more than ever before, the issue has become even more crucial (Meyer & Brown, 1999). The developing world indicates such a new trend. Though the experiences differ from one country to another, they all share the goal of systematically using their expatriate experts, scientists and engineers for development at home. Some lessons and policy implications may already be extracted from these recent attempts (Meyer & Brown, 1999). They should pave the way for an efficient use of the S&T's Diaspora. These are indeed strong potential resources for effective and mutually beneficial cooperation between developing and highly industrialised countries (Meyer & Brown, 1999).

The policy challenges in promoting entrepreneurship in developing countries are already substantial and are likely to become even more complex in the future (NAudÉ, 2011). This is partly due to the essential limitations of the nation state in dealing with the growing number of global challenges, including global climate change, insecurity, violent conflict and terrorism, migration, and the vulnerability to financial and economic shocks magnified by globalization (NAudÉ, 2011).

On the other hand, Chang (2010) mentioned that what makes the poor countries poor is not the lack of raw individual entrepreneurial energy, which they in fact have in abundance. It is their inability to channel the individual entrepreneurial energy into collective entrepreneurship. The increased capacity of Diaspora's communities to communicate and interact between themselves at all levels, transfer funds, transport goods and raw materials, and transmit ideas between the various components of a Diaspora's network is considered to be a broadly positive step in the consolidation of Diaspora's cultures and their relationships with modern society (Petrova-Mitevskaa, 2004). Diaspora can help establish robust institutions, including key state institutions, as they did in 19th century Palestine (Kuznetsov, 2006). Zionists from Europe wanted to change their 'home' country in Palestine (Kuznetsov, 2006).

Entrepreneurs are the driving force in today's globalized economy. They are the new knowledge nomads, creating pathways for innovation and new paradigms. They are the wrestlers of uncertainty, breaking waves of risk, in order to allow for emerging technologies to penetrate new markets or to force open emerging markets on a global arena. Supporting entrepreneurship has assumed an increasing agenda in the national policies of several countries. Entrepreneurs and their far-flung networks now play a vital role in the technology industries' global expansion – and make an increasingly important contribution to economic growth and development more broadly (Saxenian, 2006).

This research provides an overview on the potentials of Diaspora's entrepreneur creation which is based on a strong supporting platform of Science, Engineering, Technology & Innovation (SET&I). Exploiting these linkages, in turn strengthens this SET&I platform rendering it

an enabling and, also, an enabled platform. Additionally, such connections could thus profit developing nations through the economic network benefits created. The resource loss through what is called brain drain could be converted into a long-term resource profit for the developing country. Within this perspective, the emigrated intellectual, skilled and technological personnel would remain an invaluable resource for the development of their home country. Their contributions to economic development would be substantial through platforms of the knowledge economy, and *via* knowledge networks of global knowledge societies. “Because of their experience and professional networks, these cross-regional entrepreneurs can quickly identify promising new market opportunities” (Saxenian, 2006). The same individuals who left poor countries like India and China for better professional and economic opportunities abroad are now increasingly reversing the brain drain, transforming it into ‘brain circulation’, as they return home to establish business relationships or start new companies.” (Saxenian, 2006).

‘Cross-regional networks develop only when skilled immigrants are both willing and able to return to their home countries for business in large enough numbers to create close links to the technical community in the home country’ (Saxenian, 2002).

This study discusses entrepreneurial networks via Knowledge Diaspora (Knowledge Entrepreneur), positioning Diaspora entrepreneurs of countries in conflict as a global asset in driving innovative capabilities. The study will introduce in the coming chapter the Palestinian Diaspora and the possibilities of applying such a strategy on its situation. The coming chapter provides a brief account of the knowledge economy while sketches the entrepreneur

network. It also discusses how the Palestinian Diaspora's entrepreneur network can act as a catalyst in the knowledge economy.

2.9 Summary

This chapter divided into eight sections. The first section introduced a look about knowledge economy and the role of knowledge nomads (knowledge Diaspora) or skilled Diaspora that may play in the development of the mother (origin) country, whether by returning or via transnational linkages concentrating on entrepreneurial network. Then, Science and technology, and its importance, with the role of Diaspora was discussed. Entrepreneur, its definitions, entrepreneur and economic development and Diaspora entrepreneur were discussed in this chapter.

The next chapter will give a comprehensive view about Palestine, Palestinian Diaspora, its capacity and about entrepreneurs among Palestinian Diaspora.

CHAPTER 3

LITERATURE REVIEW PART II

(PALESTINE)

3.1 INTRODUCTION

This chapter provides a review of some relevant literature about Palestine that deals with the main themes of this study. It is organized into many parts. It starts with a brief introduction, followed by a brief history about Palestine including how a large number of the Palestinian people emigrated from their mother country and are distributed around the world. It concludes with some general information about the present situation in Palestine. Furthermore, Palestinian Diaspora is discussed from different perspectives: capacity and capability, factors of mobility, and others. Palestinian Entrepreneur is also discussed with reference to the networks that were used to connect the Palestinian Diaspora with Palestine. The theoretical framework of the study is presented with the research issues. Moreover, a brief summary is presented in the final part of the chapter.

3.2 Palestine²– A PAST & A PRESENT

Undoubtedly, one cannot discuss the issue of Palestinian migration meaningfully without considering the historical and the political events that have shaped, and which continue to shape, both Palestine and the region (Middle East) as a whole (Khawaja, 2005).

²General information about Palestine and Palestinian Government is introduced in Annex 1

“1947 Great Britain decided to leave Palestine and called on the United Nations (UN) to make recommendations. In response, the UN convened its first special session and on November 29, 1947, it adopted a plan calling for partition of Palestine into Jewish and Arab states, with Jerusalem as an international zone under UN jurisdiction. 1947 Arab protests against partition erupted in violence, with attacks on Jewish settlements in retaliation to the attacks of Jews terrorist groups to Arab Towns and villages and massacres in hundred against unarmed Palestinian in their homes”(Shashaa, 1996).

In 1948, Britain decided to leave Palestine and hand it over to the Jews. (The year marked the first Arab-Israeli War). The Arab nations failed to prevent the establishment of a Jewish state. The war ended with four UN-arranged armistice agreements between Israel, Egypt, Lebanon, Jordan, and Syria. The small Gaza Strip was left under Egyptian control whereas Jordan (Shashaa, 1996) controlled the West Bank.

Of more than 800,000 Arabs who lived in Israeli-held territory before 1948, only about 170,000 remained (Shashaa, 1996). The rest became refugees in the surrounding Arab countries, cutting short the Arab majority in the Jewish state (Shashaa,1996).

Khawaja (2005) presents inclusive information about history of migration from Palestine as follows:

“The 1948 Arab–Israeli war was a watershed for Palestinian migration, and led to the forced exile of approximately 750,000 Palestinians, mostly to Jordan, Lebanon, and Syria, where they were settled. It was at this point that the term ‘refugee’ entered the Palestinian lexicon. Less than twenty years later, in 1967, an additional 350,000 Palestinians were displaced as a

result of the 1967 Arab–Israeli war. These refugees were dispersed among Arab and European states, and as far away as North and South America. Following these initial stages of migration, the difficult economic and social circumstances and the UN certainty of the legal status of Palestinians in host countries—particularly in those Arab states that had accepted large numbers of refugees. Along with the political instability and complexity of the situation in what is now officially referred by the UN and in other official documents as the Palestinian Territory—led thousands of Palestinians to search for employment opportunities elsewhere. This led to a further dispersion of Palestinians, especially to the Arab oil countries, such as Saudi Arabia and Kuwait, as well as to the USA, Canada, and Latin America. In addition, the political and economic instability and the uncertainty of the future of the region have been a major determinant in the size of migration from the Palestinian Territory.”(Khawaja, 2005; P.5)

3.3 Palestinian Development

Palestinian development, in the medium and long term, depends crucially on the strength of societal institutions and on the **skills** as well as the **resources of the people** that bind them together (Fargues *et al.*, 2005). Palestinian society has withstood numerous shocks during the past century, including sustained occupation. In the absence of strong institutions of self-government, an informal social support system has traditionally played an important role in maintaining social cohesion and alleviating poverty in Palestinian society (Fargues *et al.*, 2005). Palestinian society and human capital have been also strengthened by their rich cultural and intellectual heritage, and by the strong emphasis Palestinians have traditionally placed on education. Human

development has been fostered by relatively strong public service provision, both to refugee and non-refugee communities (Fargues *et al.*, 2005).

3.4 Knowledge Economy and Palestine

In the Middle East, countries with limited resources, such as Jordan, are moving from energy-based economy to knowledge economy. Similarly, oil-exporting countries, such as Saudi Arabia, Oman, and UAE, are working towards this shift as well (Islaih, 2007).

Sustainable development in Palestine in today's world should be focused on facilitating Palestinian access to the emerging human civilization through programs of human resource development, technology programs and partnerships, and expansion of ICT infrastructures (Islaih, 2007).

To benefit from globalization, the Palestinian Authority should shift its economic vision to Knowledge Economy (Islaih, 2007). According to a World Bank Report on the Knowledge Economy and World Bank Operations (2005), the authors of the report stated: "with the spread of modern and efficient information communication technologies, the world economy has become more competitive and interdependent. As such, economic survival made it essential to have knowledge creation and use play a focal point in long-term development strategies. In other words, it is critical for countries to make the transition to become Knowledge Economy"

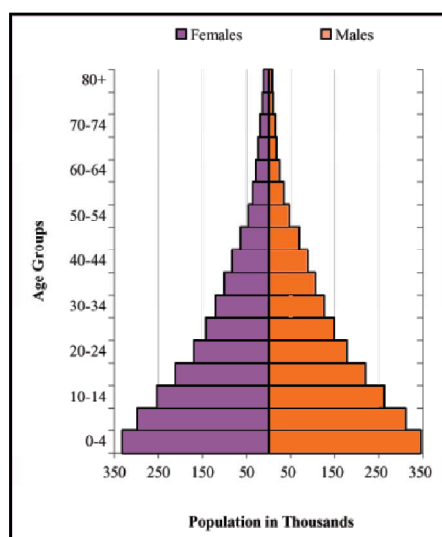


Figure 3.1: Palestinian Population Pyramid, End Year 2006.
Source: (PCBS, 2006)

Palestinian people have a better chance to succeed in a knowledge-based world as argued by Islaih (2007). He claimed, it is because they have the highest levels of education in the Arab world (Figure 3.1), of young population (Figure 3.2), of high ICT penetration rates, and consequently Palestinian Diaspora worldwide (will have major impact on knowledge and Technology flows coming into Palestine) (Islaih, 2007).

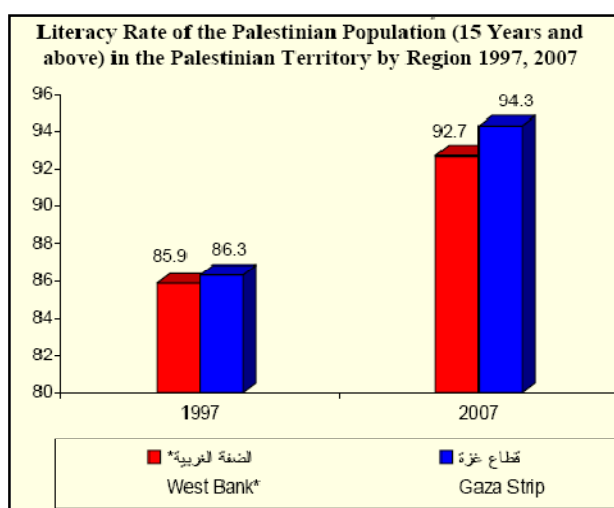


Figure 3.2: Literacy Rate of the Palestinian Population (15 Years and above) in the Palestinian Territory by Region 1997, 2007, Source: (PCBS, 2009)

In today's world, immigrants, refugees, and foreign workers are considered as brain gain (not brain drain) for their countries of origin. Furthermore, Muslims, Arabs and other talents worldwide will have the opportunity to contribute to knowledge and technology development in Palestine, limited and negative outcomes of the production based development experiences over the last 15 years and finally Palestinians have no other approach for sustainable development (Islaih, 2007).

Similarly, to many other intellectuals, Islaih (2007) emphasized that Palestinians abroad (Diaspora) will sense their connection to their homeland through their knowledge flows (a first step to achieve their right of return). This new knowledge is already in action in Palestine. This is obvious in the Palestinian emerging interests and initiatives (focused on science, technology, and human development). In the age of globalization/alternative globalization, Palestinian minds and talents have a great potential to make important contributions to the wellbeing of the global community. Essentially, they need help to upgrade their human resources and introduce some education reforms and expansion of new technologies infrastructure (Islaih, 2007). Nevertheless, who are these people? Moreover, what is their capacity and capability to believe in them as partners in the Palestinian development?

3.5 Science and Technology in Palestine

The current state of Palestinian SETI development is one of poorly funded, unorganized, and lacking in direction. While education and scientific achievements are core values in the Palestinian society, the development of SETI in Palestine has been hampered by a multitude of factors including the

Israeli occupation, the young state of the Palestinian National Authority (PNA), and the less than optimal allocation of donor funding (MOP, 2005).

The Ministry of Education and Higher Education (MOEHE) guided by its mandate for scientific research, and its obligations and responsibility to educate Palestinian youngsters into the careers required by the 21st century has committed itself to a process aimed at establishing a strong foundation for SETI development in Palestine.

3.5.1 Education in Palestine

The literacy rate for the total population is 92%, (MOEHE, 2006) (Fannoun, 2008). A total of 187 papers were contributed from the research establishments in past ten years. An average of 26 research papers is contributed per year. The top three contributing institutions of past ten years are Al Azhar University (43 research papers), An Najah National University (31 research papers), and Birzeit University (30 research papers) (MOEHE, 2006).

The Education sector in Palestine was, and in fact, is one of, perhaps, the most affected because of the Israeli occupation. However, higher education sector has managed to survive, despite all obstacles. Currently, there are 11 traditional universities, of which eight in West Bank and 3 in Gaza, 9 university colleges, and 20 community colleges. Statistical reports from Ministry of Education & Higher Education, (MOEHE, 2006) of the academic year 2004-2005 show that there were 76650 students registered with traditional universities, and 46453 students were registered with 'Open University' system. Another 6034 students were registered with university colleges. In the community colleges, there were 9002 registered students.

Overall number of students registered with HEI in Palestine was 180905 students, as mentioned by MOEHE 2007/2008, (see Table 3.1) (Abu Zuhri, 2009). The same source shows that HE sector employs 5884 employees ranging from PhD holders to no-degree holders, only 1308 of them are female employees. Out of the whole number of HE employees, there are only 1846 full time academicians, 1599 of them are male. If we look at the PhD and Master Degree holders, we notice that out of 1402, PhD holders there are only 98 female, and in the Master level there are only 266 female compared to 955 male employees (MOEHE, 2006). Despite all problems, a document of The World Bank states: “The tertiary education system in the PA is a binary system with 11 universities and 29 community (technical) colleges. More developed than the average for the region, the system shares indicators comparable with middle-income countries. The enrolment rate of 25% in 2003 is higher than the 15% average found in other Arab states, and compares to those of countries like Mexico (21%), Costa Rica (21%) and Malaysia (27%)” (MOP, 2005).

Table (3.1): PNA Contribution to Education, Source: (Abu Zuhri, 2009)

	1996	1999	2002	2003	2004	2008	2009
1- Spending on all Levels of Education							
a. PNA education spending (US\$ millions)	159.6	173.4	184.3	235.7	258.6	388.3	482.2
b. As % of PNA total budget	20	19.2	17.5	17.6	17.1	18.7	20.2
2- Higher Education Spending							
a. PNA higher education spending	13.7	10.4	8.3	12.4	14.2	16.8	17.0
b. As % of all education spending	8.6	5.8	4.5	5.2	5.5	4.3	3.8
c. As % of PNA total budget	1.7	1.1	0.8	0.9	0.9	0.8	0.7

The number of students registered in HE has increased dramatically since 1995 to a triple, and the gross enrolment rate has reached 17% in 1999, and estimated to be 23% or above in 2003, which is above the average of Arab countries (World Bank, 2005).

Even all of that, none of the Palestinian universities ranking in the Top 25 Most Productive Universities in the developing countries, at the same time the number of publications still to humble, statistics show that the period between 1995-2005 only 187 publications in all fields which is too little related to the percentage of the educated people. *How to rise this percentage by the help of Palestinian Diaspora?*

Table (3.2): Distribution of Students Enrolled At the HEIs by Type of Institution and Field Of Study, 2007/ 2008 Academic Year. Source: (Abu Zuhri, 2009)

Type of Institution	Total	Education	Humanities & Arts	Social Sci., Business & LAW	Sciences	Engineering	Agriculture	Health & Welfare	Others
Traditional Univ.	102125	26271	18335	26666	11883	10263	704	7760	243
Open University	60631	31828	-	21126	3564	-	240	1	38732
University Colleges	5228	1022	761	1920	552	277	-	636	60
Community Colleges	12921	1550	435	5340	1545	1185	-	2755	111
Total	180905 (100%)	60671 (33.5%)	19531 (10.8%)	55052 (30.4%)	17544 (9.7%)	11725 (6.5%)	944 (0.5%)	11152 (6.2%)	4286 (2.4%)

3.5.2 Scientific Research in Palestine

MOEHE (2005) on its web site mentioned that, Scientific research, prior to 1967, in the OPT was limited to agriculture. There were eleven experimental stations in the West Bank, within the Jordanian Ministry of Agriculture, involved in agricultural technology transfer. Following 1967, the Israeli authorities took over these stations in line with their policy to obstruct any developmental process in the OPT. As a result, all research activities in these experimental stations came to a halt by the early 1980s.

Research at Palestinian universities and colleges was and continues to be modest, in both quantity and quality with only 0.75 publications per university researcher per year, which is similar to productivity in the Arab World, and far less than that in developing countries. In addition, forty percent of published research in Palestine is thesis-driven (MOP, 2005).

MOEHE (2005) stated that the primary force behind much of the research done at Palestinian universities had to do with promotion and, therefore, was not oriented towards societal needs. This is mainly due to the scarcity of research resources and funds. Further, coordination and cooperation between research institutions and the private sector is very weak: the industrial sector does not solicit, hence fund, universities or research centers to conduct applied research, nor, by and in large, do universities manifest to the industrial sector what they can provide. This is clearly reflected in the fact that less than 5 percent of research output is applied in Palestine. Also worth noting is that, while Palestine has not registered a single patent, several have been documented abroad as research results in Palestine.

The low productivity of research publications is due to several factors, including as described by MOP (2005):

- Heavy teaching load, as claimed by university Professors.
- Insufficient funding.
- Lack of coordination and cooperation amongst local institutions.
- Insufficient number of specialists, and lack of interaction with institutions at the regional and international levels.
- Poor satisfaction with the existing research infrastructure standing at a low of 30 percent.

- Lack of financial incentives for researchers, which is further manifested with the absence of Intellectual Property Rights Laws.

Education and Training

Without a supply of the right skills, businesses will continue to avoid employing Palestinians for particular roles. In contrast with many countries, the OPT continues to produce young people who are, on paper, highly educated and well trained. The problem is not the quantity of education, therefore, but its relevance and quality.

Gap between education and the labour market

Historically, the OPT has had an excellent education system that has succeeded in producing a skilled labour force. A skilled labour force, however, must have the right skills to meet the needs of the economy in order for the young graduates to find productive work. In the OPT today, young people are being educated and trained to a high degree but choices and subject selections are rarely made with adequate information about the prospects for such careers. Meanwhile, vocational education and training has suffered from chronic underinvestment and is perceived as second rate by most parents, students, and even universities. The result is a gap between education and employment that causes young people to spend time and money studying that will not help them get a job.

Lack of services

In particular, services bridging the gap between education and work (careers services) are poor quality or non-existent. These services are valuable in order to ensure that job-applicants can properly communicate their suitability for the job they are applying for. The absence of such services creates an imbalance between those people who can and those who cannot access them. Youth who have studied abroad have a significant advantage in the OPT itself having had access to careers services. Meanwhile, for youth competing abroad, the likelihood of success is even more affected given the quality of services available to those they are competing with.

Source: (SHYF, 2011).

3.5.3 Palestinians in the Diaspora and SETI

MOP (2005) emphasized that most of Palestinian Diaspora did not lose faith of someday returning home, and the long years of living outside Palestine did not stop many of them from being a part of the lives of their families and communities in the OPT. Whether through sending money and aid or through actively coming to participate in some official or voluntary capacity, Palestinians in the Diaspora continue to be one nation with those living in the OPT.

Over their long years abroad, many have amassed a great wealth, which under a Palestinian State, at least part will come to build the State (MOP, 2005). In addition, many have become leaders in science and technology in the countries where they live.

MOP (2005) assured that it is a national strategic objective of the PNA that all Palestinian living in the Diaspora; have the right to return home. Further, it is the policy of the PNA to harness the wealth of experience and encourage investments of Palestinians in Diaspora in Palestine.

Palestinians in the Diaspora and SETI

It is a national strategic objective of the PNA that all Palestinian living in the Diaspora have the right to return home. Further, it is the policy of the PNA to harness the wealth of experience and encourage investments of Palestinians in Diaspora in Palestine.

In line with this national strategic objective and for the purpose of advancing the stated policy of the PNA, and as it relates to SETI development in Palestine:

1. The PNA shall strives to hold annual or bi-annual conferences in specialized fields of SETI bringing Palestinian science and technology experts from the Diaspora together with their counterparts in Palestine to exchange experiences and to create and foster a network of professionals aimed at advancing SETI in Palestine.
2. The PNA shall encourage the development of programs aimed creating specialized science and technology journals to publish the work of both experts living in the Diaspora and those in the OPT.
3. The PNA shall encourage programs, which support bringing Palestinian SETI experts form the Diaspora to help build the local capacity in the different fields of SETI.
4. The PNA shall encourage programs aimed at building specialized networks of Palestinian SETI experts in the Diaspora to assist in formulating future SETI policies in Palestine, and to actively participate in developing criteria and evaluating programs, and becoming expert bases for peer review of SETI proposals and publications.
5. The PNA shall develop policies aimed at providing incentives to support the investments of Palestinians in the Diaspora in the development of the SETI infrastructure in Palestine.

Source: (MOP, 2005)

3.6 Palestinian Economic Structure

The Palestinian economy is naturally small due to the population size. Its structural weaknesses lie in the lack of the diversity and the lack of a labour-intensive industrial base to absorb large numbers of new labour-market entrants (SHYF, 2011).

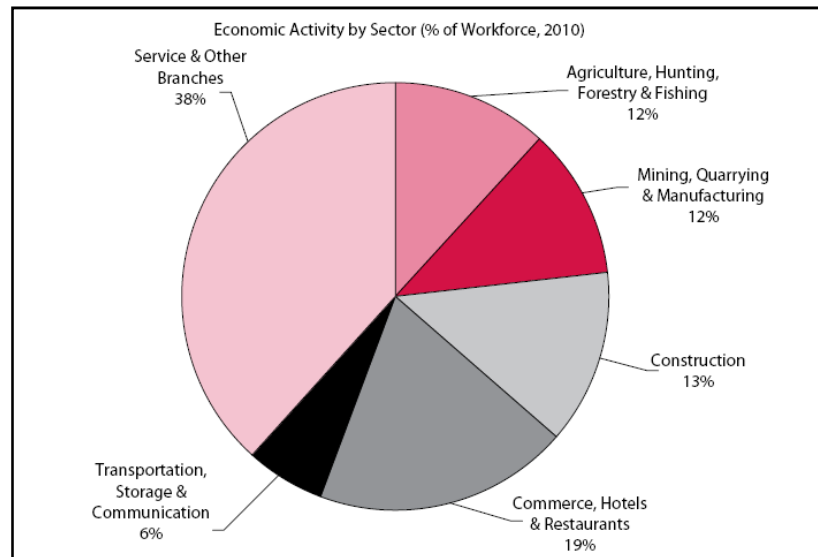


Figure (3.3): Economic Activity by Sector (% of Workforce, 2010)

Source: (SHYF, 2011)

Poor economic performance alone does not necessarily create a problem for employment (SHYF, 2011). If the population growth rate exceeds economic growth rates, however, as it does in the OPT, insufficient new jobs are created to absorb the new entrants to the job market – the youth (SHYF, 2011).

Many problems described below are shared with all labour-market participants. While this is not the place for an in-depth economic analysis, the following factors play a big role in limiting economic growth and are briefly explored with an eye on youth as mentioned by SHYF (2011):

- Dependency on foreign aid

- Lack of access to markets
- Underinvestment
- Technological Development
- Import and Export Restrictions
- Land seizure
- Cost of living

3.6.1 Technological Development

SHYF (2011) described Technological Development in Palestine as follow:

Technology required to compete, even locally, is expensive and complex to operate. It also goes against traditional practices, particularly in agriculture and reduces the availability of less-skilled work for youth with limited experience. On the other hand, it provides an excellent opportunity if the necessary preconditions are in place (not least, an excellent education and the lifting of import restrictions). On balance, a positive policy should embrace technological development but must also ensure the preconditions and devise clear strategies for avoiding the elimination of all labour-intensive industry. (p. 12)

3.6.2 Entrepreneurial Opportunity in Palestine

In almost all economies, small enterprises employ the vast majority of individuals (SHYF, 2011). The youth in the OPT are largely excluded from entrepreneurial opportunities despite the fact that these offer the most interesting and beneficial options to them (SHYF, 2011). Meanwhile entrepreneurial opportunities are not easily exploited as the West Bank and

Gaza Strip is ranked 173 out of 183 in the world for *ease of starting a business* by the World Bank in 2011³.

The following factors play a big role in Entrepreneurial opportunity, and are briefly explored by SHYF (2011):

- **Occupation** is the central barrier for new businesses being started.
- **Economic performance and structure:** Few profitable opportunities exist locally and the export markets are extremely expensive and difficult to access.
- **Lack of affordable business development services**
- **Lack of access to finance**
- **Lack of access to markets**
- **Closed networks**
- **Bureaucracy, legislation, and regulations**
- **Capital and technology intensity:**

In short, the youth are unable to start businesses in a large number of profitable markets and so are limited to labour intensive industries or simple services (such as retailing). This severely limits their ability to innovate and restricts their profit-making potential.

- **Competition:** dominant competition comes from four sources: Israeli imports, large local businesses with closed distribution networks, OECD imports, and the rest of the world (including Turkey and China). The cost of competing with any one of these groups makes it almost impossible without personal connections or funding. Remaining

³ “Doing Business”, <http://doingbusiness.org/data/exploreeconomies/west-bank-and-gaza> (accessed 11/05/2011), World Bank, 2011. (SHYF, 2011).

opportunities are, therefore, limited to completely innovative products or ultracompetitive service sector niches such as grocery shops, mini-markets, micro-factories, and agriculture.

- **Skills and training:** Meanwhile, the quality of vocational education and training is varied and in some cases poor. Without the skills and training to provide high quality products and services, young people can never expect to start profitable businesses. On top of this, skills for enterprise, such as financial management, marketing, people management, networking, and innovation are rarely, if ever taught through the formal education system. Where these skills are provided by civil society, the quality is variable, even those of high quality are ineffective on a national scale due to the limited availability of funding for such work (SHYF, 2011).

From what introduced in this section (3.5), it is obvious the situation in Palestine shows the need for a help or cooperation from external sources. Palestinian Diaspora worldwide with their long years abroad has a great wealth of knowledge and skills. Palestinian Diaspora's skills, knowledge, and experience can enable them to be as International partnerships to Palestinian people in Palestine. Collaboration could be between individuals or institutions. For example, could be between one university and another or between a university in one country and industry in another country or otherwise, between a university in one country and another two universities from different countries. It is deeply believed that many benefits could materialize, in the form of spin-offs, spillover, etc. These means and mechanisms towards

involving Diaspora in the development of the country of origin could be applied anytime and anywhere.

INTERNATIONAL PARTNERSHIPS

International partnerships provide funding for research in neglected fields. One example is the partnership between the Novartis Institute for Tropical Diseases (NITD) and the Singapore Economic Development Board (SEDB), which seeks to make new drugs (initially for tuberculosis and dengue) available to poor people in developing countries at the lowest possible price. The partnership could use differential pricing strategies, financing the research by charging higher prices in developed country markets. It could create additional partnerships for developing, manufacturing, and distributing drugs. Novartis will patent novel compounds, but patents will not interfere with the goal of making drugs affordable for the poor.

The partnership represents a new business model for Novartis and a commitment to social responsibility. Novartis's interest is in broadening its research base in infectious diseases as well as helping find new treatments for diseases that are becoming major public health challenges. The effort is part of the company's effort to fulfil its role as a good corporate citizen through its commitment to the UN Global Compact. Its commercial interests are also clear: it strives to refinance the institute's activities and make it economically sustainable. Novartis retains marketing rights for compounds that have a significant commercial potential in developed markets.

SEDB seeks to strengthen Singapore's technology platform, develop its manpower capabilities, and commercialize technologies and products arising from the NITD. It expects the partnership will have positive spin-off effects, potentially leading to the proliferation of local biomedical start-ups. This example could be replicated, although persuading multinational corporations like Novartis to base a research institute in other developing countries will not be easy. Countries with strong research capabilities can influence the decisions of such firms to base their operations in their territories.

A mentoring scheme—in which an institution or firm in a developed country institution teams up with one in a developed—might be the answer. An institute based in Singapore could mentor one in Bangladesh, where there are opportunities for human resource development through farming out of projects, movement of scientists, and creation of technology incubators and spin-offs. This would encourage Bangladesh to devote more resources to R&D. Such involvement will not take place without the help of an international agency, which could identify potential partners and promote their collaboration.

Source: (UN Millenium Project, 2005).

3.7 Palestinian Diaspora

3.7.1 How far is counting reliable?

Two preliminary remarks by Fargues *et al.*, (2005):

“Firstly, in theory the same person should be counted as an emigrant in the country of origin and as an immigrant in the country of destination. However, immigrants are present while emigrants are not. Because we can only count those who are ‘in’, and not those who ‘out’ (at least by direct enumeration), most migration data are on immigrants, not on emigrants. Secondly, migration is a movement and accordingly primary statistics should deal with flows. However, for a variety of reasons, which are beyond the scope of this note, only a few countries provide accurate data on flows of migrants, and most available data are on stocks.”(Fargues et al., 2005, p.12)

The situation of Palestinian Diaspora is not better than that of many Diasporas in the world. However, there is a lack of information about Palestinian Diaspora. Numbers of migrants vary according to who is counted as well as to who does the counting (Fargues, Cassarino, & Latreche, 2005). Not only there is no universal definition as to who or what constitutes a migrant, but also the same definition will generate quite different figures depending upon whether migrants are recorded at origin or at destination. To make things worse, statistics are far from being perfect and migration data have a particularly bad reputation (Fargues, Cassarino, & Latreche, 2005).

Not only is ‘diaspora’ an elusive term, but defining the ‘Palestinian Diaspora’ is equally problematic (Schulz, 2003). Hence, one problem is simultaneously political and moral (Schulz, 2003). Whether one has stayed put

or moved, the meaning of 'diaspora' to Palestinians is larger than referring to specific processes of migration and displacement (Schulz, 2003). The diaspora is, rather, a 'condition' of alienation and estrangement, of 'shattered lives and homes' (Schulz, 2003).

3.7.2 Lack of studies

Although there exist a large number of important works on specific Palestinian refugee situations, there is, perhaps somewhat oddly, a lack of comprehensive studies on the Palestinian Diaspora so far (Schulz, 2003; Shiblak, 2005). Most studies on Palestinian society have focused on PLO politics, the conflict with Israelis, and the Israeli occupation (Schulz, 2003; Shiblak, 2005). With some noteworthy exceptions, the people living the ordeal of Palestinian exile have been conspicuously absent from academic undertakings (Schulz, 2003). Moreover, only seldom is the Palestinian predicament treated from a diaspora perspective (Schulz, 2003).

3.7.3 Defining the Palestinian Diaspora

Palestinian Diaspora, whether forced to leave their homes and become refugees, or displaced from their lands due to economic hardship under the Israeli occupation, millions of Palestinians live in Diaspora (MOP, 2005). Palestinian Diaspora refers to all the Palestinians who currently reside outside the territories of Mandatory Palestine, i.e. outside the West Bank, Gaza Strip, and Israel. It is important to stress that Palestinian Diaspora does not encompass all the refugees, since over one third of all the UNRWA registered refugees reside in the West Bank and Gaza Strip (UNRWA, 2001).

3.7.4 The Palestinian Population Worldwide

The Palestinian Diaspora currently comprises between four and 5 million people (Mavroudi, 2008; Hanafi, 2005; Shaml, 2001; PCBS, 2011; AlJazeera.net, 2011), settled for the most part in neighbouring countries. A large number, however, is also to be found in the Gulf States, the USA, Canada, Latin America, and Europe (Hanafi, 2005). Palestinian refugees registered with the United Nations Relief and Works Agency (UNRWA) account for about 18% of the world's refugees. These refugees, numbering 4,082,300 and living in the regions covered by UNRWA (Lebanon, Syria, Jordan, the West Bank, and Gaza), account for only 75% of all Palestinian refugees. About 1.5 million registered refugees reside in the West Bank and Gaza (Khawaja, 2005).

Table 3.2: Palestinian Population Estimate According to their Place of Residence at the End of the Year 2009, Source: (PCBS, 2009)

Place of Residence	Population Estimate (thousands)	% of Palestinian Population
The WB and GS	3,992	36.7
Palestinian Territories Occupied in 1948 (Israel)	1,247	11.5
Jordan	3,240	29.8
Other Arab Countries	1,776	16.3
Other Countries	618	5.7
Total	10,873	100

PCBS released that the number of Palestinians in the world, at the end of the year 2010, reached 11.0 million, among which more than half (51.9%) live in Diaspora (PCBS, 2011; AlJazeera.net, 2011), while the rest (around 1.22 million) are distributed in the 1948 occupied territories and (around 3.88 millions) in the occupied Palestinian territories i.e. WB and GS. The latter

statistics include the Palestinians living in the East of Jerusalem that was forcefully annexed by the Israeli occupation in 1967, and exclude the Arab Syrian population living in the occupied Golan Heights (Al-Zaytouna, 2010).

Palestinians in Diaspora are concentrated in the neighbouring Arab countries, notably in Jordan where the Palestinian population was estimated at 3.17 million at the end of 2008, i.e. approximately 29.9% of the total Palestinian population (Al-Zaytouna, 2010). The majority of the Palestinians in Jordan hold Jordanian citizenship, unlike Palestinians in other Arab countries who were estimated at 1.73 million (16.3% of the total Palestinian population) at the end of 2008. The latter are concentrated in Lebanon, Syria, Egypt, and Gulf countries (Al-Zaytouna, 2010). As for the remaining Palestinians living in foreign countries, their number was estimated to be about 605 thousands (5.7% of the total Palestinian population), most of whom live in the USA, Latin America, Canada, Britain, and other EU countries (Al-Zaytouna, 2010).

The migration of Palestinians in and out of the West Bank and the Gaza Strip has been heavily shaped, if not altogether determined, by the history of the region over a period of almost sixty years (Khawaja, 2005). Waves of out migrants caused by war, in the form of refugees and the displaced, have created a Palestinian Diaspora, made up of millions of people worldwide. Therefore, people in the Palestinian Territory now have relatives and friends living abroad (Khawaja, 2005). These extended family relations generate high levels of solidarity and cooperation between the Palestinians within and outside the West Bank and the Gaza Strip. In fact, they help each other as to arrange marriages and to secure employment and housing. Hence, in the context of the Palestinian Territory, political factors strongly reinforce the socio-economic aspects of migration choices (Khawaja, 2005).

3.7.5 Creation of Israel

Israel is the successor country of the Jewish State established together with the Arab State by the UN General Assembly in its 29 November 1947 Resolution 181, decreeing the end of the British Mandate and the partition of Palestine. In its Declaration of Independence in May 1948, the State of Israel affirmed its aim to serve both as the focal point for Jews worldwide and as a democratic society offering equal civil and cultural rights to all citizens, irrespective of religious and ethnic origin (Pergola, 2005).

Creation of Israel

From the outset the Zionist colonial project was based on flows of immigration, and the existence of a pre-state Zionist community in Palestine was entirely the result of successive waves of Jewish immigration. Jewish immigration has played an instrumental role in the conflict between the Zionist settlers and the Arab population of Palestine, and in the confrontation with the Arab countries since 1948. Since the beginning of Zionist settlement in Palestine and over the entire pre-state period, the demographic ratio between the Zionist settlers and the Arab population was one of the key dimensions of the conflict between the two national movements. Both sides recognised that demography would play a central role in determining the political future of Palestine and its two national communities. Accordingly, Palestinian attempts to halt, or at least to limit Jewish immigration, and Zionist efforts to enlarge it as much as possible, were key components in their respective political strategies.

Source: (Rosenhek, 2005).

3.7.6 *Palestinian Diaspora in Jordan*

Because of the Israeli occupation of all Palestinian territory as well as the Golan Heights and the defeat of the Arab military forces, there was a massive wave of popular resistance in the form of mushrooming Palestinian

movements (Zaghal, 2005). At the end of 2008, the Palestinian population in Jordan was estimated to be about 3.17 million, according to PCBS estimates (Al-Zaytouna, 2010). Jordan has a very long border (360 km) with Israel, separated only by the Jordan River. It also hosts the largest proportion of Palestinian refugees (Zaghal, 2005). These refugees enjoy full citizenship rights according to the unification between the East and the West Banks in 1950, under the 1952 Jordanian Constitution. Furthermore, over 82.3% of all Palestinian refugees in Jordan live outside the camps, while the rest live in thirteen camps located in or near major cities. The latter did not leave camps because they did not have the economic means to leave and to take up residence elsewhere, or because they considered the camps as a symbol of the survival of the refugee question and of loyalty to the Palestinian cause (Zaghal, 2005).

Available data indicates that the Palestinians living in Jordan in 2007 constitute a relatively young community, where 35.9% are aged 15 years or below. The total fertility rate among the Palestinians in Jordan in 2007 was estimated at 3.3 births per woman (Al-Zaytouna, 2010).

Jordan has an open door policy for entry visa requirements, on the base of bilateral agreement with Syria, Iraq, and Egypt (Zaghal, 2005). Consequently, most economic labour immigrants enter as visitors and then go on to look for employment (Zaghal, 2005).

3.7.7 Palestinian Diaspora in Europe

Although the presence of large numbers of Palestinians in Europe is a relatively recent phenomenon, compared say to their presence in America or the Arab world, the size of their population in Europe is on the increase (Shiblak, 2005).

Shiblak (2005) described the situation of these people as follow:

“The largest communities are to be found in Germany, the Scandinavian countries, Britain and Spain, but smaller communities can also be found dispersed in every other European country. After offering a historical brief of population mobility between Europe and Palestine, this paper argues that there is a Palestinian diaspora in ever more complex formation in Europe at present. It offers reflections and insights on the status of Palestinian communities in Europe and looks into the patterns and causes of their emigration to the host countries. The paper also examines demographic and social characteristics pertaining to these communities and tries to assess some of the primary issues related to the process of adaptation in their new societies.” (Shiblak, 2005)

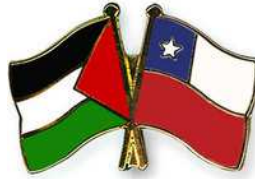
3.7.8 Palestinian Diaspora in Latin America

Migration to Americas has a long history, but there is very little scholarly knowledge on Palestinian communities there (Schulz, 2003). Migration to the Americas has been constituted by family-related chain migration and is not directly related to the ‘nakba’ like that of the most other migratory processes (Schulz, 2003). Apart from the USA, sizeable communities reside in Chile, Sao Paulo and Buenos Aires, Uruguay, parts of Central America, and in particular Honduras (Schulz, 2003).

The Palestinian community there is almost exclusively made up of Christians from Bethlehem, Beit Jala and Beit Sahour (Schulz, 2003).

The communities in Latin America are among the wealthiest in the diaspora (Smith, 1986 quoted in Schulz, 2003).

Palestinians in Chile



It's been said that in every small village in Chile, there are sure to be three things -- a priest, a policeman, and a Palestinian. That may or may not be true but there are approximately 350,000 – 500,000 citizens of Palestinian descent in Chile – the largest Palestinian community outside the Middle East. The majority of them is Christian and come from the Bethlehem area. They began immigrating as far back as the 1850s, working in the areas of business and farming. They even founded many churches including the *Iglesia Ortodoxa San Jorge* in Santiago as far back as 1917. The numbers increased during the 1948 war in Palestine.

Refugees have always found Chile to be friendly and a special "home away from home." In 2008, 117 Sunni Muslim Palestinian refugees, who had been stranded between Syria and Iraq, were warmly received by politicians in a big celebration.

Not only have Palestinians established one of the most prestigious community organizations in Santiago (Club Palestino), but they also have a professional soccer team (Club Deportivo Palestino). The team, established in 1920, has been the champion of the Chilean Primera (First) Division.

There are many prominent Chileans of Palestinian descent, including: award-winning film director Miguel Littin, soccer talent Daud Gazale, and legislator Francisco Chahuan.

Source: (PalestinianSurprises, 2011)

3.8 Capacity and Capability of Palestinian Diaspora

As introduced in the previous chapter, personal capacity is the ability to use personal resources to achieve goals. Personal capacity includes attitudes, skills and knowledge, including knowledge based on experience and interpersonal skills (Dodd & Boyd, 2000). **Capacity** has also been defined as the: “abilities, skills, understandings, attitudes, values, relationships, behaviours, motivations, resources and conditions that enable individuals as well as institutions to carry out functions and identify and achieve their development objectives over time” (UNDP, 1995).

Capability is defined as being the collective skill or aptitude of an organisation or a system to carry out a particular function or process either inside or outside the system (Baser & Morgan, 2008).

The issue here is that not all countries do have the same educational system. Fargues, Cassarino, & Latreche (2005) explained more about this issue:

“As in the case of occupational differences, the period of migration cannot completely explain the differences in levels of education, but the policy of receiving countries does play a critical role. For example, two contemporary flows of departure from the same country, i.e. Morocco, will have very different educational profiles according to whether they are bound for Spain or the USA. In the former case they will tend to have only an intermediate, or lower secondary level of education, while the majority of those heading for the USA will have a university degree.” (Fargues, Cassarino, & Latreche, 2005, p.25).

Today, with the global knowledge-based economy increasingly relying on science and technology (S&T) skills and generating their international flows more than ever before. Actually, the role of immigrants in contributing to developments in their country of origin is very crucial. Migrant workers from

Palestine, as mentioned by Fargues *et al.* 2005, are characterised by the diversity of their levels and types of occupational skills. Nevertheless, as pointed out by Hanafi (2001), it would be unwise to give an estimate of the volume of Palestinian professionals since verifiable data is unfortunately unavailable.

One of the issues that arise in this study is what is the Capacity and Capability of the Palestinian Diaspora? What are the skills levels of Palestinian Diaspora? Hence, these aspects are part of the first research questions in this study:

Research Issue 2:

2.4 What are the Capacity factors that are influencing Palestinian Diaspora network?

2.5 What are the Capability factors that are influencing Palestinian Diaspora network?

3.9 Causes of Mobility for Palestinian Diaspora

Emigrational trajectories can be characterised by diverse push and pull factors, respectively, from countries of origin and to recipient countries. Thus, the phenomenon of people migration differs from country to country, from time to time, and from mechanism to mechanism.

3.9.1 Push-Pull factors

Migration flows of highly qualified personnel are usually explained by a push-pull model (Baruch et al, 2007) quoted in (Delicado, 2007). No clear answers are to be encountered in the literature on the pull and push factors for return migration (Thorn & Holm-Nielsen, 2006). However, Push factors are the

conditions in the home country that push the person to leave while Pull factors are the conditions in the host countries that attract migrants to them (Delicado, 2007).

Economic push and pull factors continue to play an important role as determinants of migrants' decisions to leave their country of origin. These factors are arguably the most obvious when approaching the emigration and immigration policies adapted to date by most Med-MENA countries (Fargues *et al.*, 2005). Forced migration has continued throughout the Israeli military occupation of the West Bank and Gaza Strip (Schulz, 2003). Deportations have been used by Israel as a means of punishment for activities which allegedly threaten its security (Schulz, 2003).

There is also a whole range of non-economic factors that have affected the gradual definition of Med-MENA ⁴countries' migration policies, and on the institutionalisation of the linkages between states and migrants (Fargues *et al.*, 2005).

The very simple lifestyle becomes shattered as families are spread across the Arab world, the Americas and Europe (Schulz, 2003). The fighting, the violence and the atrocities perpetrated against the Palestinians were the main driving forces behind the exodus, whether the violence was part of an explicit transfer policy or not (Schulz, 2003). Flight occurred for the most part as a result of violence and warfare subsequently entering different areas of the land (Schulz, 2003). This happened in different forms: there were direct attacks, fear of attacks or word of attacks in neighbouring areas (Schulz, 2003).

All Med-MENA countries, with the exception of Palestine, have become places of transit migration originating from neighbouring or more

⁴Mediterranean countries of the Middle East and North Africa (Fargues *et al.*, 2005).

distant regions (Fargues, Cassarino, & Latreche, 2005). Indeed, Kuznetsov (2006) in his article, which talks about leveraging Diasporas of talent, introduced Palestine as an example demonstrating how diaspora can help to establish robust institutions, including key state institutions, as Zionists did in 19th century in Palestine. Zionists from Europe wanted to change their “home” country in Palestine (Kuznetsov, 2006).

Since emigrational trajectories can be characterised by diverse push factors and pull factors, which differ from time to time and from one place to another, it was necessary to identify these factors before looking for a solution. Thus, the first research question rises, summarised as follows:

Research Issue 2:

2.2 What are the push factors that are influencing Palestinian Diaspora network?

2.3 What are the pull factors that are influencing Palestinian Diaspora network?

Away from the causes of the migration, the question is “How to re-attract Palestinian Diaspora to contribute to the development in Palestine?”

3.9.2 Re-pull factors

International migration, historically a one-way process, has become a reversible choice, particularly for those with scarce technical skills, and it is now possible to collaborate in real time, even on complex tasks, with counterparts located at great distances (Saxenian, 2008). This study is about a country - Palestine - whose diaspora population is even larger than the population of the people residing in the country.

Columbia University's Center for Palestine Studies



Launched in the fall of 2010, the Center for Palestine Studies (CPS) at Columbia University is the first of its kind in the United States. According to Columbia's statement on the CPS website: CPS provides an institutional home for faculty, post-doctoral researchers, and students at Columbia in fields that include history, literary studies, the social sciences, religion, philosophy, law, archaeology, architecture, and the arts. The Center also builds connections with other institutions and scholars to strengthen the academic study of Palestine and Palestinians throughout the United States and the world.

To find out more about CPS, please visit their website:

<http://www.columbia.edu/cu/palestine/>

The distinguished faculty, who teach CPS courses out of Columbia's Middle East Institute, were inspired by the late Professor Edward Said (who taught at Columbia for 40 years). Among those who spearheaded the establishment of CPS is the widely-published Professor Rashid Khalidi who not only serves as Director of the Middle East Institute at Columbia, but he is also the Editor-in-Chief of the Journal of Palestine Studies and a member of the Council on Foreign Relations.

Source: (PalestinianSurprises, 2011)

The magnitude of the migration of scientists, and more widely of professionals, has been increasing on a global level in the last three decades (Hanafi, 2001). As previously mentioned in this chapter 2, immigrants, refugees, and foreign workers are seen as brain gain (not brain drain) for their countries of origin. Furthermore, Muslim, Arab and other talents worldwide

will have the opportunity to contribute to knowledge and technology development in Palestine. However, how could this be achieved?

3.10 How to Strengthen Links with Palestinian Diaspora?

3.10.1 Mechanism (Location) of the contribution

As mentioned before in chapter 2, there are two ways to implement the brain gain strategy: either through the return of the expatriates to the country of origin (return option) or through their remote mobilization and association to its development (Diaspora option) (Meyer & Brown, 1999). Kuznetsov (2006) claimed that Diaspora could play direct roles to the mother country by implementing projects there, or indirect roles by serving as bridges and antennae for the development of projects in the mother country. Kuznetsov (2006) classified the contribution to the mother country by direct and indirect contribution. The direct contribution is the engagement of Diaspora members in well-defined roles such as investors, consultants, lawyers, philanthropists, or business angels. Whereas, the indirect contribution is the search role of the Diaspora and its function as a bridge, translator, and midwife, is important.

For Palestinian Diaspora Hanafi (2007) discussed the solutions that are available for Palestinian Diaspora when he talked about “Solutions to refugee problems have traditionally been divided into three categories”:

“Voluntary repatriation, local integration in the country of asylum, and resettlement from the country of asylum to a third country. The first option might be perceived as the most 'natural' option but it is also the most complicated. I prefer to call it 'return migration' to emphasize the fact that

voluntary repatriation is a migration like any other migratory movement. It involves a complex legal framework and institutional arrangements as well as favourable political, economic, and social conditions. In addition, the international environment is very important to enable such movement. In the optimistic environment that accompanied the end of the Cold War, a number of large repatriation operations have taken place and there was hope that lasting solutions might be found for many of the world's refugee problems.” (Hanafi, 2007)

Many factors influence a refugee's decision to return. Understanding patterns of return cannot be achieved through an analysis of macro processes of globalization and global markets, but should rather be gained through a sociological analysis of the political, social, and cultural attributes of the Palestinian people (Hanafi, 2007).

3.10.2 Incentives of the contribution

MOP (2007) presented a possible mechanism and incentives for integrating Palestinian Diaspora into the Palestinian economy, which is to give them citizens' rights similar to those provided by Israel to Jews worldwide. Although it is unlikely that a significant number of diaspora Palestinians would relocate to the OPT under current political conditions, attracting them to invest funds in some sectors of the Palestinian economy is unrealistic even in the current environment. In addition, funds sent by Palestinians in diaspora to immediate family members as well as to community organizations will continue to be an important source of financial support (MOP, 2007).

Diaspora Palestinians account for a disproportionate share of Palestinian human capital accumulated in the last six decades (MOP, 2007).

They therefore represent an important source of skilled labour for the Palestinian economy (MOP, 2007). Additionally, Palestinians in the Diaspora have accumulated substantial wealth over the period (MOP, 2007). However, there is a limit to the PNA's ability to attract investors, as granting residency permits remains the exclusive competence of the Israeli authorities (Hanafi, 2005).

At the same time, it is a challenge for the Palestinian government to introduce the best incentives for the Palestinian Diaspora that will encourage them to take a stride toward Palestinian development.

What are incentives that encourage the Palestinian Diaspora to return?

Additionally, this question is part of the research questions of this study.

3.10.3 Method (Way) and Sectors of contribution

Palestinian Diaspora will sense their connection to their homeland through their knowledge flows (a first step to achieve their right of return). This new knowledge is already in action in Palestine (Islaih, 2007). This is obvious in the Palestinian emerging interests and initiatives (focused on science, technology, and human development). In the age of globalization/alternative globalization, Palestinian minds and talents have a great potential to make important contributions to the wellbeing of the global community. Essentially, they need help to upgrade their human resources and introduce some education reforms and expansion of new technologies infrastructure (Islaih, 2007).

Migrant workers from Palestine, as mentioned by Fargues *et al.* 2005, are characterised by the diversity of their levels and types of occupational skills. These people are trained in the scientific, professional, and intellectual disciplines and include entrepreneurs, doctors, academics, highly skilled technicians, engineers and

intermediate and lower-level workers in the sectors of healthcare and education (Fargues *et al.*, 2005). Such an outflow must be viewed in the context of the mass exodus of Palestinians since the creation of the Israeli State in 1948 (Hanafi, 2001). There are many ways or methods to make Palestinian Diaspora contribute to Palestinian development, which may depend on their education or their experience in certain area.

The issue here is summarized in the following questions: what kind of network Palestinian Diaspora would prefer to contribute through. Moreover, through which sector their contribution will be achieved.

Research Issue 2:

2.1 What are the components comprising Palestinian Diaspora network?

3.10.4 Responsibility

Among the contributing factors to the exodus is also the lack of strong organization among the Arab/Palestinian leadership (Schulz, 2003), whether it is from governmental and nongovernmental organization.

The League of Arab States (LAS),

the primary regional organization in the Middle East and North Africa, as mentioned By BADIL (2006), has consistently called for the return of Palestinian refugees to their homes and properties. In 1949, LAS members emphasized that “the lasting and just solution to the problem of refugees would be their repatriation and the safeguarding of all their rights to their properties, lives and liberty, and that these should be guaranteed by the United Nations” (LASC Resolution 231, 17 March 1949). During the 1950s and 1960s, Arab states set out a variety of plans for durable solutions for Palestinian refugees. These included several plans outlining a staged return of the refugees. LASC

resolutions taken after 1967 continue to emphasize the right of Palestinian refugees displaced from the occupied Palestinian territories to return to their home of origin (BADIL, 2006).

The Palestine Liberation Organization (PLO) as mentioned by EOSOP (2009) has been the embodiment of the Palestinian national movement. It is a broad national front, or an umbrella organization, comprised of numerous organizations of the resistance movement, political parties, popular organizations, and independent personalities and figures from all sectors of life. The Arab Summit in 1974 recognized the PLO as the "sole and legitimate representative of the Palestinian people" and since then the PLO has represented Palestine at the United Nations, the Movement of Non-Aligned Countries (NAM), and the Organization of the Islamic Conference (OIC). In addition to its broad national and political goals, the PLO has dealt with numerous tasks with regard to the Palestinian people's life in their main communities and throughout the world through the establishment of several institutions in such realms as health, education, and social services. As such, the PLO is more than a national liberation movement striving to achieve the national goals of the Palestinian people, including the establishment of a Palestinian state with Jerusalem as its capital (EOSOP, 2009).

3.10.4.1 The United Nations (UN)

has been working on the question of Palestine since the first special session of the General Assembly on 28 April 1947, which established a body to investigate the issue and return with its recommendations. Over 60 years later,

the range of the UN's work on the issue has continued to adapt to meet new challenges and address changing realities on the ground.

Creation of UNSCOP

At the special session, the Assembly established the United Nations Special Committee on Palestine (UNSCOP), made up of 11 Member States, to investigate all questions relevant to the problem of Palestine and to recommend solutions to be considered by the General Assembly at its regular session in September 1947. During the course of a two and-a-half-month investigation, the Special Committee went to Palestine and the neighbouring countries of Lebanon, Syria, and Trans-Jordan. It also visited displaced persons camps in Austria and Germany, which had been ravaged by the Second World War and had experienced the tragedy of the European Jews under Nazism.

3.10.4.2 Non-governmental organizations (NGOs)

NGOs have also played a key role in assisting Palestinian refugees. Major international non-governmental aid agencies in 1948 included the American Friends Service Committee, as well as the International Committee of the Red Cross in co-operation with the League of Red Crescent Societies. Most NGOs, however, soon transferred responsibilities to the authorities of the host countries and/or UNRWA.

Until the beginning of the 1990s, NGOs played a limited role and many Palestinian refugee communities did not receive aid from such organizations. In Lebanon, for example, NGOs were barred from operating in the camps between 1959 and 1969, a time during which camps were placed under military surveillance. Moreover, Lebanese law barred NGOs from providing services to non-Lebanese, including Palestinian refugees. In Israel, internally displaced

Palestinians were subject to military rule until 1967, and few non-governmental organizations existed that provided or advocated for IDPs.

Some of NGOs that concern about Palestinian Diaspora:

- **BADIL** - A Bethlehem-based resource centre for Palestinian refugee rights. www.badil.org (EOSOP, 2009).
- **Shaml** - A refugee rights organization whose mandate is to create regional and global public awareness about the conditions of Palestinian refugees and strengthen links between Palestinian communities in the Diaspora and the homeland. www.shaml.org (EOSOP, 2009).
- **Al-Awda**, The Palestine Right to Return Coalition - A grassroots organization whose objective is to fulfil the right of Palestinians to return to their homeland and their right to full restitution of all their confiscated and destroyed property in accordance with international law. www.al-awda.org. (EOSOP, 2009).
- **Palestine Remembered** - A website created to highlight the towns and villages destroyed by Israel in 1948. www.palestineremembered.com. (EOSOP, 2009).

3.10.5 Networks of Palestinian Diaspora with Palestine

The diaspora maintains tight, albeit rather fragile, links with the Palestinian Territory focusing on two main spheres, as mentioned by Hanafi (2005): networks and cyberspace. Hanafi noted that the networking sphere is based on the relations between members of social and economic networks, especially within each geographical locality and between different poles, but

especially with the Palestinian Territory. However, these links are not always strong, and some networks have been seriously undermined by the structural constraints imposed by the Arab states (visa requirements for refugees, conservative economic policies hindering Arab investment, etc.).

As described by Hanafi (2005) Palestinian Ministry of Planning hosts an internet-based network PALESTA ⁵(Palestinian Scientists and Technologists Abroad), set up in 1997 to harness the scientific and technological expertise of expatriate professionals for the benefit of development efforts in Palestine. The PNA also works to attract business people to promote investment which gives newly-created foreign capital enterprise tax breaks for a certain period and under certain conditions.

3.11 Palestinian Diaspora Entrepreneur

Unstable political conditions, and its Diaspora population outnumbers its inside population, this is the situation in Palestine. Although a large number of important works on specific Palestinian refugee situations do exist, there is so far a lack of comprehensive studies on the Palestinian Diaspora (Schulz, 2003; Shiblak, 2005; Baldwin-Edwards, 2005). Most studies on Palestinian society have focused on Palestinian liberation Organization (PLO) politics, the conflict with Israelis and the Israeli occupation (Schulz, 2003; Shiblak, 2005). With some noteworthy exceptions, the people living the ordeal of Palestinian exile have been conspicuously absent from academic undertakings (Schulz, 2003; Baldwin-Edwards, 2005).

⁵ More information about PALESTA and TOKTEN program will be in Annex 3.

**Entrepreneur and Researcher
Dr. Adnan Mjalli**



Dr. Mjalli is an internationally recognized expert in drug discovery and development of new medicines in the pharmaceutical and biotechnology industry. Dr. Mjalli is the founder, Chairman of the Board, President & CEO of TransTech Pharma, Inc., a drug discovery and development company and currently serves as Chairman of the Board of PharmaCore a drug discovery tool company, having previously been its founder, President and CEO. Dr. Mjalli obtained his Ph.D. in medicinal chemistry in 1989 from the University of Exeter, UK. His postdoctoral work was carried out at the University of Rochester. Dr. Mjalli has held various positions of increasing responsibility in research and senior management at several pharmaceutical and biotechnology companies including Merck & Co., Inc. and Ontogen Corporation. **He is the author of more than 40 scientific papers, four book chapters and an inventor on more than 620 patents and patent applications.** Dr. Mjalli also serves on the Board of Directors of Siga Technologies, the North Carolina Biotechnology Center, and High Point Economic Development Corporation. Dr. Mjalli has raised more than \$110M for TransTech Pharma and PharmaCore.

Dr. Mjalli has been the recipient of several awards and honors including: the 2007 Fast 50 Award honoring the Triad's 50 fastest growing private companies and their CEOs, Carolinas regional Finalist for Ernst & Young 2007 Entrepreneur of the Year, the Health Care Heroes Innovator Award and the North Carolina Biotechnology Economic Development Award from the North Carolina Biotechnology Center. He has been named among the Triad's Most Influential People, was issued the City of High Point North Carolina Key Award and awarded the Science Award in Recognition and Appreciation of Excellence in Innovation and Creativity by Helios Pharmaceuticals. As a student, he was the recipient of academic awards such as the Glaxo Group Research Scholarship for Ph.D. degree, the Lovis Rydon Memorial Research Prize for Outstanding Research from the University of Exeter and the European Economic Community Scholarship for M.S. degree.

Source: (PalestinianSurprises, 2011)

Hanafi (2007) who depends on ILK (1998) definition of entrepreneur, states: “Entrepreneurship concerns not only business people but entrepreneurs in general, including the self-employed and employers” ILO (1998). Thus, the situation among the Palestinian tends to be more toward entrepreneur–family rather than entrepreneur–individual relationships (Hanafi, 2007).

The mode of entrepreneurship is a concept that allows us to understand how **capital** and the **know-how** necessary for launching development are acquired, as well as the sustainability of any business (Hanafi, 2007). Entrepreneurship does not imply **a fixed behaviour** or a kind of economic mentality, but rather is a dynamic concept (Hanafi, 2007). Entrepreneurship concerns not only business people but also entrepreneurs in general, including the self-employed and employers (ILO 1998). According to this definition, Palestinians in the diaspora (whether refugees or not) are quite entrepreneurial (Hanafi, 2007).

There are two different types of Palestinian entrepreneurship: individualist and communitarian, which are both operating on a transnational level (Hanafi, 2007). Hanafi also pointed out that business people among Palestinian diaspora diversify their business in different fields and across various geographical areas, using mainly capital transfers rather than physical re-location. That is notably because of the **insecurity** of Palestinian economic activity in the diaspora. Hanafi (2007) emphasized the sectoral diversification and choice of place of investment by Palestinian entrepreneurs which depend on vagaries of social and political criteria such as the impact of the Oslo Peace Process, the juridical status of the investor in the host and investment countries, mobility, access, and difficulties in obtaining visas.

Former President of El Salvador Tony Saca



Tony Saca, the son of Palestinian immigrants, was elected President of El Salvador for a five-year term in 2004. A member of the conservative *Nationalist Republican Alliance*, Saca defeated Shafik Handal (now deceased) of the leftist *Farabundo Martí National Liberation Front* -- ironically of Palestinian descent, as well.

Tough on crime and drugs, police once foiled an attempt on Saca's life by gangs. After the assassination attempt, Saca was quoted as telling the press, "I want to send a message to these people who want to assassinate me, that they are not going to stop us and we are going to continue capturing drug traffickers and people involved in organized crime."

Though a conservative and an advocate of the free market, Saca initiated the "Solidarian Network plan" with aid from European countries. The goal was to help economically-poor communities by providing monies (about \$15-\$20) per eligible family. Popular former sportscasters, he gained widespread visibility for his coverage of soccer games before going into politics.

Source: (PalestinianSurprises, 2011).

From what has been discussed, Hanafi depends on ILO Definition which depends on self-employed and employers. Nevertheless, Entrepreneurship does not imply a **fixed behaviour** or a kind of economic mentality, but is rather a dynamic concept (Hanafi, 2007). Based on the literature that has been discussed so far, literature about Palestinian diaspora entrepreneur has a gap in defining the behaviour and characteristics of

Palestinian diaspora entrepreneur. Therefore, and according to what is introduced in chapter about the definition of the entrepreneur, this study will examine the behaviour and characteristics of the entrepreneur among Palestinian diaspora. This examination will be based on Entrepreneurialship includes: (1) initiative taking, (2) the organization, and recognition of social and economic mechanisms to turn resources and situations to practical account, and (3) the acceptance of risk or failure.

3.12 Theoretical Framework and research Issues

Proposed Model – Palestinian Diaspora Entrepreneurial Network

Linking Diaspora experience to the development in the mother country is a process, which requires a bridge. Some people in Diaspora have experience and skills in working across different sectors and with different parts of the development process. These “bridge people” can help to build Entrepreneurship between Diaspora and development in the mother country. Bridge Entrepreneur people help Diaspora and policy makers (especially in S&T) in the mother country to access each other, to listen to each other’s concerns, and to find common ground. A bridge Entrepreneur may be someone who has worked in many different international organizations in the past, but is currently working in a government department – someone who understands a particular international community’s experience and has knowledge of the entrepreneurship. Bridge Entrepreneur understands the needs and realities of different sectors, and has the skills to build relationships and processes across sectors.

This study aims at building a framework for stronger relationships between Palestinian Diaspora entrepreneurs and development in Palestine,

based on a strong supporting platform of Science, Engineering, Technology & Innovation (SET&I). Within this context, Science and Technology are perceived as an enabling platform. However, before being so, this platform must be enabled.

A theoretical model is proposed in order to enable the Palestinian Diaspora to contribute with the development in Palestine, especially through the advancement of Science and Technology, based on entrepreneurship in the era of knowledge-based economy.

At the initial starting point of this study and based on what is mentioned, it was presumed that the study will create a strong network that will enable the Palestinian Diaspora to be connected (bridged) with the development in Palestine through Entrepreneurship, and the factors that may influence such a strategy. However, by going deeply into the literature, the conceptual framework has been refined into many stages, until reaching this stage.

Many variables were seen as important variables in order to accomplish this framework.

The main aim of this study is to focus on Palestinian Diaspora entrepreneur worldwide and to portray the Diaspora Palestinians as knowledge nomads who contribute to foster the development in Palestine.

The causes of their mobility are the first thing to be identified in terms of sorting the Push and Pull factors. It is believed that highlighting the causes of leaving the country goes halfway to the problem solving. At the same time, understanding the policies and strategies that have been used by other countries in order to attract the talented people among the Palestinian Diaspora was also important. This will deepen the study presenting a comprehensive view about

the needs of the Palestinian Diaspora that they may miss in the mother country and force them to leave.

From many previous studies, feeling of nationality was a core element in re-attracting the Diaspora to the country of origin. However, the question is whether this factor is substantial enough for making the Diaspora community re-attracted to the mother country or does it need more elements? The study highlights re-pull factors in order to examine this issue among the Palestinian Diaspora, which would give an absolute foundation for policy makers to understand how to re-attract them.

Moreover, there is an inevitable need to examine the issue of whether the Palestinian Diaspora are skilled or less skilled or even highly skilled people, in order to verify the capacity and capability of the Palestinian Diaspora and their relationship with the Entrepreneurial network.

Research Issue 2:

2.2 What are the push factors that are influencing Palestinian Diaspora network?

2.3 What are the pull factors that are influencing Palestinian Diaspora network?

2.4 What are the capacity factors that are influencing Palestinian Diaspora network?

2.5 What are the Capability factors that are influencing Palestinian Diaspora network?

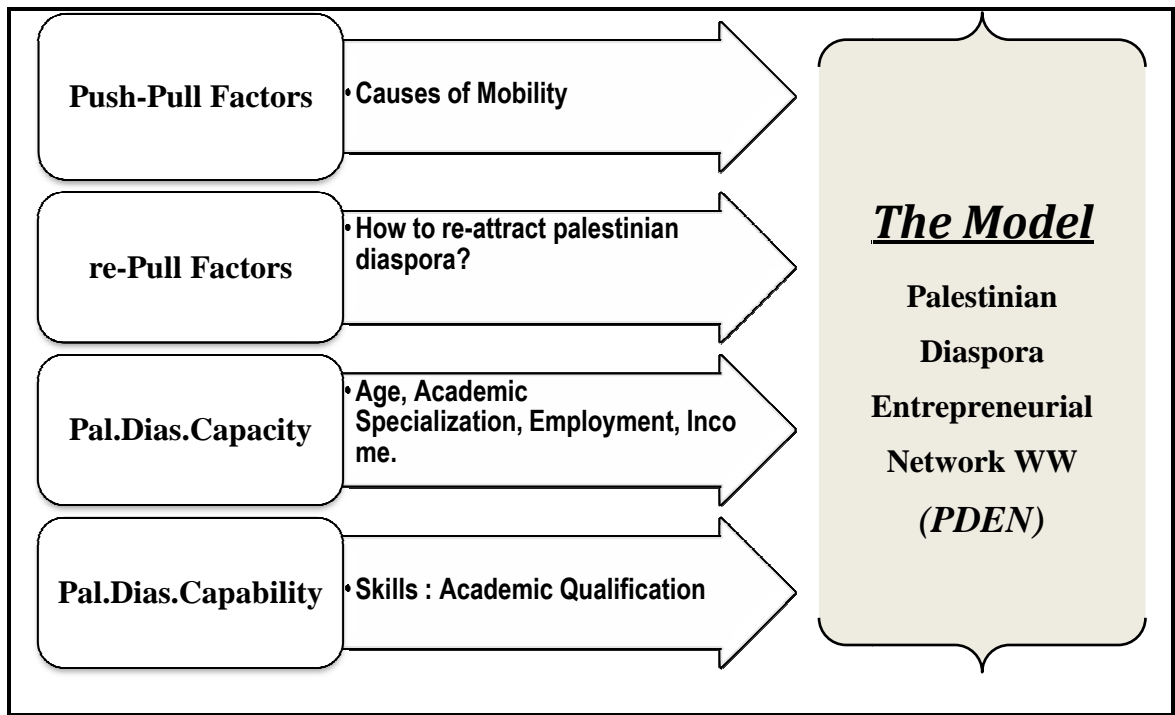


Figure 3.5: Hypothesized Model with external factors

The model itself is composed of many elements that are extracted from the literature review. The *Entrepreneurial Characteristics*, which are the core element of the study, depend on the common elements stated mostly in all the definitions that refer to the behaviour of Entrepreneur: (1) initiative taking, (2) the organization, and recognition of social and economic mechanisms to turn resources and situations to practical account, (3) the acceptance of risk or failure. Obviously, to highlight the entrepreneurial behaviour and characteristics to launch the framework is not enough. Hence, many core elements were involved.

Research Issue 1:

How high does Palestinian Diaspora enjoy Entrepreneurial characteristics?

The **location** of the contribution, whether the Palestinian Diaspora prefers take the return option or the Diaspora option (as previously highlighted by (Meyer & Brown, 1999). The **sector** that they prefer to reconnect through, also the **Method** or **way** of re-connecting that they want to be involved through. **Incentives** were seen also as a very important factor that may help in advancing the framework, as spotted in many examples in different countries. These elements are seen as components of the framework, but this framework needs to be incubated by a responsible administer. Who should foster these steps, and create the needed policies for launching such an important subject matter? This theme was highlighted as **responsibility** that the Palestinian people really believe in and trust, then will be ready for the contribution. Creating such a strategy may be a challenge for the Palestinian government, but is also an extremely important foundation. Without political commitment, these efforts will flounder.

Research Issue 3:

2.1 What are the components comprising Palestinian Diaspora network?

Recent American experience yields one important lesson: good public policy can have a profound effect on entrepreneurship (NCOE, 2002). The Oslo Process for example, seems to have generated around 40 per cent of the entrepreneurial activities (Hanafi, 2007).

The six elements were seen as components of any module or framework that is needed to make a strong network among Palestinian Diaspora with the mother Palestine.

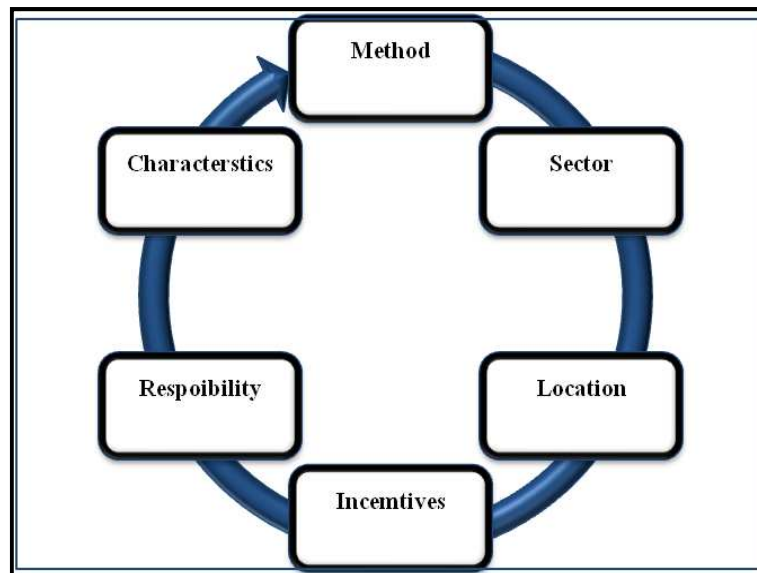


Figure 3.2: Components of the model

Research Issue 3:

How strong is the relationship between factors and components of Palestinian Diaspora network?

Research Issue 4:

How Factors and Entrepreneurial characteristics could be integrated with the component of Palestinian Diaspora network to form a Palestinian Diaspora

Such a strategy was created in order to help the Palestinian Diaspora to be connected to Palestine, since the majority of the Palestinian people (more than 50%) reside outside Palestine. If Palestine wishes to move forward on a strategy that can be implemented, then this strategy would need to be flexible, adaptable, and feasible in its requirements. The strategy of harnessing the talents of Diaspora must be seen as integral to the overall efforts of developing the economies of these countries. Without political commitment, these efforts will flounder. It is highly confident that the issues presented in this study underscore the potentials as well as challenges involved in tapping the Palestinian Diaspora networks.

3.12 Summary

This chapter introduced one of the problems encountered throughout this research, which is a lack of information about Palestinian Diaspora especially from scientific perspectives. Therefore, this study hopes/aims to fill this gap by investigating in the main research problems. In order to come to that end, a survey is distributed among Palestinian Diaspora in order to examine the research problems. Key personnel's among Palestinian Diaspora in order to get a clearer picture and to go deeper in the issue also conducted a few interviews. The details of the research methodology and how the data collecting is done would be presented in the next chapter, with a detailed discussion on how the research is carried out with a clear view for the conceptual framework.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

After discussing the literature review in the previous two chapters, this chapter illustrates the conceptual framework and the design of the study, and the methodology for gathering data in order to answer the research questions. A combination of a quantitative and a qualitative methods were used in employing both qualitative and quantitative data, and offering an opportunity in order to answer and explore deeply into the issues that were raised by the research questions.

This chapter also explains the survey instrument, its distribution technique , the sample demographic, the translation of the survey and validation. In addition, it presents a review for the results of the pilot study and instrument reliability, and the data collection procedure. Finally, the statistical techniques employed for primary data analysis were discussed. A brief summary of the chapter is presented in the last section.

4.2 Conceptual Framework

The conceptual framework for this research is based on the literature review which was introduced in chapter2 and chapter 3.

Several countries have adopted various strategies to develop and exploit talents to advance their socio-economic goals (see OECD 2002, Kapur and McHale, 2005 and Solimano, 2008). These strategies have resulted in an

uneven flow of talented people to the developed nations, many of whom are drawn from the developing world.

This skewed migration of talented people in the recent years have generated much concern since talented people are already in short supply in many of these developing countries. It is estimated about 30 to 50 percent of the developing world's population of people trained in science and technology live in the developed world (Meyer and Brown, 1999; Barre et al., 2003).

Palestine is one country that has unstable political conditions. These conditions are related to the occupation, which was one of the reasons behind the migration of the people from Palestine. The Palestinian population is distributed through out whole world. A remarkable note is that the Palestinian population outside of Palestine is more than in Palestine.

This study aims at building a framework for stronger relationships between the Palestinian Diaspora entrepreneurs and development in Palestine, based on a strong supporting platform of Science, Engineering, Technology & Innovation (SET&I). Within this context, Science and Technology are perceived as an enabling platform. However, before being so, this platform must be enabled. A theoretical model was proposed in order to enable the Palestinian Diaspora to contribute to the development in Palestine, especially through the advancement of Science and Technology, based on the entrepreneurship in this era of knowledge-based economy.

At the beginning of the study and based on what have been mentioned, it was thought that the study will create the best network that will enable the Palestinian Diaspora to be connected (bridging) with the development in Palestine through Entrepreneurship, and factors that may influence such

strategy. By going deeply in the literature, the conceptual framework was developed into many stages, from the beginning until the final stage.

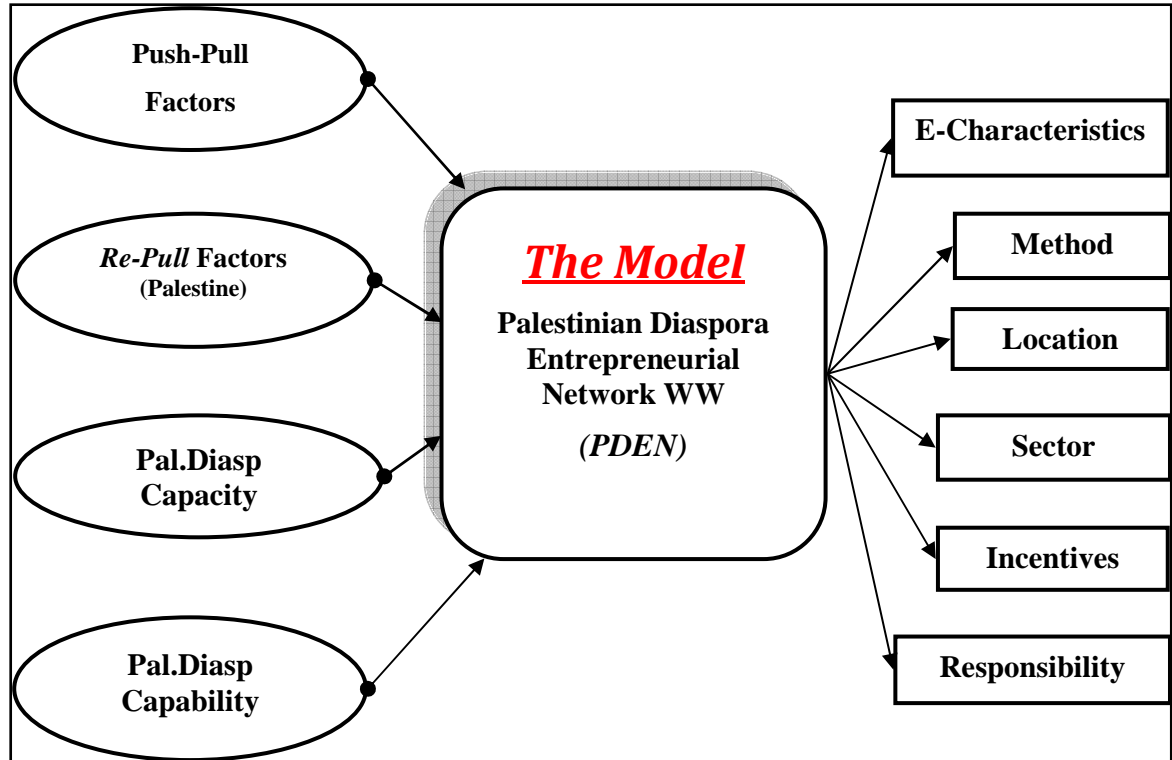


Figure 4.1: Conceptual Framework of the study

4.2.1 Variables

The conceptual framework of this study is divided into two parts (Figure 4.1). First, factors that may influence the diaspora in general and the proposed model specifically. The second part which is a theoretical model, which is called “*Palestinian’s Diaspora Entrepreneurial Network*” (PDEN).

The first part is composed of factors that are defined as causes of Diaspora’s mobility, in terms of push and pull factors, and how to re-attract these people back to the mother country, Figure (4.1). The last two variables were about capacity and capability of the Palestinian diaspora.

The components of the model have been identified as six Dependent Variables (Entrepreneurial characteristics, Location, Method, Responsibility, Incentives and sector). The other five variables (Push factors, Pull factors, re-Pull factors, Capacity and capability of the Palestinian Diaspora) seen as variables that have an influence on the model, these are Independent Variables as shown in Table 4.1.

Table 4.1: Variables of the study

<i>Variables</i>	<i>Research Variables</i>
Independent Variables	Push Factors
	Pull Factors
	Re-Pull Factors
	Capacity PD
	Capability PD
Dependent Variables	(Network Components): Location
	Incentives
	Responsibility
	Method/Way
	Sector
	Entrepreneurial Characteristics

Specifically, the dependent variables are the component of the proposed model (as extracted from the literature), which are: Entrepreneurial characteristics, Sector, Responsibility, Method (Way), Incentives and Location. These variables are dependent ones because they are affected by and depended on other elements.

The Independent Variables that are influencing the Palestinian's Diaspora entrepreneurial network are divided mainly into three sections: The first part of them is, identifying the push-pull factors (causes of mobility) for the Palestinian diaspora. Push-pull factors may differ from country to another, what is a push factors in one country are not necessary to be the same in the other another country. The push and pull factors continue to play an important

role as determinants of migrants decisions to leave their country of origin (Fargues, Cassarino, & Latreche, 2005).

The second one is how to re-attract (re-pull) the Palestinian Diaspora towards the development in Palestine. Which is the aim of this study.

Capacity and capability of the Palestinian's Diaspora are the last part of the independent variables. To examine whether these people are skilled, highly skilled or less skilled people? Does the Palestinian Diaspora characteristic of individual members impact their capacity and capability to contribute with to the development in Palestine?

As mentioned many times before, what makes the poor countries poor is not the lack of raw individual entrepreneurial energy, which they in fact have in abundance. It is their inability to channel the individual entrepreneurial energy into a collective entrepreneurship (Chang, 2010), This is The gap in this study, is to bridge the Palestinian Diaspora entrepreneur's that are were distributed around the world with the development inside Palestine through entrepreneurship.

The purpose of this research is to have better understand on how Palestinian's Diaspora contributes to the economic growth in Palestine. By promoting Entrepreneurship among Palestinian Diaspora and Palestine. Entrepreneur is available to be connected with his or her origin country, to open the boundaries and to start bridging Palestine with people around the world anywhere worldwide. This can be achieved through developing a model tailored towards establishing an Entrepreneurial network, where Palestinian Diaspora's Entrepreneurs play a major role in fostering the development in Palestine. Through this participation, Palestinian diaspora are not only

contributing to the development in Palestine, but are also connected to their homeland.

4.4 STUDY DESIGN

There is a shortage of studies on the Palestinian diaspora despite the large number of important works that are mainly written mainly on the political context and on specific Palestinian refugee situations (Schulz, 2003; Shiblak, 2005). Because of that, this descriptive-exploratory study employed a quantitative and a qualitative approach to gain both breadth and depth of data about the Palestinian Diaspora. The quantitative approach was by distributing a questionnaire among the Palestinian Diaspora World Wide. While the qualitative approach depends on interviewing key personnel in and out of Palestine.

The questionnaire was used to collect data about Palestinian Diaspora worldwide. Palestine has a special situation in many aspects, Palestine as a refugee-producing country has been excluded from many studies because of the complexity of its situation which allied with a complete lack of data render attempts at scientific analysis meaningless (Baldwin-Edwards, 2005).

The main objectives of the questionnaire was to identify the causes of the mobility of Palestinian Diaspora worldwide by identifying the push , pull and re-puling factors. Push factors are the conditions in a home country that push the person to leave, whereas pull factors are the conditions in the host countries that attract migrants to them (Delicado, 2007). These factors were needed in order to highlight the main reasons behinde the movement of the Palestinian's diaspora in order to create the best model as a solution for such situation.

Re-attract (re-pull) the Palestinian Diaspora toward development in the Palestine is a national strategic objective of the PNA. All Palestinian living in Diaspora have the right to return home (MOP, 2005). Furthermore, it is the policy of the PNA to harness the wealth of experience and encourage investments of Palestinians in Diaspora in the Palestine (MOP, 2005). What is the motivation for return: pure nationalism and the desire to stabilize identity after experiencing exile, or something extending beyond that (Hanafi, 2007). *Thorn & Holm-Nielsen* (2006) mentioned that number of factors that pull migrants back to their countries of origin, among these are commitment to home, economic growth and increased demand for skills .

Capacity and Capability of the Palestinian Diaspora were also covered by the questionnaire. The last dimension in the questionnaire was to identify the components of the proposed model (as extracted from the literature), which are: Entrepreneurial characteristics, Sector, Responsibility, Method (Way), Incentives and Location. While the qualitative part of this study was dependent on the interview with the key personnels among the Palestinian Diaspora and in Palestine. People from government also were interviewed to go in depth about the objectives of the study. A comprehensive details about the interviews will be in section (4.6.2).

4.5 Population

This study is about a country – Palestine - whose diaspora population is even larger than the population of the people residing in the country (see Annex 2).

The population of this study (Palestinian diaspora worldwide), whether forced to leave their homes and become refugees, or displaced from their lands due to economic hardship under the Israeli occupation, are the millions of

Palestinians who live in Diaspora (MOP, 2005). Palestinian refugees and internally displaced Palestinians represent the largest and longest-standing case of displacement in the world today (BADIL, 2007).

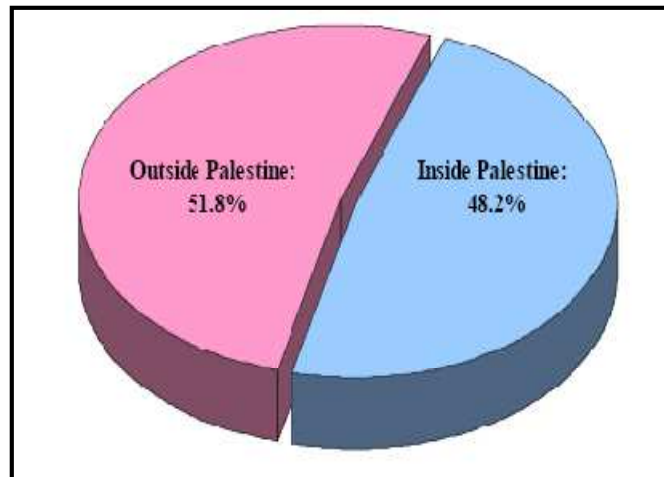


Figure 4.2 Palestinian Population Distributions in Percentages Inside and Outside Palestine at the End of the Year 2009. Source: (Al-Zaytouna, 2010)

The migration of Palestinians in and out of the West Bank and the Gaza Strip has been heavily shaped, if not altogether determined, by the history of the region over a period of almost sixty years (Khawaja, 2005). Waves of migrants leaving caused by war, in the form of refugees and displaced, have created a Palestinian diaspora, made up of millions of people world-wide, so that many people in the Palestinian Territory will now have relatives and friends living abroad (Khawaja, 2005).

Mavroudi (2008) mentioned that the Palestinians have been living in diaspora since 1948 or what they call the year of the *nakba* (or catastrophe) and the creation of the state of Israel. They are dispersed mainly throughout the Middle East but also to the rest of the world (Mavroudi, 2008).

The Palestinian Diaspora is currently comprises of between 4 to 5 million people (Mavroudi, 2008; Hanafi, 2005; Shaml, 2001) settled for the

most part in their neighbouring countries, but also in the Gulf States, the USA, Canada, Latin America, and Europe. In 2001, the Palestinian Diaspora and Refugee Centre (Shaml), in Ramallah reported an estimate of 4,233 million of Palestinians who are living abroad, which constitutes about half of the total Palestinian population (Hanafi, 2005).

Palestinian refugees suffer the twin misfortunes of being the largest refugee population in the world, and also one of the oldest (Brynen & El-Rifai, 2007). The numbers of recent emigrants are very low compare with second-generation and third-generation refugees, who form the vast majority of the 4.7 million Palestinians (official figure) living outside of the Palestinian Territory (Zaghal, 2005). Jordan hosts the largest proportion of Palestinian refugees (Zaghal, 2005). Palestinian refugees in Jordan constitute about 42% of the total population of the country, which is the highest ratio in any of the UNRWA operational regions (Zaghal, 2005).

Lack of studies on the Palestinian Diaspora

Most studies on Palestinian society have focused on PLO politics, the conflict with Israeli and the Israeli occupation (Schulz, 2003; Shiblak, 2005). With some noteworthy exceptions, the people who are living the ordeal of Palestinian exile have been conspicuously absent from the academic undertakings (Schulz, 2003). What is more, only seldom is the Palestinian predicament treated from a Diaspora perspective (Schulz, 2003).

Although there exist a large number of important works on specific Palestinian refugee situations, there is, perhaps somewhat oddly, a lack of comprehensive studies on Palestinian Diaspora so far (Schulz, 2003; Shiblak, 2005). While the purpose of this research is to have a better understanding on

how Palestinian's Diaspora contributes to the economic growth in Palestine by creating Entrepreneurship among the Palestinian Diaspora, to be connected with the development in Palestine. This will open the boundaries and to start bridging the Palestine with people around the anywhere worldwide.

4.6 Data Collection Method

This study used both, the primary and secondary data collection methods. The primary data collection methods include both interviews and questionnaire, while the secondary data collection include the government, NGO's, UN and other sources of reports and studies. In this study, both qualitative and quantitative approaches were used. Using both methods helped to overcome the limitation of each other (Yin, 1994). Methods of data collection in this study involved two primary methods namely interviews and questionnaire survey. Interviews were useful for variable identification as well as for the development and validity of the modularity construct, and the questionnaires were used to collect data on a large scale. Besides, the interviews also served as an important ground to validate the final stage of the PDEN model.

4.6.1 Primary Data Collection

To offer a very rich picture, the data collection methods of this study were as follows:

- A written survey questionnaire (Quantitative)
- Face-to-face semi-structured interviews (Qualitative).

4.6.1.1 The Questionnaire

The purpose of this questionnaire is descriptive-exploratory. Survey research is probably the best method to the social researcher who is interested in collecting original data for describing a population that is too large to observe directly (Babbie, 2004).

Questionnaires are frequently conducted for the purpose of making descriptive assertions about the population that is discovering the distribution of certain traits or attributes (Babbie, 2004). Some advantages of the questionnaire design are the cheap economy of the design, the rapid turn around in data collection, and the ability to identify attributes of a population from a small group of individuals.

4.6.1.1.1 The Questionnaire ⁶ Design – Contents of the questionnaire

The questionnaire was adopted from three different questionnaires, with some modifications. The first source is from a study about “*Australia’s Diaspora: Its Size, Nature and Policy Implications*” (Hugo, Rudd, & Harris, 2003), that was conducted by The Committee for Economic Development of Australia (CEDA). The second source was from the “*Entrepreneur: Tools for energizing Entrepreneurship*”, which was conducted by Center for Rural Entrepreneurship (Macke & Mrkley, 2003). In addition, questions pertaining to the entrepreneurship discipline were also included, from a survey that was under a title of “*ARE YOU AN ENTREPRENEUR?*”,

Conducted by the “Center for Ethics in Free Enterprise, An Entrepreneur's Character Traits”.

⁶ See the questionnaire in English and in Arabic language in Annex 5.

4.6.1.1.2 Contents Of The Questionnaire

The questionnaire asked the respondents with twenty eight questions. Based on the variables, the questions of the questionnaire are arranged in two main sections (as explained in section 4.6.1.1.1). The first section was to identify the characteristics of the Palestinian diaspora and their mobility world wide (Independent variables). The second section is to identify the basic elements of the model (Dependent Variables) that was highlighted from the literature review.

Entrepreneurial characteristics

Entrepreneurial characteristics were measured based on What Chapero (1975) mentioned, which quoted in (Hisrich et al, 2008), that mostly all definitions of Entrepreneurship refers to behaviour that includes: (1) initiative taking, (2) the organizing and recognizing of social and economic mechanisms to turn resources and situations to practical account, (3) the acceptance of risk or failure.

These three elements were translated into more acceptable, simpler and more measurable sentences based on the survey that entitled “*ARE YOU AN ENTREPRENEUR?*”. This survey was looking at several so-called Entrepreneur surveys that measure entrepreneurial readiness or what one might consider ‘having the traits of an entrepreneur’. Much study and so-called research by academics around the world has gone into attempts to determine who is, or who can be, an entrepreneur (CEFE, 2006).

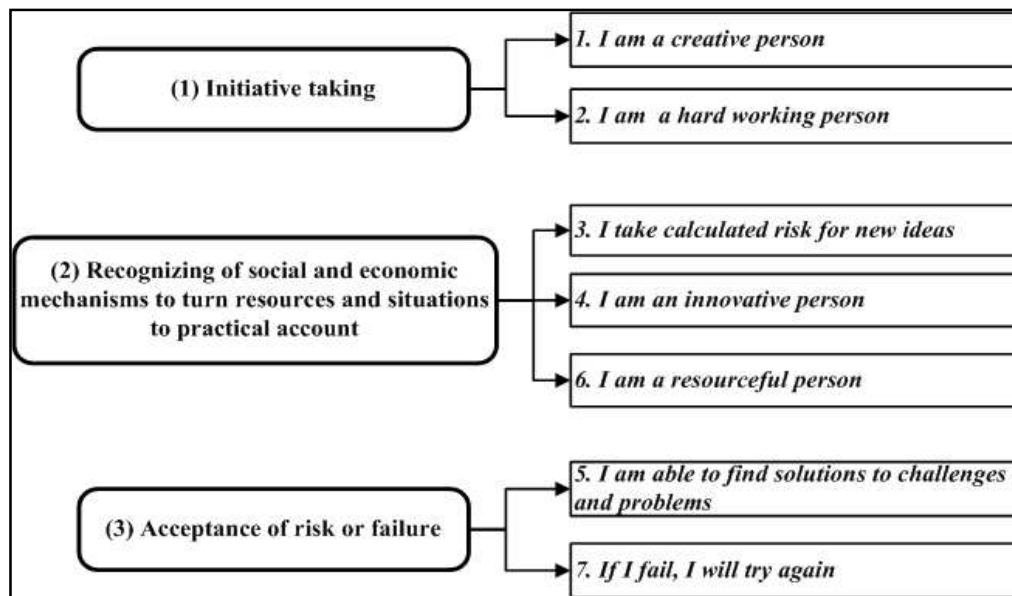


Figure (4.3): Translation of Entrepreneurial behaviour

The second source was from the “*Entrepreneur: Tools for energizing Entrepreneurship*”, which was conducted by Center for Rural Entrepreneurship (Macke & Mrkley, 2003).

Table 4.3 : Dimension of the questionnaire

<i>Objectives</i>	<i>Dimension</i>	<i>Questions</i>	<i>Items</i>	<i>Total</i>
Push Factors	Causes of mobility in the mother country	Q20	19	19
Pull Factors	Causes of mobility in the host country	Q24	16	16
Re-Pull Factors	Causes of mobility to the mother country	Q21	10	10
Capacity	Age, Income, Academic specialization, Employment.	Q3 Q18 Q6 Q17	6 8 16 6	36
Capability	Skills (Academic Qualification)	Q5	5	5
Model	Way/method (Network) Location Responsibility Sector Characteristics Incentives	Q26 Q22 Q25 Q27 Q28 Q23	7 6 6 15 7 8	59

The questionnaire consists of twenty eight questions which are divided into three themes: theme one covers the demographical questions, which explains the capacity and capability of the Palestinian's Diaspora. Theme two covers the Push factors, Pull factors and the re-Pull factors. Theme three of the questionnaire consists of six different questions that cover the component of the hypothesised model (PDEN). Table 4.4 shows the questions of the questionnaire with items in each question.

The third theme of the questionnaire is composed of eight questions. The respondents were asked to answer each question using the Likert scale. It is a scale which is often used in a survey research where people express attitudes or other responses in terms of ordinal-level categories that are ranked along a continuum (Neuman, 2006). This format offers several advantages over the other formats. First, it uses space efficiently. Second, respondents will probably find it faster to complete a set of questions presented in this fashion than in other ways. In addition, this format may increase the comparability of responses given to different questions for the respondents as well as the researcher (Babbie, 2004).

In questions number 20 to 28, respondents were asked to answer the questions which uses a five interval-scale with 1 representing strongly disagree and 5 representing strongly agree. This scoring has an advantage that a zero implies neutrality or complete ambiguity, where as a high negative number means an attitude that opposes the option which is represented by a high positive number (Neuman, 2006). Also, the scale have properties that are associated with improving reliability and validity (Neuman, 2006), which will be discussed in the coming sections.

Table 4.4: The items of the questionnaire:

1. Push Factors (Mother Country)	Reasons	Why did you leave Palestine (you or your family)? You may tick more than one
		<ol style="list-style-type: none"> 1. Forced by Israeli forces to leave 2. I was overseas when the war started (1948 / 1967) 3. Having health problems 4. Political reasons 5. Overseas job transfer / exchange 6. Better employment opportunities 7. I invested many times in Palestine and I failed 8. For Patent registration 9. To establish, relocate or expand a business 10. Partner's employment 11. I was promoted 12. Marriage 13. To be close to family / friends 14. Education / study 15. Lifestyle 16. Adequate domain for my professional / academic specialization is not available 17. Requirements to conduct my research are not available 18. Higher income 19. Professional development
2. Pull Factors (Host Country)	Reasons	If you are free to go back to Palestine, what are the reasons that discourage you to do so?
		<ol style="list-style-type: none"> 1. Employment opportunities are better here 2. Business opportunities are better here 3. Career development and promotion 4. Partner's employment is located here 5. No equivalent job in Palestine 6. Marriage partner keeps me here 7. Children grew up here 8. Family/friends are here 9. Lifestyle more attractive here 10. Established in current location 11. Cost of re-location back to Palestine 12. Higher income 13. Better education institutions for skill training 14. Better health institutions and treatment 15. I want to live in a peaceful place 16. Current political or security situation in Palestine

3. Capability	Skills	What is your highest Academic qualification?
		1. <i>School Certificate</i> 2. <i>Diploma (2 years)</i> 3. <i>Bachelor</i> 4. <i>Master</i> 5. <i>PhD (Doctorate)</i>
4. Capacity	Age	Age
		1. <i>Less than 20</i> 2. <i>21 – 30</i> 3. <i>31 – 40</i> 4. <i>41 – 50</i> 5. <i>51 – 60</i> 6. <i>More than 60</i>
	Employment?	Currently, you are
		1. <i>Employed (Full-time)</i> 2. <i>Employed (part-time)</i> 3. <i>Business Owner</i> 4. <i>Professional⁷</i> 5. <i>Student</i> 6. <i>Unemployed</i> 7. <i>Others.....</i>
	Income	Monthly Income (US\$)
1. <i>Less than \$500</i> 2. <i>500 – 1000</i> 3. <i>1001 – 2000</i> 4. <i>2001 – 5000</i> 5. <i>5001 - 10,000</i> 6. <i>10,001 - 20,000</i> 7. <i>20,001 - 30,000</i> 8. <i>More than \$30,000</i>		
Academic Specialization	Academic Specialization	
	1. Teacher Training Programs 2. Medical Diagnostic & Treatment 3. Trade, Craft & Industrial Programs 4. Engineering Programs 5. Agricultural, Forestry & Fishery Programs 6. Service Trade Programs 7. Programs in Mass Communication & Documentation 8. Other programs 9. Fine & Applied Arts Programs 10. Humanities Programs 11. Religion & Technology Programs 12. Social & Behavioural Science Programs 13. Commercial & Business administration 14. Law & Jurisprudence 15. Natural Science 16. Mathematics & Computer science	

Palestinian's Diaspora Entrepreneurial Network WW	Network	<ol style="list-style-type: none"> 1. Knowledge networks 2. Business network 3. Social networks 4. Scientific networks 5. Research networks 6. Technology transfer 7. Business investments
	Sectors	<ol style="list-style-type: none"> 1. Employment opportunities are better here 2. Business opportunities are better here 3. Career development and promotion 4. Partner's employment is located here 5. No equivalent job in Palestine 6. Marriage partner keeps me here 7. Children grew up here 8. Family/friends are here 9. Lifestyle more attractive here 10. Established in current location 11. Cost of re-location back to Palestine 12. Higher income 13. Better education institutions for skill training 14. Better health institutions and treatment 15. I want to live in a peaceful place 16. Current political or security situation in Palestine
	Location	<ol style="list-style-type: none"> 1. While staying overseas 2. When returning back to Palestine 3. Being in Palestine with Overseas Networks 4. While overseas with Palestinian Networks 5. Through short time return for specific activities 6. I do not believe that I can help
	Characteristics	<ol style="list-style-type: none"> 1. I am a creative person 2. I am a hard working person 3. I take calculated risk for new ideas 4. I am an innovative person 5. I am able to find solutions to challenges and problems 6. I am a resourceful person 7. If I fail, I will try again
	Responsibility	<ol style="list-style-type: none"> 1. PLO, Palestinian Authority and official entities 2. Palestinian People 3. Arab League 4. Organization of Islamic Conference (OIC) 5. United Nation (UN) 6. Non Governmental Organizations (NGOs)
	Incentives	<ol style="list-style-type: none"> 1. No need for incentives to return 2. Giving my marriage partner permanent residency 3. Good job 4. Tax Reduction 5. Facilities to establish myself 6. Housing facilities 7. Educational facilities for children 8. Assurance of stability (security) in Palestine

4.6.1.1.3 Instrument translation process

Since the survey was conducted and was originally developed in English, thus, it was necessary to translate the instrument into the Arabic language that is equivalent to the meaning of the original English version. Therefore, in order to ensure that the Arabic version correctly reflects the meaning and nuances of the original instrument, the researcher translated the questionnaire to Arabic language, and was given to two persons for evaluation in order to provide an appropriate translation of the items in the original version of the questionnaire. Both of them were native Arabs and have good experience in translation. One of them is interested in the Entrepreneurship, and she is a doctor in Marketing. The second one is an intellectual person who has strong experience in Arabic language, and she graduated from International Islamic University of Malaysia (IIUM). Some items were re-worded so that it would be easy to be understood in the Arabic context. Thus, some revisions for a better understanding meaning were made.

To verify the validity and reliability of the instrument after the translation process and before conducting the actual study, it was tested for its clarity, validity, and reliability. The instrument was piloted and administrated by 35 people from the Palestinian Diaspora. Details of the pilot test study are shown in section 4.6.1.1.5.

4.6.1.1.4 Validation

No matter how careful the researchers are in designing the data collection instrument such as a questionnaire, there will always be a possibility ___ indeed the certainty ___ of error (Babbie, 2004). They will always make some mistake; an ambiguous question, one that the people cannot answer, or some other violation of the rules that were just discussed. The surest protection

against such errors is to pretest the questionnaire in full or in part (Babbie, 2004).

Validity is concerned with whether the findings are really about what they appear to be or not (Saunders et al 2000; Babbie 2004). Fraenkel & Wallen (2010) stated that, the content validity could be obtained from an expert judgment. Asking experts to comment on the questionnaire helped in establishing the content validity (Saunders et al. 2000).

In this study and before conducting the pilot study, the questionnaire was checked for content validity by five experts in this field and their comments on the items of the questionnaire were highly contributed to the questionnaire particularly, and to the study in general as well.

4.6.1.1.5 Pilot test

Pilot testing is intended to reveal errors in the design and improper control of extraneous or environmental conditions (Cooper & Schindler, 2006).

After preparing the questionnaire in both languages, English and Arabic, and to ensure that the questions are clearly understood, a pilot test was conducted to check the validity and reliability of the questionnaire which is used to ensure the study variables. This procedure is necessary before performing the actual data collection to ensure that the respondents understood the instructions and the questions asked. The questionnaire was distributed to at least 35 people in the Palestinian Diaspora from different countries. They were asked to complete the questionnaire and identify any ambiguous items. The purpose of this test was to refine the questionnaire, so that the respondents will have no problems in answering the questions, and also in reporting and recording the data (Saunders et al. 2000; Babbie 2004). In addition, it enables

the researcher to obtain an overall assessment to the question's validity of the data that has been collected.

The people who were involved in the pilot test were asked to continue the whole questionnaire and not just to read it, because as Babbie (2004) said that a question may seem to make sense on a first reading, but it proves to be impossible to answer.

Their comments on the items of the questionnaire were highly useful in consolidating the questionnaire. For example, during the pilot test, it was observed that the respondents disagreed about a question that was designed based on Likert scale, while after the pilot test and based on the respondents' comments on the question, it was changed to a "Yes", "No" question as question 20.

4.6.1.1.6 Reliability Test

Reliability means dependability or consistency (Neuman, 2006). It could be measured in special statistical measures as measuring *Cronbach Alpha*, which is used to calculate the internal reliability. The reliability is expressed as a coefficient between 0 and 1.00. The higher the coefficient is, the more reliable the test. The most common reliability coefficient is the Cronbach's Alpha, which estimates the internal consistency by determining how the items on a test relate to all the other items and to the total test – internal coherence of data.

Because reliability can be improved by using pilot test (Neuman, 2006), the reliability test has been done twice, the first is when the pilot study was done and the second is after the data were completely collected. Table 4.5 lists the detailed scores of Coefficient Cronbach's Alpha for the pilot test. The value

is above 0.7, so the scale can be considered to be reliable with the sample (Saunders et al. 2000).

**Table 4.5: Reliability test for the Questionnaire as measured by SPSS
(Pilot study, n=35)**

<i>Reliability Statistics</i>	
Cronbach's Alpha	N of Items
.794	95

Reliability test was carried on for the second time, after collecting the data. The results of the reliability test was as seen in table 4.6:

**Table 4.6: Reliability test for the Questionnaire
as measured by SPSS**

<i>Reliability Statistics</i>	
Cronbach's Alpha	N of Items
.907	95

4.6.1.2 SAMPLING

Non-probability Sampling, Snowball sampling

Sample was mainly depending on the Non-probability Sampling. There are many times when the probability sampling would not be appropriate even if it is possible (Babbie, 2004). Many such situations call for non-probability sampling. Probability sampling can be impossible or inappropriate in many research situations (Babbie, 2004).

Snowball sampling is one method of the non-probable sampling, which was used in the distribution of the questionnaire. Snowball sampling (also called network, chain referral, or reputational sampling) is a method for sampling (or selecting) the cases in a network (Neuman, 2006). This design has found a niche in recent years, in applications where it is difficult to identify respondents who are allocated through referral networks (Cooper & Schindler, 2006). It is based on an analogy to a snowball, which begins small but gradually becomes larger as it rolled on the wet snow and picks up additional snow (Neuman, 2006). In snowball sampling, the researcher collects data on the few members of the target population, he or she can locate, and then asks those individuals to provide the information needed to locate the other members of the population whom they happen to know. "Snowball" refers to the process of accumulation as each located subjects. Because this procedure also results in samples with questionable representativeness, it is used primarily for exploratory purposes (Babbie, 2004).

Ahmad (2007) mentioned that his student used the snowball sampling in a research which was involved in expatriates, and the final sample was heterogeneous and representative of the population of expatriates in the study area because one was giving the survey to his family, friends and so on. The crucial feature is that each person or unit, is connected with another through direct or indirect linkages (Neuman, 2006). This procedure is appropriate when the members of a special population are difficult to locate, such as homeless individuals, migrant workers, or undocumented immigrants (Babbie, 2004). The questionnaire was manually and electronically distributed among the Palestinian Diaspora. It was sent to relatives, friends, and some organizations

that have a connection with the Palestinian Diaspora. A website was created for this purpose, to make it easier in conducting with the people around the world.

4.6.1.3 Distribution

4.6.1.3.1 Manual distribution

The questionnaire was distributed manually in three main places Jordan, Malaysia, Saudie Arabia (SA) and United Arab of Emirates (UAE). Questionnaire was distributed manually in these countries since these countries host the largest number of Palestinian diaspora. At the end of 2008, the Palestinian population in Jordan was estimated to be about 3.17 millions, according to PCBS estimates (Al-Zaytouna, 2010).

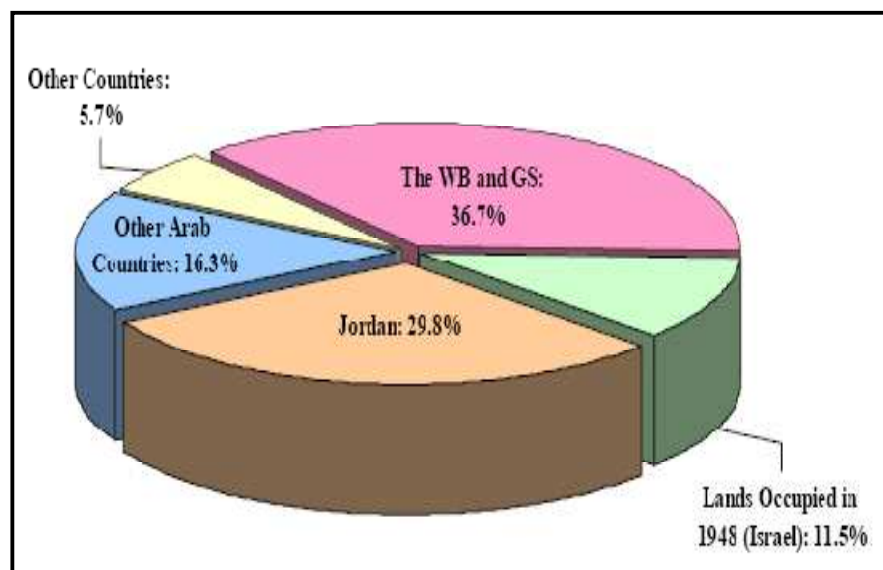


Figure (4.4): Palestinian Population Distribution in Percentages According to Their Place of Residence at the End of the Year 2009 (Al-Zaytouna, 2010).

The researcher traveled to Jordan in order to supervise the distribution of the questionnaire. The distribution took place in many different areas; in schools, universities, refugee camps and among friends and neighbours and family members.

More than 200 was collected from Jordan.

Questionnaire was distributed in Malaysia since it is the host country of the researcher.

The distribution in the other countries was carried on by the help of many friends and other people.

4.6.1.3.2 Electronic Distribution:

The questionnaire was distributed electronically as well as distributed manually. The questionnaire was also distributed through online, by using Emails, in order to contact the Palestinian people around the world. The distribution of the questionnaire depends on the snowball sampling, the researcher asked the people to forward the emails to their friends in order to contact the Palestinian Diaspora that were distributed around the world.

4.6.1.3.3 Web surveys

Information technology brings Palestinian closer together and therefore reduces the geographical distance (Schulz, 2003). Of course, it must be stressed that the access is quite limited (Schulz, 2003). Web-based surveys over the internet or by e-mail are very fast and inexpensive, and they also allow flexible design (Neuman, 2006). Such method was also provided as mentioned by Neuman (2006), a potential for overcoming international boundaries as significant barriers, also the time required for questionnaire implementation can be reduced from weeks to days or even to hours. The rapid development of surveys on the World Wide Web (WWW) are leading some to argue that Internet (and, in particular, Web) surveys will replace the traditional methods of survey data collection (Babbie, 2004).

Questionnaire was programmed⁸ and uploaded to a dedicated website (Annex 6), which was reserved by the researcher under a domain (**www.paldiaspora.net**). The link of the website was distributed through emails and online forums, and also other websites that are concerned about the Palestinian Diaspora.

Neuman (2006), argued that the web surveys have three disadvantages or even areas of concern: coverage, privacy, and design issue. The first concern for Neuman involves sampling, and unequal access, and use of the internet. This concern is one immediate objection that many social researchers make to online or web surveys, “Will the people who can be surveyed online be representative of meaningful population? (Babbie, 2004). Older, less educated, lower-income, and rural people are less likely to have online access (Neuman, 2006).

The second concern that was highlighted by Neuman (2006), involves protecting the respondent privacy, which may be addressed as technologically with secure websites and high confidentiality protection (Neuman, 2006). Because of the questionnaire that was electronically distributed among the Palestinian Diaspora. It was sent to relatives, friends, and some organizations that have connection with the Palestinian Diaspora. A website was created for this purpose, to make it easier in conducting with the people around the world. The online questionnaire ⁹was prepared in English language as well as in Arabic. Data was collected as a file that can be easily downloaded from the website of the questionnaire. The respondents who contributed to the online questionnaire were from 43 countries (Annex 6)

⁸ A copy of the website is in Annex 6.

4.6.1.4 Selection Bias

In common with sampling, bias simply means that those who are selected, are not typical or representative of the larger populations they have chosen (Babbie, 2004). It is a threat that the research participants will not form any equivalent groups (Neuman, 2006).

- The distribution of the Palestinian Diaspora worldwide was not easy, and not in all countries.
- The distribution was done manually in Jordan , UIA, SA and Malaysia.
- The use of the Internet in Syria and Lebanon is low (UNDP, 2003), which makes the contribution of the Palestinian Diaspora from these places low.
- The language of the questionnaire was in both Arabic and English language. Palestinian population in Chile are 350,000 – 500,000 (largest community outside the Arab world, See Annex 3). They may need Spanish language.

4.6.1.5 Sample Size Calculator, (Creative Research Systems, 2007)

This Sample Size Calculator is presented as a public service of the Creative Research Systems survey software. One can use it to determine how many people researcher need to interview in order to get the results that reflect the targetted population as precisely as needed. The details of the calculation are presented in Annex 7.

Sample size=1040

4.6.1.6 Response Rate

Non probability sample means a sample size that is rarely determine (Neuman, 2006). Since the distribution of the questionnaire is worldwide and

by using snowball sampling, it may be impossible to calculate the number of questionnaires that have been distributed among the population of study. Although, about 800 respondents answered to the questionnaire, it was not easy to know how many person received the questionnaire as the sample of the questionnaire was mainly dependent on the snowball sampling, but roughly the response rate was estimated by using the following formula:

$$(\text{Number of respondents} / \text{sample size}) 100\% = \text{Response Rate}$$

$$(800/1040) 100\% = \underline{\underline{76.923\%}}$$

Babbie (2004) believes that a response rate of 50 percent is adequate for analysis and reporting. A response of 60 percent is good; a response rate of 70 percent is very good (Babbie, 2004). So, the response rate for this study was very good.

4.6.2 Interviews

Qualitative methodology seems to provide measures with greater validity than survey (Babbie, 2004). Unlike a survey, qualitative interview is an interaction between an interviewer and respondent, semi-structured interviews were employed in this study to get a deeper understanding of why certain relationships exist between the dependent and independent variables, and whether the hypothesised PDEN model is acceptable by the interviewees or not.

Because qualitative methodology can produce a rich understanding of many social phenomena and wide ranging issues than can be achieved through other observational methods (Babbie, 2004), several interviews were conducted with the people who are seen as experts and/or representatives in this field. Interviews were conducted by people from the Palestinian

government, people from Palestinian Diaspora worldwide seen as success and talented people, and people from Palestine who tried to contact and work with the Palestinian Diaspora.

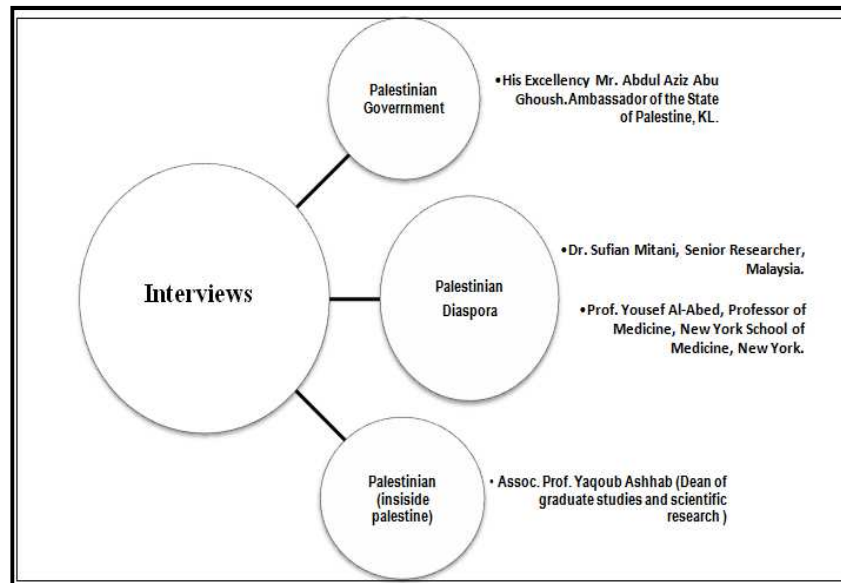


Figure 4.5: Interviews structure

The first interview was with The Ambassador of the State of Palestine to Kuala Lumpur, Malaysia, His Excellency Mr. Abdul Aziz Abu Ghoush, who represents the Palestinian government. Other interviews were conducted by sending interview questions through email to selected certain individuals among Palestinian Diaspora that are considered as talented, scientists, scholars, entrepreneurs, and highly skilled personnel among the Palestinian Diaspora. Many Palestinian Entrepreneurs among Palestinian Diaspora were contacted to for interview, but unfortunately, the researcher was not able to conduct them.

The outcomes of the conducted interviews are encouraging and strongly contributed to the main theme of research. Each of the interviewees were asked several questions that may differ from the others. The questions were designed based on their positions and experiences. Although, the interviewed key personalities hold different posts and views, there are common things

among their responses to the questions. The responses to these interviews and a brief bibliography of interviewees are included in Annex 8.

4.6.3 Secondary Data Collection Methods

Apart from the primary data collection methods, the study also made use of the secondary data sources to complement some cases on the missing data or unreported data as well as to understand a particular situation and specific information about the Palestinian Diaspora in more detail. On the internet, one can find everything from the official Palestinian National Authority (PNA) sites, through various organizations in the West Bank and Gaza and in the Diaspora, to personal home pages (Schulz, 2003). Some information was obtained from many organizations like UN's annual reports as well as from the World Bank electronic version of the annual reports and many other Palestinian's NGO's websites such as Shaml, Meftah, etc. This had provided valuable information in understanding the situation of Palestinian's Diaspora and its background.

4.7 Data Analysis

To ensure testability of the study, the systematic data analysis was stringently followed throughout the process of data analysis. The processes include translating the data to English language, coding and preparing data for analysis. The results of data collected are shown based on the following tests: reliability, validity and confirmatory factor analysis.

First of all, by using descriptive statistics, collected data were summarized, simplified, and organized. Descriptive statistics provide

background information for the sample characteristics. Background information includes the profiles of the respondents (gender, religion ...). Frequency distributions and percentages provide an overview of the collected data. These were displayed in the form of graphs and tables, which explain the results of the reliability, normality and the questionnaire validity.

Since in many cases, the variables were not normally distributed, the choice of the statistical tests used depends on non-parametric statistical test to answer the study questions.

For descriptive and inferential statistics, the Statistical Package for Social Sciences (SPSS) version 16.0 was used, while analysis of Moment Structures statistical program (AMOS) version 14.0 was used for the Confirmatory Factor Analysis.

Confirmatory Factor Analysis (CFA) seeks to determine if the number of factors and the loadings of measured (indicator) variables on them conform to what is expected. The indicator variables are selected on the basis of a strong literature review, and the factor analysis is used to see if they load as predicted on the expected number of factors. All of the data show that the CFA is more than 0.5, which means that there is an internal consistency of each construct (Saunders et al 2000).

The correlation between the component of the PDEN and the model itself, was studied in order to measure the strength between the model and the dependent variables. Also, to evaluate these component and their strength to the model.

The correlation between the model and the five independent variables were studied also, thus, we can distinguish the role of each independent variable, and see which variable correlate with entrepreneurial model more.

While the correlation between capacity and capability was not able to be measured using this systematic way, it was measured only by using Descriptive analysis.

4.8 Summary

The chapter outlined the study conceptual framework and described the study design, and the methodology for gathering data to answer the research questions. The questionnaire and its translation processes were also included. Followed by, the results of the pilot study, and its validity and reliability. Furthermore, the chapter reviewed the population and response rate, and finally, the statistical techniques that were employed. The empirical evidence and analyses of findings are discussed in the next chapter.

CHAPTER 5

RESULTS AND DISCUSSION

5.1 INTRODUCTION

The target population of this study is the Palestinian Diaspora worldwide. Many participants from different countries participated in this study with a response rate of 76.923%. This chapter begins with a descriptive information of the Capacity profiles of the respondents such as gender, age, academic specializations, monthly income. It continues with the analysis of the research questions. Results for each research question are presented through both quantitative and qualitative data. The qualitative results are introduced in boxes. The chapter follows on with a discussion for each section. It ends up with tests of reliability, normality, and questionnaire validity.

Note:



Results of Interview with: Ambassador of the State of Palestine in Malaysia,



Results of Interview with: (Respondent from inside Palestine), *Dr. Yaqoub Ashhab*,



Results of Interview with: (Palestinian Diaspora), *Dr. Sufian Mousa Ibrahim Mitani & Prof. Yousef Al- Abed*

5.2 Profile of respondents – Capacity

The population sample of this study is part of the Palestinian Diaspora distributed worldwide. There are 804 participants who responded to this study. The response rate is of 76.923%. A descriptive analysis of this is presented in the following sections.

5.2.1 Gender of Respondents

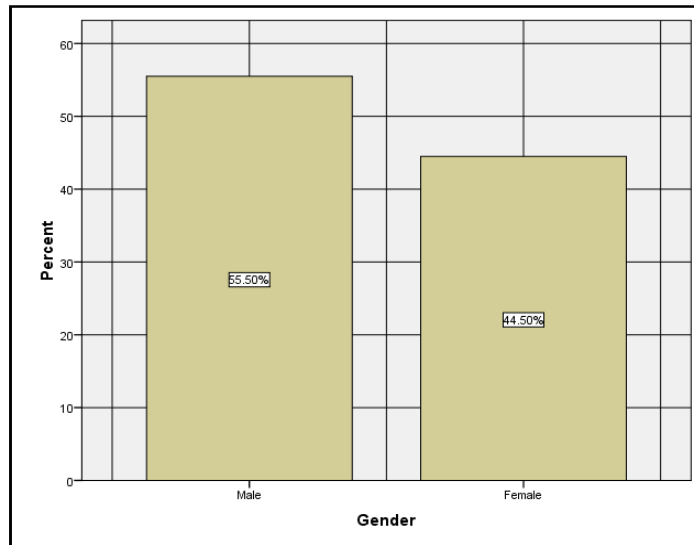


Figure 5.1: Distribution of Respondents by Gender

Figure 5.1 shows that out of 804 more than 55.50% (444) of the respondents are males while 44.50% (356) are females.

5.2.2 Age – Capacity

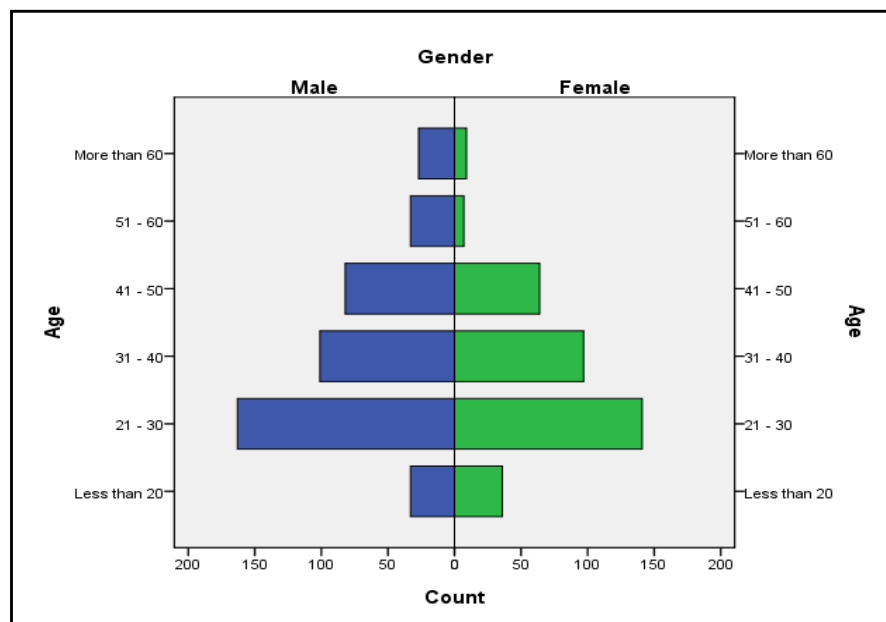


Figure 5.2: Distribution of Respondents by Age and gender

As shown in Figure 5.2, the age of 37.7% (305) of the participants is between 21–30 years old. The age of 25.0% of the respondents is 31- 40. The

third group constitutes respondents whose age are between 41-50 years old. Hence, 18.0% of the respondents are under this category. Comparing these results with its equivalent in Palestine, we find out that there is a match between the two distributions. (See Figure 3.1: Palestinian Population Pyramid, End Year 2006).

5.2.3 Academic Specialization - Capacity

The study reveals that the majority of respondents, around 23.5% (161), are from Engineers programs. Respondents from Mathematics & Computer Science specialization make up 17.1% (117) of the total number. The third category is the Commercial & Business administration, which constituted 13.4% (92) of the respondents.

Table 5.1: Distribution of Respondents by Academic Specialization

<i>Academic Specialization</i>	<i>Frequency</i>	<i>Valid Percent</i>
Teacher Training Programs	1	.1
Medical Diagnostic & Treatment	54	7.9
Trade, Craft & Industrial Programs	15	2.2
Engineering Programs	<u>161</u>	<u>23.5</u>
Agricultural, Forestry & Fishery Programs	6	.9
Service Trade Programs	3	.4
Programs in Mass Communication & Documentation	5	.7
Other programs	32	4.7
Fine & Applied Arts Programs	2	.3
Humanities Programs	88	<u>12.8</u>
Religion & Technology Programs	25	3.6
Social & Behavioural Science Programs	34	5.0
Commercial & Business administration	92	<u>13.4</u>
Law & Jurisprudence	6	.9
Natural Science	44	6.4
Mathematics & Computer science	117	<u>17.1</u>

The results show that the majority of the respondents are involved in scientific specializations. This indicates that Palestinian Diaspora involved in this study are characterized by the diversity of their Academic Specialization.

5.2.4 Monthly Income (US\$) - Capacity

Less than one quarter, that is 20.9% (169) of the respondents earn less than \$500. For some obvious reasons, this is due to the fact that the majority of the Palestinian Diaspora still live in refugee camps with bad conditions. Hence, the economic situation of the Palestinian Diaspora who left their country looking for better place to stay in, is still weak and needs a huge effort to be enhanced. Moreover, as previously mentioned in this chapter, the majority of the respondents are between 21-30 years old. Thus many of them are still students. Furthermore, the response about the income amount may most probably be unreliable as the researcher believes that many of the respondents do not want to reveal their actual income. This may be attributed to cultural influences.

Table 5.2: Distribution of Respondents by Monthly Income

<i>Monthly Income (US\$)</i>	<i>Frequency</i>	<i>Percent</i>
Less than \$500	<u>169</u>	<u>20.9%</u>
500\$ - 1000\$	130	16.1%
1001\$ - 2000\$	94	11.6%
2001\$ - 5000\$	108	13.3%
5001\$ - 10,000\$	53	6.6%
10,001\$ - 20,000\$	20	2.5%
20,001\$ - 30,000\$	8	1.0%
More than 30,000\$	16	2.0%

5.2.5 Job Status – Capacity

As shown in table 5.3, the majority of the respondents, 40.4% (327), are full-time employed whereas 19.5% (158) are students. Besides, 7.4% (60) of respondents are business owners while 13.6% (110) are unemployed.

Table 5.3: Distribution of Respondents by Job Status

<i>Job Status</i>	<i>Frequency</i>	<i>Percent</i>
Employed (Full-time)	<u>327</u>	<u>40.4%</u>
Employed (Part-time)	37	4.6%
Business Owner	60	7.4%
Professional	32	4.0%
Student	<u>158</u>	<u>19.5%</u>
Unemployed	110	13.6%
Others	23	2.8%

4.0% of the respondents consider themselves as professional. There is no doubt about the importance and impact of investment phenomenon in Palestine by business people. In fact, this sector usually depends on directforeign investment. It is undoubtedly necessary to strengthen this field among Palestinian Diaspora in order to improve the Palestinian development.

As we mentioned above, around 19.5% of the respondents are students. Indeed, studying abroad is often a first step towards immigration (Delicado, 2007). Studying abroad offers possible cultural integration and provides the educational credits (recognised abroad) that make integration less difficult (Delicado, 2007). Students studying abroad seem to shape a critical flight

phenomenon these days, with only 5.4% of Arab students who are studying abroad, returning back to their home countries. As a matter of fact, we witness strong waves of students migration to industrialized countries.

Palestinian students, seeking studies abroad to realise their first professional steps and start their future career, considerably contribute to the increasing Diaspora number. The question is: how many of those migrating are students and how many do return to Palestine after completing studies abroad?

Nevertheless, these students could contribute to their home country by increasing the number of publications. Also, with the different backgrounds of all these students, the research fields would become more diversified. Collaboration could be established through university-industry relationships. Many means could be employed to capture Diaspora involvement in the development of its origin country, without leaving the host country. Capturing Diaspora R&D involvement would also impact R&D fund acquisition through foreign sources.

5.3 Academic Qualification– Capability

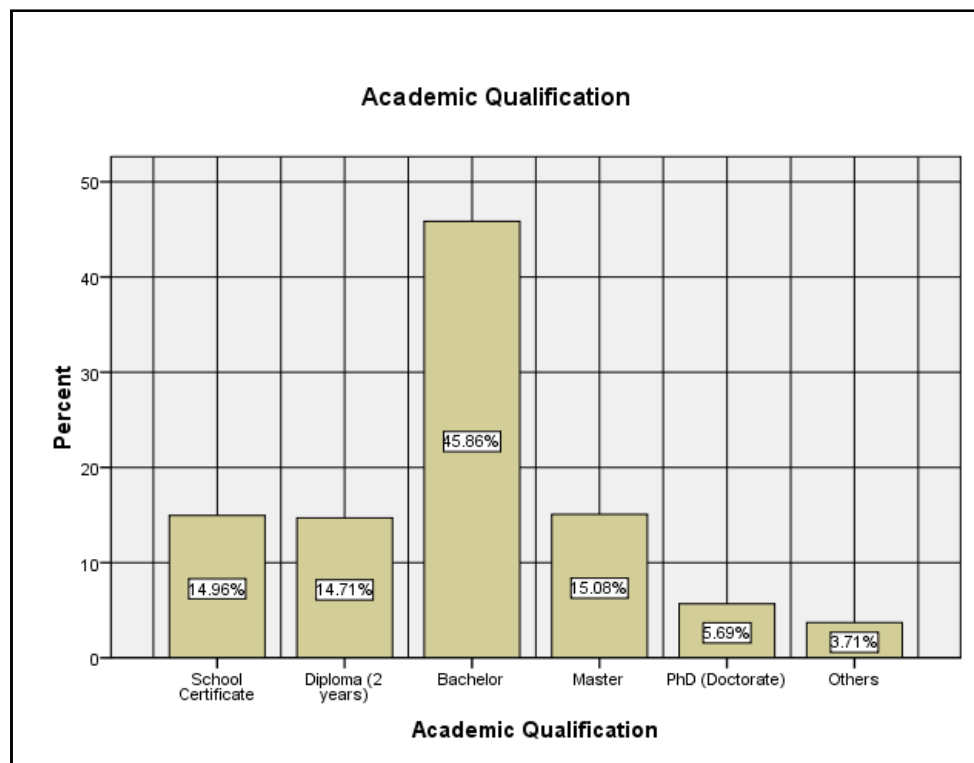


Figure 5.3: Distribution of Respondents by Academic Qualifications

Findings show in Figure 5.3 that **bachelor** holders represent the highest percentage (45.86%). They are followed by those who hold higher qualifications, namely master degrees, at 15.08%. Respondents who hold “school certificate” and “Diploma (2 years)” are very close to each other, both of them making up around 15% of the respondents. Respondents who hold “PhD (Doctorate)” constitute around 5.7% of the whole number.

OECD uses “capabilities” to refer to human capital. It includes skills created by experience and firm-level training as well as formal education (OECD, 1987; Baser & Morgan, 2008). Capabilities enable an organisation to do things and to sustain itself (Baser & Morgan, 2008). Capability refers to skills (OECD, 1987) which could be measured by rates of enrolment in secondary and tertiary education. (Fagerberg & Srholec, 2008).

Skilled emigration is defined as the emigration of people who had completed their tertiary education (Devane, 2006). Others defined it as being the migration of highly skilled workers, having completed tertiary education (Lowell, 2001).

Whether we depend on Lowell's definition or Devane's, it is clear that Palestinian Diaspora contributing to this study are skilled and even highly skilled people. Indeed, more than 67% of the respondents have bachelors degree and above.

Based on what is mentioned in the previous chapters, skilled and talented individuals usually have considerable influence at national and international levels as they are often well-connected, shape ideas, values and beliefs (Solimano, 2006). Recent economic thinking on economic development suggests that the human capital assets of a nation are one of its most important tools for growth. Indeed, the average level of human capital in a society has positive effects on productivity. **The greater a country's average level of education, the greater its economic growth** (Lee and Barro 1993; Barro and Sala-I-Martin)

Attracting talented and skilled people has assumed importance in today's increasingly knowledge-intensive economy. Without competent people, the innovation process in Palestine is severely constrained. Several countries have adopted various strategies to develop and exploit talent to advance their socio-economic goals (see OECD 2002, Kapur and McHale, 2005 and Solimano, 2008), and Palestine needs to do the same. These strategies have resulted in attracting people and leaving Palestine in a critical situation, especially with all unfavorable conditions. These conditions put Palestine in a challenge to re-attract the skilled people from Palestinian Diaspora.

Theory and research suggest that the direct impact of a brain drain, that is a sizable loss of highly educated natives abroad, represents a reduction in the accumulation of human capital or knowledge (Lowell 2001). Such losses are greater than the simple loss of investment in educating the emigrants in the first place and the immediate result is a reduction in economic growth of developing countries (Lowell, 2001). When a nation loses significant numbers of its most educated workers, it stands to lose a critical asset that can damage the earnings of its low-skilled workers, increase poverty, and widen inequality (Lowell, 2001). The challenge is how to re-attract these people to contribute and be a part of the development in the mother country Palestine.

An interview is conducted with the Ambassador of the State of Palestine. His Excellency discusses education sector in Palestine in details. His comments enrich the study with many strong points, and highlight the areas that need a serious help from Palestinian Diaspora. His comments are as follow:

Ambassador of the State of Palestine in Malaysia

H.E. asserted that **education** is a very sensitive and important sector to any country, and especially to Palestine. The sector was and is under constant attack and is subject to various direct and indirect efforts to weaken it. The sector is very important and vital for Palestinians, as Palestine is somehow short of natural resources and depends heavily on its educated work force. Moreover, Palestinians are considered as one of the most educated nations in the region and are comparable to other developed nations in terms of literacy and enrolment rates. However, despite all efforts, whether positive or negative, the education sector still suffers from some problems, such as:

- Economical problems: many students have left their studies and joined work force before finishing their, and teachers were and are forced to search for some kind of extra work, not related to education, in order to secure basic needs for their families. All these are due to the Israeli occupation, incursion, and sanctions imposed on the nation as well as on the government
- Brain migration (educated individuals migrating to other countries)
- Migration of the Palestinian capital (businessmen leaving or not investing in Palestine and migrating their money to other more relaxed environments).

In the past, mainly prior to the second Intifada, youth and others were working as cheap labor in Israel, for job opportunities in West Bank and Gaza were almost close to zero. More available job opportunities in Israel provide Palestinian labor with much higher income than that provided by any type of job within their areas especially that associated with education. Consequently Palestinian economy became almost fully dependent on that of Israel.

5.4 Entrepreneurial Characteristics

“How do you describe yourself?”

Table 5.4 : Entrepreneurial characteristics among Palestinian Diaspora

Reasons	Decart Scale		Strongly/Disagree		Neutral		Strongly/Agree	
	Freq	Perc	Freq	Perc	Freq	Perc	Freq	Perc
If I fail, I will try again	12	2%	44	7.3%	548	90.7		
I am able to find solutions to challenges and problems	15	2.5%	76	12.8%	504	84.7%		
I am a hard working person	13	2.1%	89	14.5%	512	83.4%		
I am a resourceful person	13	2.1%	90	14.7%	508	83.1%		
I take calculated risk for new ideas	35	6%	136	23.3%	413	70.7%		
I am a creative person	27	4.7%	153	26.6%	395	68.7%		
I am an innovative person	25	4.5%	183	33%	347	62.5%		

The results show that Palestinian Diaspora has strong entrepreneurial characteristics. These characteristics vary from 91% to 62%. The highest percentage (90.7%) goes to “*If I fail, I will try again*”. The second, third and fourth highest percentage range from (84.7%) – (83.4%) go to “*I am able to find solutions to challenges and problems*”, “*I am a hard working person*” and “*I am a resourceful person*”. The lowest percentage go to *creativity* and *innovative* characteristics.

The Palestinian Diaspora, distributed around the world, face many challenges in their lives. The hard conditions create a feeling of perseverance and persistence toward challenges they confront in their lives. Palestinian Diaspora has no choice except to keep up in their lives, and if they fail they will try again. These characteristics of entrepreneurship increase their percentage of success.

Palestinian Diaspora has the highest levels of education in the Arab world, of young population, of high ICT penetration rates. Consequently, Palestinian Diaspora worldwide “will have major impact on knowledge and Technology flows coming into Palestine” (Islaih, 2007). These spirit of the palestinian with entrepreneurial characteristics may make Palestinian Diaspora very unique. Indeed, well educated emigrants may be more likely to capitalize on their skills to pursue upward mobility in well-paying jobs in the receiving country. In turn, educated diaspora may be more likely to make philanthropic contributions to their hometown (Lowell & Gerova, 2004).

On one hand, migrants are in a good position to invest in their homeland because they have specialized knowledge and they may have savings from their generally higher earnings in an industrial economy (Lowell & Gerova, 2004). On the other hand, a lack of capital and managerial expertise in the home country, limit the effectiveness of investments in business creation and can undermine government programs intended to stimulate diaspora investment (Lowell & Gerova, 2004). Diaspora investors can attract other investors by taking a leadership role when others are reluctant to invest. This is the role of the “first movers” who succeed and create a climate of confidence that invites others to invest (Lowell & Gerova, 2004).

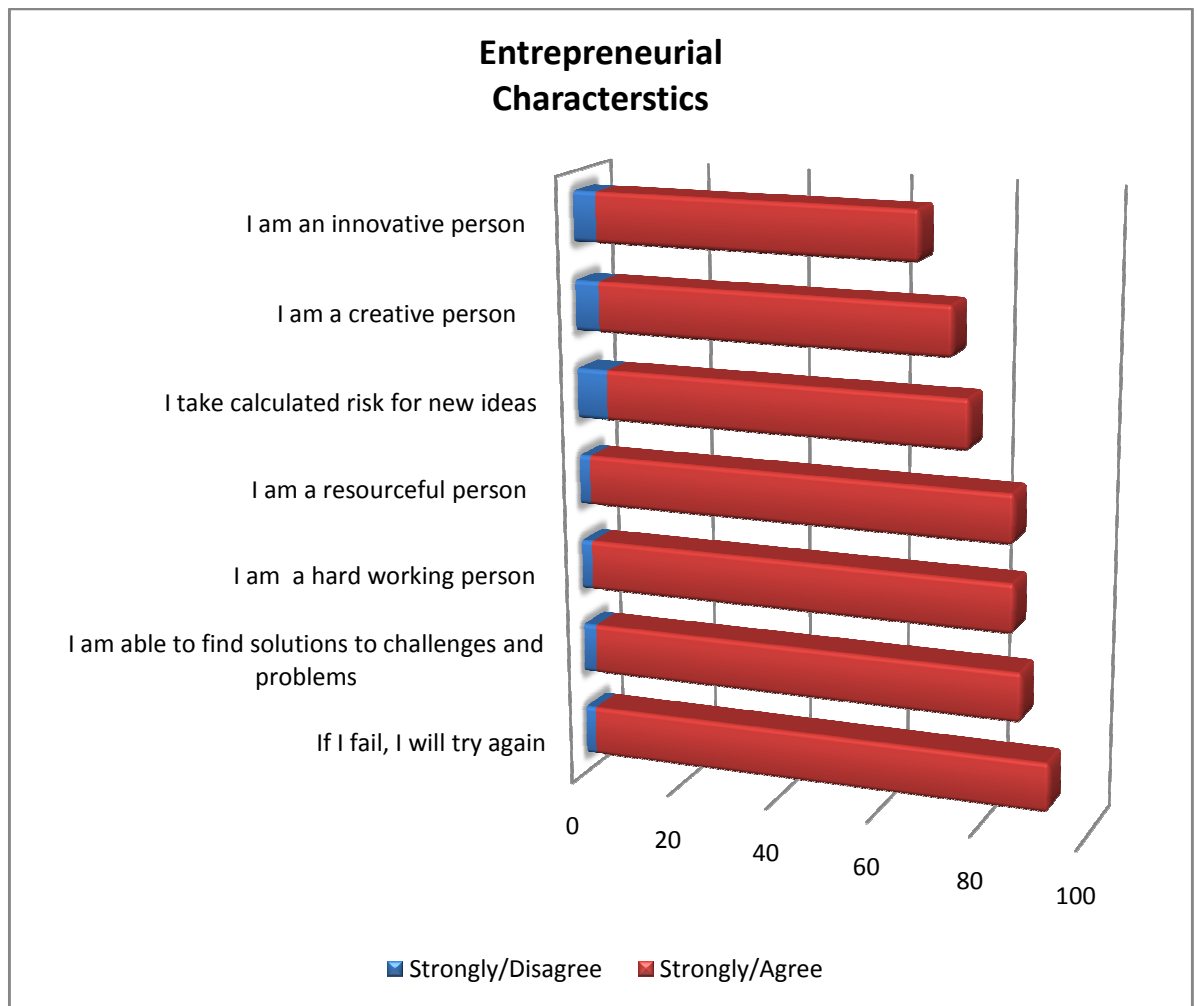


Figure 5.4: Entrepreneurial characteristics among Palestinian Diaspora

Palestinian Diaspora Entrepreneurs with their strong capacity and capability (as shown in previous sections in this chapter) could be **“bridge people”**. These **“bridge people”** can help to build Entrepreneurship between diaspora and development in Palestine, the mother country. A bridge entrepreneur may be someone who has worked in many different international organizations in the past, but is currently working in a government department – someone who understands a particular international community’s experience and has knowledge of the entrepreneurship. Bridge Entrepreneur understands

the needs and realities of different sectors, and has the skills to build relationships and processes across sectors.

This study aims at building a framework for stronger relationships between Palestinian diaspora entrepreneurs and development in Palestine, based on a strong supporting platform of Science, Engineering, Technology & Innovation (SET&I). Within this context, Science and Technology are perceived as an enabling platform. However, before being so, this platform must be enabled. A theoretical model is proposed in order to enable the Palestinian Diaspora to contribute to the development in Palestine, especially through the advancement of Science and Technology, based on entrepreneurship in the era of knowledge based economy. Results of this study present Palestinian Diaspora as skilled people with high percentage of Entrepreneurial characteristics. This will rise the success possibility for the proposed model.

Thus, the results of this section answer the first research question of this study:

Research issue 1:

How much Entrepreneurial characteristics do Palestinian Diaspora exhibit?

5.5 Push Factors in Palestine (Mother Country or Country of Origin)

“ Why did you leave Palestine (you or your family)? You may tick more than one”

Table 5.5: Push factors (in Palestine)

<i>Reasons</i>	<i>Frequencies</i>	<i>Percentage</i>
Forced by Israeli forces to leave	326	67.6%
I was overseas when the war started (1948 / 1967)	186	51.4%
Education / study	178	56.2%
Better employment opportunities	171	52%
Higher income	140	48.8%
Professional development	138	49.6%
Overseas job transfer / exchange	135	44%
Lifestyle	127	44.3%
Adequate domain for my professional / academic specialization is not available	90	33.7%
To be close to family / friends	82	31.7%
Partner's employment	71	26.1%
Requirements to conduct my research are not available	60	24.6%
Political reasons	57	20%
Marriage	56	21.5%
To establish, relocate or expand a business	40	15.9%
I invested many times in Palestine and I failed	34	13.2%
I was promoted	33	13.5%
Having health problems	26	9.8%
For Patent registration	11	4.5%

Push factors are the conditions in the home country that push the person to leave his or her mother country (Delicado, 2007). One of the objectives of this study is to identify push and pull factors that force Palestinian people to emigrate to outside Palestine. The respondents are asked to identify the push factors by answering the following question: “*Why did you leave Palestine (you or your family)? You may tick more than one*”.

Based on the results of the questionnaire, and as explained in Table 5.4, the main reason behind the migration of the Palestinian diaspora is political,

stemming from the occupation by the Israeli forces. 67.6% of the respondents attributed this factor as their reason to leave Palestine. Another factor that is chosen by the respondents as a push factor is “Professional development” (49.6%). That means that those people are looking to enhance their skills and seeking more development in their fields. Other important push factors include education/study (51%) and higher income (48.8%).

Political reasons are not the only reason behind the migration, although it remains the core reason. Meanwhile, migration from Palestine has not stopped. People until now are still looking for opportunities to enhance their lifestyle situations or seeking a place to incubate their skills and their academic future. The Israeli occupation is definitely the cause of the retrogressive development in Palestine, but Palestinian people can still produce more efforts and skills by bridging themselves with the rest of the world with the help of Palestinian Diaspora.

The international mobility of highly skilled workers presents developing countries with a serious challenge. Palestine has no choice; a concentrated effort is needed from policy makers to start reducing or even to try to stop these push factors as much as they can. Theory and research suggest that the direct impact of migration (brain drain), that is a sizable loss of highly educated natives abroad, represents a reduction in the accumulation of human capital or knowledge (Lowell, 2001). Such losses are greater than the simple loss of investment in educating the emigrants in the first place and the immediate result is a reduction in economic growth of developing countries (Lowell, 2001).

What is (are) the main reason(s) that made you leave Palestine?
<i>Dr. Sufian Mousa Ibrahim Mitani:</i> Like many other Palestinians, the main reason is purely searching for a better secured life as well as seeking out new opportunities which are not available in Palestine due to the occupation.
<i>Prof. Yousef Al-Abed:</i> Education

Education, secured and better life, and new opportunities are the main push factors for our interviewees. Push factors will vary among people, and that maybe due to their level of education, their specialization and so forth. Students from developing countries, as far as pull factors are concerned, are attracted to higher education in developed countries due to several factors: quality of life in these countries, quality of education and social and cultural factors (family ties, social networks) (Delicado, 2007).

It is strongly believed that identifying the push factors, and working in order to stop them, would improve the overall living situation among Palestinian people in and out of Palestine. Identifying the main causes of migration in Palestine may help fashioning the solution for the problem. Push factors which are the reason behind the migration in Palestine are (as identified by the questionnaire) attributed to the Israeli occupation of Palestine and its consequences on the economy. As Lowell (2001) pointed out, policies that stimulate migrants to return, may have the greatest immediate impact on setting off the brain drain.

5.6 Pull Factors

Pull factors are the conditions in the host countries that attract migrants to them (Delicado, 2007). The questionnaire introduces this question:” If you are free to go back to Palestine, what are the reasons that **discourage** you to do so? “.

As it is shown in Table 5.5, the political stability is the prominent reason for migration. Indeed, 69.8% opt for the political situation and the security issues as being the main factors. The other factors are related to good employment and economic reasons that encourage the diaspora to stay in the countries they are living in. Another reason that attracts the migrants is education, since 50.9% of the respondents choose this issue as “strongly agree”. Based on the above results concerning the push and pull factors for the Palestinian Diaspora, it is obvious that there is a strong relationship between the factors that push the people to leave their country and those that pull them and encourage them to stay in the host country.

“If you are free to go back to Palestine, what are the reasons that **discourage** you to do so?”

Table 5.6: Pull Factors(Host or recieve country)

Reasons	Decart Scale	<i>Strongly/Disagree</i>		<i>Neutral</i>		<i>Strongly/Agree</i>	
		<i>Freq</i>	<i>Perc</i>	<i>Freq</i>	<i>Perc</i>	<i>Freq</i>	<i>Perc</i>
Current political or security situation in Palestine		120	19.4%	67	10.8 %	432	69.8%
Employment opportunities are better here		121	20.4%	91	15.3 %	382	64.3%
I want to live in a peaceful place		134	23.3%	88	15.3 %	355	61.5%
Business opportunities are better here		130	22.6%	115	20%	331	57.5%
Better health institutions and treatment		126	22.9%	120	21.8 %	304	55.3%
Career development and promotion		133	23.1%	126	21.9 %	316	54.9%
Established in current location		154	26.5%	120	20.7 %	306	52.8%
Better education institutions for skill training		126	23%	143	26.1 %	279	50.9%
Higher income		154	28%	140	25.5 %	256	46.5%
Cost of re-location back to Palestine		191	33.9%	128	22.7 %	244	43.4%
Partner’s employment is located here		144	26.1%	191	34.5 %	218	39.4%
Marriage partner keeps me here		188	34%	172	31.1 %	193	34.9%
Family/friends are here		248	44.1%	129	22.9 %	186	33%
No equivalent job in Palestine		193	34.7%	182	32.7 %	182	32.7%
Lifestyle more attractive here		246	43.9%	135	24.1 %	179	32%
Children grew up here		237	42.5%	155	27.8 %	165	29.6%

The magnitude of the migration of scientists and, more widely professionals, has been increasing on a global level in the last three decades (Meyer & Brown, 1999). It became a challenge for the developing countries to face.

What is (are) the main reason(s) that encourages you to live in the host country?

Dr. Sufian Mousa Ibrahim Mitani:

The main reasons that encourage me to live here

1. Leading a very peaceful life along with my family
2. Very friendly and enduring people in general and colleagues in particular
3. I found the style of life at this country close to mine (kind of a Muslim man living in a Muslim country, No problem of finding halal food, celebrating Muslim festivals such as Eid, putting on veil is a common practice for women.....etc.)

The quite highly educated Arab community lives in this country makes social life much easier and making friends always accessible

Prof. Yousef Al-Abed:

The advancement of the country as well as the opportunity to be in the right place to use and advance my knowledge.

Away from political problems and focussing on skilled people (who make up the majority of respondents in this study), lifestyle is highlighted as an important factor for these people. Peaceful and development places, are things that encourage them to stay in the host country.

To go further, there are many factors that Palestinian government cannot solve by itself, such as political problems. Palestinian political problems need an international effort to come to a solution. But, Palestinians can concentrate on the pull factors that are introduced from the host countries, and try to introduce the same in Palestine. Palestinian may work on converting the pull factors (from the host country), into pull factors in Palestine.

Creating and implementing policies in this direction, may change something in the Palestinian development. As mentioned by SHYF (2011) economical development is not a thing to be measured directly. But stopping the migration, by stopping the pushfactors, may be half way to a solution.

Policies of the Host Country:

What does the host country offer you to live and stay in?
<p><i>Dr. Sufian Mousa Ibrahim Mitani:</i></p> <p><u>This country has offered me unlimited breaks throughout my life such as</u></p> <ol style="list-style-type: none"> 1. Scholarship to go on with my Ph.D. course 2. Job in Research & Development at one of the most prestigious companies (TM) 3. Unlimited opportunities to promote myself as well as my company such as, generous funds for research, publications around the globe, lab and industrial attachments at the finest laboratories and companies in the world....etc. 4. A relatively reasonable income which is sufficient enough for me to live along with my little family a respectable life
<p><i>Prof. Yousef Al-Abed:</i></p> <p>The well established institutions (science, technology, and immigration laws)</p>

Scientists need as suitable place to carry out their research. This is exactly what Palestine lacks. Consequently a critical condition is engendered in Palestine. It is presumably known that Palestinian people are the most educated people in the Arab world. Education sector, especially in science and technology, needs to be more enhanced.

Studying abroad in many countries is the first step for migration (ILO, 2005). For developed countries, hosting foreign students was first seen as a contribution to the development of the Third World countries, but in later years

has become a business venture and a source of income for universities (Delicado, 2007). In some cases, due to the lack of skilled workers, foreign students are encouraged to stay in the host country after their studies (Delicado, 2007).

5.7 Re-Pull Factors - (to Palestine)

Return migration is a multifaceted and heterogeneous phenomenon (Thorn & Holm-Nielsen, 2006). Despite a very large literature on brain drain and migration, surprisingly few facts have been established about the pull and push factors guiding the decisions of individuals going abroad or returning home (Thorn & Holm-Nielsen, 2006). Based on the results of this study, there are many correlations among push-pull and re-pull factors.

“Why do you think you should live (stay) in Palestine?”

Re-Pulling Factors in Palestine (Brain Gain)

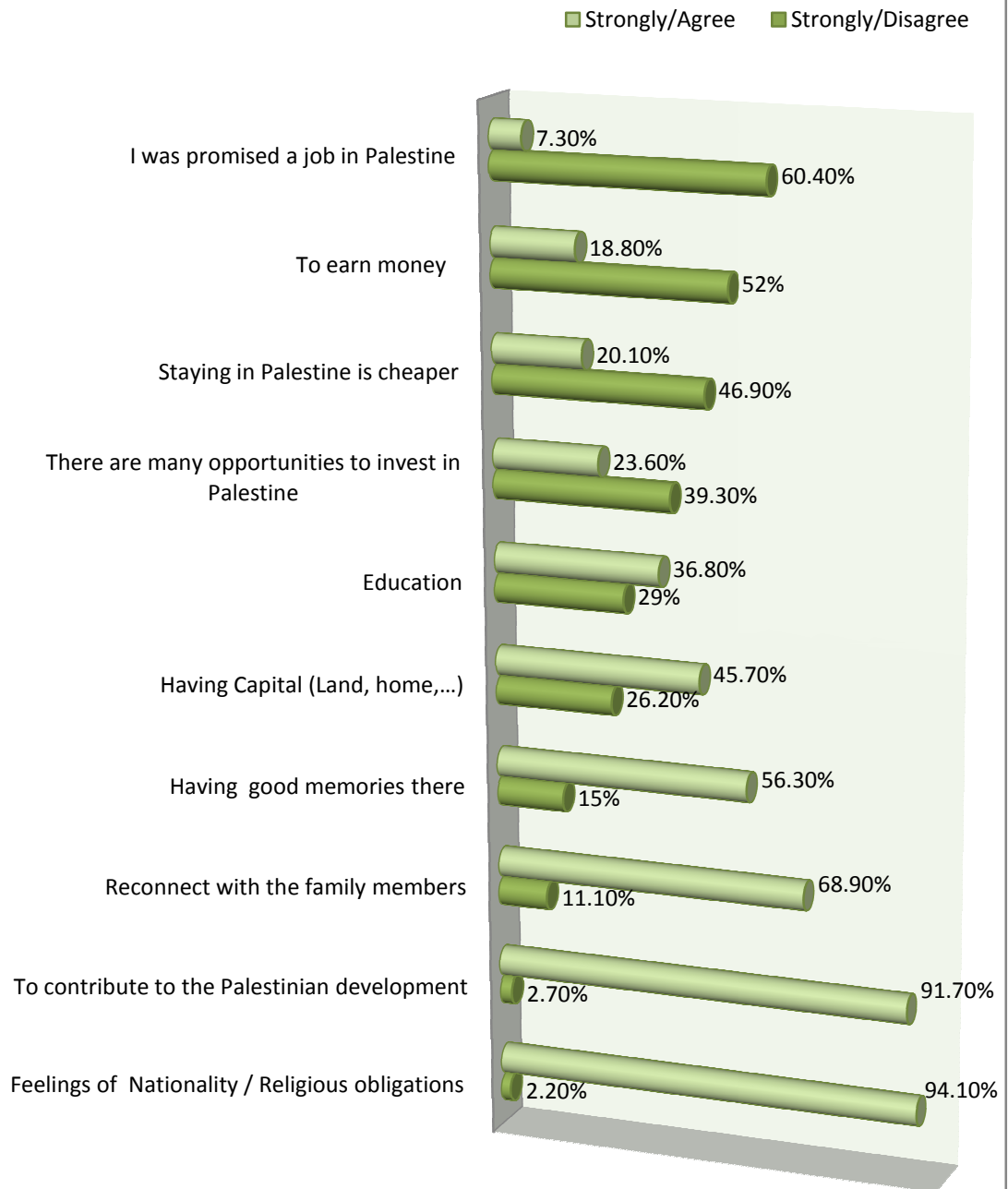


Figure 5.5: Re-Pull Factors in Palestine

Many psychological issues also are involved. ‘Feeling of nationality’ is chosen by 94% of the respondents. So is the ‘sense of responsibility about the

contribution with the development' chosen by 91.7%. All these issues are complicating the construction of a strong strategy to re-attract the Palestinian Diaspora, with its unique situation and conditions.

As a scientist (Academic) in Palestine, Do you believe that Palestine needs to be connected with its Diaspora? Why?

Yes. There are several good reasons to believe that such connection is essential;

No development can be done while maintaining yourself in a closed system. Look at successful models, such as China, India, and Brazil. To build their capacities, they have invested in a model that links between indigenous resources and their scientists working in U.S, EC, and Japan...etc. Such a model would be more vital and more effective when the case is about a very small country, with limited resources, such as Palestine. It is embarrassing to see how a small "country!" like Israel has been able to use the Jews of the so called Diaspora to build a very strong network with eminent scientists, hi-tech industries, international funding agencies, as well as editorial boards of the top peer-reviewed journals.

Dr.Yaqoub Ashhab
(Respondents from inside Palestine)

Based on our results, the sense of the Palestinian Diaspora to return, is very high. Many obstacles prevent them from a permanent return. As mentioned earlier in chapter 2, contribution could be either through the return of the expatriates to the country of origin (return option) or through their remote mobilization and association to

its development (Diaspora option) (Meyer & Brown, 1999). Those who are prevented or not allowed to enter Palestine may use the Diaspora option. Thus, contribution with Palestine is not depending on return option only.

Re-Pull (Mother Country): Policies of Mother Country

Do you plan to return back to Palestine? Why?
<p><i>Dr. Sufian Mousa Ibrahim Mitani:</i></p> <p>It has always been my dream. However, in the current political situation, it is almost impossible due to the fact that my wife has been prevented by the occupation forces to enter Palestine, being considered a Palestinian refugee. She was born in UAE and raised up in Jordan. She doesn't have a Palestinian national number.</p> <p><i>Prof. Yousef Al-Abed:</i></p> <p>Yes, if I find an opportunity where I can exploit my knowledge or skills.</p>

Kuznetsov (2006) mentioned that Diaspora can play a direct role to the mother country by implementing projects there, or an indirect role by serving as bridges and antennae for the development of projects in the mother country. Therefore, it is evident that Kuznetsov (2006) classified the contribution to the mother country by direct and indirect aspects. The direct contribution is the engagement of Diaspora members in well-defined roles such as investors, consultant, lawyers, philanthropists, or business angels. Meanwhile, Kuznetsov added, the indirect contribution is the search role of the Diaspora where its function as bridge, translator, and midwife, is important.

Again, the majority of the respondents (80.6%) are willing to return back to Palestine in order to be part of the development in Palestine, but it is not feasible for them to do so because of the occupation. Brain circulation

which actually does not automatically demand the physical transfer of migrants back to their home countries may be a good solution within the current situation. Palestine has been occupied for more than 60 years and the Palestinian Diaspora are not able to return. Brain circulation, which actually perceives migration of the highly skilled not as an end in itself but as the start of a circular process in which everyone might be better off, may provide alternate avenues whereby such skills can be accessed to steer Palestine's development.

Unstable conditions in the political situation in Palestine may make it impossible for Palestinian Diaspora to return home. Their unfulfilled needs could be translated into mechanisms that allow them to contribute to their country from their host country. This could include contributing to increase research impact and variety in scientific research particularly in addressing problems faced by specific sectors in Palestine. Policy makers in Palestine can institute a number of mechanisms and support measures to tap the expertise of the Palestinian Diaspora who have overwhelmingly expressed desire to contribute to the motherland. Given commitment and imagination, a number of measures can be introduced to effect productive collaborations with the Palestinian Diaspora to overcome the harsh political conditions in Palestine. The Diaspora cannot be suppressed and, if properly mobilized, may prove to be a valuable resource in steering the development agenda of Palestine.

How can you evaluate the willingness of the Palestinian Diaspora to contribute to the development in Palestine?

Usually they show eagerness when they are coming to visit Palestine during summer, but their enthusiasm cool down when they are back to their works abroad. Unless we have a national program with clear goals, a framework of implementation and a good budget, there will be few individual-based success stories.

Dr.Yaqoub Ashhab
(Respondents from inside Palestine)

According to the qualitative and quantitative results, it is obvious that people inside Palestine are looking to collaborate with the Palestinian Diaspora. The Palestinian Diaspora also have a high willingness and readiness to connect with Palestine. Palestinians (Diaspora or local), mentioned the lack of effort from the part of Palestinian government or the mandate authority which is responsible about Palestinian Diaspora. As Lowell pointed out (2001), policies that stimulate migrants to return, may have the greatest immediate impact on offsetting brain drain. While, as mentioned by Dr.Yaqoub, “unless we have a national program with clear goals, a framework of implementation and a good budget, there will be few individual-based success stories”.

By closing this section, the second research question is answered with its five branches.

2.2 What are the pushfactors that are influencing Palestinian Diaspora's network?

2.3 What are the pull factors that are influencing Palestinian Diaspora's network?

2.4 What are the re-pull factors that are influencing palestinian Diaspora network?

2.5 What are the capacity factors that are influencing Palestinian Diaspora's network?

2.6 What are the capability factors that are influencing Palestinian Diaspora's network?

The next section will focuss on The Creation of the Palestinian Diaspora Entrprenurial Network (PDEN).

5.8 The Model

Did you ever try to work with people from Palestinian Diaspora? If yes: How? Why?

I have been trying this since I came back to Palestine in 2006.

How:

Most of my connections were through friends who are doing their postgraduate studies or postdoc. They use to feed us with some information about well-known Palestinian scientists working in their research institutions. Sometimes, I have such connections through international conferences and meetings. Unfortunately, there is no official body at PA that takes care of knowing anything about these people.

Why:

I am very interested in building a network with Palestinian scientists in the field of biotechnology so as to:

- a. Human capacity building through offering scholarships to some Ph.D. students.
- b. Possible joint research projects.
- c. Facilitating connections with international scientific community.
- d. Short scientific visits to their homeland Palestine so as to take part in the human capacity building.

How can you evaluate the results of that experience?

Honestly speaking, not very fruitful! Actually to have a productive communication you should have willingness and responsibility of both communicated sides. At one end, neither the PA nor the Palestinian academic institutions have a clear goal or strategic objectives to define why, how, when and where we can benefit from and network with the Palestinian Diaspora. On the other hand, the Palestinian Diaspora themselves are usually overwhelmed with their own stuff and it seems that all their time is dedicated to prove their competencies to their foreign institutions.

Dr.Yaqoub Ashhab.
(Respondent from inside Palestine)

5.7.1 Location (Options of contribution)

“Within your current situations, do you personally believe that you can contribute to the development in Palestine ...?”

Table 5.6 Location

Location	Decart Scale		Neutral		Strongly/Agree	
	<i>Freq</i>	<i>Perc</i>	<i>Freq</i>	<i>Perc</i>	<i>Freq</i>	<i>Perc</i>
When returning back to Palestine	36	5.5%	91	14%	525	80.6%
While overseas with Palestinian Networks	63	10.4%	142	23.4%	401	66.2%
Being in Palestine with Overseas Networks	60	10.4%	160	27.6%	360	62%
While staying overseas	140	22.2%	112	17.7%	379	60.1%
Through short time return for specific activities	125	21.8%	179	31.3%	268	46.8%
I do not believe that I can help	459	79.6%	60	10.4%	57	9.9%

Recent investigations of brain drain suggest that, a first step would be to evaluate the potential and the quality of the “brain drain” population of a developing country (Borta, 2007). Studying Palestinian Diaspora’s potential, we notice that they have a strong potential to contribute to the development in Palestine, even though they may choose many ways for doing that. Indeed, 79.6% (459 respondents), chose “*strongly disagree*” for “*I do not believe that I can help*”. It is evident to conclude that Palestinian Diaspora have a strong potential for the contribution to the development in Palestine.

Two ways are to be implemented to re-attract the skilled Diaspora (brain gain): either through the return of the expatriates to the country of origin (return option) or through their remote mobilization and association to its development (Diaspora option) (Meyer & Brown, 1999).

According to Uwe Hunger (2002), the “brain gain” hypothesis is supported on two basic hypotheses. Firstly, skilled workers from developing countries that migrated to developed nations can play an important role in the development course of their origin country through return migration and/or transnational networks (remigration). Secondly, it is possible to give the emigrated skilled workers of developing countries adequate motivations to return even if they have already been living abroad for a long time and have not yet built up any productive contacts to their country of origin. Policy makers can build on the positive development impulse of remigration as mentioned in the first hypothesis.

As far as Palestinian Diaspora contributing in the current study is concerned, 80.6% (525) indicate “Strongly agree” for the *return option*, (“*When returning back to Palestine*”). While, for the “diaspora option”, 66.2% (401) strongly agree for this mode of contribution (“*While overseas with Palestinian Networks*”), 62% (360) strongly agree for “Being in Palestine with Overseas Networks”. Whereas 60.1% (379), strongly agree for “*While staying overseas*”, as indicated in Table.5.6

5.7.2 Incentives

Since the aim of the study is to propose a framework that enables the Palestinian Diaspora to be connected with the development in Palestine, brain gain strategy is taken into account and the researcher is looking for the incentives or the most desirable factors that may help to reach the best way to enable the Palestinian Diaspora to contribute to their home country development despite all obstacles that they may face.

“ What are the incentives that encourage you to return to Palestine (especially from the government)?”

Table 5.7 : Incentives

Decart Scale Reasons	<i>Strongly/Disagree</i>		<i>Neutral</i>		<i>Strongly/Agree</i>	
	<i>Freq</i>	<i>Perc</i>	<i>Freq</i>	<i>Perc</i>	<i>Freq</i>	<i>Perc</i>
No need incentives to return	102	15%	60	8.9%	515	76.1%
Assurance of stability (security) in Palestine	93	15.7%	56	9.5%	442	74.8%
Educational facilities for children	79	14.2%	101	18.2%	374	67.5%
Housing facilities	92	16.4%	110	19.6%	359	64%
Good job	93	16.5%	122	21.6%	350	62%
Giving my marriage partner permanent residency	84	14.7%	146	25.6%	340	59.7%
Facilities to establish myself	100	18.1%	123	22.4%	327	59.4%
Tax Reduction	119	22%	162	29.9%	260	48%

Out of the involved Palestinian Diaspora, 76% (515) indicate “Strongly agree” for the *No need for incentives to return* while 75% prefer “strongly agree” for “Assurance of stability (security) in Palestine”. On the other hand, 67.5% of the respondents mention “*Educational facilities for children*”. “Housing facilities” and “good jobs” are also chosen at a closer percentage (64% - 62% respectively) as “strongly agree”. However, “Tax reduction” is the lower marked percentage (48%).

Examining the incentives chosen by this Palestinian Diaspora sample, we find out that the majority do not need any incentives to return back to their home country. They want to contribute and to be connected with Palestine. It is somehow accepted as a ‘feeling of nationality’ (patriotism); especially given the fact that the majority of these people are not allowed to return back to

Palestine. Some of them are even born outside Palestine and had never been there.

Political problems in Palestine keep on being on the front burner of any discussion. People who are used to live in a peaceful place will have fear of living in the Palestinian unstable conditions, especially for those who have families along.

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When asked about the incentives that the government provide in order to gain the Diaspora, H.E. explained that there is no exact and clear policy being implemented. However, the government tries always to attract the Diaspora in various ways, through several initiatives, within the given circumstances.

In general, the incentives that Palestinian Diaspora is looking for are somehow humble ones, like education and housing facilities. “Giving my marriage partner permanent residency” is among the many reasons because many of Palestinian Diaspora got married to non-Palestinians, or even with Palestinians who were outside Palestine when the 1948 Palestinian war broke out.

Taking the matter further, the interviewees described the incentives they want as follows:

What are the incentives that you expect from the Palestinian government which encourage you to return back to Palestine?

Dr. Sufian Mousa Ibrahim Mitani:

The Incentives –as I believe- must be the following:-

1. The Palestinian Authority must create research centres to promote the Palestinian researchers and to keep them in touch with the latest technical development at various fields.
2. The Palestinian Authority must supply funds for the various national universities in Palestine to support any research activities for various scholars
3. The Palestinian Authority must give a relatively good salaries, allowances and medical coverage for the Palestinian scientists and scholars in order to live a respectful easy life
4. The Palestinian Authority must guarantee the freedom of speech as a basic right for all the Palestinians
5. The Palestinian Authority must find a link between academician and industrials for the mutual benefits

Prof. Yousef Al-Abed:

To be responsible and democratic government. Hire the right people to help PA building a survival state. Once done, this will encourage many skilled people to return and participate in building their country.

Palestinian Diaspora account for a disproportionate share of Palestinian human capital accumulated in the last six decades (MOP, 2007). They therefore represent an important source of skilled labour for the Palestinian economy (MOP, 2007). Additionally, Palestinians in the Diaspora have accumulated substantial wealth over the period (MOP, 2007). However, there is a limit to the PNA's ability to attract investors, as granting residency permits remains the exclusive competence of the Israeli authorities (Hanafi, 2005).

At the same time, it is a challenge for the Palestinian government to introduce the best incentives for the Palestinian Diaspora that would encourage them to take a stride toward Palestinian development.

5.7.3 Responsibility

“Connecting Palestinian Diaspora with Palestine is the responsibility of the?”

Table 5.8 : Responsibility

<i>Decart Scale</i> <i>Reasons</i>	<i>Strongly/Disagree</i>		<i>Neutral</i>		<i>Strongly/Agree</i>	
	<i>Freq</i>	<i>Perc</i>	<i>Freq</i>	<i>Perc</i>	<i>Freq</i>	<i>Perc</i>
Palestinian People	35	5.4%	59	9.1%	552	85.4%
PLO, Palestinian Authority and official entities	91	13.9%	42	6.4%	522	79.7%
Organization of Islamic Conference (OIC)	87	15.2%	102	17.8%	384	67%
Arab League	109	18.9%	86	14.9%	381	66.2%
Non Governmental Organizations (NGOs)	111	19.8%	96	17.1%	355	63.2%
United Nation (UN)	173	30.3%	112	19.6%	286	50%

As shown in Table 5.8, it is obvious that 85.4% of the participants indicate “Strongly agree” with ‘Palestinian people as a responsible union about the connection among Palestinian Diaspora and Palestine’. Around 80% of the respondents chose PLO as a responsible party for the Diaspora contribution. Respondents see OIC, Arab League and NGO’s as well as responsible parties, since around 67% opted for them. Unexpectedly, half of the participants consider UN as a responsible organization for the connection between Palestinian Diaspora and Palestine. Moreover, 50% choose “strongly agree” for UN as a responsible authority for Palestinian Diaspora.

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...he further explained that the main entity/body that is responsible for Palestinian Diaspora is the Department of Refugee Affairs, PLO. However, other units are also involved in this responsibility, each within its own scope.

The fact that strong individualism fosters creativity and innovation in its first stage and that start-ups very often consist of smart individuals who have an idea 'to create value', might lead to the idea that sharing and teaming up with another person with complementary skills is the surest path to success (Sharif & Chan, 2004). The respondents of this study, they balloted Palestinian people as a responsible power for connecting Palestinian Diaspora with Palestine. The Palestinian Diaspora believes in themselves and in their strength. Maybe this is due to the high percentage of the entrepreneurial characteristics that they have. Maybe they donot believe in all the organizations that were not able to change things since more than 60 years.

As a Diaspora, did you have any contact with Palestinian Embassy / representative / office in the host country regarding initiatives for development efforts in Palestine? (Whether you initiated it or the Embassy did). If yes, what was the outcome of such contact?

Dr. Sufian Mousa Ibrahim Mitani:

Yes, I do have contact with the Palestinian Embassy for development efforts in Palestine. I have given free talks to Palestinian Telecom staff in Ramallah and Nablus. I have created cooperation between Telecom Palestine and Telekom Malaysia for technology transfer and quite frequent continuous technical discussion. The outcome is so humble and not as good as it could be. Nonetheless, I have been trying seriously to improve.

Prof. Yousef Al-Abed:

NO

Among the contributing factors to the exodus is also the lack of strong organization among the Arab/Palestinian leadership (Schulz, 2003), whether it is from the part of governmental or non-governmental organizations.

Lowell & Gerova (2004) argued about governmental role in stimulationg the Diaspora that, governments (generally) may have a difficult time stimulating diaspora involvement, even though they play a central role in establishing a favorable investment climate. However this may not be a challenge for Palestinian Diaspora. The Palestinian Diaspora believe that they have the power to do something; that they have the willingness, ability and readiness to take steps forward.

5.7.4 Method/Way

“There are many ways/methods to make Palestinian Diaspora contribute to the development in Palestine. Which of these would you personally choose?”

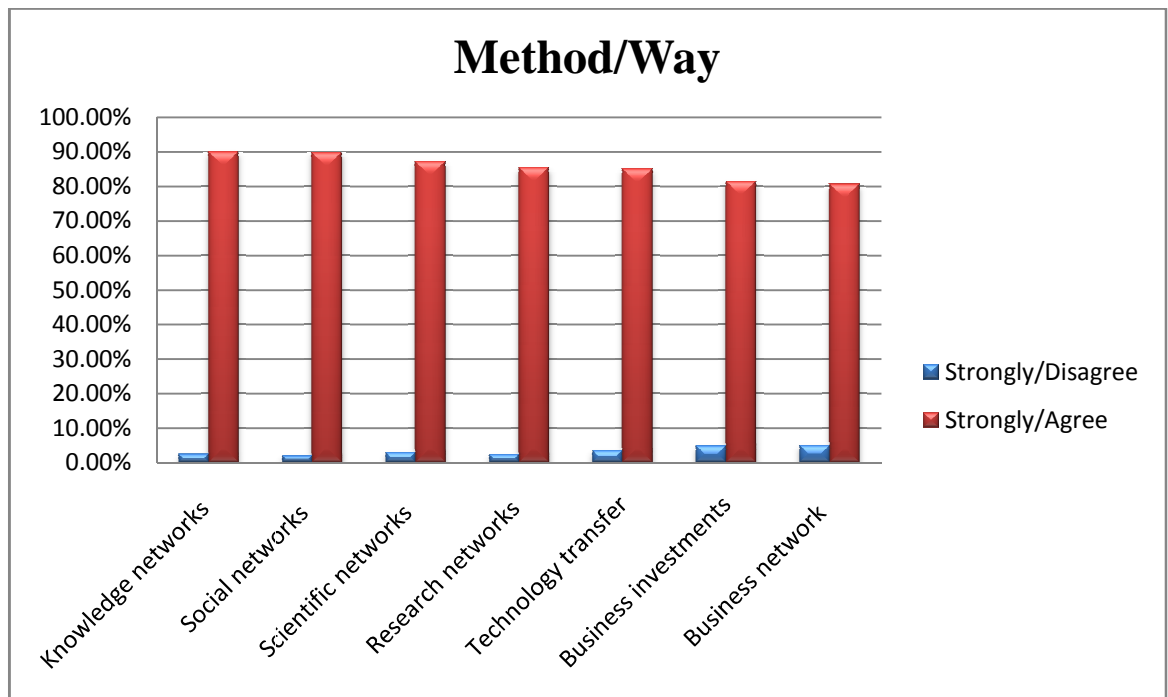


Figure 5.6 : Method/Way

The increased capacity of Diaspora's communities to communicate and interact between themselves at all levels, transfer funds, transport goods and raw materials, and transmit ideas between the various components of a Diaspora's network, is considered to be a broadly positive step in the consolidation of Diaspora's cultures and their relationships with modern society (Petrova-Mitevskaa, 2004).

The respondents to the interviews also prefer to work within networks:

Do you prefer to work separately or with a team (networks)? Why?

Dr. Sufian Mousa Ibrahim Mitani:

I definitely prefer to work within a network. Why? The nature of my job – researcher at the field of optoelectronics- demands me to know Physics, Optics, Chemistry, Mathematics, Design, computer skills, materials, photonic and electronics, which is indeed absolutely impossible to deal with all that all alone. I have a team of dynamic and highly educated (Masters and PhDs) working a long with me as well as I am collaborating with Tampere University-Finland, Illinois University-USA, Tokyo Institute of Technology-Japan and some local universities like University Malaya and Multimedia University as well as UKM. Furthermore, I found it more pleasant to work with a team at a personal scale, means we share dinning, morning coffee and of course some jokes and laughs, it makes life much easier and more delighted.

Prof. Yousef Al-Abed:

Always with a team or multiple teams. This recipe contributed greatly to my success.

As seen in Figure 5.6, the respondents choose knowledge and social networks in the first position (90%). For scientific networks, 87% prefer it, while 85% opt for research and technology networks. Nevertheless, 81% of respondents choose bussiness investments and bussiness networks to contribute through to the Palestinian development.

Palestinian Diaspora will sense their connection to their homeland through their knowledge flows (a first step to achieve their right of return).

This new knowledge is already in action in Palestine (Islaih, 2007). This is obvious in the Palestinian emerging interests and initiatives (focused on science, technology, and human development). In the age of globalization/alternative globalization, Palestinian minds and talents have a great potential to make important contributions to the wellbeing of the global community. Essentially, they need help to upgrade their human resources and introduce some education reforms and expansion of new technologies infrastructure (Islaih, 2007).

For example, a network of technologists with strong ties with global markets, and the linguistic and cultural skills to work in their home country is arguably the most efficient and compelling way to overcome these limitations. Cross-regional entrepreneurs and their communities can facilitate the diffusion of technical and institutional know-how, provide access to potential customers and partners, and help to overcome reputational as well as informational trade barriers for isolated economies (Saxenian, 2008).

Here is a remarkable contribution from one of the interviewees about his effort to achieve such aims:

There are many mechanisms that enable the Diaspora people to contribute to the development in the mother country. Did you ever try to contribute through such mechanisms? Why? If yes, How?

Dr. Sufian Mousa Ibrahim Mitani:

Yes indeed, I have tried my level best.

Why?

Because I do love my country and I wish to see Palestine one of the most advanced country in research, technology and development not only in the region but all over the globe.

How?

Myself as well as my team, -Optoelectronic cluster, at microelectronic & nanotechnology programme of TM R&D- have developed and commercialized an optical transceiver (optical-electrical-optical converter). In Palestine, they purchase the same device from CISCO which costs them approximately US\$ 400. After discussion with my general manager, we have agreed to ship them few devices for free trials and if they are happy with the performance, only then we will charge them USD 200, (half the price). Anyway, we have already sent them the free samples and still waiting for their reply... Moreover, I always e-mail the Physics department, at Al-Najah National University, Nablus, Palestine, all of my publications and always update them with the latest hot topics that have been discussed at my attended conferences

5.7.5 Sector

Education is an important sector among Palestinian people. This is obvious from the results that are represented in Figure 5.7. The majority of the respondents (89.7%) desire the education sector as a sector that they can contribute through.

“Which sectors would you personally prefer to contribute to the development
in Palestine?”

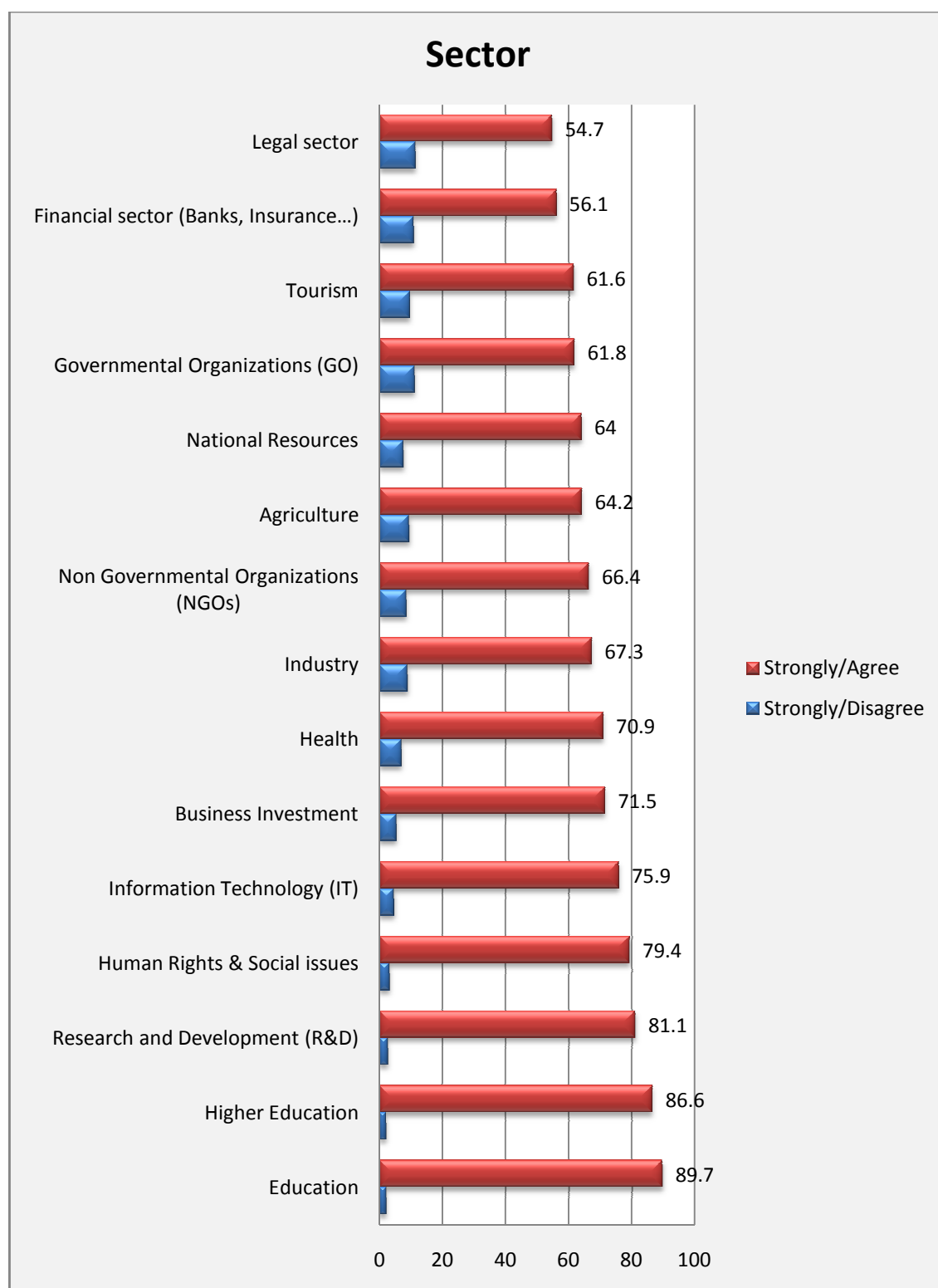


Figure 5.7 : Sector

As indicated, 86.6% selected Higher Education while 81.1% opt for Research and Development sector. In the meantime, 76% of respondents prefer Information and Technology to contribute through. Actually, there is a diversity in the sector that could be chosen. The desired sector may depend on the Diaspora skills and knowledge, or maybe based on their experiences. Furthermore, they may try to connect with networks linked with sectors they have good experience in. What is noticeable here is the diversity of the interest. Education and higher education sectors are the most favorable for the Palestinian Diaspora. This could be matched with the literacy rate of the Palestinian population.

An interview is conducted with the Ambassador of the State of Palestine. His Excellency discussed the Education sector in Palestine in detail. H.E.'s comments enrich the study with many substantial points, and highlight the areas that need a serious help from Palestinian Diaspora. H.E.'s comments are as follows:

Ambassador of the State of Palestine in Malaysia

H.E. asserted that **education** is a very sensitive and important sector for any country, and especially to Palestine. The sector was and is under constant attack and subject to various direct and indirect efforts to weakening it. The sector is very important and vital for Palestinians, as Palestine is somehow short of natural resources and depends heavily on its educated work force, and Palestinians are considered as one of the most educated nations in the region and are comparable to other developed nations in terms of literacy and enrolment rates. However, despite all efforts whether positive or negative, the education sector still suffers from some problems. Among such problems are:

- Economical problems: many students have left studies and joined the work force before finishing their education, and teachers were and are forced to search for some kind of extra work not related to education, in order to secure basic needs of their families. All these are due to the Israeli occupation, incursion, and sanction imposed on the nation and on the government
- Brain migration (educated individuals migrating to other countries)
- Migration of the Palestinian capital (business men leaving or not investing in Palestine and migrating their money to other more relaxed environments).

IN the past, prior to the second Intifada mainly, youth and others were working as cheap labours in Israel for job opportunities in West Bank and Gaza were almost close to zero, with more opportunities in Israel which gave Palestinian labours higher income than working in any type of job within their areas, especially those associated with education. This has resulted in the Palestinian economy becoming almost fully dependent on Israeli economy.

Palestinian Diaspora, as mentioned by Fargues *et al.* 2005, are characterised by the diversity of their levels and types of occupational skills. These people are trained in the scientific, professional, and intellectual disciplines and include entrepreneurs, doctors, academics, highly skilled technicians, engineers and intermediate and lower-level workers in the sectors of healthcare and education (Fargues et al., 2005).

As a matter of fact, 81.1% of the respondents prefer Research and Development sector to contribute through. This sector is a vital sector in many ways; it is a noticeable weakness in R&D in Palestine. Many people can work through conferences or even working, for example, on a scientific journal to establish the connection between Palestinian Diaspora and Palestinian people inside Palestine.

It is not contested that Palestinian Diaspora has the highest levels of education in the Arab world, with high ICT penetration rates. Consequently, Palestinian Diaspora worldwide “will have major impact on knowledge and technology flows coming into Palestine” (Islaih, 2007). Such an outflow must be viewed in the context of the mass exodus of Palestinians since the creation of the Israeli State in 1948 (Hanafi, 2001). There are many ways or methods to make Palestinian Diaspora contribute to Palestinian development, which may depend on their education or their experience in certain areas.

In your opinion, what are the most important factors or elements that should be present in any network in order to connect the Palestinian Diaspora with Palestine?

Dr. Sufian Mousa Ibrahim Mitani:

Seriousness, altruism, field of interest, loyalty, commitment, encouragement by the Palestinian Authority, and the feeling of I am not wasting my time are a very important elements that should be presented at any network. Also, The Palestinian Embassies around the world could help holding some kind of video conferences among the Palestinian Diaspora with Palestine.

5.8 THE FRAMEWORK

Identifying the main causes of migration in Palestine may help us in fashioning the solution for the problem. Pushfactors which are the reasons behind the migration in Palestine are (as identified by the questionnaire) attributed to the occupation of Palestine by Israeli forces and its consequences on the economy. There is an obvious relationship between the pull and pushfactors among the Palestinian Diaspora. The people who leave Palestine because of the political situation would look for a peaceful place to stay in. So the pull factors are to be related with the political issues. ‘Feeling of nationality’ is the main reason behind making the Palestinian Diaspora contribute to the development in Palestine. It is a strongly effective reason for these people feel they were forced to leave their country, and hence migration was not their own voluntary choice.

The majority of the respondents (80.6%) are willing to return back to Palestine in order to be part of its development. However, it is not

feasible for them to do so because of the occupation. Brain circulation, which actually does not automatically demand the physical transfer of migrants back to their home countries, may be a good solution within the current situation. Palestine has been occupied for more than 60 years and the Palestinian Diaspora are not able to return. Brain circulation, which actually perceives migration of the highly skilled not as an end in itself but as the start of a circular process in which everyone might be better off, may provide alternate avenues whereby such skills can be accessed to steer Palestine's development.

Ambassador of the State of Palestine in Malaysia

Responding to the question about Palestinians in the Diaspora and their relations with Palestinians inside Palestine, H.E. said that there was always a continuous contact and direct relations with the two sides. There are many organizations and establishments that take care of Palestinians in the Diaspora since the first moments of they were displaced and became refugees. As an Example, he mentioned UNRWA, Teacher Union (inside and outside), Palestinian Student Union, UNISCO, ICESCO, Palestinian Red Crescent, SAMED, and other PLO administered firms and organizations.

One major event that has been taking place over the past years is the Bethlehem investment conference, which is targeting Palestinian businessmen especially in the Diaspora, and other Arab businessmen. The aim is to connect local businessmen with their counterpart in the Diaspora and the Arab world for fruitful cooperation and investment in Palestine and to transfer experience and knowledge. The fact that more than 2000 persons (mainly businessmen and high profile persons) coming to Bethlehem is by itself a major outcome. They are Palestinian Diaspora and Arab businessmen who are willing and wanting to invest in and do something for Palestine. Any percentage of their contribution, no matter how small, is promising. There would be a good effect on SMEs in Palestine through prospective co operations with these businessmen. They bring with them their expertise and capital, which Palestine needs. One directs an immediate benefit is the effect on tourism. A second one is the publicity of the event by itself, which draws significant attention to Palestine and the opportunities that do exist despite the harsh conditions. Yet another benefit is the opportunity for Palestine Diaspora and Arab businessmen to see the real conditions on the ground, be it harsh or promising ones.

In general, the government tries to restore security and confidence within the Palestinian controlled area, which indeed would lead to stability and better investment and job creation environment, that would lead to paving the way for more external investment and return of the Diaspora capital, and more graduate student returning back to Palestine. In addition, the government encourages the establishments of NGOs in Palestine and in the Diaspora.

Uncontestably, unstable conditions in the political situation in Palestine may make it impossible for Palestinian Diaspora to return home. Their unfulfilled needs could be translated into mechanisms that allow them to contribute to their home country from within their host country. This could include contributing to increase research impact and variety in scientific research particularly in addressing problems faced by specific sectors in Palestine. Policy makers in Palestine can institute a number of mechanisms and support measures to tap the expertise of the Palestinian Diaspora who have overwhelmingly expressed desire to contribute to the motherland. Given commitment and imagination, a number of measures can be introduced to effect productive collaborations with the Palestinian Diaspora to overcome the harsh political conditions in Palestine. The diaspora cannot be suppressed and, if properly mobilized, may prove to be a valuable resource in steering the development agenda of Palestine.

5.9 SUMMARY OF FINDINGS

Capacity Palestinian Diaspora	<i>Age</i>	21–30 years old 31- 40 years old 41-50 years old
	<i>Academic Specialization</i>	Engineering Programs Mathematics & Computer science Humanities Programs
	<i>Monthly Income (US\$)</i>	Less than \$500 (21%) 500\$ - 1000\$ (16.1%) 2001\$ - 5000\$ (13.3%)
	<i>Job Status</i>	Employed (Full-time) <u>40.4%</u> Student (<u>19.5%</u>) Unemployed (13.6%)
Capability Palestinian Diaspora	<ol style="list-style-type: none"> 1. bachelor holders (45.86%) 2. master degree (15.08%.) 3. school certificate and Diploma (2 years) 	
Pushfactors	<ol style="list-style-type: none"> 1. Forced by Israeli forces to leave 2. I was overseas when the war started (1948 / 1967) 3. Education / study 4. Better employment opportunities 5. Professional development 	
Pull factors	<ol style="list-style-type: none"> 1. Current political or security situation in Palestine 2. Employment opportunities are better here 3. I want to live in a peaceful place 4. Business opportunities are better here 	
Re-pull factors	<ol style="list-style-type: none"> 1. Feeling of nationality 2. I was promised a job in Palestine 3. To earn money 4. Stay in Palestine is cheaper 	

<i>Model:</i>	
Sector	<ul style="list-style-type: none"> ~ Education ~ Higher Education ~ Research and Development (R&D) ~ Human Rights & Social issues ~ Information Technology (IT)
<i>Incentives</i>	<ol style="list-style-type: none"> 1. No need for incentives to return 2. Assurance of stability (security) in Palestine 3. Educational facilities for children 4. Housing facilities
<i>Way / Method</i>	<ul style="list-style-type: none"> • Knowledge networks • Social networks • Scientific networks
<i>Entrepreneurial Characteristics</i>	<ol style="list-style-type: none"> 1. If I fail, I will try again 2. I am able to find solutions to challenges and problems 3. I am a hard working person 4. I am a resourceful person
<i>Responsibility</i>	<ol style="list-style-type: none"> 1. Palestinian People 2. PLO, Palestinian Authority and official entities 3. Organization of Islamic Conference (OIC) 4. Arab League
<i>Location</i>	<ol style="list-style-type: none"> 1. When returning back to Palestine 2. While overseas with Palestinian Networks 3. Being in Palestine with Overseas Networks 4. While staying overseas

5.10 Summary

This chapter described the findings of the first and second research questions. Background on variables were presented in the beginning of the present chapter. This chapter latter presented the data in two sections. The first part introduced the results of independent variables with a discussion for each section. The second part reviews the dependent variables (components of the proposed model). The results were presented in both quantitative and qualitative aspects. Both results (Questionnaire results followed by results of Interviews) are offered for each variable separately, followed with the discussion for each section. The next chapter answers the last two research questions. The whole is examined and discussed.

CHAPTER 6

THE PROPOSED MODEL

6.1 INTRODUCTION

This chapter provides the results of the Structural Equation Modelling (SEM) analysis. The first part addresses the assumptions in using SEM. The second part discusses model testing procedures including the Principle Component Analysis (PCA) and structural model testing. A number of variables were extracted from the literature and introduced as components of the hypothesised model. The validity and the relationship among the components of the model, and among the model and the independent variables were examined. Details of the technical method that was used are discussed in detail in this chapter.

6.2 DATA PREPARATION

6.2.1 Data Screening

In order to prepare the data for SEM analysis, it is important to conduct data screening. Screening through exploratory data analysis includes investigating missing data, influential outliers, and distributional characteristics (Shah & Goldstein, 2006; Kline, 2005). Significant missing data could result in convergence failures, biased parameter estimates, and inflated fit indices.

Influential outliers are linked to the issues of normality (discussed later in the chapter) and skewness with observed variables.

6.2.2 Missing Data

A number of methods to deal with incomplete observations assume that the pattern of the data loss is **ignorable or unsystematic** (Kline, 2005). According to Kline, a systematic pattern means that incomplete cases differ from cases with complete records for some reason other than randomness, and thus, the results based only on the latter may not be generalizable to the whole population. With the presence of the missing data, AMOS either fails to calculate the results or gives an error message. Because of this, the missing data are treated with caution before the start of the data analysis by identifying the value of the missing data.

6.2.3 Preliminary Analysis

The analysis in this study is based on 804 respondents after subjecting the data to screening. Originally, there were 863 respondents. Some respondents contributed to the survey in Arabic language, which was then translated into English language for the purpose of the data and results analysis. The original number of the respondents was reduced for the following reasons:

1. Some respondents that contributed to the created website (www.paldiaspora.net) were from Palestine while the focus of this study was on the Palestinian diaspora worldwide.

2. The language of some data was ambiguous, probably because of the different systems of the software used.
3. Some cases had similar information (such as an email address) that was provided almost at the same time (with only seconds or a minute separating two contributions). This could be due to technical glitches or the fact that the respondent was not sure whether his or her contribution was confirmed.
4. A total of five (5) cases of the remaining 809 were found to have untreated missing data. It was therefore imperative to delete these cases because Structural Equation Modeling (SEM) is a systematic analysis that does not accept missing data while processing the results.

6.2.4 AMOS

AMOS is a statistical software which stands for Analysis of Moment Structures. AMOS is an added SPSS module, which is specially used for Structural Equation Modeling (SEM), Principle Component Analysis (PCA), Path Analysis (PA) as well as Confirmatory Factor Analysis (CFA) and Exploratory Factor Analysis (EFA). It is also known as analysis of covariance or causal modeling software (Statistics Solutions, 1996). According to Statistics Solutions, AMOS is a visual program that can be used to draw models graphically with simple drawing tools, and perform computations for SEM and display results.

The rationale behind applying Structural Equation Modelling (SEM) by using AMOS software:

After running the analysis by using AMOS software, the results are displayed in the graphic window (Statistics Solutions, 1996). The text output is also displayed. The graphic window only shows the standardized and unstandardized regressions and error term weights. All the results are shown in the text output (Statistics Solutions, 1996). The following are some of the merits of using AMOS:

1. **Variable Summary:** In AMOS and its text output of variable summary, the number of variables and which of those variables are used for SEM analysis is displayed. Thus, how many observed variables and how many unobserved variables in the model are clearly displayed.
2. **Assessing the Normality:** In the SEM model, the data should be normally distributed. In the AMOS text output, Skewness, Kurtosis, and Mahalanobis d-squared test are presented that describe the *normality* of the data.
3. **Estimates:** In the AMOS text output, the estimate option presents the results for the regression weight, standardized factor loading, residual, correlation, covariance, direct effect, indirect effect, and total effect among other things.
4. **Modification Index (MI):** In the AMOS text output, the modification index result shows the reliability of the path drawn in the SEM model. If the MI index value is large, then more paths are added to the SEM model.
5. **Model Fit:** In the AMOS text output, the model fit option shows the results for the goodness of fit model statistics. It presents all the goodness of fit indexes including GFI, RMR, TLI, BIC, and RMSEA (Kenny, 2010; Statistics Solutions, 1996).

6. **Error Message:** If there is any problem during the process of drawing the model (such as forgetting to draw the error term or drawing the covariance between two variables, or the presence of missing data), then AMOS either displays an error message or fails to calculate the results.

6.2.5 Structural Equation Modeling (SEM)

Structural Equation Modelling (SEM) is a technique that is designed to specify, estimate, and evaluate models of linear relationships among a set of observed variables in terms of a generally smaller number of unobserved variables. SEM models consist of observed variables (also called manifest or measured or MV in short) and unobserved variables (also called underlying or latent or LV in short) that can be independent (exogenous) or dependent (endogenous) in nature (Gefen et al., 2005). LV represents hypothetical constructs that cannot be directly measured and are typically represented by multiple MVs that serve as indicators of the underlying constructs in SEM. The SEM model is a priori hypothesis about a pattern of linear relationships among a set of observed and unobserved variables. According to Gefen et al. (2005), the objective in using SEM is to determine whether the a priori model is valid, rather than to ‘find’ a suitable model.

6.3 ASSUMPTION OF VARIABLES

6.3.1 Model Testing

The model testing process of this study follows the two-step procedure proposed by Kline (2005). The first step involves the Principle Component

Analysis of the measurement model. This is conducted by freeing the parameters among the constructs to allow correlation. Fit refers to the ability of a model to reproduce the data (i.e., usually the variance-covariance matrix).

The second step is conducted to evaluate the fit of the structural model if the fit of the exploratory factor analysis is acceptable. Kline (2005) indicates that this two-step modelling approach provides an accurate representation of indicator reliability through the measurement model that focuses on the interaction of the structural model or latent variables. In other words, the two-step approach best addresses the potential effects of within-construct and between-construct interaction on estimation results (Kenny, 2010).

Assessing the goodness-of-fit is not a straightforward procedure with SEM since no single statistical test provides a clear description of the proposed model fit (Hair et al., 1998). Commonly used fit indices include Chi-square (χ^2), Normed chi-square, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error Approximation Index (RMSEA) (Gefen & Straub, 2005). While assessing the goodness of fit is important, it should be noted that a good-fitting model is not necessarily a valid model (Statistics Solutions, 1996).

Uses of Exploratory Factor Analysis (EFA)

According to Gefen and Straub (2005), the uses of Exploratory Factor Analysis include the following:

1. To identify the nature of the constructs underlying responses in a specific content area.
2. To determine the set of items that “hang together” in a questionnaire.

3. To demonstrate the dimensionality of a measurement scale. Researchers often wish to develop scales that respond to a single characteristic.
4. To determine the features that are most important when classifying a group of items.
5. To generate “factor scores” that represent values of the underlying constructs for use in other analyses.

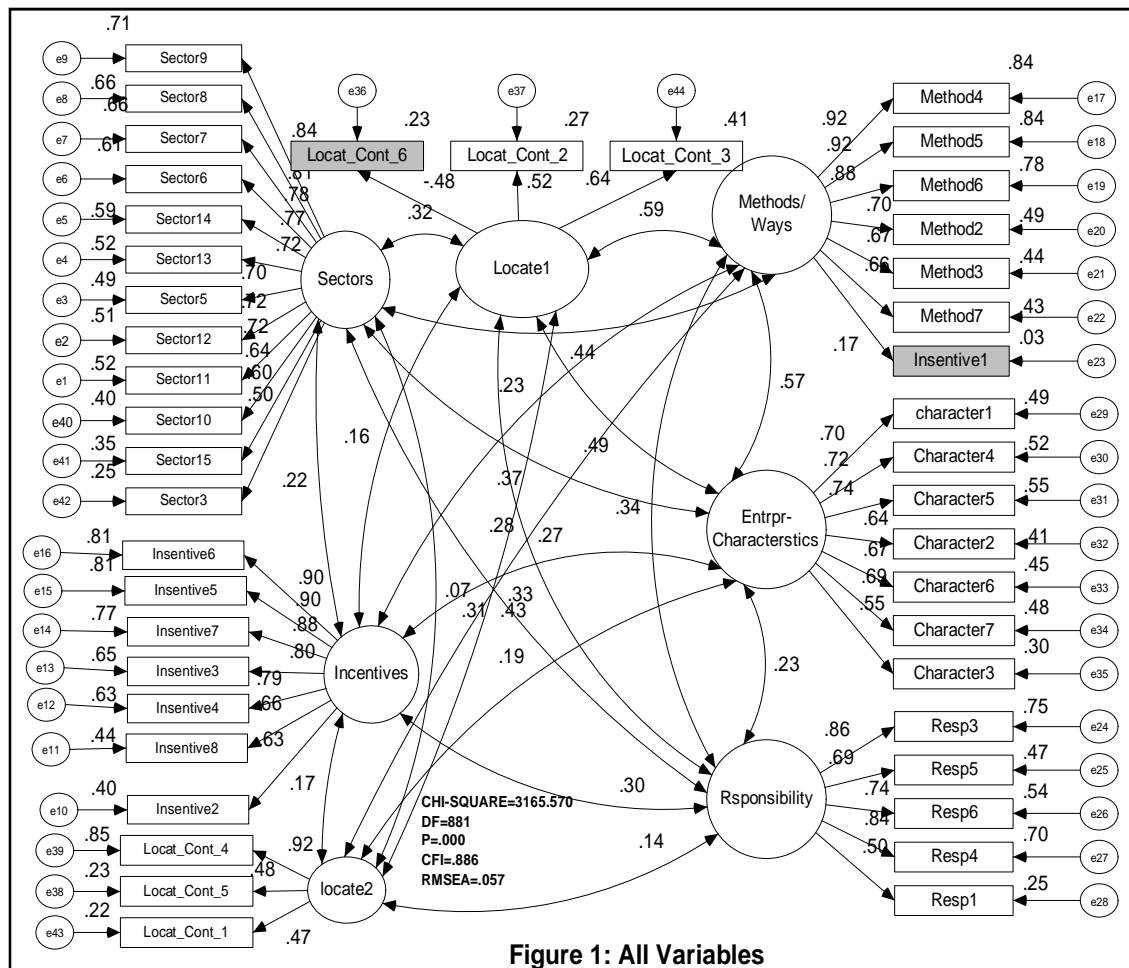
6.4 MODEL ESTIMATION AND FIT CRITERIA

With the sample size equal to 804 respondents, the data were ready to be examined. The number of the variables in the sample is given in Table 6.1 below. The procedure for the examination of the data and the results are presented in the coming sections.

**Table 6.1: Sample Size = 804
Variable Count (Group Number 1)**

Number of all variables in the model:	95
Number of observed variables:	44
Number of unobserved variables:	51
Number of exogenous variables:	51
Number of endogenous variables:	44

6.4.1 The First Step in Model Estimation



The first step in model estimation involved examining the model fit results of the hypothesised model. Some common fit indices reported in Structural Equation Modeling are designed to identify model goodness-of-fit. The common criteria for SEM upon which this study is based are REMSEA and CFI. The structural model presented here indicates an adequate fit with the observed data, compared with the suggested fit criteria (REMSEA and CFI with the overall loading values).

In this stage of model estimation, all the variables with their items are included for the purpose of the examination. The values of the indicators

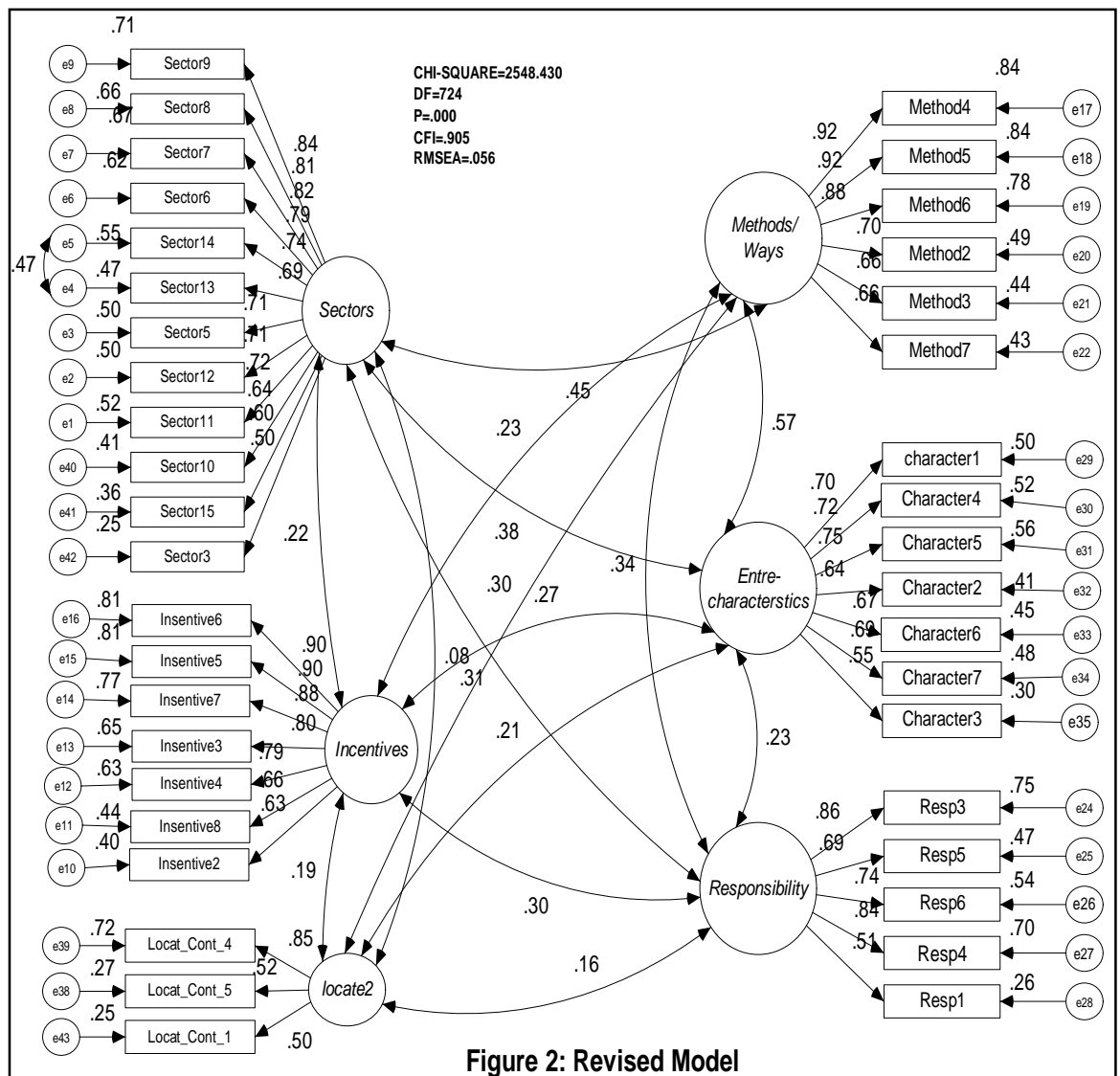
representing the fitness of the model in this study are 0.886 (while the recommended value should be >0.9) for Comparative Fit Index (CFI) and 0.057 (while the recommended should be <0.05) for Root Mean Squared Error of Approximation (RMSEA). The results of the structural model presented here do not indicate an adequate fit with the observed data compared with the suggested fit criteria. Thus, the results of the analysis on the overall fit of the model at this stage are not as encouraging as the fit statistics for the measurement model fall short of the conventional standards.

To solve the problem, it was deemed necessary to exclude either the weak or the negative items. In this case, a decision was made to delete the weak items and some items with negative values (such as Locate 6 item) in order to fix the problem. The items in the dark color are examples of the items that have the weak loading values with their variables.

In total, 14 items were excluded from the examined model. These are Locate 6, Locate 1, Locate 3, Incentive 1, Characteristics 3, Responsible 1, Responsible 2, Method 1, Method 2, Sector 1, Sector 2, Sector 3, Sector 4 and Sector 5. The examination was carried out again to ascertain model fitness. The items which were related to Locate 1 were deleted because despite being good items, they carried weak values. Thus, deleting them meant more acceptable results and a stronger model.

6.4.2 Revised Model

The model was revised with the fourteen problematic indicators being excluded in the subsequent analysis. The overall model was first assessed for fitness, which is the degree to which the specified indicators represent the hypothesised constructs.



The CFI value in the revised model is .905, which is more acceptable than that in the previous stage. The RMSEA value however suggests that the fit of the model is questionable. The value of .059 exceeds the .05 suggested as a cut-off for accepting the model fit.

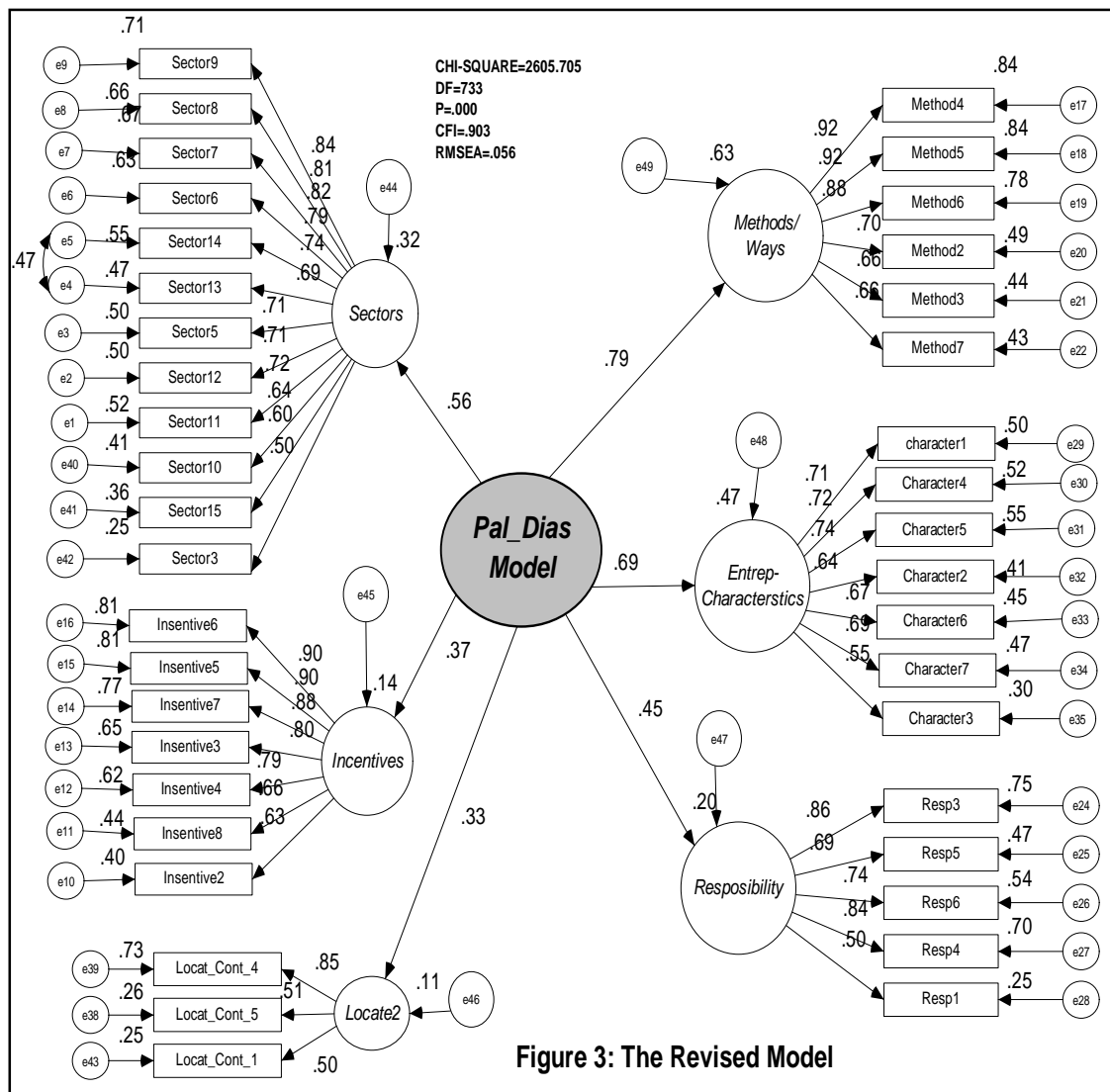
While the relationship among the variables is better now at this stage, it could be strengthened by including latent variables in the model. According to Kline (2005), it is believed that there is a latent variable that could pull variables together. However, Gefen and Straub (2005) mentioned that factorial validity is important in the context of establishing the validity of latent constructs because latent constructs are research abstractions that cannot be measured directly, such as beliefs and perceptions. Quantitative positivist

researchers assume that while some variables such as gender and age can be measured directly and with little error, a major difficulty arises with surrogates where the abstraction is removed from objective reality (Gefen & Straub, 2005). It was therefore decided to insert a Latent Variable in the model to strength the relationship among the variables. After the insertion of the latent variable in the model, among the six variables, the SEM was carried out again, the results of which are presented below.

6.4.3 Model with a Latent Variable

AMOS estimates for the measurement model were examined and found not to have any wrong estimates (a loading greater than 1.0). The overall model was first assessed for fitness. The model is now more acceptable. After examination, the model was not found to have any wrong estimates (a loading greater than 1.0). The results of the goodness-of-fit indicate that the revised model is consistent with the data in the revised measurement model

This step in model estimation was carried out to examine the significance of each hypothesised path in the research model as well as the variance explained by each path. AMOS reports raw and standardized estimates for all specified paths along with standard errors and test statistics for each path.



The results are shown in Figure 3 that clarifies the measurement model and belief correlations. Six variables are connected to the latent variable (core of the network) with six paths having strong parameter estimates ranging from 0.33 to 0.79. The whole model is stronger and more acceptable with CFI = .905 and REMSEA = .056.

6.4.4 SUM of Items with Independent Variables

Sum of the items for each variable. This step enables the examination of the relationship among the variables (component of the model) and among the variables (components) with the model itself.

The results show a correlation between Responsibility and Incentives. These results are discussed in the coming sections.

The independent variables (exogenous variables) which are Capacity, Capability, Push Factors, Pull Factors, and Re-Pull Factors were examined with the model. The correlation among the model and Capacity (Demographic Variables) failed to be examined because of statistical differences. At the same time, Capability was having a very weak factor loading as noticed in table 5. Academic Qualification (representing skills → capability) has a 0.07 value. This variable had to be excluded.

When Academic Qualification was excluded, the correlation among the other variables became stronger. The values for all Discourage Variables increased from 0.09 to 0.19 as seen in Figure 6. Without this increase, the variable would have been cancelled. The overall values of the model component with the model itself (Latent Variable) are now very strong varying from 0.3 to 0.8 as shown in Table 5. The strong estimate of the model component suggests a strong indicator for the construct validity of the model.

Table 5: Standardized Regression Weights & Squared Multiple Correlations

<i>Component Of the model</i>			Estimate	SMC
All_Methods	<---	PD_Model	.7970	.6352
All_Characters	<---	PD_Model	.6521	.4252
All_Sections	<---	PD_Model	.5731	.3284
all_response	<---	PD_Model	.4143	.1716
All_Incentives	<---	PD_Model	.3452	.1191
All_Location	<---	PD_Model	.2798	.0783

6.4.4 The Whole Framework

The whole framework shows a moderate correlation between the model and the independent variables as shown in Figure 6 below.

A good correlation was clear among the independent variables. The loading factor for these correlations varied from 0.11 to 0.22. The negative sign (minus) suggests an opposite direction of the correlation among the variables, wherein an increase in the first variable is met by a decrease in the second and vice versa. The correlations among the whole framework are listed in Table 6 below.

Table.6: Standardized Regression Weights

<i>Framework of the model</i>		<i>variables</i>	<i>Estimate</i>
Pal-Dias_Model	<---	All_Reasons	-.1549
Pal-Dias_Model	<---	All_Stay	.3213
Pal-Dias_Model	<---	All_Discourage	.1874
All_Characters	<---	Pal-Dias_Model	.4798
All_Incentives	<---	Pal-Dias_Model	.6535
All_Location	<---	Pal-Dias_Model	.3207
All_Methods	<---	Pal-Dias_Model	.6400
all_response	<---	Pal-Dias_Model	.4603
All_Sections	<---	Pal-Dias_Model	.6872

6.4.5 Tests of Normality and Validity

A number of indicators carried out in this study provide the tests of normality and validity of the data. With the use of the SEM model in this chapter, the data are expected to be normally distributed. The values of Skewness, Kurtosis, and Mahalanobis d-squared test in the AMOS text output indicate the *normality* of the data. Assessing data normality (along with skewness and kurtosis) is important because some methods of model estimation are based on the assumption of normality. Shah and Goldstein (2006) suggest that non-normal data may result in inflated goodness of fit statistics and underestimated standard errors; although these effects are lessened with larger sample sizes. Table 6 shows that the variables were in the normal range of normality distribution and construct validity.

**Table 6.1: Assessment of normality for
the framework (Figure 6)**

Variable	Skew -3.0 < X < 3.0	kurtosis -3.0 < X < 3.0	Degree of normality
All_Discourage	-.5930	1.0344	Normal
All_Stay	-.1729	1.3116	Normal
All_Reasons	-1.7718	2.9877	Normal
All_response	-.3538	.2899	Normal
All_Location	-.2753	.7468	Normal
All_Characters	.0375	.4462	Normal
All_Methods	.0367	-.6534	Normal
All_Sectors	.5818	-.5246	Normal
All_Incentives	-.4072	.3996	Normal

6.5 DISCUSSION

6.5.1 Assumptions of the Model

The analysis begins with ten variables of which six represent the proposed model (described as the components of the model). These are the Dependant Variables or Endogenous Variables that include Location, Ways, Responsibility, Sectors, Incentives, and Entrepreneurial Characteristics. The other four are Independent Variables or Exogenous Variables that include Push Factors, Pull Factors, Capacity, and Capability of the Palestinian Diaspora (see Figure 6 below).

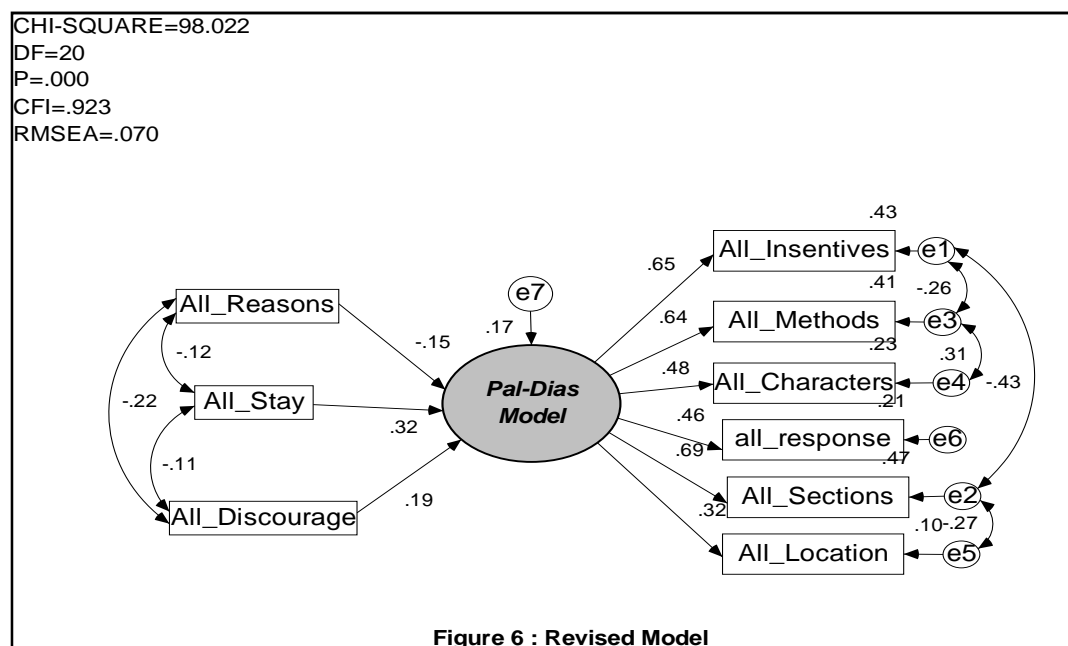


Figure 6: All variables with their items as a result of the Principle Component Analysis (PCA)

In order to justify the use of the Principle Component Analysis, one of the important assumptions to be assessed is the inter-correlations among the items (Kline, 2005). The AMOS program was used in order to measure the correlation between the factors (Objective). The factors with their items were drawn by the AMOS program that was linked to the SPSS program to examine

the fitness of the data for the figure and the validity as well as the reliability of the study (Statistics Solutions, 1996).

Initially, the model fit was examined based on the results of the hypothesised model. This resulted into the removal of some items from the analysis. The affected items were those with very high/low percentages which were not accepted by the program. Following this, a revised model with accepted items was constructed and its variables correlated and examined.

6.5.2 The Framework

6.5.2.1 Independent Variables

6.5.2.1.1 Correlation between Independent Variables and the Model:

1. *Push factors (Reasons)*: The Push factors have the weakest relationship with the model as compared with the other variables. The direction of the relationship is negative indicating that as much as the Push factors decrease or even stop, the model becomes stronger. This implies that when the Push factors force the Palestinians to migrate outside Palestine, the result is a stronger relationship between Palestinian Diaspora and Palestine.
2. *Pull factors (Discourage)*: The Pull factors have a positive relationship with the model. As Pull factors increase, many Palestinians emigrate and networking among the emigrants and Palestine increases. This variable has a better relation with the model compared with the Push factors.
3. *Re-Pull factors (Stay)*: The Re-Pull factors have the strongest relationship with the model as compared with the previous two variables (Push and Pull factors). This means that the model enhances and strengthens the re-pull factor to Palestine.

6.5.2.1.2 Inter-correlation of the Independent Variables:

1. *Push ↔ Pull factors*: As much as the push factors decrease, the pull factors increase. This is probably why the dimension of migration usually occurs in one direction; from east to west and from south to north. As a result, the developed countries strengthen their policies and pull the skilled people to their countries.
2. *Push ↔ Re-Pull ↔ Pull factors*: It is believed that as much as the push factors decrease, the result is an increase in the re-pull factor to the country of origin. If all causes of migration stop, the Diaspora reconnects with and re-attracted to the motherland.
3. As much as the host country encourages and provides a conducive environment for the migrants to stay in the country, the re-pull factor of the migrants to reconnect with or even return to Palestine is affected.

6.5.2.2 Component of the Model - Dependent Variables

The model shows a strong correlation with its components. The factor loadings are somehow close to each other. The values of these factor loadings vary from 0.7 to 0.32. The arrangement of the model components, starting with the strongest correlations, is in the following order: *Sectors*, *Incentives* and *Method (Way)*.

Taking the Incentives variable for instance, if it increases, more Palestinians abroad are expected to reconnect with Palestine. Also, when many sectors and types (ways) of contribution are identified, the result is a stronger correlation to

the model by virtue of choosing the right networks and the right sectors for the contribution. Similarly, the Incentives are expected to be identified based on the way of the contribution, whether this contribution is through scientific networks or business investments.

Entrepreneurial Characteristics and Responsibility are next followed by Location that is ranked in the lower part of the list regardless of the location of the Diaspora. The most acceptable location for the model was “While staying overseas with Palestinian networks and through a short time return for specific activities”. In general, all the components of the model are accepted and have a good fit with the data. The correlation between the model and its components is very good. The model shows a strong correlation with a strong construct validity, which is seen from the strength of the correlation among all the variables (see Table 6, which shows the normality and validity of the framework). Based on the the above discussion, the last two research questions are answered. These are:

3. *How strong is the relationship between factors and components of Palestinian Diaspora's network?*
4. *How could factors and entrepreneurial characteristics be integrated with the component of Palestinian Diaspora's network to form a Palestinian Diaspora's knowledge network?*

6.6. Summary

This chapter presented the proposed model of the study in an attempt to determine the relationship between factors and components of the Palestinian Diaspora's network as well as examine the necessary platform for the Palestinian Diaspora's knowledge networks. The results revealed that six

variables (Location, Incentives, Way, Responsibility, Sectors with entrepreneurial Characteristics) are strongly linked to the core of the network with stronger parameter estimates, resulting into the structural model with the standardized solutions that is stronger and more acceptable. The framework needs to be managed in a holistic fashion. This will be discussed in chapter 7, in the recommendations section.

CHAPTER 7

CONCLUSION AND RECOMMENDATIONS

7.1 INTRODUCTION

The previous discussion offered a qualitative and a quantitative evidence to support the objectives and research questions of this study. While the quantitative approach assessed the important role of the Palestinian Diaspora Entrepreneurship in contributing to the development of Palestine, the qualitative approach provided further insights into the role. This final chapter attempts to draw together the key findings of the survey that has been carried out in this research and the interviews that have been done to provide comprehensive insights into the issue of the Palestinian Diaspora entrepreneurship. Future studies and recommendations are addressed at the end of this chapter.

7.2 SUMMARY OF THESIS

The purpose of this study is to explore the entrepreneurial characteristics among Palestinian Diaspora and to propose a model that enables the Palestinian Diaspora to contribute to the development of Palestine. To achieve the objectives of the research, the following research questions were used:

7.2.1 Research Questions

1. How much Entrepreneurial characteristics do Palestinian Diaspora exhibit?
- 2.1 What are the components comprising the Palestinian Diaspora's network?
- 2.2 What are the push factors that influence the Palestinian Diaspora's network?
- 2.3 What are the pull factors that influence the Palestinian Diaspora's network?
- 2.4 What are the capacity factors that influence the Palestinian Diaspora's network?
- 2.5 What are the capability factors that influence the Palestinian Diaspora's network?
3. How strong is the relationship between the factors and the components of the Palestinian Diaspora's network?
4. How could the factors and the entrepreneurial characteristics be integrated with the components of the Palestinian Diaspora's network to form a Palestinian Diaspora's entrepreneurial network?

In order to address the research questions, the thesis was organised into seven chapters. **Chapter 1** presented an overview of the study and came up with the statement of problem in an attempt to contribute to the body of knowledge by addressing the knowledge and practical gap in the literature. Research questions were advanced in the study in order to answer the objectives upon which this study was based. The research questions also acted like a roadmap for the contribution of the study. The key terms used in the study were defined and the rationale as well as the scope of the study was also discussed.

Chapter 2 reviewed the relevant literature from a global view concerning the themes of this study. It provided a detailed discussion of the terms used and the relevant previous studies. The chapter started with an

introduction and then discussed Diaspora including causes of mobility in terms of push-pull factors; how to re-attract the Diaspora to the motherland; entrepreneurship among the Diaspora; methods used to re-attract the Diaspora; and incentives used in different countries to re-attract their Diaspora. The chapter also presented other important issues related to the study that helped in shaping the conceptual framework of the study.

Chapter 3 presented the similar issues that were discussed in the previous section but with an emphasis on the Palestinian situation. The elements included definition of the Palestinian Diaspora as well as their capacity and capability, causes of mobility (push-pull factors), entrepreneurship among the Palestinian Diaspora and the Palestinian Diaspora networks. While chapter 3 offered a specific discussion centred upon Palestine, chapter 2 provided the discussion from a global perspective in order to understand the issue of Diaspora from different angles and to extract from the literature the various ways that are used by other countries to re-attract their Diaspora. By doing so, the components of the model and other relevant issues pertaining to this study were established.

Chapter 4 presented a comprehensive outlook of the methodology that was carried out for this study. After the introduction of the chapter, the conceptual framework, which was created based on the reviewed literature, was presented. This was followed by the design of the study; sources of information, population of the study and data collection procedures. The quantitative research instrument was also discussed including its translation; validation; pilot test; reliability test; sampling; distribution process and response rate. Apart from assessing the important role of the Palestinian Diaspora's Entrepreneurship for a specific contribution to the development of

Palestine by means of a quantitative analysis, the study also used a qualitative approach to provide further insights. Interviews were conducted to provide a comprehensive understanding into the issue of the Palestinian Diaspora's entrepreneurship. Both qualitative and quantitative results supported the creation of the model, which was examined in chapter six. The evaluation of the model depended on the results from the survey and the information obtained from the interviews. Structural Equation Modelling was used to examine the model separately and explore its relationship with the independent variables.

In chapter 5, quantitative as well as qualitative results were presented. The results were organised in different sections in line with the research questions. Each section consisted of the results (Survey and interviews) followed directly by a discussion. The Entrepreneurial characteristics as well as the capacity and capability of the Palestinian Diaspora were also presented. In addition, the push factors in Palestine (mother country) that caused the mobility of the Palestinian Diaspora were revealed and discussed. The pull factors (in the host country) were highlighted and discussed based on the interviews as well as the survey conducted. This was followed by the discussion on the various ways that could be used to re-attract the Palestinian Diaspora to Palestine.

Chapter 6 was based on the results that were revealed in the previous chapter. Data screening was carried out in order to deal with missing data because the presence of the missing data affects SEM analysis. The reason behind the use of this method was to examine the relationship among the variables of the study. This method makes use of average values and thus, extreme values are extracted from the analysis. The relationship among the

components of the model was examined. In addition, the correlations between the model and the independent variables were measured. The results showed many strong correlations among the variables. Weak correlations among some variables were also observed. However, the strong correlations among the components of the model provided for a stronger validity. The validity was also examined by “skewness and kurtosis” and values ranged from -3.0 to +3.0. The correlations between Capacity and Capability of the Palestinian Diaspora and the model failed to be examined because the descriptive data involving frequencies could not be measured by this technique.

Finally, **Chapter 7** concluded the discussion by summarising the key findings of the study. It also offered some recommendations to overcome the weaknesses and build on the key areas of strengths as the study aimed at building a model to connect the Palestinian Diaspora’s entrepreneurship to the development in Palestine.

7.3 DISCUSSION AND SUMMARY OF KEY FINDINGS

Like many birds, but unlike most other animals, humans are a migratory species (Borta, 2007). According to Borta, the migration of highly skilled and professional labour has for an a long period of time been a major concern to developing countries as it is perceived as a “brain drain” and believed to be a loss of economic potential. Consequently, the ‘brain drain’ phenomenon is usually seen as a zero-sum game, where one party’s gain is presumed to be another’s loss. As a result, in identifying the “winning” and “losing” entities, the positive and negative consequences of skilled migration in both sending and receiving countries have consumed social and political policy

agendas and have been intensely debated in academic discussions (Borta, 2007).

The type of policies a country offers will determine the type of immigrants or brains it attracts. Because workplaces encourage integration, countries must ensure that there are readily available jobs and housing. According to the World Economic Forum (2007), these two things give people a stake in society, because these immigrants are considered as New Blood for Industrialized Societies. Work involves more intangibles (brains) and fewer tangibles (muscle). National economies are becoming more knowledge based-economies where productivity and growth have become more dependent on knowledge. In view of this rising globalised knowledge economy, trans-national migrants are playing an increasing role contributing to demographic changes and answering to the competition amongst nations for skilled knowledge nomads.

Emigrated intellectual, skilled, and technological people are an invaluable resource for the development of their respective home countries. Their contributions to economic development are substantial through platforms of the knowledge economy, and via knowledge networks. Entrepreneurs, be they local or Diaspora, have become a key element of economic development, success, and sustainability. Entrepreneurship is presently the most effective method for bridging the gap between science and marketplace, creating new enterprise, and bringing new products and services to the market. Therefore, the purpose of the study is to bridge or channel Palestinian's Diaspora entrepreneurs to be a part of the development process in Palestine via entrepreneurship. The challenge that is facing the Palestinian Diaspora is how

to bridge the Palestinian Diaspora entrepreneurs that are distributed around the world with the development inside Palestine through entrepreneurship.

This study discussed entrepreneurial networks interactions positioning entrepreneurs among the Palestinian Diaspora as a global asset in driving innovative capabilities. This study aimed at building a framework for stronger relationships between the Palestinian Diaspora and development in Palestine based on a strong supporting platform of science, engineering, technology, and innovation. The framework for the linkages positions the entrepreneurs among the Palestinian Diaspora as the central driving force for successful implementation of the study.

The study identified and evaluated causes of mobility of the Palestinian Diaspora (push-pull factors), and evaluated entrepreneurial characteristics of the Palestinian Diaspora by identifying their capacity and capability. This study also discussed the entrepreneurial Palestinian Diaspora and proposed a mechanism and a strategy that could enable the Palestinian Diaspora to be a part of the development in Palestine. This exploratory study employed both quantitative (a survey) and qualitative (interviews) methodologies in order to cover the empirical gap. A snowball sampling was used as a strategy in the distribution process. The quantitative approach was carried out by distributing a survey among the Palestinian Diaspora worldwide, manually, and electronically, by creating a specific website for this purpose.

The results identified the push-pull factors among the Palestinian Diaspora and showed that the Palestinian Diaspora had skilled people with entrepreneurial characteristics. The results also showed high awareness among the Palestinian Diaspora to contribute with the development process through different mechanisms. A model consisting of six main themes was tailored and

its validity and reliability was examined. In addition the correlation between its components, the correlation between the model and the independent variables (push-pull, and re-pull factors), and the capability of the entrepreneurs among the Palestinian Diaspora to play an important role in the development of Palestine were also discussed.

By identifying the main causes of migration from Palestine, this study helped in fashioning the solution for the problem. Push factors, which were the reasons behind the migration from Palestine, were (as identified by the questionnaire) attributed to the occupation of Palestine by Israeli forces and its consequences on the economy. There is an obvious relationship between the pull and push factors among the Palestinian Diaspora. The people who are leaving Palestine because of the political situation in Palestine look for a peaceful place to live in. Thus, the pull factors are related to the political issues. Feeling of nationality was the main reason behind making the Palestinian Diaspora wishing to contribute to the development in Palestine, which is a strong reason especially if these people felt that they were forced to leave their country and migration was not by their own choice.

The majority of the respondents (80.6%) were willing to return back to Palestine in order to be a part of the development in Palestine. However, it was not feasible for them to do so because of the occupation. Brain circulation, which actually does not automatically demand the physical transfer of migrants back to their home countries may be a good solution within the current situation. Palestine has been occupied for more than 60 years and the Palestinian Diaspora is not able to return. Brain circulation, which actually perceives migration of the highly skilled not as an end in itself but as the start of a circular process in which everyone might be better off may provide

alternate avenues whereby such skills can be accessed to steer Palestine's development.

Unstable conditions in the political situation in Palestine may make it impossible for the Palestinian Diaspora to return home. Their unfulfilled needs could be translated into mechanisms that allowed them to contribute to their country from their host countries. This could include contributing to increase research impact and variety in scientific research simultaneously; the host country retains its skilled migrants, while working and studying there, and thus continue to contribute to the institutions of the host country. Such collaborations clearly present a win-win situation.

Policy makers in Palestine can institute a number of mechanisms and support measures to tap the expertise of the Palestinian Diaspora who have overwhelmingly expressed desire to contribute to the motherland. Given commitment and imagination, a number of measures can be introduced to effect productive collaborations with the Palestinian Diaspora to overcome the harsh political conditions in Palestine. The Diaspora cannot be suppressed and, if properly mobilized, may prove to be a valuable resource in steering the development agenda of Palestine.

It is deeply believed that many benefits could materialize, in the form of spin-offs, spillover, etc. These means and mechanisms towards involving Diaspora in the development of the country of origin could be applied anytime and anywhere. For a country like Palestine which has been occupied for more than 60 years, and which has lost many of its people, and reaching the point where the population outside Palestine is larger than inside Palestine, Palestinian Diaspora involvement could cancel the meaning of borders.

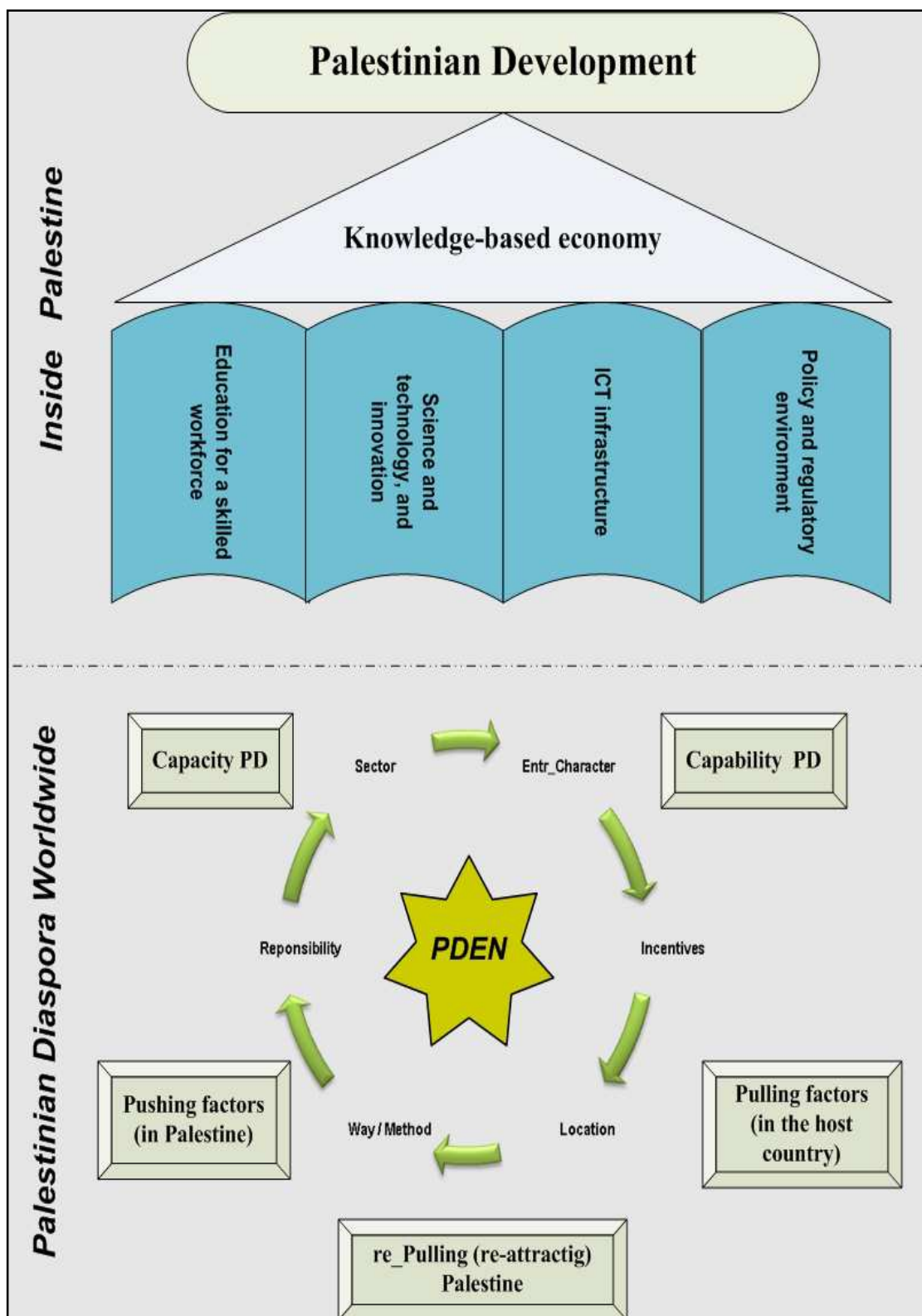


Figure 7.1: The framework

7.4 Managerial and Policy Implications

The managerial and policy implications arising from the findings of this study can be summarized as follows:

(a) Need for Effective Integration of the proposed Model

The findings of Chapter 6 regarding the proposed model for mobilizing entrepreneurship of the Palestinian Diaspora revealed that the model is robust, sound and incorporates the main elements that influence Diaspora entrepreneurship. The success of this model, however, hinges on the competence of the designated organization within the PNA entrusted to drive the S&T agenda to manage effectively the various components of this model. If any one of the components is not managed well, then, the efforts to attract or utilize the expertise of the Diaspora will not be successful.

(b) Weak implementation capacity of the Palestinian Institutions

The examination of science and technology in Palestine revealed that despite many plans to boost science and technology in the country not much has been achieved due to resource constraints as well as institutional deficiencies. Implementation of these plans has been weak. Efforts to enhance entrepreneurship improve the technological capabilities of the SMEs, promote research capabilities in prioritized areas have not been undertaken successfully due to resource constraints given the political situation of the country. Such a situation, if not improved, may not provide the necessary conditions for the Diaspora to return as they may find it difficult to apply their knowledge in their homeland. It is vital that the agency entrusted with steering the S&T agenda be accorded prominence so that it mobilizes the necessary resources to ensure that

the Palestinian Diaspora and Friends of Palestine are harnessed for the betterment of Palestine.

(c) Lack of strategic reach-out by embassies of PNA

The findings from this study revealed that PNA embassies abroad seldom take systematic efforts to reach out to the Palestinian Diaspora residing in the country of their operations. There have been no efforts to develop database of the Palestinian Diaspora nor have there been efforts to initiate research projects involving the Diaspora, researchers from the home country and third countries on problems of importance for Palestine. The failure to initiate these efforts can be attributed to lack of strategic orientation as well as resource constraints.

7.5 Recommendations

This study submits some suggestions towards enhancing the adoption of sound research management practices in PRIs and universities as follows:

(i) Strengthening the capacity of the Palestinian Institutions that are responsible for science and technology.

The strength and magnitude of talent abroad is important and the capacity of the home country institutions (in Palestine) to use the talent abroad is critical. This area needs to be discussed from the viewpoint of policy makers to make sure that the people in the home country are able and ready to contribute with the return (connected) talent among the Diaspora. This is why the government and private sectors of the home country are so crucial because they, not the Diaspora members, need to do the work (Kuznetsove, 2006).

Diasporas may be crucial in helping formulate innovative projects, but it is up to the home country organizations to implement them. Kuznetsova (2006) emphasized that the quality of home country organizations appears to be the single most important determinant of Diaspora initiatives.

(ii) Reorientation of the embassies of the PNA

Embassies of the PNA can broaden their remit to engage with the Palestinian Diaspora particularly in organizing collaborative ventures with the Diaspora and third parties on areas of research/development that are of importance to Palestine.

(iii) University Networks as Engines for Sustainable Development

Universities must be independent institutions in terms of defining areas of research that they consider important for the sake of seeking new knowledge and understanding, even in the absence of any immediate applicability or demand from government, business, or civil society. This freedom of choice is important in a long-term perspective because of the inherent uncertainty associated with scientific research. Additionally, “open science” and open access to knowledge facilitates independent replication of scientific results; enhances the generalization of results; avoids excessive duplication of research; increases the possibility for useful ideas, products and technologies; and realizes for these reasons the social value of knowledge (Foray, 1997). On this background, international university networking is necessary in order to create structured bases

for education and research and promote auto-learning societies (enhanced NIS).

(iv) Internationalization of Palestinian's Science

Scientists among the Palestinian Diaspora could play a significant role in internationalizing Palestinian's science, like research networks (university – university or university – research groups).

The following action recommendations could be adopted:

1. Identifying areas of potential scientific cooperation through collaborative research projects between research groups in Palestine and their colleagues abroad. This could enhance research and development in Palestine to foster science and technology there.
2. Supporting graduate training abroad and facilitating student's return.
3. Supporting visiting fellows and exchanges of researchers.
4. Engaging in information and dissemination activities.
5. Tapping into specialized knowledge network.

(v) Creating a Culture of Entrepreneurship

According to NCOE (2002), good public policy can have a profound effect on entrepreneurship. The Palestinian authority could achieve this by implementing various strategies. This may include low-cost projects like an Entrepreneur of the Year awards or site visits to new

firms to reward local innovators and encourage others to make the leap to business ownership. Supplementing these awards with local business plan competitions can further reinforce the message that the Palestinian community is “entrepreneur-friendly.”

7.6 FUTURE STUDIES

For future and further research, the following issues seen as areas needed to be studied, and seen as areas for future research:

▪ Women Entrepreneurs

In fact, there is one female entrepreneur for every 1.5 male entrepreneurs (NCOE, 2002). This compares with global averages of one female entrepreneur for every two males. It is likely that this gap will continue to close since women are starting businesses at faster rates than men (NCOE, 2002). Therefore, entrepreneurial characteristics among Palestinian women should be studied. It is thought that Palestinian women have higher percent of entrepreneurial characteristics more the Palestinian men have.

▪ Creating a Culture of Entrepreneurship

A greater number of entrepreneurs foster more opportunities to network, i.e., the emergence of a regional cluster and a more open culture of information sharing and networking (NCOE, 2002). The Diaspora Palestinians can play an important role in reconnecting the Palestinian economy to other Arab countries. This is one area that could further be studied.

▪ **The Role of Clusters for Entrepreneurship**

Does clustered entrepreneurial activity contribute to development more than Non-clustered? It is believed that the Palestinian Diaspora distributed in various Arab countries, may play a significant role in connecting with Palestine. Culture, language, religion, and political situation, which are nearly common among the Arab countries, may create clusters of entrepreneurs. There is a need for more studies to be conducted in order to understand the role of clusters for entrepreneurship.

▪ **Encouraging Entrepreneurship**

One of the best ways to grow the local economy is to encourage more people to become entrepreneurs. The best way to achieve this goal is via education and training. Entrepreneurship curricula exist for all levels, starting in kindergarten and going all the way through graduate school. In addition, both children and adults can learn about entrepreneurship through after-school clubs and programs or adult training programs.

7.7 SUMMARY

This study is distinct from previous studies as it contributes to Palestinian Diaspora scientifically, and characteristics of Palestinian Diaspora entrepreneurs. This study tailored a model to connect Palestinian Diaspora with development in Palestine, through entrepreneurship based on knowledge economy. This study is unique because it is built upon the elements that are considered as most important and is among the pioneer studies employing an improvised model for entrepreneurship among Palestinian Diaspora.

This study sought to understand the trend and the need for entrepreneurship development in Palestine, and identified the root of the problem that caused the mobility of the Palestinian Diaspora worldwide (Push factors) in Palestine. The study also sought to understand the Pull factors in the host country that attracted the Diaspora people to settle in. These two directions enable the research to identify the re-attract approach for the Palestinian Diaspora in order to be connected to the development in Palestine.

The contributions of this study to literature include, among others, the development of an inclusive framework. This framework takes account of the collected elements that were extracted from literature about other networks that have been designed for the same purpose. In addition, this study has implemented a modified version of SEM to examine the correlations among the components of the model separately, and among the model with the other elements. This examination of correlations for the framework enables the study to identify the validity of the framework. Furthermore, all the objectives advanced at the beginning of this research have been achieved.