

**MIGRATION AND CULTURAL CHANGE IN URBAN  
COMMUNITIES OF THE QASHQA'I OF IRAN**

**By**

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## Abstract

Pastoral nomadism as a way of life is no longer as prevalent as it once was, but it is still an important phenomenon in the Middle East. In the last few decades, the rate of sedentarization among nomads has increased as a result of technological progress in agriculture and pastoralism, as well as political, social, ecological, and economic factors. This study focuses on the Qashqa'i nomads of Iran and their migration as an example for the Middle East. It deals with both nomadic and sedentary Qashqa'i people and examines the causes and consequences of their migration.

Push-pull theory, is used as an analytical framework for the research. As a part of the methodology, logit models are employed in statistical analysis. A survey questionnaire was administered in order to develop a comprehensive picture of nomadic people at the places of origin and destination.

The research attempts to generate several 'general profiles' of nomads depending upon their location - either at the place of origin or at the place of destination. These profiles can be used to increase understanding of the causes and consequences of Qashqa'i migration, as well as the processes of cultural change which occur when nomadic people 'settle' in urban areas.

For the Qashqa'i the major economic, social, and environmental push factors are poverty, lack of educational institutions, and hardship of climate. The main pull factors are centred around their desire to improve educational, job, and accessibility criteria. The research also revealed that Qashqa'i culture is slowly adapting to urban ways.

An examination of public migration policy shows that a more systematic approach is needed to questions of inter- and intra-regional development and migration issues.

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## Introduction

Although the phenomenon of pastoral nomadism is less prevalent today, its role of linking different societies and cultures, and its economic, social and historical characteristics make the study of nomadism both interesting and important (Khazanov, 1984). Nomads exist worldwide - in a variety of geographical, social and cultural contexts (Figure 1.1). However, nowhere are they more apparent than in the Middle East where they continue to have significant impacts on economic production, the physical environment and socio-cultural institutions. Indeed, the geographic study of nomads exemplifies the “human-environment” interactions which are central to that discipline’s approach to research. Nomadic societies face many problems such as dependency on fluctuating trade markets, degradation of pasture lands, income inequality with urban communities, and lack of social services such as sanitation facilities and educational opportunities. All these problems make nomadic lifestyles unstable and lead to the disappearance of nomadic societies through rural-urban migration.

The purpose of this study is to identify the important determinants of migratory behaviour among the Qashqa’i nomads as they move to urban centres. This project also examines the extent of cultural change among the Qashqa’i in their new urban environments, and the implications of this change for nomadic society.

Chapter 1 highlights the concepts central to understanding who nomads are, where they are distributed and what makes them a unique socio-economic group. A detailed overview of the

Qashqa'i of Iran, the nomadic community which has been chosen as a case study, is presented in Chapter 2. Here, the origins of the Qashqa'i, their geographic situation, and relevant social, political and economic characteristics are reviewed. This chapter also identifies the principal research questions. Chapter 3 critically examines current migration literature, and the key disciplinary approaches to nomadism in developed and developing countries.

Chapter 4 covers the research methodology and examines "push-pull theory" as an analytical framework for this study. Four main phases of the survey questionnaire are outlined in Chapter 5. They include: questionnaire construction; testing the reliability and validity of the data; developing a sampling system; and administration of the questionnaire. In Chapter 6, the geographic, demographic, educational, and economic variables of the sampled population are discussed. Chapter 7 is concerned with an analysis of push-pull factors at the place of origin (for intending migrants), and destination (for those who have migrated).

In Chapter 8, logit models are proposed as a way to predict migration behaviour of the Qashqa'i for intending migrants at the place of origin. Regression models are used to predict migration flows between origin and destination. Chapter 9 addresses the processes of cultural change among the Qashqa'i at the cities of destination. This chapter also evaluates the current state of Qashqa'i culture. By way of conclusion, Chapter 10 provides a review of the thesis objectives and research findings, and includes critical comments on public policy and the strengths and limitations of the thesis. Areas of further research on migration are also identified.

## I. A General Overview of Nomadism

This chapter discusses the concept of nomadism, the basic forms of pastoralism, and the origin of pastoral nomadism. Then, it briefly outlines the distribution of nomads in the world, in particular the nomads of the Middle East. It concludes with the question of sedentarization of nomads in different countries.

There are several reasons why a general overview of nomadism is given here. First, pure nomadism, which entails traditional migratory routes and seasonal movements of herds from summer to winter places and vice versa, is a phenomenon that does not exist in the western world, in particular, in the United States, and Canada (Khazanov, 1984). It is therefore necessary to introduce and give a general perspective of nomadism to readers that may be less familiar with the nomadic world. Second, different groups of nomads can be identified based on the concept of nomadism, origin of nomadism, forms of nomadism, and their geographical situation. Therefore, it is important to understand these concepts relevant to nomadism and to place the Qashqa'i nomads in the correct context.

The settlement of nomads is a continuing theme in the social history of the Middle East. However, during the first half of this century, the sedentarization of nomads reached its peak because of technological progress relating to a nomadic lifestyle, and political, social, ecological, and economic problems that nomads faced.

### **1.1 The Concept of Nomadism**

The term "nomad" can mean different things to different scholars. However, we can say that it has been used mainly to describe two basic concepts. On the one hand, some scholars have defined nomads as all those communities leading a mobile way of life independent of their particular economy (Kroeber, 1947). Other scholars have described nomads as extensive and mobile pastoralists, who either have nothing at all to do with agriculture, or who are occupied with agriculture to a limited degree only as a secondary and supplementary activity (Khazanov, 1984).

The view of first group of scholars, who consider nomads "as all those leading a mobile way of life independent of its economic specificity", has been questioned recently. For example, Lee and De Vore (1968) identified all hunters and gatherers as nomads. Khazanov (1984) states that wandering hunters and gatherers on the one hand, and mobile pastoralists on the other, have too little in common to unite them under a single label. The bases of their economy - food-extracting, such as fishing, in the first instance and food-producing, such as herding sheep and goats, in the second - are in principle different. Thus their reasons differ for being mobile, and the character of the mobility is different. Khazanov concludes that the term nomads is not applicable to other mobile groups, whether ethnic professional groups such as gypsies, the so-called maritime nomads of Southeast Asia, shifting horticulturalists, or certain groups of workers in contemporary industrial societies (so-called industrial mobility).

Consequently, hunters and gatherers who do not lead a sedentary way of life are best described by the term 'wandering', and extensive mobile pastoralists by the term 'nomadic'. However, if all mobile pastoralists are described as nomads, this leads to an unreasonable, broad and inaccurate use of the term, because there are so many different forms of mobile pastoralism

(Khazanov, 1984). It is obvious that the definition of pastoral nomadism, as a particular form of food-producing economy, should be based on the total sum of those economic elements that differ from other kinds and forms of economic activity. According to Khazanov (1984), the most important characteristics defining the economic essence of pastoral nomadism are the following:

1. Pastoralism is the primary form of economic activity.
2. Pastoral nomads are concerned with the maintenance of herds all year round on a system of free-range grazing without stables.
3. Periodic mobility in accordance with the demands of a pastoral economy within the boundaries of specific grazing territories, or between these territories.
4. The participation in pastoral mobility of all or the majority of the population.
5. The orientation of production towards the needs of subsistence.

Based on the above viewpoints, pastoral nomadism is a single form of food-producing economy which remains different from other food-extracting economies (for example, different forms of hunting, fishing and gathering), and also from other food-producing economies (for example, different forms of slash and burn and arable agriculture). However, it is generally accepted that pastoral nomadism is not completely separate economically from other food-producing economies. Rather, it is linked to them by a series of transitional forms based on a gradual diminution in the importance of pastoralism. So, we can conclude that a clear-cut boundary for the definition of traditional economics cannot always be drawn (Kroeber, 1947; Markov, 1976; Marx, 1977).

## **1.2 Basic Forms of Nomadism**

At present there is no generally accepted classification of the different forms of nomadism because of the different points of view expressed by the scholars on the subject. Since the beginning of the twentieth century, geographers, particularly from France, have done basic work on the

classification of pastoral economy ( Bernard and Lacroix, 1906; Despois, 1949; Sorre, 1950; Capot-Rey, 1953). The major criteria used for these classifications, both on the regional and the global level, are the following: geographical distribution, composition of herds, distance, direction, and periodicity of pastoral migrations, character of dwellings, and the role of agriculture in the economic system. In principle, the majority of these classifications cannot be considered either true or false. The main question to ask if we want to evaluate them is how they serve the specific aims of the research. Moreover, to have a better idea of nomadism, we also need to define the forms of nomadism that are accepted by a majority of scholars.

As Table 1.1 shows the following forms of nomadism stand out as the basic forms.

1. *Pastoral Nomadism* refers the behaviour of to an ethnic group which travels with the herd and in its pure manifestation is characterized by absence of agriculture. Pastoral nomadism is often replaced by the terms *full nomadism* or *pure nomadism*. Khazanov (1984) states that pure nomads are rare and they are recorded only in certain regions (Middle East, high mountains of Asia, and the Sahara).

2. *Semi-nomadism* is characterized by extensive pastoralism and by periodic changing of pastures during most of the year; although pastoralism is the predominant activity, agriculture is present as a secondary and supplementary activity. Semi-nomads may or may not have settlements at one or other of their pastures (Khazanov, 1984).

3. *Yaylag Pastoralism* is a kind of semi-nomadism which is often called *vertical nomadism* as opposed to *horizontal nomadism*. Horizontal nomadism is adapted to plain and desert areas, while vertical nomadism is adapted to mountainous areas. Yaylaq pastoralism enables people occupied in agriculture in specific ecological zones to use other areas as seasonal pastures (Barth, 1961).

During the summer, the livestock is kept in mountain pastures (*Yaylag*), and during the winter it is driven to the lower zone (*Qeshlag*). In the Middle East and North Africa, yaylag pastoralism often co-exists with semi-nomadism and pastoral nomadism (Khazanov, 1984). As has been stated, the yaylaq pastoralism is also called vertical nomadism because, in order to find adequate pasture for their animals, it must utilize zones at various elevations during the year. This involves a migration process across or through a number of mountain and valley systems (Johnson, 1969).

4. *Semi-sedentarism* refers to behaviour of an ethnic group which lives in permanent villages, moving out in tents during their most productive season (Khazanov, 1984).

Table 1.1: Basic Forms of Nomadism

Settlement	Traditional Migration	Economic Activities	
		Herds	Agriculture
Tent	Horizontal	Pastoral nomadism	Horizontal nomadism
	Vertical	Pastoral nomadism	Yaylag pastoralism
Tent/Village	Horizontal	Semi-sedentarism	Semi-sedentarism
	Vertical	Semi-sedentarism	Semi-sedentarism

The Qashqa'i nomads in Iran have adopted and shared all the forms of nomadism listed above. For example, many of the Qashqa'i nomads spend winter (*Qeshlaq*) in the southern lowlands near the Persian Gulf and summer (*Yaylaq*) they move to the highlands of the Zagros. So they have adopted yaylaq pastoralism. Other Qashqa'i nomads have shifted from full nomadism to semi-nomadism while still others have adopted semi-sedentarism and live in permanent villages, except in summer or in winter when they live in tents.

### 1.3 Origins of Nomadism

It is difficult to give a full and detailed historical overview of nomadism, because of the different approaches that have been taken by scholars. The most important arguments that have been put forward in the literature to explain the origin of nomadism are given here.

According to Khazanov (1984), there have been three viewpoints among scholars about the emergence of pastoral nomadism. Some believed that pastoralism developed out of hunting and moreover, that it developed earlier than agriculture. Others thought that agriculture emerged earlier than pastoralism. Finally, some assumed that pastoralism and agriculture could have appeared independently of each other. In the following paragraphs, these view points will be discussed.

Rohani (1992) argues that based on the opinions of most historical sociologists and human ecologists, pastoral nomadism appeared after the hunting stage. According to him, pastoral nomadism preceded a sedentary life-style and agriculture. Rohani believes that when hunters developed tools for hunting they were able to capture animals alive, and proceeded to tame them in order to supply themselves with meat and other products. He argues that during periods of scarce of food, they used the products from tamed animals. Climatic change and pasture scarcity forced hunters to change their location, and the need for pasture led them to a shift from hunting to pastoral nomadism.

Engels (1978) states that pastoral nomadism started before the advent of agriculture with taming animals which produced milk and meat for human needs. According to him, it is specialization in the training of herds that has separated the Aryan and Semitic races from the Barbarian ( i.e. state of being uncivilized) groups. Animal husbandry resulted in the development of pastoral nomadism in some suitable places in Asia. For example, nomadic Aryan races developed

nomadism around the Oxus (Amu Darya) and Jaxartes (Syr Darya) in central Asia and nomadic Semitic races developed it around the Euphrates and Tigris rivers in southwest Asia. Engels (1978) also states that agriculture among the Aryan and Semitic races started after nomadism because they wanted to amass additional food as a necessary survival resource for themselves and their animals.

Vajnshtejn (1978) states that in recent decades the view that pastoral nomadism originated among hunting peoples has lost support. A more popular hypothesis is that in a number of steppe and foothill areas of Eurasia, a complex kind of farming emerged involving sedentary and productive land cultivation combined with animal husbandry. This led, in these areas, to a transition among some tribes which shifted from sedentary to pastoral nomadism.

Many researchers (such as Grjaznov, 1957; Sal'nikov, 1967; Markov, 1967) argue that the transition from sedentary to pastoral nomadism occurred between the Bronze and early Iron Ages - in other words at the end of the second and the beginning of the first millennium B.C. Some scholars believe that the main reasons for the transition to nomadism were increasing numbers of livestock, and the accumulated experience of a more progressive, mobile, pastoral animal husbandry (Vajnshtejn, 1978). Sal'nikov (1967) argues that changes in the landscape and climate progressively restricted grazing grounds and ultimately led to their destruction, causing the formerly sedentary land cultivators and cattle breeders to become nomads. Finally, Khlopin (1970) expressed the idea that the transition to a nomadic way of life was the result of overpopulation. According to this idea, certain groups with a complex economy centering on animal husbandry turned to a nomadic way of life, in which they were joined by some of the neighbouring hunter tribes (cited by Vajnshtejn, 1978).

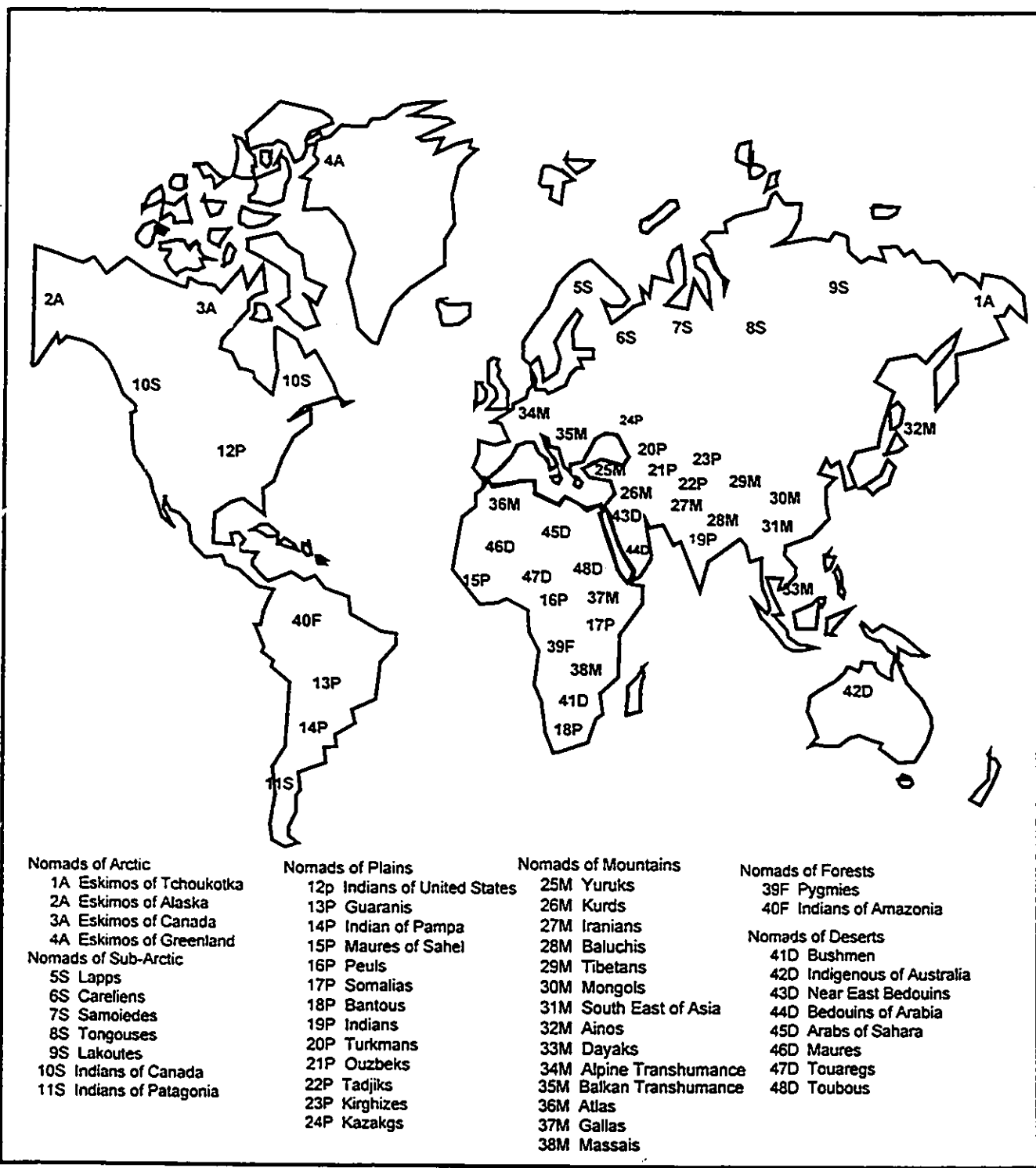
In my view, it would appear that the emergence of pastoral nomadism was such a complex

and multi-faceted phenomenon that it cannot possibly be explained by any one isolated factor. Therefore, studying this process necessitates that local factors must be separated from universal tendencies and regularities. Pastoral nomadism had reached its climax by the Second World War (Afshar-Sistani, 1986). Until that time, nomads were dominant in a variety of geographical, social and cultural contexts throughout the world. Many governments such as the Iranians were originally nomads in developing countries or obtained power with the help of the nomads. Gradually, the progress of education, the development of cities, the advent of modern means of transportation, and the centralization of power and wealth in the hands of urban people weakened the power of nomads and encouraged them to migrate to rural or urban areas. However, as discussed below, there are still different groups of people around the world which consider themselves nomads based on their culture and economy.

#### **1.4 Distribution of Nomads in the World**

Denis (1989) has proposed a division based on the geographical location of the principal ethnic and nomadic groups of the world. Based on these geographical divisions, nomadic and ethnic groups exist all over the world and include nomads of the following types of regions: the Arctic, the sub-Arctic, the plain, the mountain, the forest, and the desert (Figure 1.1). Each one of the above groups is described below.

Figure 1.1: Major Nomadic Groups by Ethnicity in the World



Source: Adapted from Denis (1989).

1. **Nomads of the Arctic.** The first members of this group were hunters, who eventually settled in coastal regions where they could also obtain food from the sea. They established themselves in Northern Canada, Greenland, and the former USSR. In 1967, the total population of this group was roughly 80,000, of which 16,000 were living in Siberia, 25,000 in Alaska, 15,000 in Canada, and 37,000 in Greenland (Denis, 1989).

2. **Nomads of the Sub-Arctic** are mainly specialized in reindeer breeding. They live in the tundra and forests of sub-Arctic areas. Among these groups, the most famous are the Lapps.

3. **Nomads of the Plains** live in the large plains where there is a moderate climate, including the western plains of Canada and the USA, and in Argentina. Some of them also live in Africa, more specifically in the Sudan, Somalia, and Namibia, usually in savannah areas (Denis, 1989).

4. **Nomads of the Mountains** represent a large group, including the nomads of central Asia who are neighbours to the nomads of the Russian steppes and those of the Middle East (Iran, Kurdistan, and Turkey). There are also the nomads in the mountainous areas of Europe. It is unclear whether they can still be called "nomads" because of their adaptation to the way of life and transportation typical of the modern way of living of Europeans.

5. **Nomads of the Forests** can be divided into two different groups. The first group, the Pygmies, are located in the equatorial forests of Eastern Africa. The second group is located in the Amazonian forest, and is composed of nomadic and semi-nomadic Indians.

6. Nomads of the **Desert** can be also divided into two groups. The first group includes the Bushmen and the indigenous people of Australia who no longer live their traditional life. The Arabs form the second group. Initially, their culture was based on dromedary breeding. They are located in the desert of Syria and in the Sahara where their relative seclusion has slowed down processes of assimilation and sedentarization.

In the Middle East at least three of the above nomadic groups are more visible. These three groups include nomads of the deserts, nomads of the mountains, and nomads of the plains. Nomads of the Middle East are briefly outlined in the following section.

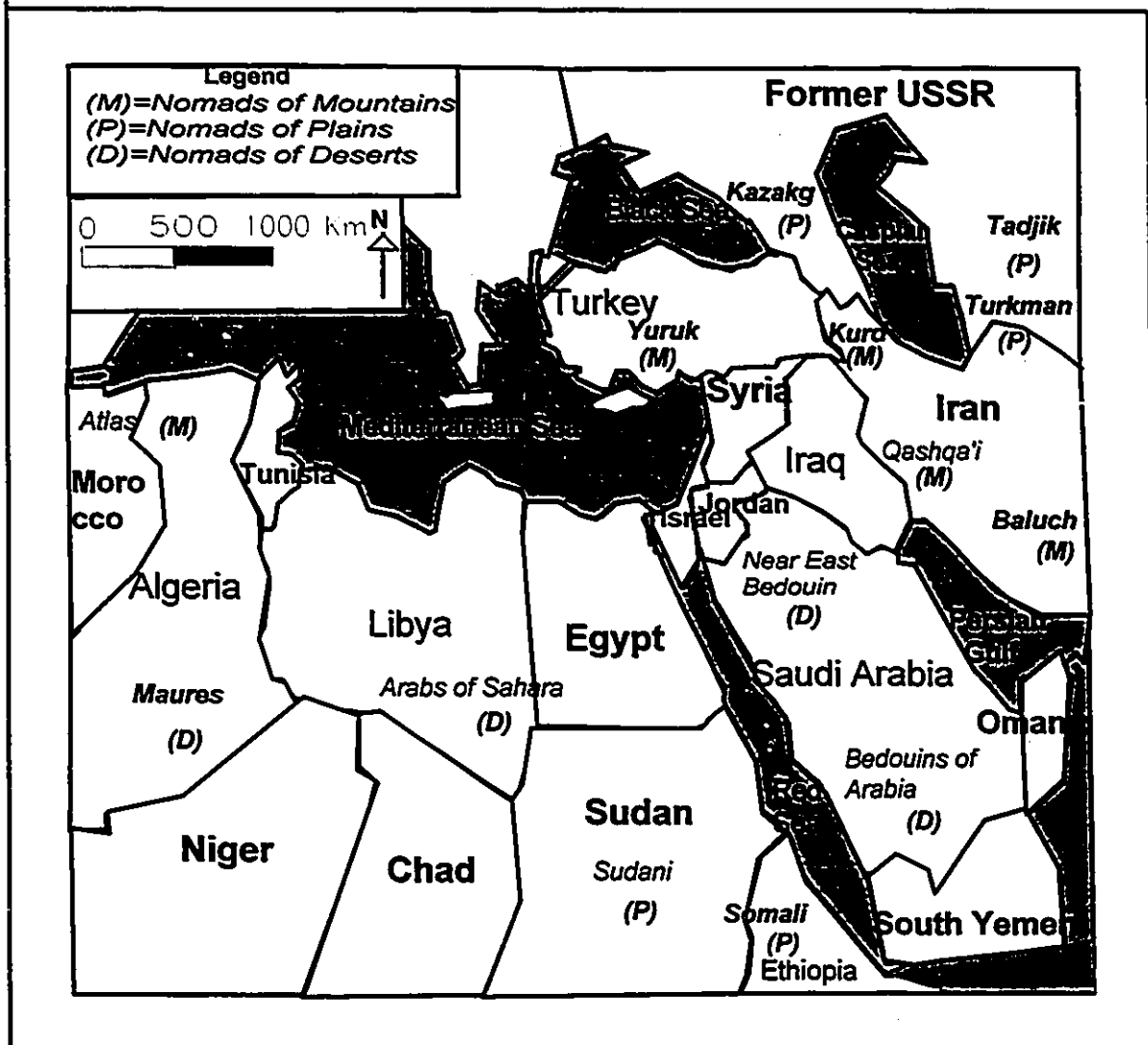
### **1.5 Nomads of the Middle East**

The basic cultural and geographical unity that is generally accepted as the Middle East comprises the north east of Africa (Egypt) down to the Sudan, the Arabian Peninsula, the Fertile Crescent, Asia Minor, the Iranian plateau, and the Indus Valley in the west of Pakistan. Figure 1.2 shows the distribution of nomads based on their geographic areas in the Middle East and North Africa. Patai (1978) states that there are several cultural and economic similarities among the nomads of the Middle East. These include:

1. Camel or sheep and goat breeding tribes follow a pastoral nomadic mode of life, while the economic activities of settled villagers mostly depend on agriculture.
2. Most of the nomads and semi-nomads of the Middle East use the black hair tent.
3. Transitional or intermediary types of societies are present ranging from semi-nomadic tribes in various stages of sedentarization to almost completely settled tribes.
4. Patrilineal descent is the basis of social organization among the nomadic tribes as well as in the villages.

The main nomadic groups from the Middle East are described below.

**Figure 1.2: Major Nomadic Areas of the Middle East and North Africa**



Source: Adapted From Willow Spring Press (1991)

### **1.5.1 Nomads of southwestern Turkey: the Yuruk**

Nomadism in western Anatolia first became common with an influx of Turkish nomads in 1071. The largest nomadic group in Turkey is called the Yuruks (meaning, those who walk). Yuruk nomads live in the Taurus mountain region in southwestern Turkey. Some of the Yuruks are still nomads today, while others are semi-nomadic cultivators. The nomadic people use winter pastures on the coastal plains of the south. The traditional form of nomadism in Turkey was yaylaq pastoralism. The Yaylaq is a region in the mountains that is occupied seasonally by nomads in order to escape the summer heat, to grow supplementary crops, and to utilize the abundant pasture present in the area for grazing. As in Turkey, Iran has several different forms of nomadism (Bates & Plog, 1980).

### **1.5.2 Nomads of southeast Anatolia: the Kurds**

The Kurdish people are intermixed with Turkish, Turkman, Armenian, Arab, Nestorian, Persian, and Azerbaijani populations. A large numbers of Kurds are sedentary, but some of the Kurdish tribes have nomadic members as well. Kurdish nomads move seasonally between highland and lowland pastures, a pattern which is typical of mountainous areas (Afshar-Sistani, 1986).

### **1.5.3 Nomads of northern Arabia: the Bedouin**

The Arabian Peninsula is considered to be the source area for Arab nomads. During the early decades of the twentieth century, the number of fully nomadic tribes that migrated within the north Arabian steppes and deserts was much greater than at present. Among the tribes, the most commonly mentioned are the Ruwala, the Shammar, and the Mutair. The Ruwala are camel-

breeding nomads that migrate from south of Damascus (Dimashq) to the northern borders of the An-Nafud desert. The Shammar tribes are camel-herders who are split between Iraq and Saudi Arabia. The Mutair is a predominantly camel-herding tribe located in the extreme northeastern part of Saudi Arabia. This group also herds smaller numbers of sheep and goats (Bahhady, 1981).

#### **1.5.4 Nomads of Afghanistan and Pakistan**

The majority of the nomads of Afghanistan and Pakistan base their way of life on herding sheep and goats and use camels as beasts of burden. The Pashtune, Baluch, and Brahui are the largest tribes in these countries. The Pashtune were originally divided between Afghanistan and Pakistan. The Baluchis live in Iran, Pakistan, and Afghanistan. The Brahui live in Pakistan. Most of the Baluchis and Brahui are semi-nomads (Afshar-Sistani, 1986).

#### **1.5.5 Nomads of Iran**

Nomadic tribal groups in Iran have held a position of great importance throughout the course of Persian history. They are scattered throughout the country and mostly herd sheep and goats. The largest groups are concentrated in the Zagros Mountains. The Qashqa'i, Bakhtiyari, Shah-sevan, Lurs, Turkman, Kurds, and Baluch are the largest tribes in Iran. Despite the environmental and governmental pressures to encourage the sedentarization of nomads, some of them maintain a nomadic mode of life, and move seasonally between lowland and highland pastures (Afshar-Sistani, 1986).

### 1.6 Sedentarization of the Middle East Nomads

Since the end of the eighteenth century, nomads, and particularly the nomads of the Middle East have constantly declined in importance relative to the sedentary population (Galaty & Salzman, 1981). Political as well as economic factors, both internal and external, have caused a decline in nomadic pastoralism and in the importance of tribes in socio-political structures. This process of change has been both subtle and violent. In North African countries such as Morocco, Algeria, Tunisia, Libya, and Palestine (Figure 1.2), there has been a recent significant decline in nomadism. In the past few decades, the discovery of oil and the opulence it has created, have taken a drastic toll on nomadic pastoralism as a central way of life throughout the Middle East. The political and social institutions are structured against the continuation of nomadism, which is regarded as contrary to the goals and aspirations of a modern nation and society (Cole, 1975).

Kay (1978) states that in all Middle Eastern countries a rapid drop in the numbers of Bedouin has been recorded. Although precise figures are not generally available, a sample survey in Saudi Arabia where the highest Bedouin populations are present, indicates a net annual loss of 2 % from the nomadic population of the desert. The decisive factor in the sedentarization of the Bedouin was the establishment of the oil industry in the desert. Bedouins provide a valuable source of cheap and reliable labour in the operation of oil rigs and wells. With the advent of oil wealth, schooling has also become available to Bedouin children. Parents are eager for their children to benefit from the free education which all contemporary states provide (Kay, 1978). According to Kay (1978), the only way for parents to achieve this is to settle within a few miles from a school.

Lewis (1987) notes that in Syria, tribesmen have built more houses in the previous twenty-five years than in any earlier comparable period. Some were built in the wake of the drought of 1956-61, others by beneficiaries of the Land Reform of the 1960s, others by people who have ceased to migrate or who, while still nomadic, make use of houses for part of the year. Of 836 shepherds of the Mawali and Hadidiyin tribes interviewed by Meyerin (1979), fourteen percent had built houses before 1958, twenty-four percent between 1958 and 1968, and twenty-nine percent between 1969 and 1979. Only thirty-three percent still had no dwellings other than their tents. Bahhady's study (1981) also shows that the total population of Bedouin in Syria has declined. Based on Bahhady's findings, the Bedouin represented 8.1 % of the total population in 1952 but, by 1978, they represented only 3.2 %.

In Iran, until Reza Shah's regime in 1920, all governments were either formed by nomads or they had established rule with the help of nomads who were militarily powerful. However, nomadic political power was consistently eroded by the advances in military technology and by centralization of government authority, processes that accelerated often the end of the Second World War (Galaty & Salzman, 1981). Nomads made up 19 % of total population of the country in 1810, while by 1986 they had been reduced to 2.5 % (Safinejad, 1986).

As a result of the settlement of nomadic pastoralists in the Middle East, many regions in Turkey are characterized by a dense network of villages where, 100 years ago, the principal land use in these areas was pastoralism (Bates, 1980). Many of these villages are the direct consequence of nomadic sedentarization (Bates, 1980). Certainly, any overview of traditional Turkish land use and rural society would include nomadic pastoral populations as an important component.

Nomadism in Sudan has also gone through a number of phases. During the first half of this

century, nomadism increased and reached its peak. However, important agricultural development projects took place (particularly the Gezira and the white Nile pump projects), they generated urban expansion and ameliorating an improved transportation network, and some nomads began "spontaneous" settlement. Thus, almost all the semi-nomads of the Gezire and White Nile regions became sedentary. Many of the Beja also settled in Port Sudan, Tokar, and Kassaia. Some changes also occurred after the World War II. Gradually, many nomads in Western Sudan began to settle as a result of a number of innovations. The most important of these were the initiation of a programme to control the water supply, improvements in the transportation system, growth of regional trading markets, and the introduction of social benefits such as education, and health services (Khogali, 1981).

### **1.7 Conclusion**

Pastoral nomadism has lost its former prevalence throughout the world. Political as well as economic factors, both external and internal, have caused its decline. Until World War II, most of the nomads, particularly in the Middle East, had up-to-date military equipment such as guns and horses, and occupied strategic locations which enabled them to defend their territory. Now they do not. Economic forces are also working to cause sedentarization. Modern transportation reduces the isolation of the nomads and brings them into contact with other cultures and the influence of the national government. Nomads make use of some modern technology in their daily lives, and many feel that nomadism is no longer a 'respectable' way of life as it was in the past. Settlement also offers benefits such as social services, medical services, clean water, sanitation facilities, and educational services. Clearly, these changes affect the nomadic way of life.

The next chapter introduces the Qashqa'i of Iran as case study to explore research issues about nomadic migration and cultural change.

## II. The Qashqa'i of Iran

This chapter provides a general overview of the Qashqa'i nomads in Iran and their on-going sedentarization process. Following this, the origin of the Qashqa'i nomads, and their geographic situation are discussed. Then, the history of Qashqa'i political centralization and socio-political organization are explored. The demographic and economic characteristics of the Qashqa'i are then presented. After giving a general perspective on the Qashqa'i and their process of sedentarization, the main problems facing the Qashqa'i and the national government concerning nomadic migration are described. Finally, the central hypotheses are introduced that have governed this study of Qashqa'i migration behaviour.

### 2.1 Origins of the Qashqa'i

Most sources agree that the Qashqa'i are not native to southwest Iran (Beck, 1986). Researchers focus mainly on establishing their previous locations, and on the timing and circumstances of their movement into that region. It is important to realize that the Qashqa'i did not exist as a 'single group' elsewhere, and therefore they did not migrate as a unit.

Regarding the origins of the name 'Qashqa'i', Oberling (1974) suggests several possible explanations. Some of the Qashqa'i leaders believe that the name Qashqa'i comes from the Turkish verb *Kacma* or *Qachmaq* which means "to flee". This idea suggests that the Qashqa'i, sometime in the past, broke away from the Khalaj tribe, a Turkish people originating in central Asia, and came

to the province of Fars in southern Iran.

Others claim that the name Qashqa'i is derived from the Turkish word *Qashqa*, which means a horse with a white spot on its forehead. The explanation behind this term is that the ancient Qashqa'i warriors believed that such a horse brought luck to its rider. Because of this notion, these tribesmen came to be known as *Qashqa Atlar* (those of the horses with white spots on their foreheads). Gradually, the name was shortened to Qashqalu or Qashqa'i (Oberling, 1974).

According to Oberling (1974), Qashqa'i leaders insist that the name is of geographic origin, and is connected with the city of *Kashqar* or with the *Kashka Darya*, a river in Uzbekistan. In this context, it is interesting to note that there is a village by the name of Qashqay, 43 km southeast of Bostanabad, in Persian Azerbaijan. On the other hand, Fasa'i (1895) places the origin of the Qashqa'i among the Khalaj, a Turkish group originating in central Asia. These people represent one of twenty-two branches of the western Oghuz, and are one of the Middle East's largest Turkish groups. Oberling (1974) also believes that the Qashqa'i descend from the Qarakhtai, who were sent to Fars by Mohammad Khwarazm Shah (1199-1220) to spy on his rival, the Salghurid Atabeg sa'd. Yet another idea connects the Qashqa'i with the Iraqi Turkman who escaped from the Ghaznavid rulers (994-1040) and settled in western Iran (Oberling, 1974).

A nineteenth century Iranian historian proposed that the Qashqa'i are a branch of a Yomut Turkman tribe named Qashqa'i that accompanied the Salghurid Atabegs to Fars in the twelfth century (Khurmuji, 1859). Beck (1986) cited a Soviet scholar who states that the Qashqa'i were part of the Turkish-speaking Shah-sevan tribes of Mughan in northwest Iran at the end of the sixteenth century, and that Shah-Abbas (1587-1628) moved these Qashqa'i to Fars to assist him in military operations in the Persian Gulf area.

Finally, Shafaghi (1976) a geography professor at the University of Esfahan, makes the following statements about the origin of the Qashqa'i:

1. The Qashqa'i people belong to the Azeri race and came from western Azerbaijan, in northwestern Iran. They are different from the Mongolian race because Mongolian people have a different skin color and round faces, while the Qashqa'i people have white skin similar to the Azeri people.
2. The languages of the Qashqa'i which include Azeri (particularly people of West Azerbaijan) and Turkish as spoken in Turkey, have the same roots and characteristics.
3. Some of the poems and melodies that are used by Qashqa'i singers are exactly the same as those of the Azeris.
4. Some of the places referred to the poems of the Qashqa'i people are located in northwestern Iran, around lake Gugcheh in Russia, lake Wan in Turkey, and Lake Oromieh in Iran.
5. The dates of tomb-stones in old cemeteries within Qashqa'i regions (mostly in the Gandeman close to the summer-quarter of Dareshuri) indicate that these people came to southern Iran around 400 years ago. This date coincides with the regime of Shah-Abbas (: 255-265).

Based on the previous statements, we may conclude that the Qashqa'i people lived in northwestern Iran and were separated from the Azeri people. It is likely that they moved to Fars during the Safavid dynasty (Shah-Abbas, 1587-1628) to assist Safavid governments in military operations in the Persian Gulf area (cited by Beck, 1986).

## **2.2 Geographic Situation**

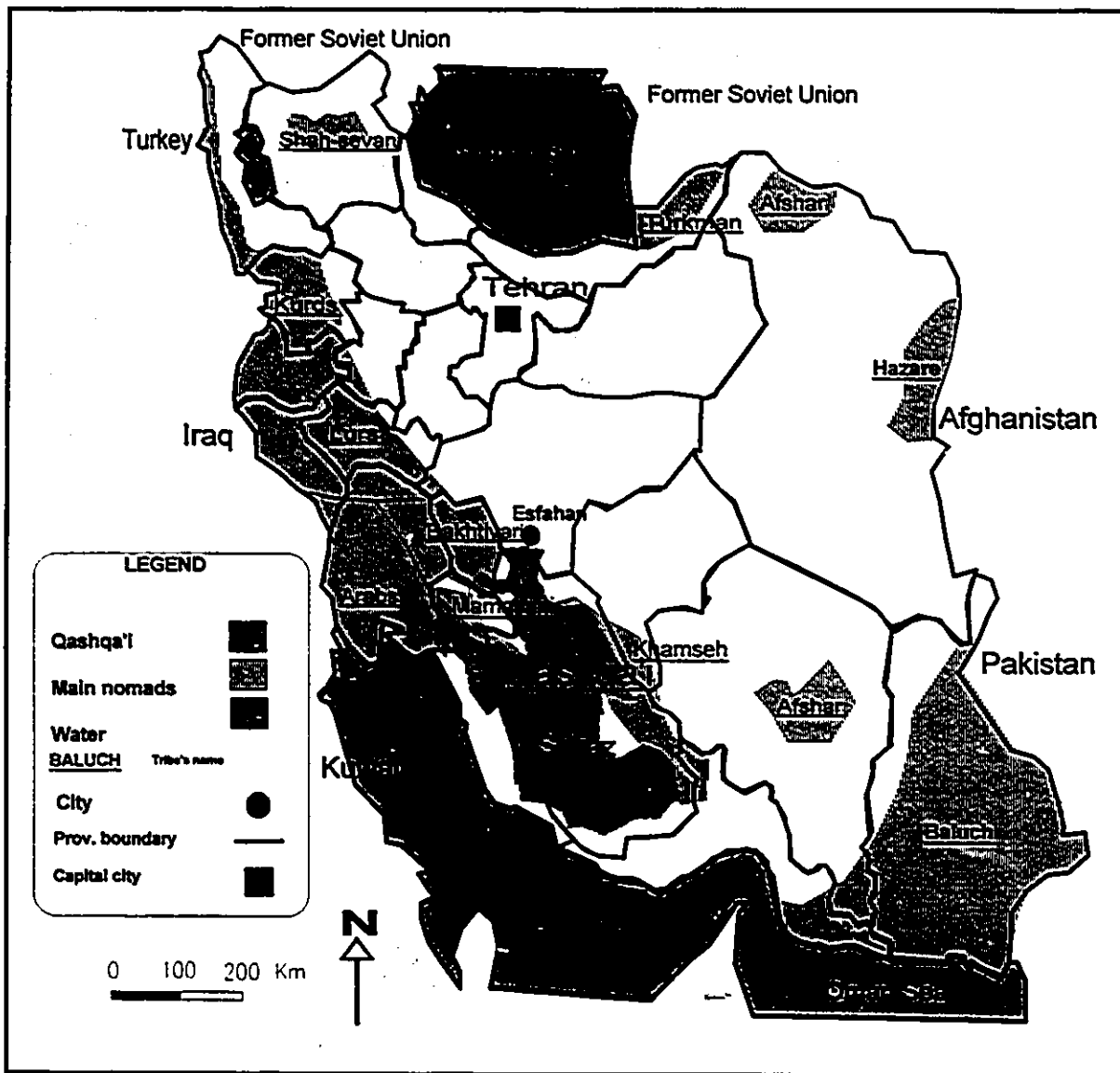
Iran is located on the direct route between central Asia, Turkey and the Arab countries, and a variety of racial and nomadic groups have settled in Iran over the centuries. The most distinctive racial groups is the Turkmans, the descendants of the Oughaze. They live in the Turkman plain, in the northern part of Khurasan. Their round and yellow facial features, language and culture are totally different from the other Iranian races. Some of the Turkman people have a nomadic mode

of life. The Azeri Turks, who live in Azerbaijan, are similar to most of the people who inhabit Iran in the central plateau with the exception of their language. One of the largest nomadic groups of Azeri are the Shah-sevan. The Arab races live mainly in Khuzestan or are scattered along the shores of the Persian Gulf. In the central south region live the Qashqa'i tribes, who are of Turkish extraction. The remaining inhabitants of Iran consist of various Iranian groups such as the Farsis, Kurds, Lurs, Bakhtiyari, Hezars, and Baluchis.

It is difficult to delineate a specific boundary for the Qashqa'i region, because the Qashqa'i co-exist with other Persian people in the same area. However, the area in which the Qashqa'i people are now living is bounded in the north by part of the Esfahan and Chaharmahal-Bakhtiyari provinces and, in the east by part of the Fars and Yazd provinces. Khuzestan, Kohgiluyeh Boyer-Ahmad, and Bushehr provinces flank the Qashqa'i area in the west, and the southern boundary of Qashqa'i is bounded by part of the Bushehr, Persian Gulf, and Hormozgan provinces. Although the Qashqa'i are distributed in several provinces such as Esfahan, Khuzestan, Kohgiluyeh Boyer-Ahmad, Chaharmahal-bakhtiyari, and Bushehr, the majority of them live in Fars province and consider this area as their home territory.

Figure 2.1 shows the areal distribution of the Qashqa'i in Iran in relation to other Iranian tribal societies in 1986. It shows that the Qashqa'i people are distributed in the southwest part of Iran, mostly in the province of Fars. Shiraz is the capital city of the province of Fars and is located in the centre of the Qashqa'i regions. This city serves as a market for exchanging goods for the Qashqa'i tribes and because of the opportunities it offers to the Qashqa'i population, it has become a major destination for Qashqa'i migrants. Other tribal neighbours of the Qashqa'i include the Bakhtiyari in the northwest, Khamsehe in the east, and Mamasani in the center of the Qashqa'i

Figure 2.1 : The Areal Distribution of Main Tribal Groups in Iran (1986)



Source : Iran Statistical Centre (1986)

region.

The scarcity of precipitation in Iran (annually 230 mm), particularly in southern regions and in Fars province are a major factor promoting nomadism in the vast area of the Zagros chains towards the Persian Gulf. Rainfall in southern Iran and in the Qashqa'i region, fluctuates greatly in amount, and in the time of year at which it falls. In a dry and 'bad year', it is not uncommon for a flock owner to lose 50% of his animals. Because of this problem, Qashqa'i nomads have recently become involved with multi-dimensional economies which help them maintain their livelihood. In addition to animal husbandry, they engage in agriculture (mainly the production of fruit from orchards planted in summer and winter-quarters), and also obtain money from low-paid jobs in the cities.

Climatic data indicate that most precipitation occurs during the winter and fall in both the winter and summer quarters. Temperature is the principal climatic factor differentiating the two areas. The Qashqa'i nomads start their fall migration from the summer quarters toward the winter quarters to enjoy the climatic and pastoral advantages of these areas which are important to sustain their livestock. The mean temperature in the winter quarters is above 10 °c. Thus, after the first precipitation, fresh grass grows, and the winter quarters produce suitable pastures for the nomads' livestock. In summer, because the winter quarters experience temperatures above 30 °c, the Qashqa'i nomads have to migrate to the summer quarters. After the snow melts in the mountainous areas of the summer quarters, the Qashqa'i start their spring migration to the highlands. Again, these movements are based on the advantages of these places for their livestock.

### **2.3 Historical Overview of Qashqa'i Political Centralization**

The Qashqa'i consist of six large tribes (Dareshuri, Sheshbluki, Amaleh, Farsimadan, Kashkuli-Bozorg, and Kashkuli-Kuchek), and each tribe was traditionally headed by a family of Khans (leaders). The tribes were united in a political confederacy until 1954, after which the central government of Iran removed their leader (Ilkhani) from office. In 1962, the formal authority of the Khan of each tribe was also removed. However, the tribes' people still consider themselves defined by political affiliation to their ancestors as well as by territorial, cultural, and linguistic criteria (Beck, 1986).

Beck (1986) states that the history of Qashqa'i political centralization is a competition of the Qashqa'i elite to exercise power over the extraction of natural resources from the Zagros mountains. The Zagros are located at the western edge of the vast Iranian plateau and consist of parallel mountain chains running northwest to southeast. These mountains are separated by valleys and plateaus, which are often suitable only as pasture because of their considerable altitude. The specific areas inhabited by the Qashqa'i in these mountains, was of central importance to political centralization. The area's features include rich natural resources (oil fields), proximity to the trade routes of the Persian Gulf, and inaccessibility to the national capital (Tehran city). Other characteristics of this area include isolated and widely separated seasonal pastures, and long and vulnerable migration routes through non-Qashqa'i territory. This combination of features is not present elsewhere in Iran. Furthermore, the Qashqa'i straddle an area of communication between the Persian Gulf and the major population centres of Iran. This area was a strategic location that proved to be vital to expanding British interests via India and the Gulf in the eighteenth, nineteenth, and early twentieth centuries. The Qashqa'i elite often relying on military strength, have competed for

control over the region's resources, products, and labour (Beck, 1986).

The rich pastures and cultivable land on which the Qashqa'i relied permitted surplus agricultural production. This contributed to the emergence of socio-economic stratification and a wealthy and powerful elite who assumed control over land use, helped to coordinate migrations, and dealt with outside forces (Beck, 1986). People who regularly used pastures in widely separated locations in the area became part of a coordinated system of migrations and land use that enabled them to compete successfully with others in the region. A well-developed, locally based, centrally linked political system was essential to this successful competition. According to Beck (1986) for at least two hundred years, the Qashqa'i tribal confederacy proved to be a viable means of organization for its members. The confederacy prevented the state from subordinating or assimilating the Qashqa'i people, while at the same time it enhanced their exploitation of resources and permitted a high degree of local political, economic, and cultural autonomy (Beck, 1986).

#### **2.4 The Socio-political Organization of the Qashqa'i**

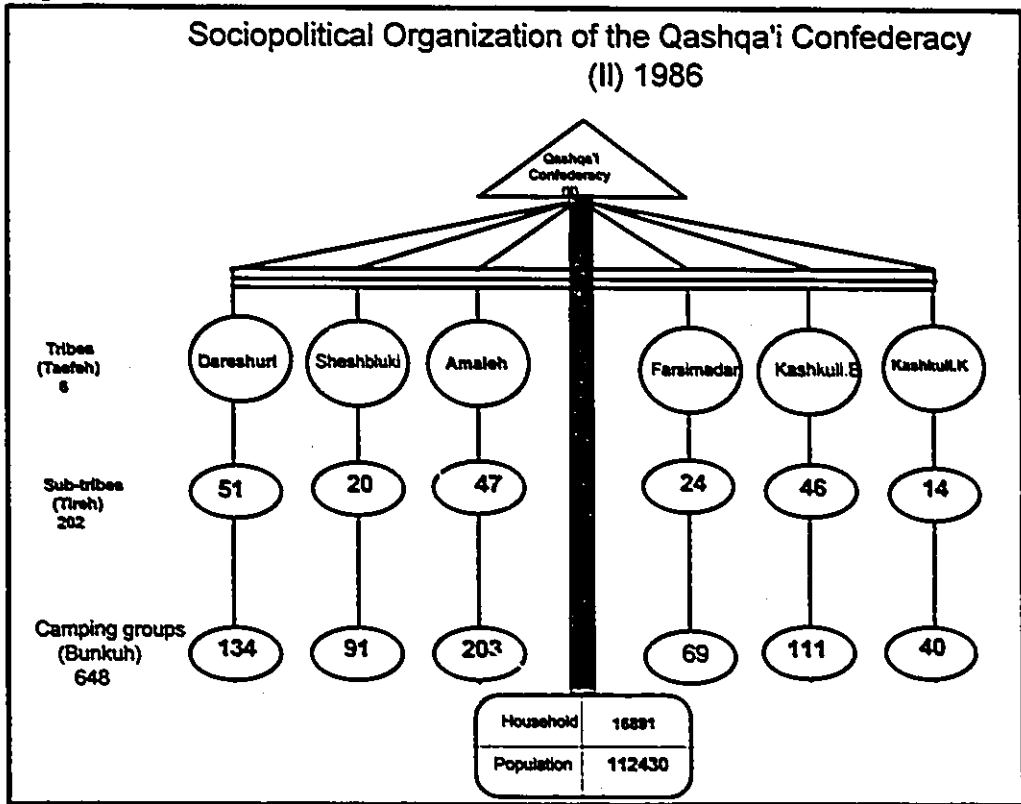
At the height of their power, the Qashqa'i people were organized into a hierarchy of socio-political groups, each represented by one or more leaders. Oberling (1974) states that the Qashqa'i confederacy or *Il*, was comprised of six tribes. The chief of the *Il-e-Qashqa'i* (Qashqa'i Tribal Confederacy) was known as the *Ilkhani*. The *Ilkhani* was assisted in his work by an *Ilbegi*. The *Ilbegi's* appointment, like the *Ilkhani's*, had to be officially approved by the Shah. He was usually a brother, cousin, or nephew of the *Ilkhani*. It was customary for both the *Ilkhani* and the *Ilbegi* to add the title of *Khan* to their names. Each *Taefeh* or tribe, was headed by one or more *Kalantars*, who were appointed by the *Ilkhani*. As a rule, they added the titles of *Beg* or *Keykha* to their names,

but on occasion, when they performed outstanding services to the confederacy, they would be rewarded with the title of Khan. Many, however, were familiarly called Khan without official authorization. Each *Tireh*, or clan, was headed by one or more *Katkhodas*, who were appointed by the Ilkhani on the advice of their Kalantars. They sometimes added the title of Keykha to their names. Each *Bunkuh*, a common migratory unit or descent group of 30-40 'tent families' was headed by an *Ag-Saggal*, or *Rish-Safid*, who was an elder of the group. There was no formal procedure for his selection. A *Beyleh* is a herding group and its composition changed from year to year according to the fortunes of individual households. A *Beyleh* was usually headed by a famous person from among the tents or families. Finally, at the base, was the *Oba* (the household), whose leader was usually the head of an individual family (Oberling, 1986).

In the early 1950's, the Qashqa'i constituted by far the largest organized nomad group in the world (NAGEL' S Encyclopedia- Guide, Iran, 1974). However, in 1954, to reduce the power of the Qashqa'i, the central government of Iran removed the leader (Ilkhani) from office. In 1962, to break the remaining power of the Qashqa'i over southern Iran, the formal authority of the Khan of each of the Taefeh was also removed (Beck, 1986). Finally, in 1979, after the Islamic revolution, most of the formal and informal leaders were removed from power by the Iranian national government, and *Shora-e-Islami* (Islamic council), replaced the *Katkhodas*.

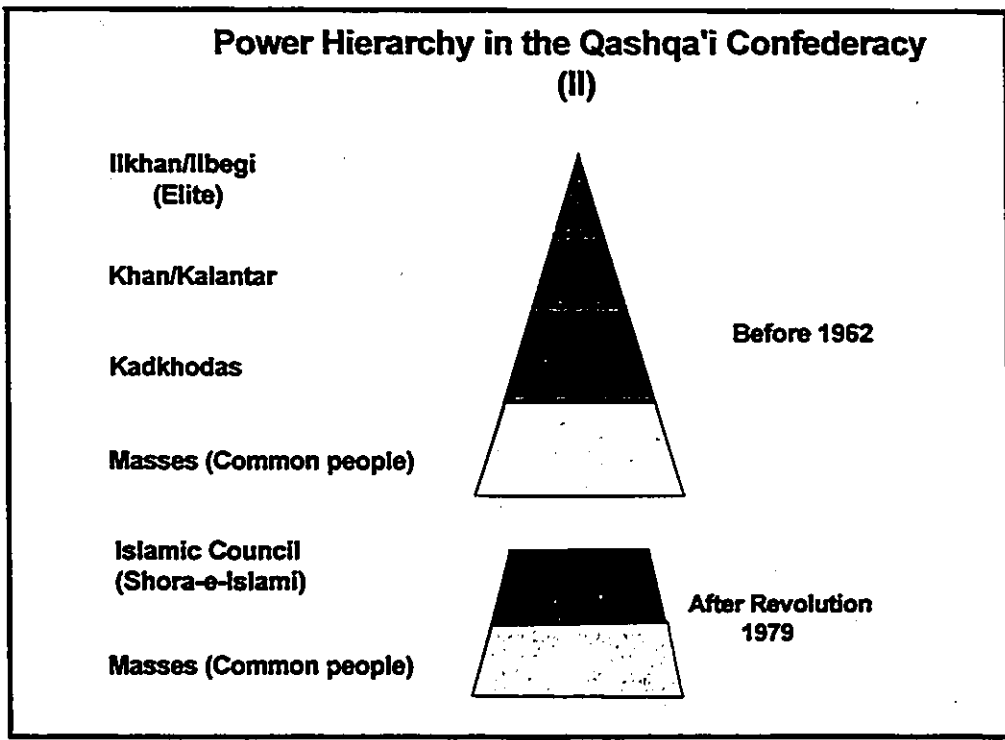
Figures 2.2 and 2.3 show the traditional socio-political organization of the Qashqa'i nomads, as it was described above. As shown in Figure 2.2, by 1986 the Qashqa'i confederacy consisted of six tribes or Taefeh, 202 sub-tribes (*Tireh*), and 648 camping groups (*Bunkuh*). The process of change in the power hierarchy of the Qashqa'i is presented in Figure 2.3. This diagram shows the reduction of class divisions since 1962. However, the establishment of the *Shora-e-Islami* (Islamic

Figure 2.2



*Source: Iran Statistical Centre (1986)*

Figure 2.3



council) by the national government after 1979, has not successfully addressed the problems of the nomads regarding their traditional migration process.

### 2.5 Population of the Qashqa'i

The mobility of the nomads and their widely scattered encampments makes them difficult to enumerate (Oberling, 1974). As a result, the Central Government has often had to rely on guesswork or on the estimates of tribal leaders to obtain demographic information. In order to discourage the Central Government from charging higher taxes, and to avoid compulsory military service for tribesmen and conscription of tribal braves, the *Khans* usually underestimated the number of tribesmen (Oberling, 1974).

Starting with the rise of Reza-Shah (1930), the father of the late Shah up to 1979, the Central Government was eager to dominate the nomads by forcing them to settle permanently in summer or winter quarters. The National government wanted to get rid of the political power that the nomads possessed which could be used against the Central administration. This led to unreliable demographic figures because enumerators were faced with the dilemma of whether or not to include semi-nomadic and sedentary tribes as pastoral nomads. This is especially the case at present, as there are hundreds of thousands of Iranian tribesmen who combine nomadic and sedentary ways of life, and as a consequence, are difficult to classify (Oberling, 1974).

Table 2.1 shows the population estimates of the Qashqa'i tribal confederacy based on various researchers record estimates over the past two centuries. What emerges from the Table 2.1 is that these estimations of the Qashqa'i population, vary greatly, but these numbers are the best available as there was no formal statistics centre in Iran until 1956. Even from 1956 to 1985, there were no

reliable statistics describing the nomads' population in Iran. The only recorded statistics about nomads were produced at the Statistical Centre of Iran and date from 1986. However, they are limited because they do not include nomadic migrants to rural or urban areas.

Table 2.2 shows the population of the Qashqa'i nomads for four different years. This suggests that the population of the Qashqa'i decreased dramatically from the mid-1970's. After this period the Qashqa'i people tended to chose a sedentary way of life. In other words, they settled in their summer or winter pasture lands, or they migrated to urban areas. It should be pointed out that the total population of settled and nomadic population of the Qashqa'i was approximately 400,000 individuals in 1986. Table 2.2 only represents the nomadic population of the Qashqa'i, still moving between summer and winter quarters.

Recently, government officials have been more accommodating towards the nomads in public. The motive was clear as government officials know that the nomadic people no longer have the power to take military action against the central government. On the other hand, they were producing red meat for the population of Iran without much compensation. So, the central government decided to consider nomads a third societal group in Iran, after rural and urban societies. As a result, government census-takers obtained more detailed statistical data from nomads in 1986. Table 2.3 shows the population of some of the most important migratory nomadic confederacies or tribes in Iran. This table indicates that, the Qashqa'i was the second largest Confederacy (II) by population in Iran after the Bakhtiyari confederacy.

Table 2.1: Population Estimates of the Qashqa'i

Date of Estimate	Author	Number of	
		Tent (households)	Individuals
Approx. 1809	A. Dupre		12,000 - 15,000
1841	C. A. De Bode	12,000	
Approx. 1849	M. L. Sheil	30,000 - 40,000	
1850	K. E. Abbott		5,000 - 6,000
1865	L. Pelly	15,000	
1866	A. H. Mounsey	25,000	
Approx. 1870	G. N. Curzon	60,000	
1875	A. Rivadeneira	20,000	
1889	G. N. Curzon	10,000 - 12,000	
1894	A. G. Tumansky	12,000	
1906	B. V. Miller	35,000	
1912 - 1913	M. E. Resulzade		350,000
1913	G. Demorgny	55,000	
1914	A. A. Romaskevich	55,000	
1916	A. T. Wilson	40,000	
1918	H. Field	30,000	
1921	P. M. Sykes		135,000
1930	P. M. Sykes		130,000
1932	F. Hesse		60,000 - 80,000
1932	S. K. Dokladov		200,000
1932 - 33	M. Kayhan	30,430	
1943	O. Garrod	30,000	
1944 - 45	A. Razmara	14,040	
1945 - 46	M. B. Bahmanbegi	20,000 - 30,000	
1946	D. D. Duncan		200,000
1948	K. Gudarzi	13,400	
1950	W. O. Douglas		500,000
1951	F. Max	25,000	

Source: Oberling, 1974. *The Qashqa'i Nomads of the Fars*, P.234-35.

Table 2.2: Population Growth of the Qashqa'i from 1963 to 1986

Date	Sources	Number of	
		Household	Individuals
1963	Kasibyan, H.	30,000	---
1974	Sahami, M. H.	34,803	---
1982	Nomads' Office Organization	28,706	---
1986	Census Center of Iran	16,891	112,430

Source: Afshar-Sistani, Iraj, 1986. *Shenakht-e-Ilal*, (text in Farsi), P.623.

Table 2.3: Population of Some Large Migratory Nomadic Tribes in Iran (1986)

Confederacy(II) or Tribes	Number of Households	Male & Female	Male	Female
Bakhtiyari	27,960	181,777	95,676	86,101
Qashqa'i	16,891	112,430	56,842	55,588
Mamund (Mayvand)	6,768	40,087	21,370	18,717
Boyer-Ahmad (sofla)	6,230	38,667	20,171	18,496
Shah-sevan (Il-sevan)	5,897	47,248	24,654	22,594
Khamseh	4,768	31,715	16,166	15,549
Kharedagh	4,676	31,350	16,279	15,071
Mamasani	3,356	20,112	10,210	9,902
Others	103,677	648,713	336,406	312,315
Total	180,223	1,152,099	597,774	554,325

Source: Statistics Centre of Iran 1986.

Figures 2.4 and 2.5 show the population distribution of nomadic tribes by Ostans (provinces) in the traditional summer and winter quarters in Iran. These maps reveal that much of the nomadic population (such as Qashqa'i, Khamseh, and Mamasani) is concentrated in Fars Ostan (province) throughout the year. However, Khuzestan has more nomads (especially from the Bakhtiyari) during the period where they move to their winter quarters.

Table 2.4 shows the number of households and the population of the six major tribes of the Qashqa'i Confederacy (II), and the percentage of the confederacy represented by each tribe.

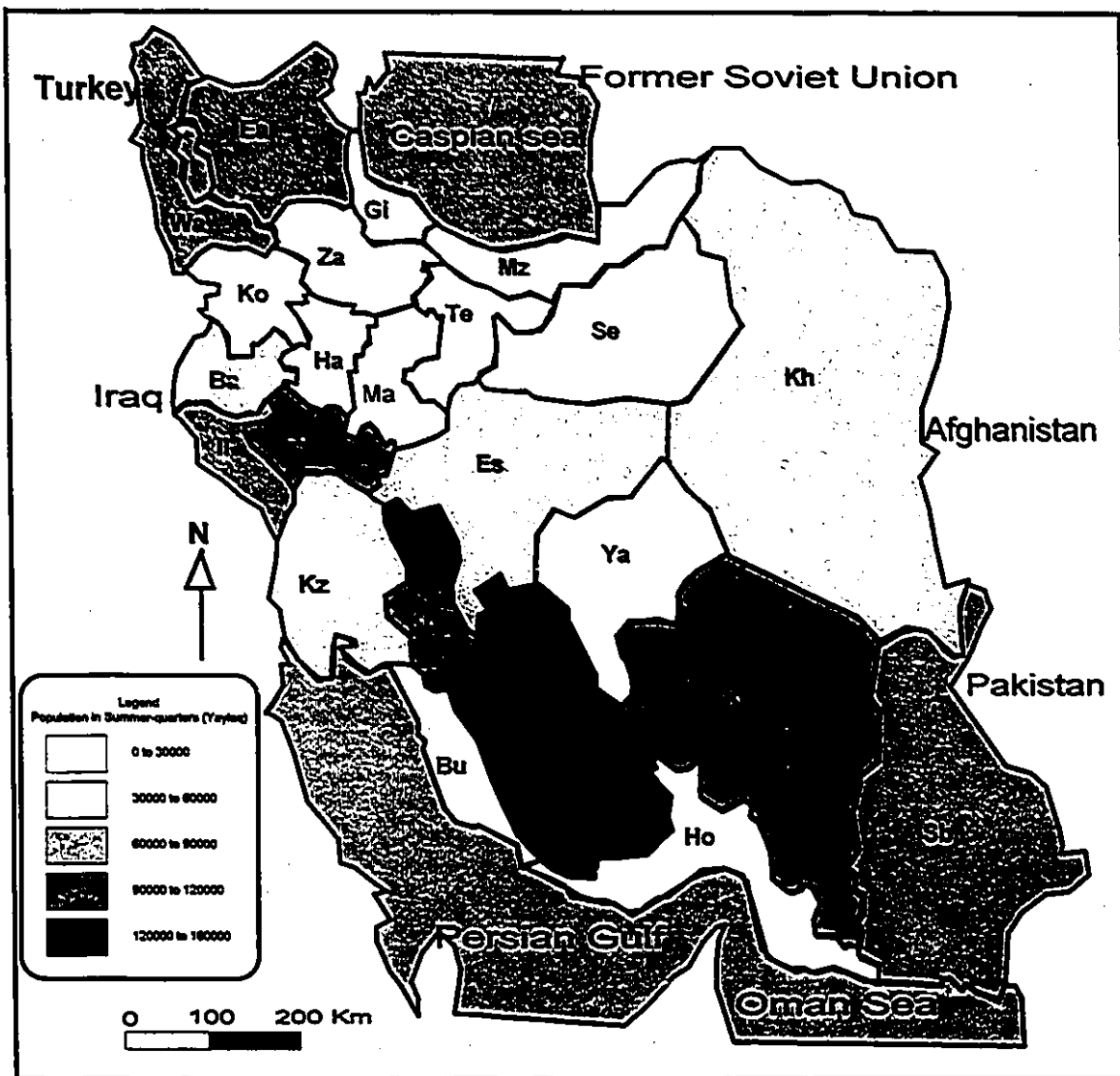
Table 2.4: Population of Six Major Tribes of Qashqa'i Confederacy (1986)

Name of Tribes	Households	Male & Female	Male	Female	%
Dareshuri	3,340	23,085	11,711	11,374	19.7
Sheshbluki	4,209	26,290	13,112	13,178	25
Amaleh	4,037	26,708	13,568	13,140	24
Farsimadan	2,073	14,170	7,180	6,990	12.2
Kashkuli-Bozorg	2,517	17,167	8,763	8,404	15
Kashkuli-Kuchek	715	5,010	2,508	2,502	4.1
Total Qashqa'i	16,891	112,430	56,842	55,588	100

Source: Statistical Centre of Iran, 1986.

As previously mentioned, the above table includes only that part of the population that leads a nomadic way of life. The total nomadic Qashqa'i population (112,430) in Table 2.4 consists of just less than 25 % of the whole Qashqa'i population (Gharakhlou, 1989) and it is estimated that more than 75 % of the population has already settled. In this thesis, the focus is on the segment of Qashqa'i

Figure 2.4: Population Distribution of Iranian Nomads by Province in Summer quarters (Yaylaq)



Source: Iran Statistical Centre (1986)

Codes=Provinces

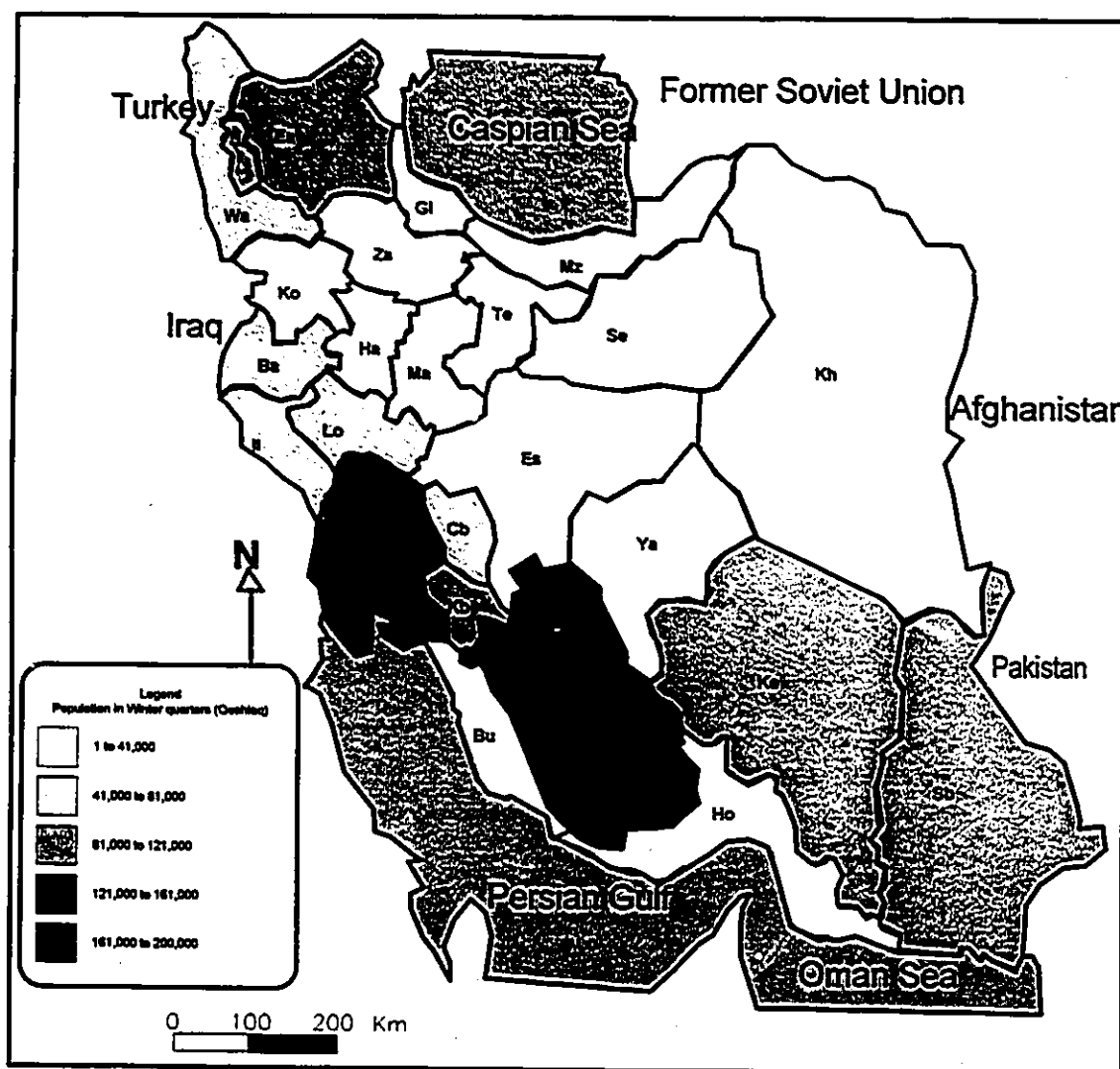
Te =Tehran

Es =Esfahan

Fa =Fars

\*For other codes, see original source

Figure 2.5 : Population Distribution of Iranian Nomads by Province in Winter quarters (Qeshlaq)



Source : Iran Statistical Centre (1986)

Codes=Provinces

Te =Tehran

Es =Esfahan

Fa =Fars

\* For other codes, see original source

population who have already migrated, or intend to migrate, to urban areas.

## 2.6 The Qashqa'i Economy

The tribes of Iran have a well-established and diversified economic base. They make a considerable contribution to the national economy in several ways. Nearly half the fresh meat produced in Iran comes from the nomads' herds (Varlet and Massoumian, 1975). Carpet-making supplements pastoralist incomes and is a valued export industry. The nomads also grow grains and tend fruit orchards in the winter and summer-quarters. Thus, the pastoralists of southern Iran make important contributions to of national production and have well established economic relationships with the larger national society. The Qashqa'i are one of the largest nomadic groups in southern Iran that actively participate in the national economy.

The Qashqa'i played a major role in the economy of the Fars and Esfahan provinces. They provided the villages and towns with animal hides, leather, and meat. They also sold rugs, carpets, blankets, and feedbags. The Qashqa'i also used to breed and train horses. To quote Oliver Garrod, a captain in the British Army Medical Corps who became well acquainted with the Qashqa'is while serving in southern Iran during the Second World War, writes:

" The Qashqa'i were celebrated horsemen and horse-breeders, but their stables have been greatly depleted by Reza Shah's short-sighted measures of oppression. Their horses, which were ponies by European standards, seldom standing more than fourteen hands high, were of predominantly Arab blood and admirably suited to the rough terrain. ... The Darreshuri ,especially their Dandelu subsection, were by far the finest horsemen and breeders" ( Oberling, 1974, p.17).

The Qashqa'i rugs and carpets were among the finest of those produced by the nomads of Iran.

Garrod tells us that:

" ....The Darreshuri weaved a peculiar coarse rug called a *Gabeh*, mostly of undyed whites, greys, and blacks woven into geometrical designs. Besides carpets, pileless

rugs or *Glims* of high quality and vivid colouring, with geometrical designs, were woven, also coarse blankets called *Jajims* serve as blankets and horse-cloths. In addition, all kinds of saddle, tent, and provision bags were woven; also the black sackcloth of goat's hair with which they roof their tents" (Ibid.,p.18).

According to Major General Ali Razmara, the distinguished Persian soldier, statesman and geographer, during World War II, the Qashqa'is owned 663,000 sheep and goats, 21,775 horses, 58,350 donkeys and 17,725 camels (Oberling, 1974). During the years of prosperity which followed the war these figures may have doubled.

The economy of all nomads in Iran was based on traditional herd ownership (sheep and goats), and in turn depend upon pastures. Table 2.5 shows the total livestock in Iran as compared to the total nomadic livestock. According to this table, nomadic livestock constituted 23 % of the national livestock in Iran. It can be observed that 26 % of the total sheep and goats of the country belong to nomads. Based on Statistical Center of Iran (1986) the total population of Iran was 49,445,010 individuals, and the nomadic population was 1,152,099 individuals. This means that the 2.3 % of total population who were nomads in Iran maintained 23 % of the total livestock of the country.

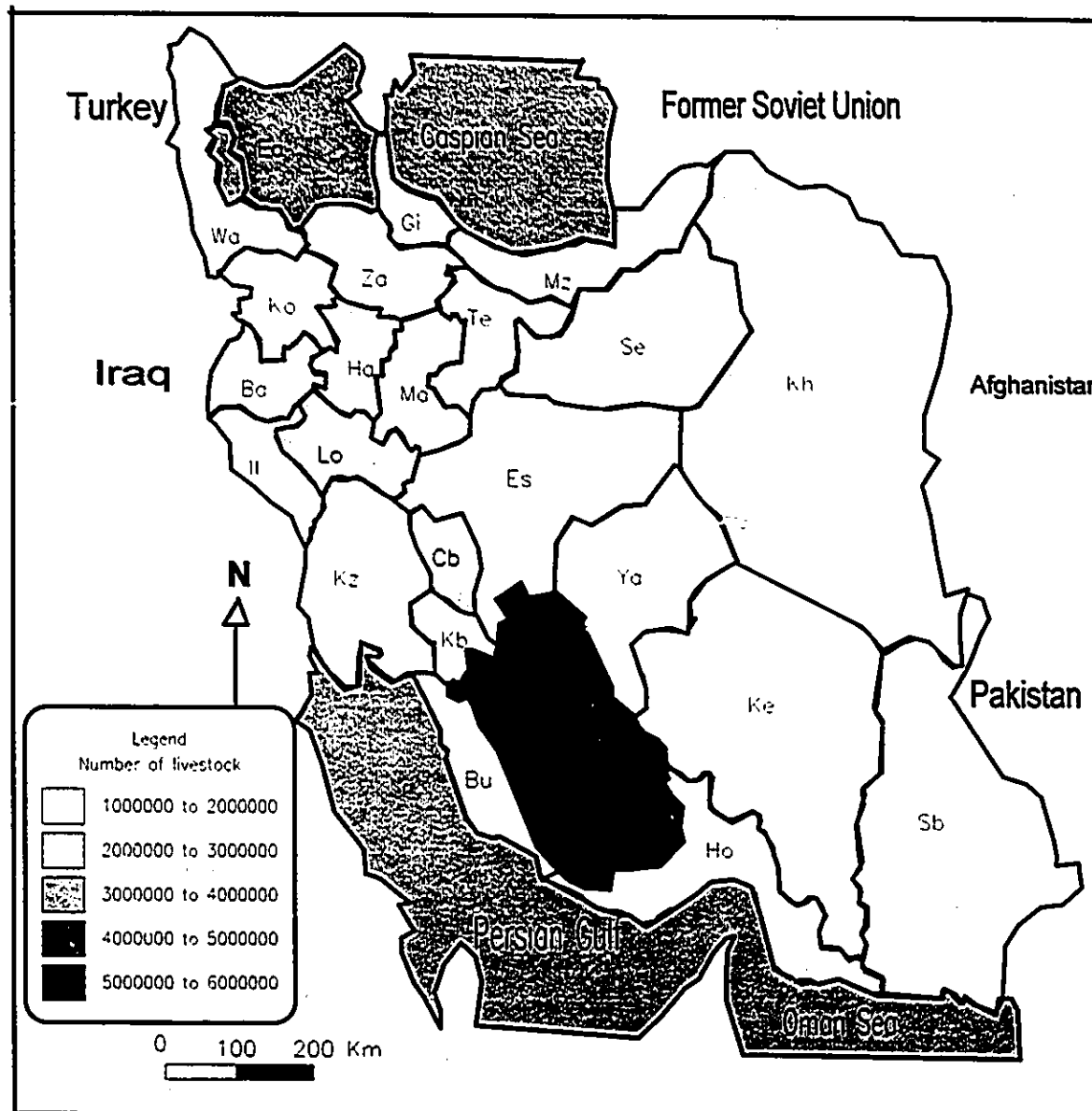
Table 2.5: Total Livestock in Iran (1986)

Kinds of livestock	Total National	Total nomadic livestock	% of national livestock Owned by nomads
Sheep & goats	65,985,848	16,961,601	26
Camels & buffalos	9,358,543	494,327	5
Total	75,344,389	17,455,928	23

Source: Statistical Centre of Iran, 1986

Figure 2.6 illustrates the distribution of the nomadic livestock in Iran by provinces. According to figure 2.6 the distribution of the nomadic livestock ranges from one million to six million from province to province, with Fars having the greatest number.

Figure 2.6 : Distribution of the Nomadic Livestock in Iran by Province



Source : Iran Statistical Centre (1988)

Codes=provinces

Te =Tehran

Es =Esfahan

Fa =Fars

\*For other codes, see original source

Table 2.6 shows the numbers of livestock of five important confederacies or tribes in Iran. According to this table, the Qashqa'i confederacy (II) with almost four million sheep and goats was one of the largest producers of red meat among the Iranian nomads by 1985.

Table 2.6: The Number of Livestock of Five Large Confederacies in Iran

Confederacy (II) or Tribe	Number of sheep and goats	Number of cows	Number of camels
Qashqa'i	3,695,377	5,463	6,666
Bakhtiyari	2,406,593	45,383	116
Khamseh	2,308,570	350	1,989
Meund (Mamund)	1,025,056	11,328	-
Shah-sevan (Il-sevan)	837,773	13,730	4,112

Source: Statistical Centre of Iran, first phase, 1985.

## **2.7 The Process of Qashqa'i Sedentarization**

Under the Qajar monarchs in Iran (1787-1925), the Qashqa'i confederacy enjoyed considerable regional autonomy. However, during the reign of Reza Shah, mostly 1930's and 1940's, this autonomy was taken away by strong central government control (World of Islam Festival, 1976). A deliberate policy of sedentarization referred to by nomads as, *Takhteh Qapu* or "wooden door policy" was conducted from 1935 to 1941. Since this policy involved compulsory sedentarization, a great decline in the number of animal occurred, and the economic and political strength of the Qashqa'i nomads was thus diminished. This policy dictated that the nomads were obliged to stay either in the *Sarhad* (summer quarters), which was too cold in the winter, or in the *Garmsir* (winter quarters), which was too hot in the summer. Following Reza Shah's policy the Qashqa'i tribes lost most of their internal organization and were forced to settle in villages. The

ultimate aim of Reza Shah was to eliminate the political power of the Qashqa'i. By the beginning of the World War II, however, most of the Qashqa'i destroyed their villages and restarted their traditional nomadic migration. In the mid-1960's, the majority of the Qashqa'i were still nomadic and pastoral and lacked permanent settlements. They spent approximately four months in lowland winter pastures, two months migrating in spring to highland summer pastures, three months residing in the summer pastures, and three months in the fall migration back to winter pastures.

During the regime of the last Shah (1960's and 1970's), government policy relating to pastoral land use was instrumental in causing the migration of the nomads to the cities. This policy contributed to land degradation and over grazing and thus to a decrease in productivity. Before 1960's, each nomad had a private pasture in the winter and the summer quarters (Beck, 1986). He was responsible for his pasture and protected it for grazing his own sheep or goats. In the 1960's, pastures were nationalized (Beck, 1986), and no one could have a private pasture or destroy forests or pastures.

The result was just the opposite of the policymakers' plans, because now only farms and orchards could be held as property. In order to keep their 'pastures', the nomads had to change them into farms and orchards. This policy caused people to adapt their pastures to sedentary systems, thereby destroying them for grazing. This was necessary because their economy depended on the land. Therefore, this kind of degradation of the forests and pastures forced nomads to decide either to lead a sedentary way of life or to migrate to urban areas.

Beck (1981) states that the decline of nomadism among Iran's Qashqa'i nomadic pastoralists was the most obvious and dramatic of many alterations in their lifestyles. The Khans' tribal responsibilities were legally removed from the Qashqa'i community in 1954, and the national land

reform program was implemented in 1962. By 1964, pasture lands were nationalized, and control over land use and the movement of the Qashqa'i was put under the military. Because of pasture scarcity, government control, the undermining of tribal organization, national economic pressures, and capitalist penetration, it was virtually impossible for most Qashqa'i to continue as nomadic pastoralists (Beck, 1981).

According to Beck (1981), the changes of the 1960's and 1970's forced the end of large-scale traditional migration of the Qashqa'i. Eventually, this led to the predominance of three patterns including:

1. Sedentarization in villages;
2. Continuation of impoverished nomadic pastoralism; and,
3. Migration to towns and cities for wage labour and employment.

These three patterns can be described in the following way:

(1) Sedentarization in villages : most of the Qashqa'i settled or made plans to settle in this pattern, and subsisted by combining raising flocks with agriculture. They settled near their traditional winter or summer pastures in villages which they built. Some Qashqa'i settled individually, but most settled with relatives and in groups. The winter and summer locations of the Qashqa'i stretched over huge expanses of land, which varied topographically. The location of the settlement depended on the availability of land, prior local affiliations, and forms of crops production. Winter and summer pasture areas presented different but serious climatic problems, ranging from intolerable heat and shortages of vegetation to extremely cold weather, heavy snow, and wind (Beck, 1986). Given the problems of harsh climates, population increases, land scarcity, and lack of facilities, the Qashqa'i started a new movement toward the cities that were closest to their place of origin (Beck, 1981).

(2) Impoverished nomadic pastoralism : A second group of Qashqa'i decided to continue nomadic pastoralism, but changed their migration patterns. To begin with, fewer complete households migrated with the herds. Women and young children tended to remain in one place all year while the man and older boys migrated with the herds. The men carried only enough equipment and supplies for basic survival, and slept in small canvas pup-tents, rather than using heavier goat-hair tents. They used donkeys and mules rather than camels as pack animals. More recently, they began to use motorized transportation as a way through the Zagros mountains and thereby shortened the seasonal migration. During the spring and fall, some of the Qashqa'i pastoralists move their families and herds with trucks or other vehicles to reach their summer or winter pastures (Beck, 1981).

(3) Migration to towns and cities : A third group migrated to towns and cities to look for jobs and to gain access to urban facilities. Most of these migrants perform low-paid work and live and work in oppressive conditions. These Qashqa'i blended into the unemployed and underemployed population of every town and city of the region, and their residences became part of large and crowded settlements (Beck, 1981). More recently, the population of the first and second groups have increased their rate of city migration and joined this third group of Qashqa'i in settlements around cities. The focus of this research is the study of the Qashqa'i who have migrated or who intend to migrate to urban areas.

## **2.8 Migration and Problems Facing the Government and the Qashqa'i**

The migration process of the Qashqa'i has created two sets of problems. The first set was related to the migration of nomads from their places of origin to cities. As described above,

degradation of pasture lands, implementation of land reform, nationalization of pasture, destruction of the socio-political organization are part of these problems. In addition, the traditional migratory routes of the Qashqa'i were cultivated and therefore closed in the vicinity of non-Qashqa'i villages. Also the nomadic educational system was closed in 1983 and has been replaced with the national education system. All of these changes have encouraged the migration of the Qashqa'i to urban areas.

A second series of problems have shaped the prospects of the Qashqa'i migrants who have moved to the cities. These people have problems in finding employment, in adjusting themselves to the new socio-cultural way of life, in obtaining housing, and in language as they have to replace Turkish with Farsi. Other events after the 1979 Islamic revolution which have exacerbated their difficulties include the Iran-Iraq war, revolutionary politics and continued internal social disintegration.

To address these problems, an International Conference on Nomadism and Development was held in Shahr-E-Kord (Iran) on the 1st of September, 1992. The conference paid special attention to pastoral nomadism as an historical, social, cultural, economic, and ecological phenomenon. Here is a part of the summary of conference statement.

1. Pastoral nomads have played an important role in Iran's history, culture, and economy. Pastoral nomads live throughout Iran and have long adapted the exigencies of its geography and ecology to provide essential animal products and related services for the national economy.
2. Equally important, the number and variety of pastoral nomadic peoples have added to the cultural richness and diversity of Iran in devotion to Islam and their country, in their languages and traditions, and through their handicrafts and other cultural specialities.
3. Iran's history has been enriched by the many contributions of its pastoral nomadic peoples. In the past, valuable contributions have been threatened by thoughtless incorporation into a national economy and administration, including forced sedentarisation. Past policies failed to recognize the cultural characteristics linked

to the unique pastoral nomadic economy and society (International Conference on Nomadism & Development, Iran, 1992, p.61-62).

In order to strengthen this invaluable heritage, the participants of the conference believed that the new policies were necessary to protect the richness and diversity of pastoral nomadic society, and its contribution to Iran's future. However, the decision-makers who participated in the International Conference never achieved the conference's goals. After a few years, the decision-makers changed their policy about the nomadism, and encouraged sedentarization of nomads.

## **2.9 Conclusion**

The Qashqa'i people lived in northwestern Iran and were originally derived from the Azeri people. They moved to Fars to assist the Safavid government in military operations in the Persian Gulf area. Although the Qashqa'i are distributed in several provinces, they consider Fars province as their home as the majority of the Qashqa'i population live there. The Qashqa'i consist of six tribes: Dareshuri, Sheshbluki, Amaleh, Farsimadan, Kashkuli-Bozorg, and Khshkuli-Kuchek. Until 1954, the Qashqa'i tribes were united in a political confederacy, but the government of Iran removed their leaders (Ilkhan) from office, and weakened their political centralization. The Qashqa'i people were organized in a hierarchy of socio-political groups (Il, Taefeh, Tireh, Bunkuh, Beylrh, and Oba), and each level was represented by one or more leaders (Ilkhan, Kalantar, Katkhoda, and Rrish-Safid).

After the Islamic revolution (1979), the remaining formal and informal leaders were removed from the tribes and the Islamic council replaced the whole system. According to some estimates the population of the Qashqa'i in 1986 was about 400,000 individuals, and 112,000 of them are still nomads (Statistical Center, Iran, 1986). Based on population, the Qashqa'i is the second largest confederacy in Iran after the Bakhtiyari. The Qashqa'i economy is mainly based on sheep, goats,

and agriculture. The Qashqa'i nomads are still one of the largest producer of red meat among the Iranian nomads. Their rugs, and carpets are among the finest of those produced by nomads in Iran. However, the Qashqa'i nomads are in danger of disappearing as a consequence of their movement from their place of origin to urban areas. This migration may cause them to lose their culture, and their traditional economic productivity in the near future.

The process of Qashqa'i sedentarization started with *Takhteh Qapu* (wooden door policy of Reza shah). After this period the Qashqa'i leaders were removed from power, land reform was implemented, pastures were nationalized, and control of the Qashqa'i was put under the military. After the revolution in Iran (1979), traditional migratory routes were closed, and the degradation of pastures increased because of social disintegration among the Qashqa'i. The continuation of nomadic pastoralism became virtually impossible for most Qashqa'i, and has led to their migration to urban centres where they face new problems.

### 2.9.1 Significance of the study of Qashqa'i migration

Iranian nomads consist of 96 confederacies(II) and 547 tribes (Statistical Centre, Iran, 1986), with the Qashqa'i of Iran being one of the largest confederacies (II) among them. Also, the Qashqa'i of Iran are the only Turkish speaking people in the central and southern part of the country. Thus, they have a different language and culture from other Persian speaking Iranians. During the past three decades, the Qashqa'i urban migrants have been effectively absorbed within Iranian cities (Aghajanian et al., 1985). This integration of the Qashqa'i minority with the Persian speaking majority may cause the migrants to lose their language and their culture. The Qashqa'i people also played a key role in producing red meat, carpets, and other products as part of the national economy.

But the flow of the Qashqa'i to cities has resulted in the loss of productivity, and has added to the number of Iranian urban consumers. Therefore, in order to find out the causes and consequences of the Qashqa'i migration, and also to protect their unique culture in southern Iran, it is useful to focus on the migration of the Qashqa'i community and to consider the reasons for this migration, as well as the impacts that the Persian and Qashqa'i communities have on each other.

In planning this research, it was necessary to start from a very basic level, since this is original work and one of the few migration surveys ever done on a nomadic population. It should be pointed out that I am a Qashqa'i and I was raised among my tribe. This has made me deeply involved in the processes of change of the Qashqa'i lifestyle. I have special concern for this area and its people and these factors have given me extra inspiration to work in this area of study.

### **2.9.2 Thesis statement**

Since the 1960's the Qashqa'i nomads of Iran have been facing numerous problems in meeting their subsistence survival needs, and they have decided to change their way of life by migrating to either rural or urban areas. The population of the Qashqa'i in 1966 was 211,225 individuals ( Afshar-Sistani, 1986). The average growth rate of the population in Iran between 1966 to 1986 was 3.25 % (Javan, 1988). Accordingly, the total population of the Qashqa'i in 1986 should be about 400,000 individuals. But, the Statistical Center of Iran records the population of the Qashqa'i nomads in 1986 as only about 112,000 individuals. The remainder of the population, totaling 288,000 individuals have adopted a sedentary way of life. In other words, more than two thirds of the Qashqa'i people have migrated to rural or urban areas.

The trend noted above raises an important research question:

- 1. What were the causes of the substantial rise in the flow of nomads to urban areas? More specifically, did the increased migration result mainly from "urban pull" factors ( facilities such as education, health services, and accessibility to other urban services), or was it mainly due to "push" factors or, could still other forces be responsible?**

Using question one as the main issue, it is reasonable to focus on the following secondary objectives:

- 2. With regard to the geographical distribution of the Qashqa'i in Iran, are the Qashqa'i tribes affected differently from each other, when push and/or pull factors are involved?**
- 3. What are the important push and pull factors for intending Qashqa'i migrants and migrants at the places of origin and destination?**
- 4. What are the impacts of existing urban populations on the Qashqa'i migrants? How do these populations influence the culture and assimilation process of the migrants?**
- 5. What is the specific policy in Iran with respect to the migration of nomadic Qashqai to urban areas?**

This thesis attempts to address these questions. The two previous chapters were presented in order to describe nomadism in the world and the particular situation of the Qashqa'i nomads in Iran. The next chapter concentrates on the study of migration and reviews basic concepts from the migration literature. This helps in presenting the interrelationship between nomadism and migration.

### III. Review of Literature on Migration

The main purpose of this chapter is to introduce and define the basic concepts relating to migration. Following this, the determinants of migration are critically described in relation to different approaches and selected theories. Then, the causes and consequences of rural-urban migration in developing countries, and more specifically in Iran, are discussed. In developing countries, the major flow of population from rural areas to cities has continuing impacts on the societal and economic structure of these countries. In the last part of the chapter, the nomad migrants to urban areas are considered. Nomadic migrants are mostly classified as rural inhabitants by demographers in Iran. Therefore, while the migration of tribal populations is an important component of internal migration, it has received little attention in the Middle East in general, or, in Iran in particular.

#### 3.1 Basic Concepts

Migration may be defined as the permanent or semi-permanent change of residence of an individual or group of people (Roseman, 1971). Each 'academic' discipline has viewed migration studies differently, depending on its own particular scholarly perspective and the variability of data sources available for migration studies (Lewis, 1982). The term 'migration' is defined in light of the demographic balancing equation by Clark (1986) as follows :

$$P_t = P_{t-1} + B_{t-1,t} - D_{t-1,t} + IM_{t-1,t} - OM_{t-1,t} \quad (1)$$

where:

- $P_t$  = the population at the end of the period;  
 $P_{t-1}$  = the population at the beginning of the period;  
 $B_{t-1,t}$  = the number of births during the period from t-1 to t;  
 $D_{t-1,t}$  = the number of deaths during the period from t-1 to t;  
 $Im_{t-1,t}$  = the number of in-migrants during the period from t-1 to t;  
 $Om_{t-1,t}$  = the number of out-migrants during the period from t-1 to t.

Based on the above equation, the population at time  $P_t$  is equal to the population at the earlier time  $P_{t-1}$ , plus births (*fertility*), minus deaths (*mortality*), and plus net migration (*NM*) the difference between in-migration and out-migration (Clark, 1986).

To understand the migration literature, we need to understand the terminology and the concepts related to migration more precisely. Peters and Larkin (1993) state some of the basic concepts in the following way:

*Out-Migration (OM) and In-Migration (IM)*: Each migratory event involves two actions, leaving one place and arriving at another. Leaving the place of origin is referred to as out-migration, whereas arriving at the place of destination is referred to as in-migration.

*Areas of Origin and Destination*: The area of origin is the place which a migrant leaves, whereas the area of destination is the place where a migrant arrives.

*Gross Migration (GM)*: The total sum of all the people who enter and leave an area is termed "gross migration". Thus, this measurement indicates the total volume of population turnover in a community:

$$GM = OM + IM \quad (2)$$

*Net migration (NM)*: During any specific time, a region may be receiving migrants from one region and losing out-migrants to another region. The difference between the arrivals and departures

is called net migration. When more people leave an area than move into that area, net migration is said to be negative. Positive net migration, on the other hand, occurs when more people enter than leave an area.

$$NM = IM - OM \quad (3)$$

*Migration Rates:* The relative frequency of migration is called the migration rate. It is the number of migratory events divided by the population exposed to the chance of migrating. In other words, it is the number of migrants divided by the population exposed to the possibility of migration over a certain period of time. According to Clark (1986) migration rates can be calculated for out-migration (4), in-migration (5), and net migration (6). For example:

$$Or = (O / P) K \quad (4)$$

$$Ir = (I / P) K \quad (5)$$

$$Nr = (I - O / P) K \quad (6)$$

where

Or = out-migration rate;

Ir = in-migration rate;

Nr = net migration rate;

O = number of out-migrants;

I = number of in-migrants;

N = number of net migrants;

P = population at risk (the population who might have moved);

K = constant (usually 1,000)

*Migration Interval:* Because migration is a time-specific process, it is necessary to specify the time interval over which migration is studied or observed. All other things being equal, the longer the time interval, the smaller the average size of the annual number of migrants, because a significant proportion of migrants return rather quickly to their places of origin.

*Migration Streams and Counter Streams:* Migrants who move from a particular origin to a particular destination over the same migration interval are considered part of a migration stream.

Migrants who return to that place of origin during the same period are part of a counter stream.

*Differential Migration* : The study of the selectivity of migration and of the differing rates among various social, demographic, and economic groups is referred to as differential migration. This term is also used when studying the differences in the population composition of migration streams.

*Emigration and Immigration*: A person who changes residence from one country to another is considered an emigrant relative to the country of origin and an immigrant relative to the country of destination.

*International Migration and Internal Migration*: It is conventional to divide the field of migration into two parts: *internal migration*, or the migration of people within a nation or community and *international migration*, or the migration of people between nations. Throughout the world, international migration has played a very minor role in population redistribution in recent decades. On the other hand, internal migration has been the most significant factor in inter-regional population shifts. Since the difference in birth and death rates between communities of the same nation are usually small, differences observed in regional growth rates must be due to internal migration (Peters & Larkin, 1993).

There are some essential criteria for the classification of migration. These criteria include time (temporary or permanent); distance (long or short); decision-making (voluntary or forced); numbers involved (individual or mass); social organization of migrants (family, clan or individuals); political organization (sponsored or free); causes (economic or social); and aims (conservative or innovative).

There are other type of movements in Third World societies which are not frequently

included in migration concepts by researchers. For example, *pilgrimage* plays a central role in many societies in which there are large volumes of people who occasionally travel considerable distances to sacred places. Muslims are obliged to undertake the *hajj*, or pilgrimage to Mecca at least once in their lives, provided they are physically and financially able to do so (Parnwell, 1993).

Another kind of population movement which is closely associated with ecological factors is *transhumance*, which is prevalent in the most mountainous parts of the Third World. Transhumance involves the shifting of populations between different environmental zones in response to prevailing climatic and ecological conditions (Parnwell, 1993).

There is also *the traditional migration of nomads* that is again related to ecological and seasonal factors prevalent in the harsh geographical zones of the Middle East. All Qashqa'i used to practice the traditional migration (*Kuch*), and 112, 000 individuals still follow the old system with some modifications (Iran Statistical Centre, 1986). For example, all the Qashqa'i families originally moved with their herds, loaded camels, horses, and donkeys. Some of these animals have now been replaced by cars, and some Qashqa'i transport their herds from summer quarters to winter quarters with trucks. All of the above concepts should be included in the study of migration in the context of the Third World, and in the Middle East in particular.

### **3.2 Determinants of Migration**

A variety of different approaches to migration studies exist, each claiming to provide an understanding of how migration decisions are made. The approaches advocated by sociology, economics, and geography are described briefly below.

The study of migration has traditionally been the domain of sociologists more than any other

academic discipline, dating back to the early work of Ravenstein (1885, 1889). Among the useful surveys of this literature are Bogue (1959), Elizage (1972), Balan et al.(1973), United Nations (1980b), Ritchey (1976), IDRC, (1977), Findley (1977), and De Jong and Gardner (1981). Sociologists have examined a wide range of factors influencing individual and household migration decisions. These include demographic factors such as age, sex, education, race and household size and composition. Other factors consist of geographic elements such as distance, and economic factors such as income and occupation (Olsson, 1970).

While the field of sociology has clear ties to geography in its recognition of the importance of distance and to economics in its recognition of the primacy of economic factors in determining migration movements, it has not attempted to develop a coherent theory of migration (Bilsborrow, 1984).

Economists began their studies by reviewing the causes and consequences of international movements from Europe to the United States and other countries in the nineteenth century. They also continued with studies of the effects of labour market conditions on migration rates between states and districts in various countries. The focus has traditionally been on aggregate factors influencing migration, especially wage and income levels, and levels of unemployment (Byerlee, 1974; Greenwood, 1975; Todaro, 1976; Bilsborrow, 1976; Gaude, 1976; Stark, 1979; Cebula, 1979, DaVanzo, 1981). Lately, economists have begun to focus on factors influencing individual migration decisions. Despite the focus on economic variables, age, sex, education, and even the presence of relatives can also be considered as factors influencing migration within this framework (Da Vanzo, 1981).

Although the economy plays a major role in the migration process though income and

occupation factors, there are other components such as sociological and geographical factors that have explicit influences. For example, during the in-migration of nomads to urban centres, economic factors play an important role. This does not mean that social and geographical factors can be omitted from migration study.

Geographers have devoted a lot of attention to the study of migration. The collection of data on migration requires that a boundary of some sort has been crossed and that a certain length of time has been spent over that boundary in the new area of residence (Johnston, 1994). The focus of the geography literature on migration is not so much on who migrates or why, or on the consequences of migration, but on identifying spatial aspects (parameters such as distance, size of places, and intervening opportunities between alternative destinations) and directions of movement. Bilborrow (1984) argues that a significant part of human geography is referred to as economic geography, which examines economic determinants of migration at the areal or ecological level. Aggregate movements of population are seen to occur as a consequence of the relative attractiveness of places and are considered to be inversely related to the distance between them. The distance factor (it would be expected that the probability of migration between two places diminishes as distance increases) is inherent in geographic research and figures prominently in the well-known "gravity" model, in which migration between places is directly proportional to their mass (city size) and inversely proportional to the distance between them (Bilborrow, 1984). In this context, the spatial components of accessibility measurement techniques are spatial separation between origin and destination (Cameron, 1995). The close linkages between geographic and economic approaches to migration are also seen in the focus of geographic research on the role of differences in economic opportunities and government investments on population redistribution across areas or regions

(Bilsborrow, 1984).

### **3.3 Specific Models and Theories on the Determinants of Migration**

Much has been written about the use of models in geography, especially since 1960. Harvey (1967) states that the best definition of the word 'model' is the formal presentation of a theory or the simplification of a reality. The objective of this section is to introduce some of the theories behind the function of quantitative models used in migration study.

#### **3.3.1 Ravenstein's laws of migration**

Explanations of rural-urban migration have a long history, dating from the 1880's when Ravenstein first proposed his "laws of migration" (Ravenstein, 1885, 1889). According to these laws, migrants move from areas of low opportunity (low income, fewer jobs, fewer facilities, and denser population) to areas of high opportunity. The choice of destination is regulated by distance, with migrants tending to move to nearby places. Ravenstein also observed that each stream of rural-urban migration produces a counter stream of return migration back to rural areas. He hypothesized that urban residents are less migratory than rural ones, and that migration accelerates with improvements in transportation and communications and with the expansion of trade and industry.

#### **3.3.2 Lee's theory of migration**

Building on Ravenstein's 'laws', Lee developed a "general schema into which a variety of spatial movement can be placed" (Lee, 1966). He divided the forces exerting an influence on migrant conditions as "push" and "pull" factors. The former are "negative" factors which tend to

force migrants to leave source areas, while the latter are "positive" factors which attract migrants to destination areas in the expectation of improving their lives. Lee hypothesized that factors associated with origin area conditions would be more important than those associated with destination area conditions. The forces associated with the area of origin and of destination are governed by personal factors "... which affect individual thresholds and facilitate or retard migration" (Lee, 1966, p.51). Lee's approach is reflected in a broad range of studies, and is actually a conceptual framework for classifying factors in migration decisions rather than a theory (Bilsborrow et al., 1984).

In my opinion, Lee's approach is one that can be used to explain the Qashqa'i migration process, because during the data collection for this study, migrants declared that there were some negative and positive factors that influenced their migration. As described below, the study is partly based on the premises established by Lee's approach.

### **3.3.3 Sjaastad's human investment theory**

In 1962, Sjaastad presented a theory of migration which sees the decision to migrate as an investment decision involving the individual's expected costs and returns over time (Sjaastad, 1962). Moving from one place to another involves financial and psychological costs. These costs are expected to be mitigated by the improved benefits of the new location. When persons migrate, they leave a familiar environment, their community life, and particularly, their friends and relatives. It takes time and effort to establish new communication channels, find new friends and familiarize themselves with the new environment, all of which represent "migration costs". Furthermore, transportation costs, possible retraining for employment, and food expenses play an important role

in the migration process. Opportunities at the destination area are supposed to compensate for all of the migration "costs", and to provide an overall benefit to a prospective migrant in order for him to consider moving (Hemmasi, 1971).

### **3.3.4 Todaro's model of rural-urban migration**

Todaro's basic idea is that migrants as decision-makers consider the various labour-market opportunities available to them among the rural and urban sectors and choose the one which maximizes their "expected" future income (Todaro, 1969, 1976). Todaro's model is an extension of the human capital approach of Sjaastad. In the Todaro approach, migration rates in excess of the growth of urban job opportunities are not only possible, but also rational and probable, in the face of expected large positive urban-rural income differentials. High rural-urban migration can continue even when high urban unemployment rates exist and are known to potential migrants.

Todaro's model assumes that the urban labour force is distributed between a relatively large traditional rural subsistence sector characterized by zero or very low productivity and surplus labour, and a modern urban industrial sector into which labour from the subsistence sector is gradually transferred (Harris and Todaro, 1970). Wage rates in the traditional sector are not determined by formal market forces that tend to create higher wages in the modern sector. As a result, traditional sector wages are substantially lower than those in the modern sector. Most urban in-migrants are assumed to be absorbed by the traditional sector while they seek employment opportunities in the more prosperous, modern urban sector.

Bilsborrow (1984) states that a major weakness of the Todaro model is its assumption that potential migrants are homogeneous with respect to skills and attitudes and have complete

information for working out the probability of finding a job in the modern urban sector. Moreover, both the Todaro and the human investment model do not consider non-economic factors. Therefore, a better understanding of the causes of migration requires an analysis of the macro-economic and institutional factors that generate rural-urban differentials (Bilsborrow, 1984).

### 3.3.5 Gravity models of migration

The gravity model has been one of the more frequent approaches to understanding migration because of Ravenstein's emphasis on the factor of distance, and also the involvement of social scientists with a background in physics. Under the assumption that physical processes can be translated into social contexts, the law of gravity and the concept of potential force are utilized to examine population interaction and distributions (Clark, 1986). According to Clark (1986), any two places (designated I and j) will have an interaction (I) in proportion to their mass, usually designated as their population size (P), and inversely proportional to the distance separating them (D). This can be expressed by the following equation:

$$I_{ij} = k (P_i P_j / D_{ij}^b) \quad (7)$$

In equation (7), k and b are constants to be estimated from observed data. The model can be transformed into a simple linear equation in which the log of the interaction is regressed against the logs of the population and distance as in equation (8).

$$\log (I_{ij} / P_i P_j) = \log k - b \log D_{ij} \quad (8)$$

This equation states that the interaction between the two places can be expected to be related to their population size and inversely to their intervening distance. However, although the gravity model may be a good device for estimating flows between places and a useful technique for

emphasizing the role of distance in these flows, it says nothing about the causes of migration or about the many variables that go into the decision-making process behind migration behaviour.

### 3.3.6 Regression models of migration

It is important to consider variables in addition to distance to improve the explanation of the level of migration between places. Regression analysis identifies the direction and the strength of relationship between a dependent variable ( $Y$ ) and a set of independent variables ( $X_1, X_2, \dots, X_n$ ) (Ansari, 1983). Using this approach, Lowry (1966) attempted to enlarge the gravity model by specifically including employment opportunities. The Lowry model required estimates of hourly manufacturing wages which were not available in the 1960's when the model was proposed. Rogers (1968) suggested and tested a modified model. The Lowry-Rogers model, equation (9), was estimated for population flows between metropolitan areas in California (Clark, 1986). This model can be expressed by the following equation:

$$\ln M_{ij} = \beta_0 + \beta_1 \ln U_i + \beta_2 \ln U_j + \beta_3 \ln WS_i + \beta_4 \ln WS_j + \beta_5 \ln LF_i + \beta_6 \ln LF_j + \beta_7 \ln D_{ij} + \epsilon_{ij} \quad (9)$$

where:

- $M_{ij}$  is the number of migrants from  $i$  to  $j$ ;
- $U_i, U_j$  is civilian unemployment rate at  $i$  and  $j$ , respectively;
- $LF_i, LF_j$  is labour force eligibles at  $i$  and  $j$ , respectively;
- $WS_i, WS_j$  is Per capita wages and salaries at  $i$  and  $j$ , respectively;
- $D_{ij}$  is shortest highway mileage between the major county seats at  $i$  and  $j$ , respectively; and
- $\epsilon_{ij}$  is error term

Rogers showed that over 90 % of the variation in the migration flows was accounted for by the seven variables, but distance and labour force eligibles were the most important variables (Clark, 1986). This model can be adapted to explain the migration of nomads in terms of number of

migrants to cities, total migrants, city size, distance, and total nomadic population at the place of origin.

### **3.3.7 Migration selectivity and differentials**

Another explanation of internal migration focuses on migration differentials, which refer to the selectivity of certain persons or the tendency of certain groups (based on age, sex, education, or occupation) to be more migratory than others. People of different ages, sexes, skills, and ethnic backgrounds may respond differently to economic challenges at the place of origin and to potential opportunities at the place of destination. The probability of persons aged from 20 to 35 migrating, is much higher than for children and old people. The likelihood of female migration over long distances is lower than that for males (Bilsborrow, 1984). Professional and skilled workers are more migratory than unskilled workers (Kuznets, 1960). These tendencies have been tested using deterministic migration models (gravity and regression models) and aggregate data reported in various censuses (Bilsborrow, 1984).

### **3.3.8 Probabilistic migration models**

Probabilistic migration models have been developed to predict individual migration decisions. For example, Kulldorf (1955) based his computations of migration probabilities primarily on the size and shape of the area of out-migration. The probability that a person will be recorded as a migrant increases as the size of the spatial unit decreases and as the shape of the areal unit deviates from circular. Hagerstrand (1957) hypothesized that migration depends on the number and timed frequency of movements, and on previous contact or migration from the same area. In general,

probabilistic models of individual migration decisions require special kinds of data which as yet are not easily obtainable.

### **3.4 Migration Studies in Developing Countries**

Most of the theories and hypotheses reviewed above have been proposed by scholars who have considered migration in the developed nations of the world. These ideas have not frequently been tested in the context of the developing nations. Population redistribution in areas with advanced economics has already passed into a cycle of dominant urban to urban migration. In contrast, Middle Eastern countries are still changing from rural-agricultural economies to urban-industrial economies. The generally high birth rate and low death rate, together with an inflow of rural migrants into the cities, accelerates the process of urbanization (Danes, 1987). As a result, the dominant migration streams seem to be from villages and towns to major urban centres.

Table 3.1 presents UN (1980b) estimates and projections of urbanization in the various regions of the world. The proportion of the world's population living in urban areas has risen from less than 30 percent in 1950 to over 40 percent in 1980 and is expected to be greater than 50 % in 2000. The corresponding figures for the low-income regions are 17 % in 1950, 30 % in 1980 and over 40 % in 2000, showing accelerating urbanization. While such figures may suggest that rural-urban migration is very important in developing countries, rural-urban migration is not the only determinant of urban growth. In many countries, intra-rural, seasonal and other forms of population mobility are even more important, and have been neglected in the literature as well as in the policy-making process (Bilsborrow, 1984).

Table 3.1: Percentage of Urban Population in the World and Selected Regions (1950-2000)

Geographic Locations	Year					
	1950	1960	1970	1980	1990	2000
World total	28.9	33.9	37.5	41.3	45.6	51.3
Developing regions	16.7	21.8	25.8	30.5	36.5	43.5
Developed regions	52.5	58.7	64.7	70.2	74.9	78.8
Africa	14.5	18.2	22.8	28.8	35.7	42.5
East Africa	5.5	7.5	10.6	16.1	22.7	29.4
Central Africa	14.6	18.1	25.2	34.4	43.6	51.6
North Africa	24.5	29.8	36.6	43.8	51.4	58.3
South Africa	37.3	41.7	43.8	46.5	51.4	57.9
West Africa	10.2	13.5	17.3	22.3	28.6	35.9
Latin America	41.2	49.4	57.4	64.7	70.7	75.2
Caribbean	33.5	38.2	45.1	52.2	58.7	64.6
Central America	39.8	46.7	53.9	60.8	67.0	72.2
Tropical South America	36.3	46.4	56.0	64.8	71.5	76.2
Temperate South America	64.8	72.7	77.8	82.2	85.4	87.8
East Asia	16.7	24.7	28.6	33.0	38.6	45.4
China	11.0	18.6	21.6	25.4	31.1	38.6
Other Asia	15.6	17.8	20.4	24.0	29.1	36.1
Southeast Asia	14.8	17.5	20.0	23.2	28.1	35.1
South Asia	15.6	17.2	19.4	22.5	27.5	34.5
Southwest Asia	23.4	32.5	44.5	55.8	63.5	68.5

Source: United Nation (1980b) Table 8.

The economic conditions of migrants in the large cities of developing countries today do not conform to Ravenstein's statement written in the 19th century; "migration means life and progress". This statement was true for the situation in England during the Industrial Revolution. Industrial establishments in 18th century England required labour, and more importantly, could absorb the unskilled and semi-skilled agricultural labour. Migrants could also quickly find jobs in cities which paid more than farming (Hemmasi, 1971). In contrast, the industrialization of developing countries is relatively a much longer term process. There are generally not enough industries to absorb the incoming unskilled labour force, and a resulting major problem in developing countries is urbanization accompanied by unemployment in the cities. Seemingly positive forces such as the spread of literacy, the influence of mass media, and improved transportation have raised the aspirations and expectations of migration. Given these circumstances of high expectation and fewer occupational opportunities in urban areas, migration may not be "progress" but a catastrophe.

#### **3.4.1 Rural-urban migration in developing countries**

Most of the discussion here considers rural-urban migration. There are several reasons for this. First, we need to narrow down the literature that relates to the research. And second, although movement between rural areas, urban-urban migration, urban-rural migration, and international migration, all exist, the major flows in developing countries are still rural-urban. Todaro (1976) states that over 50 percent of urban growth in many developing nations is due to the accelerated pace of rural-urban migration. In addition, Goldscheider (1983) states that about half of the growth of urban population in Iran was attributed to net rural to urban population. A UN finding (1993) states that in Turkey, as in many other countries, socio-economic development has been accompanied by

population redistribution through rural-to-urban migration. In 1935 only 24 percent of the population in Turkey lived in urban areas, but by 1985 the figure had risen to 53 percent and rural to urban flow was the main cause. Finally, some of the rural communities in the Middle East have a nomadic population base, so they may exhibit migration characteristics similar to the causes and effects in this migration study.

The extent of rural-urban migration in recent years has greatly exceeded the capacity of industrial urban centres to absorb the influx, and as a result, the majority of strategic urban centres have been plagued by rising urban unemployment, acute shortages of basic urban amenities, sharpening class divisions, and overcrowded housing and squatter settlements (Danesh, 1987). For example, increased urbanization in Uganda results from a concentration of development in large cities which has had negative development results for rural areas (Bazimya, 1993). The growing presence of migrants in urban areas, particularly if they are unemployed, has a number of social, economical, and political consequences for the areas of origin and destination, as well as for national governments in developing countries.

#### **3.4.2 Rural-urban migration in Iran**

Rural-urban migration is a major factor in the shaping of the pattern of urbanization in contemporary Iran. Rural migrants do not move evenly into urban regions, and as a result this form of population displacement has been crucial for the growing disparity in the spatial pattern of urban populations. Rural migrants come to the cities either directly, or indirectly through a number of moves. The second option is usually taken by those migrants who cannot afford to come to large cities at once due to the distance and cost of migration. In addition, those who are unfamiliar with

large cities or do not have relatives and friends to help them at the time of arrival prefer to move to familiar and neighbouring small cities.

According to the Iranian Census Centre (1986), of all internal migrants, 41.9 % were born in cities, 50.1 % were born in rural areas, and the rest were born out of Iran. Danesh (1987) states that 50 percent of internal migration is rural -urban migration. The most direct and accurate data on the volume of rural-urban migration can be derived from a nation-wide study conducted by the National Statistical Centre of Iran (1972). In this study, it was found that 53.5 % of all internal migration was due to rural-urban migration.

The overall volume of internal migration is presented in Table 3.2 for four census periods, and shows that the rate of internal migration reached its peak of 23 % in 1976.

Table 3.3 shows the sex and age groups of Iranian migrants to urban areas. People in the age group 20-29 are more migratory than any other and this group represents 23.4 % of all migrants' rates. Among the same age groups, women are more migratory than men. This can be explain by the fact that in the 1980's, the majority of young men were involved in the Iran-Iraq war and women migrated to safer places farther from the border. Elderly people, aged sixty and over, are less migratory than the other age groups. These age patterns are similar to those of almost all migrants in developing countries.

Table 3.2 : Internal Migration in Iran (in thousands)

Year	Total pop.	No.born same places	No.born dif.place, but same prov.	No.born dif.place & prov.	Total No. migrants	Percent of migrants (%)
1956	18,955	16,815	741	1,340	2,081	10.98
1966	25,079	21,798	1,232	1,991	3,223	12.87
1976	33,709	25,893	4,392	3,345	7,737	22.95
1986	49,193	38,272	5,952	4,181	10,133	20.60

Source : Adapted from National Census, Iran, 1956, 1966, 1976, and 1986.

Table 3.3 : Migration by Age and Sex in Iran (1986)

Age groups	Men & women		Men	Women	Sex ratio (women= 100)
	No. of migrants	%			
0 - 9	1,238,220	11.64	634,481	603,739	105
10 -19	2,014,723	18.94	1,038,331	976,362	106
20 - 29	2,475,715	23.28	1,167,920	1,307,795	89
30 - 39	1,875,007	17.63	952,172	922,835	103
40 - 49	1,180,594	11.09	621,446	559,148	111
50 -59	995,912	9.36	533,012	462,900	115
60 and over	848,695	7.97	441,595	407,100	108
unknown	7,655	0.07	4,521	3,134	---
Total	10,636,521	100	5,393,478	5,243,043	102

Source : National Statistic Centre, Iran, 1986.

In summary, internal migration in Iran has at least three 'disruptive' consequences and occurs when there is an acute disjunction between rural push and urban pull:

1. Rural-urban migration has negative and disruptive effects on the socio-economic organization of the place of origin (e.g., brain drain;

flight of young and pioneer rural workers; breakdown in traditional economic and cultural systems of production, distribution, and exchange), while it is beneficial to the development of the urban economy (the place of destination). This type of irregular migration is usually predominant when the urban economy is growing rapidly and needs cheap and abundant labour;

2. Rural-urban migration helps the place of origin reduce its surplus population, whose economic productivity has approached zero, and can also intensify the general socio-economic problems of urban regions (e.g., housing crisis, unemployment); and,
3. Rural-urban migration has disruptive effects on the socio-economic structure of both the places of origin and destination. This is because the place of origin cannot prevent the migration of young, innovative, and educated village dwellers to the cities (Danesh, 1987,p.27).

### 3.4.3 Nomad-urban migration in Iran

In addition to rural-urban migration, there are nomad migrations to urban areas. However, these nomads are always classified as rural inhabitants by demographers in Iran. Therefore, the migration of tribal populations, which are usually composed of nomadic pastoralists, despite its potential importance, has received little attention to in the Middle East, especially in Iran. Indeed, except in a few scattered studies, nomadic migrations are not identified in the available literature.

The current situation of nomadic migration in Iran is expressed by Danesh in the following passage:

The local Iranian name for nomad societies is "Ashayer" or "Koochnesheenun". For the past two decades, the Ashayerans have been facing numerous problems in meeting their subsistence survival needs. Privatization of land ownership in recent years has threatened the life and economic bases of Iranian Ashayerans across the country and has significantly limited their access to wide and open

landscapes which they traditionally used seasonally to migrate to. Given the growing social and economic problems of Ashayerans, the Iranian government decided to settle the Ashayerans permanently in either new places or existing villages (Danesh, 1987, p.27).

This recent trend in tribal settlement is one of the contributory factors by migration in Iran. Aghajanian (1984) states that 30 % of all marginal migrants in Shiraz city were nomads. He argues that in the 1960's and 70's, the revenue from petroleum production was spent to import cheap meat from other countries, and because the price of the nomadic products could not compete with the imported ones, nomads migrated to urban areas to seek a better income.

The significant trend of nomadic population settlement must be taken into account by policy-makers in Iran. Otherwise, the rate of rural-urban migration will be inflated and will be incorrectly assumed to be the only source of urban growth in the nation.

The focus of the next chapter is on an appropriate research methodology for studying the Qashqai of Iran who represent a case study of nomadic migration in developing countries.

## **IV. Research Methodology**

In this chapter, a short explanation of the conceptual framework of this study is given. This is followed by a description of pull-push theory as the principal analytical framework for this study. This chapter also includes a brief description of the techniques and models used in the research. Particular emphasis is placed on describing the logit model which forms the focal point of the statistical analysis. Then, the specific hypotheses connected with the research questions are outlined. Finally, the variables used in this study and the means of data acquisition are identified.

### **4.1 Conceptual Framework**

The conditions of urbanization and migration in developing countries offer an opportunity for testing existing migration theories. Relatively few migration studies have been produced in the past, and this was partly due to the lack of adequate or reliable data (Bilsborrow, 1984). However, many developing countries (e.g., Iran, Kuwait, Syria, and Pakistan) have now conducted national population censuses which attempt to account for migrant populations. Although there are still serious problems of data reliability in these censuses, the data available do provide an opportunity for analyzing migration within the developing world.

Migration studies in developing nations are important for two main reasons. First, they provide an opportunity to test the validity of migration theories and models which have been developed and tested in developed countries. Bogue (1969), in reviewing Ravenstein's "Laws of

Migration," concluded that:

...there is still a surprising amount of validity in these statements after more than 80 years. However, they are not inflexible "laws" without exceptions, and to explain the exceptions it is necessary to import the situational model.....As is true for most of social science, migration research findings are not timeless (Bogue, 1969, p.753-4 ).

Secondly, knowledge about the determinants of population redistribution may serve as a basis for policies affecting employment, anti-poverty programmes, education, and infrastructure development which are vital to the economic growth of poor countries.

In the majority of migration studies throughout the world, researchers have ignored the migration of nomadic people. Given this oversight, a survey was conducted in the fall of 1993 and relevant data were collected for the Qashqa'i of Iran. Recent migration research has tended to focus on total levels of in- and out- migration in the context of two areas - a particular place of origin and the place of destination within a country. In the Qashqa'i region, 1000 heads of households were enumerated in two areas: place of origin, and place of destination. Based on the available data from our research area and the variables that were chosen, the push-pull theory of migration was chosen as an appropriate framework for this study. The push-pull framework is capable of describing how migration is caused by a series of forces and variables in the areas of origin and destination.

#### **4.2 A Short Presentation of Push-Pull Theory**

Lewis (1982), argued that migration is caused by a series of forces which encourage an individual to leave one place (push) and to be attracted to another (pull). In other words, if an individual's needs cannot be satisfied at a present location, then a move elsewhere may be considered. On the other hand, despite being satisfied with one's present situation, information about greater opportunities elsewhere may persuade the individual to move. For each migration, however,

several push and pull forces may be operating so that the move cannot be attributed totally to either force. Bogue (1969) has briefly summarized these push-pull forces as described below:

**Push factors**

1. Decline in a national resource or in the prices paid for it; decreased demand for a particular product or the services of a particular industry, exhaustion of mines, timber or agricultural resources;
2. Loss of employment from mechanization or automation of tasks previously performed by more labour-intensive procedures;
3. Oppressive or repressive discriminatory treatment because of political, religious or ethnic origins or membership;
4. Alienation from a community because one no longer subscribes to prevailing beliefs, actions or mode of behaviour- either within one's family or within the community;
5. Retreat from a community because it offers few or no opportunities for personal development employment or marriage; and,
6. Retreat from a community because of catastrophe - floods, fire, drought, earthquake or epidemic.

**Pull factors**

1. Superior opportunities for employment in one's occupation or opportunities to enter a preferred occupation;
2. Opportunities to earn a larger income;
3. Opportunities to obtain desired specialized education or training such as a college education;
4. Preferable environment and living conditions - climate, housing, schools, other community facilities;
5. Dependency; movement of other persons to whom one is related, such as migration of a bride to join her husband; and,
6. Line of new or different activities, environment or people, such as the cultural, intellectual or recreational activities of a large metropolis for rural and small-town residence (Bogue, 1969, p.735).

Lee (1966) states that migration causation needs to be viewed within a framework of factors associated with the areas of origin and destination, with intervening obstacles, and also with the migrants themselves.

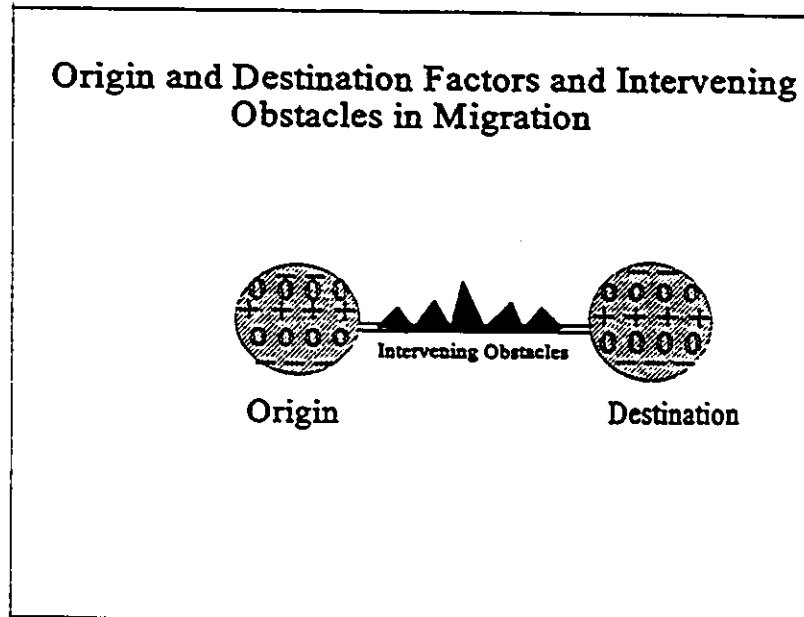
Figure 4.1 represents the factors proposed by Lee to be involved in the act of migration:

1. Factors associated with area of origin;
2. Factors associated with area of destination;

3. Intervening obstacles; and,
4. Personal factors.

Direct interviews were conducted with the Qashqa'i people at the place of origin and destination, where they identified many factors related to their migration process. Some of these factors as Lee (1966) outlined, were related to the place of their origin; others were associated with the place of intended destination, and, of course, there were some intervening obstacle factors such as distance, cost of migration, and poverty.

Figure 4.1



Source: After E. Lee, 1966

Based on the above diagram, for every mover, the place of origin includes 'positive and negative factors', as does the place of destination. A set of intervening obstacles such as distance and cost of migration must also be overcome to complete the move. Theoretically, individuals are either 'pushed' out of a place of origin by the negative factors, or pulled to another place based on its positive attributes.

A study of male migration from rural northern Nigeria to the oil towns in the south of the country at the beginning of the 1980's (Hocking and Thomson, 1981) considered the factors influencing migration at the origin and destination in terms of Lee's framework. The authors suggest that the plus factors at destination were better jobs, higher wages, the ability to buy more consumer goods, the possibility of acquiring capital to establish a business in the area of origin, better facilities ( e.g. medical facilities, schools, water supplies), and better entertainment. However, these advantages were offset by a number of negative factors including the complexities of the rules and regulations of urban life, bad housing, relatively low numbers of women, the danger of cultural isolation, and the anonymity of urban life. This example indicates that a number of the variables identified in the last section of this chapter are most likely to explain the propensity of nomadic migrants to move.

### **4.3 Analytical Methods and Techniques**

In this section, the techniques used in this thesis are outlined. Also, the models that are used in this study, in particular logit models, are described.

Although the push-pull interpretation is conceptually logical, it is not entirely clear how the various factors combine to cause population movement. We are left with a list of factors, all of which can clearly contribute to migration, but which lack a framework to bring them together into an explanatory 'model'.

In this thesis, logit models and regression analyses with dummy variables were used in order to analyze survey data systematically to elucidate the causes of migration. These techniques and models were used to describe two surveyed groups of Qashqa'i people: one at the place of origin

(potential migrants), and one at the place of destination (people who had already migrated). These two groups were compared in terms of level of education, occupation, income, age, and sex. Through these comparisons, it was possible to establish links between these variables, migration behaviour, and the processes of cultural change.

#### 4.3.1 Logit models

"Logit" is a term used to refer to a particular type of analytical transformation. The logit model is a reformulation of the general linear model for the specific case when the dependent variable takes on a binary or categorical form (Clark & Hosking, 1986). The analysis of categorical data began to emerge in the late 1960's but did not become important in geography until after the 1970's. One reason for this is that throughout the 1970's, space-time series and spatial process modeling were dominant foci in geographical analyses (Haggett et al., 1977). It was only in the 1980's that quantitative analysis in geography showed an increased concern with categorical data (Wrigley, 1985).

Clark & Hosking (1986) state that not all variables used in geographical research in both human and physical geography can be measured on metric or enumerated scales. There are some for which the level of measurement is at the nominal or ordinal level. In such cases, when the dependent variable is expressed as a dichotomous variable, the ordinary multiple regression model is inappropriate as a method for predicting the variable value. For example, when survey methods have been used, and responses are recorded as 'yes' or 'no', it is important to be able to evaluate the probabilities of those categorical responses. This technique is not limited to applications in human geography. There are instances in physical geography when the presence or absence of some physical

response has to be evaluated against a set of independent variables. The logit model specifies a functional relationship between a basically dichotomous dependent variable and either classified or metric scaled independent variables. Thus, it represents a particular type of multiple regression analysis designed to deal with the situations where the measurement of presence or absence, occurrence or nonoccurrence of some factor is under study (Clark & Hosking, 1986).

The mathematical basis of logit models can be explained by considering the derivation of the logit transformation for one independent variable. For example, if  $Y$  is a probability, it must lie between 0 and 1. One of the ways to represent a relationship between  $Y$  and  $X$ , such that  $Y$  is always between 0 and 1, is to define a functional relationship such that whenever  $Y$  is approaching its upper or lower limit, it becomes very difficult to produce any more change in  $Y$  (Clark & Hosking, 1986). One way to do this is not to take changes in  $Y$  as proportional to a constant ( $\beta$ )  $X$ , but rather to modify  $X$  by a factor such that it becomes deflated as  $Y$  approaches 0 or 1 (ibid, 1986). One such relationship can be expressed as:

$$\Delta Y = \beta Y (1 - Y) \Delta X \quad \text{for } 0 \leq Y \leq 1 \quad (1)$$

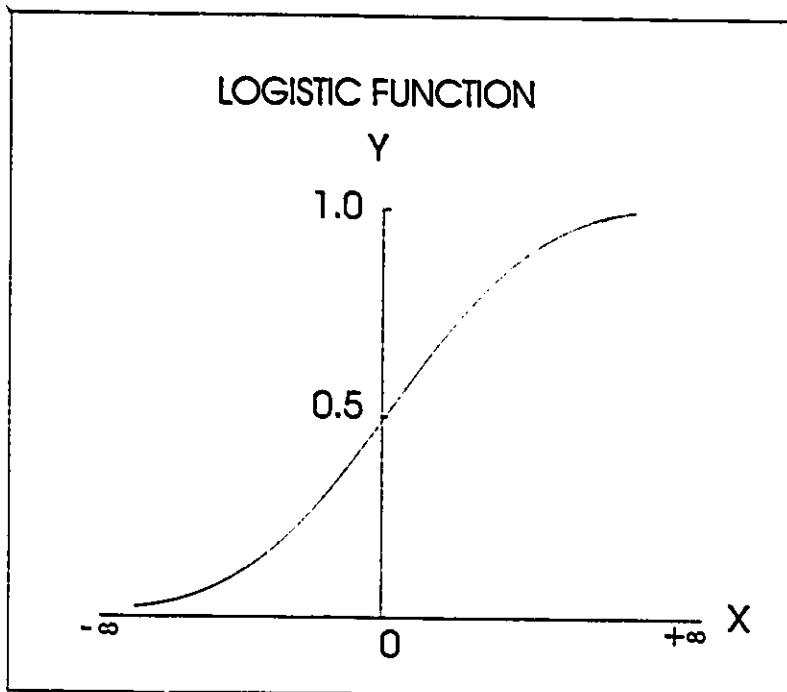
In this relationship, as  $Y$  gets closer to 1, the coefficient of  $\Delta X$  approaches 0. By taking the natural logarithms of equation (1) we can write:

$$\text{Log}_e \frac{Y}{1-Y} = \beta_0 + \beta_1 X_1 \quad (2)$$

Equation (2) is the logistic equation in which the left-hand side is a transformation of  $Y$ , and is called

the logit of  $Y$  (Clark & Hosking, 1986). Graphing this equation yields the logistic function (Figure 4.2).

Figure 4.2



#### 4.3.2 The approach using the logit model

When survey data have been used and responses recorded as 'yes' or 'no', we can measure the probabilities of categorical responses. In this research, the objective is to estimate the probability of migration based on three kinds of factors. These factors include push factors (a series of forces which encourage people to leave one place), pull factors (a series of factors which attract people to another place), and personal factors (such as age, education, income) at the places of origin and destination. More specifically, the model we want to use is based on the following formula, one that fits the logit model:

$$P_{ij} = f(F_1, F_2, F_3) \quad (1)$$

where  $P_{ij}$  is the probability of migration; and  $F_1$ ,  $F_2$ , and  $F_3$  the push factors, pull factors, and personal factors respectively. Further, we can also use the interaction between factors ( $F_1 * F_2$ ), ( $F_1 * F_3$ ), or ( $F_2 * F_3$ ), as defining components in the models. Based on Statistical Analysis System (SAS) procedures, and by using logit models, we have been able to construct some appropriate models that best explain the migration behaviour of the Qashqa'i.

#### **4.5 Hypotheses Relating to the Research Questions**

Before reviewing the tested variables and methods of data collection and analysis, it is first necessary to outline the specific hypotheses associated with each research question.

**Question One** is concerned with the substantial rise in the flow of nomads to urban areas, and leads to the following testable hypothesis:

*(I) It is hypothesized that Qashqa'i migration is a response to lifestyle hardships at the place of origin and more favourable lifestyle conditions at the place of destination.*

**Question Two** is concerned with the effects of migration on the Qashqa'i tribes based on their geographical situation with regard to push and/or pull factors. The testable hypothesis for question two is that:

*(ii) Qashqa'i tribes are affected differently from each other in their geographical distribution according to various push and pull factors.*

**Question Three** is concerned with the important push and pull factors for intending migrants at the place of origin. It is hypothesized that:

*(iii) The important push and pull factors at the place*

*of origin are similar to those push and pull factors for migrants at the place of destination.*

Question Four is concerned with the processes of cultural change experienced by living in urban areas. The primary hypothesis is that:

*(iv) Qashqa'i migrants' culture was not influenced by the wider urban community.*

Question Five is concerned with comments on government policy with regard to nomadic migration. It is hypothesized that:

*(v) The government does not have an effective policy concerning nomadic migrants to urban areas.*

The above hypotheses will be tested and the results discussed in chapters six through ten.

#### **4.6 Related Variables and Data Acquisition**

The survey questionnaire for this research was expected to cover a variety of variables. This data collection technique was the method used to obtain basic information for this study.

Three approaches were applied to develop 'closed - answer' questionnaires.

1. Relevant literature on rural-urban migration such as Todaro (1976), Bilsborrow et al., (1984) and Clark (1986) were reviewed in order to include all variables and factors.
2. Personal field experience in 1989 using an opened - answer questionnaire helped ensure that the 'closed - answer' questionnaire incorporated appropriate variables and factors.
3. A pilot-test and the feedback from this experience helped to build the main questionnaire (see Chapter 5 and Appendix C).

The variables selected include some general indicators of migrants, some that are associated

with push factors for intending migrants at the place of origin, and some that are related to pull factors at the place of destination. The following list was developed:

### **General conditions**

1. Sex
2. Age
3. Ethnicity (tribe)
4. Status in household
5. Marital status
6. Number of children
7. Education
8. Distance

### **Variables related to push factors**

9. Land reform
10. Pasture Nationalization
11. Drought
12. Epidemics
13. Poverty
14. Increase of population
15. Degradation of pastures
16. Limitation of farmland
17. Limitation of traditional nomads' routes by villagers
18. Nomads' education
19. Hardship of climate
20. Economic inequalities
21. Hardship of nomadic life
22. Government policy
23. Less viable jobs
24. Discriminatory treatment by Ilkhan
25. Discriminatory treatment by government
26. Mechanization of land

### **Variables related to pull factors**

27. Occupations
28. Better facilities
29. Better housing conditions
30. Higher income
31. Dependency or relative (family ties)
32. Supplementary benefits
33. Comfortable living
34. Accessibility to education
35. Accessibility to health services
36. Accessibility to better climate
37. Accessibility to informal jobs
38. Accessibility to information

The push-pull theory suggests two sources of data appropriate for the analysis of the process

of migration: census data and survey questionnaire data. Data for this study were collected from a combination of results of the decennial census (from 1966 to 1986) of Iran, and a survey questionnaire, as well as from archival sources. Since the census data do not trace the city-ward movements of nomadic migrants, survey questionnaires were definitely required.

Qashqa'i migrants are distributed throughout a vast area, including several cities. However, the survey questionnaires were administered in only six urban areas (Shahreza, Shiraz, Firuzabad, Farrashband, Kazerun, and Qaemieh) as the places of destination. These cities were chosen as representing three different geographical zones that are central to the exchange of commodities for the Qashqa'i. They are also representative of the other cities where the Qashqa'i in-migrants are located. The following four places of origin were chosen (Semirom, Kazerun, Gachsaran, and Firuzabad) based on their different tribal and geographical zones. The people at the places of origin consist of two groups: Qashqa'i who live inside the tent and practice a traditional nomadic way of life (in other words, their livelihood is based on livestock husbandry); and Qashqa'i who live in villages and mixed agriculture with herding for their livelihood. Both groups were targeted for the questionnaire.

#### **4.7 Conclusion**

This chapter discussed the fact that the lack of adequate and/or reliable data in some developing countries has resulted in relatively few migration studies. However, even in using existing data, migration studies in developing countries can make have at least two important contributions. The first is to test the validity and generality of migration theories which have already been developed. And second, knowledge about the determinants of population redistribution can

help decision-makers to think about economic equality in regional planning.

Migration research requires a framework to carry it out. Push-pull theory can describe how migration is caused by a series of forces which encourage an individual to leave one place (push) and to be attracted to another (pull). Lee (1966), has suggested that the cause of migration needs to be viewed within a framework of factors associated with area of origin, area of destination, intervening obstacles, and personal factors. Based on Lee's theory, selected variables were identified to cover the analysis for the Qashqa'i community.

Techniques used in this migration study consist of a survey questionnaire for the collection of data, and selected models for the analysis of data. The logit model is the one preferred because it can be used with categorical responses, and it can also explain factors that are associated with place of origin and destination in migration studies. Finally, the specific hypotheses related to the each research question were reviewed. Following this, the appropriate migration variables and data acquisition were outlined. The next chapter will discuss the data collection process in more detail.

## V. Data Collection among the Qashqa'i

An efficient scientific study requires the application of an appropriate methodology and technique. Three types of data collection techniques are considered in social research: observation, interview, and questionnaire. These techniques are shown in Table 5.1 (Forcese and Richer, 1973).

Table 5.1: The Format-Data Collection Combination in Social Research

Data Collection Techniques	Case Study	Experiment	Survey
Observation	*	*	
Interview	*		*
Questionnaire			*

Source: Forcese & Richer 1973, p. 142.

Based on Table 5.1 we note that when social researchers carry out case studies or experimental research they often use the observation technique. When a survey is undertaken, a questionnaire or interview can be used. We also expect that there will be some mix of data-collection methods. There is no doubt that the different objectives of the three types of studies, as well as different investments of time, are important factors for social researchers. In case study research, we aim for, among other things, an in-depth description of the functions of a particular social unit (Forcese & Richer, 1973). Questionnaires or interviews with individuals tend to present a fragmented view of the group. Observing the group from day to day has generally been thought to be the most relevant technique in an anthropological study (ibid, p.142). Similarly, surveys are generalizations from a sample population. Also, the individual and not the social group has generally been the unit of investigation (ibid, p.143). A study of several hundred or thousand

individuals seems difficult without a relatively rapid data collection instrument. A questionnaire is well suited to this end (ibid, p.143). There are several reasons for the use of the **survey questionnaire technique** in this research. The main objective is to investigate the causes and the consequences of Qashqa'i migration. The questionnaire is an effective technique for this purpose. Since census data in Iran do not trace the city-ward movement of nomad migrants, the survey questionnaire is required for gathering all necessary data not available through the census. Four main stages associated with the using questionnaire have been followed in this research: questionnaire construction, testing the reliability and validity of the data, developing a sampling system, and administration of the questionnaire.

### **5.1 Questionnaire Construction**

Constructing the questionnaire involves selecting the response form, deciding the level of measurement, developing the phrasing and sequencing of the questions, designing the answer sheet, and training for the interviewers (Stoddard, 1982).

The nature and scope of a given problem will determine how, and to what degree, the answers or responses to the question asked should be classified. The type of response forms of the questionnaire represent the two extremes: the **open response** and **closed response** (Lounsbury & Aldrich, 1979).

**The open or free response form** allows complete freedom in answering and the answers are not classified in a precise manner. This form is helpful in some fields of social science because it reveals the range of possible answers, and provides certain qualitative knowledge which can be used to develop a closed response questionnaire for subsequent interviews. However, the spontaneity,

length, and general lack of organization of the responses make coding and precise statistical analysis difficult (Stoddard, 1982).

One of the main reasons that a researcher may use the open response form is to develop a closed response questionnaire. Since we already have enough background knowledge and skill in relation to the study area, we have chosen not to use the open response form in the research.

**The closed response form** limits the responses to a finite set of possible answers, which can be coded and analyzed statistically without much difficulty (Stoddard, 1982). Closed response forms have other advantages over open response forms. They normally are shorter and require less time to administer. They make it easier for the interviewer and respondent to keep on track. The disadvantage of using it is that they may produce answers when none exist, such as when the respondent has no information or experience in the area under study (Stoddard, 1982). In order to save time, reduce costs, and analyze the research data statistically, the closed response form is preferred. Table 5.2 shows some of our questions and the closed responses.

**Measurement** consists of identifying the values which may be assumed by the variables, and representing these values by some numerical notation (Walsh, 1990). The numerical notation is systematically and consistently assigned, that is, it is assigned according to some set of rules (ibid,1990).

Walsh (1990) states that there are four levels of measurement with different properties that are important for us to understand: nominal, ordinal, interval, and ratio. Nominal and ordinal variables are qualitative, meaning that they differ in kind but cannot be expressed numerically except in an arbitrary fashion (Walsh, 1990). Interval and ratio measures are quantitative, meaning that they can be expressed numerically. The four levels of measurement are described below.

Table 5.2: Examples of Closed Responses in the Questionnaire

Questions	Closed Responses
1. What tribe do you belong to?	1. Darehshuri 2. Sheshbluki 3. Amaleh 4. Farsimadan 5. Kashkuli-Bozorg 6. Kashkuli-Kochek
2. How did you get information on migration?	1. Newspaper 2. Radio 3. Friends 4. Visits to the cities 5. Other (specify)
3. What are your reasons for migration?	1. Land reform 2. Pasture nationalization 3. Drought 4. Epidemic (Illness) 5. Poverty 6. Population increase 7. Pasture degradation 8. Limitation of farmland 9. Restriction of traditional migratory route by rural or urban inhabitants 10. Limitation of pasture by government agencies 11. Education of nomads 12. Hardship of climate 13. Hardship of nomadic life 14. Less income 15. Less viable jobs 16. Discriminatory treatment of Khan / Kadkhoda 17. Discriminatory treatment by government officials 18. Mechanization of agriculture 19. Other (specify)
4. Which languages do you speak?	1. Turkish 2. Farsi 3. Both
5. What is the source of your income?	1. Livestock 2. Agriculture 3. Wage labour 4. Salaried jobs 5. Carpet making 6. Small business 7. Other (specify)

The nominal level of measurement is the crudest form of measurement and is used only to classify data. It records observations that represent 'qualitative' differences in the data. For example, in our survey, the variable of sex, either male or female, is nominal. The numbers assigned to nominal-level data are arbitrary. In our survey we assign the number of 1 to male and 2 to female. Statistical formulas for variables measured at this level make use of category frequencies, such as how many males or females are in the sample.

Ordinal-level data are more sophisticated than nominal data in that we can order and name them. For example, we can ask all the people in a classroom to stand. We can then arrange them

in a line based on descending order of height. We know that the tallest person is at the top and the shortest person is at the bottom, but we do not have the precise heights of the tallest or the shortest person (Walsh, 1990). An example of ordinal-level data in our survey is the level of education (illiterate, read & write, elementary school, ..., university degree).

The interval level is the next highest level of measurement. At this level, in addition to classification and order, we have equal units of measurement. That is, there are precisely defined intervals between and among the observations; for example, the interval between 5 and 6 is exactly the same as the interval between 15 and 16. An example of interval variables in our sample is how long seasonal return migrants stay at the place of origin (three months, four months, ..., six months). What we lack with an interval scale is a stable starting point (an absolute zero), and consequently, the scale values cannot be interpreted in any absolute sense. However, we can perform a large number of mathematical operations with interval data which are not possible with nominal and ordinal data (Walsh, 1990).

The ratio level has all the properties of the lower measurement scales in addition to an absolute zero point. In other words, we can classify ratio-level variables, we can place them in order, the numbers we use to measure them are of equal magnitudes, and they start at an absolute zero point (Walsh, 1990, p.79). An example of a ratio level variable in our survey is net annual family income. It should be obvious that we can use all sorts of mathematical procedures with ratio-level variables. For example, someone with an income of \$ 3,500 makes precisely five times as much as someone with an income of \$ 700. This means a ratio of 5:1.

It is necessary to **construct the questions** as clearly, concisely, and specifically as possible. Words should be stated that are direct, simple, and familiar to both the interviewer and the

anticipated respondent. We should be careful with slang, jargon, and technical terms, because the wording and phrasing of the question should be understandable to respondents at all educational levels. For example, in the case of nomads, we must recognize that a high percentage of tribal people are illiterate.

As we describe in the translation section of this chapter, the questions are stated in Farsi which is the formal language in Iran, but only the second language for Qashqa'i nomads. Since the Qashqa'i's first language is Turkish, the interviewers can also verbally describe all the questions to respondents in Turkish when administering the survey.

It is important to consider the **sequence of questions**. Logic and common sense will determine what questions come first and what questions follow in most cases.

Two types of questionnaires were developed: one for the place of destination, and one for the place of origin. There are five sections in the questionnaire administered at the destination: personal data, migration behavior, socio-cultural behavior, description of the environment, and views for the future in that order. Table 5.3 shows the titles of the sections of the questionnaire for both places (origin and destination), the number of questions in each section, and the total number of questions for the places of origin and destination.

*The personal data* variables include tribal group, sex, age, marital status, number of children, level of education, and economic situation. The reason for collecting this type of information in the survey is to identify the characteristics of the migrants and their families at the destination, and to compare the situation of migrants with intending migrants at the place of origin.

Table 5.3 : Sections of the Questionnaire Administered in Both Places of Origin and Destination

Questionnaire Sections	Number of Questions	
	Destination	Origin
Personal Data	14	14
Migration Behaviour	7	0
Socio-Cultural Behaviour	8	8
Description of the Environment	5	9
View for the Future	6	6
Total	41	37

*The migration behaviour* variables consist of place of origin, distance traveled, duration of migration, information related to destination for migration, reasons for migration, and reasons for the choice of destination. These types of information in the survey show us why, where, when, and how the Qashqa'i migration occurred.

*The socio-cultural behaviour* section contains variables such as language, clothes, food, and leisure time. This information can help us to understand to what extent the migrants integrate with or assimilate into urban communities.

*The description of the environment* incorporates variables such as residential area, neighbourhoods, and usage of commodities and public services by migrants. This material shows the general condition of the migrants' milieu at the place of destination.

*The view for the future* involves variables like return migrants (the migrants who return back to the place of origin), and a general idea about the migrants' perception of their status in the future. Here, we want to know what the migrants opinions are about their future in terms of satisfaction with

the place of destination, and to see if there is any cultural change process within the urban communities.

The questionnaire at the place of origin includes all of the sections that exist in the questionnaire at the place of destination, except the migration behaviour section ( see Table 5.3). Each of the sections has the same questions, except the section on description of the environment at the origin which has four more questions than the same section for the place of destination. In total, the questionnaire at the place of destination has forty one questions, while the questionnaire at the place of origin has thirty seven questions. See Appendices A and B for both questionnaires.

Each respondent's answers to the questionnaire are entered on an individual answer sheet. The answer sheet contains spaces for recording all the answers to the questions. The interviewers asked questions of the respondents, and put a check mark next to the appropriate answer, which was numbered to correspond to the questions. Entering the research data from answer sheets into the computer was faster than recording them from the written questionnaires. Thus, the development of the answer sheets was very helpful in saving time and reducing the cost of the research.

On the answer sheet, the first column includes numbers from 1 to 41, these numbers corresponding with the numbers of the questions in the Questionnaire for the place of destination. The first row includes all the numbers of the responses corresponding with the number of responses that each question has on the questionnaire. The answer sheet for the place of origin has the same format as the answer sheet for the place of destination. Thus, during the interview, each interviewer needed to carry only one questionnaire plus the total number of answer sheets that were needed to put check marks on.

**Training the interviewers** was another important part of our survey questionnaire.

Although the official language in Iran is Farsi, the Qashqa'i people speak Turkish. In order to appropriately implement the research, we decided to choose only Qashqa'i students attending the universities of Esfahan and Shiraz as interviewers. One reason for this was that Qashqa'i people do not trust strangers who cannot speak their language, and this might have affected their answers to the questions. Further, the Qashqa'i students at these Universities are familiar with the Qashqa'i culture because they belong to it. There was no refusals to questions because they know intrinsically how to behave with people during the survey. Adequate training for the trainees was possible in one week, and this covered understanding the questions, introducing themselves to respondents, and recording the answers on answer sheet (see Appendix C). The trainees were then divided into different groups. Each group had two individuals that were sent to places of origin and destination. The trainees were sent to places where they were familiar with the locals. During the survey the researcher worked with one group. However, he tried to keep in touch with the other groups in order to solve any problems.

### **5.2 Questionnaire Reliability and Validity**

It is essential that measurements be reliable and valid. Reliability means that the same measure can be used repeatedly by the same or different researchers at different points in time, and the same results will be obtained (Walizer & Wienir, 1978). Validity, on the other hand, means that what is being measured is what is intended to be measured (ibid, p.265). Obviously a valid measure is impossible to achieve without first realizing reliability. The extent to which our survey can be reliable and valid is examined below.

Originally, the questions were developed in English at the University of Ottawa. Then, in

Iran, the researcher was obliged to translate all the questions to Farsi because there is no written Turkish language for Qazqa'i. The translation was done at the University of Esfahan. During the translation, the English words were replaced as exactly as possible by Farsi equivalents. However, it was difficult to find exact equivalents for certain English words as indicated Table 5.4. For example, the words "assimilation" and "integration" equivalent to similarity and unity do not have the same meaning in English as they do in Farsi. Also, other words in this table when translated from English to Farsi have different meanings. Since the interviewers are fluent in both Farsi and Turkish, we did not have many problems with translated questions during the field work. In order to have an appropriate answer to our questions, the interviewers sometimes had to translate the questions verbally to the respondents from Farsi to Turkish.

Table 5.4: Some English Words with a Slightly Different Meaning in Farsi

1. Assimilation	4. Small business
2. Integration	5. Free time
3. Behaviour	

The pilot study made it possible to do a preliminary check on the validity and reliability of the questions. Pilot tests were conducted in order to determine if the sample population (5% of the total sample) could understand the wording of questions, if the interviewers were adequately trained, and whether the questions and answers meant the same thing to the subjects as they did to the researcher (Barber, 1988). Thus, a small percentage of the questionnaires were tested in the province of Esfahan before starting a real survey. During this, we tested the questions and responses and adjusted the questions accordingly (see Appendix C for more details on pilot-test).

Some parts of whole questions / responses were omitted or changed during the pilot tests. For example, the two following questions gave almost the same answers in the questionnaire at the

place of origin.

31. Why do you intend to leave this location?

1. To seek a better job
2. To get education for children
3. To join family / relative
4. Poor amenities here
5. Hardship of climate
6. Other (specify)

36. Why do you prefer to leave this place?

1. To seek a better job
2. To get education for children
3. To join family / relative
4. Poor amenities here
5. Hardship of climate
6. Other (specify)

Question number 36 was omitted, and question 31 was kept in the section on the view of the future.

In sections about the view of the future in the questionnaires for the place of origin and destination, the form of some questions were also changed. For example, in these two questions:

32. Do you leave your present residence yearly? 1. Yes 2. No

33. Where did you go?

The second question is related to the first one. Hence, the second question was changed as follows:

33. If the answer for the previous question is yes, where did you go?

Finally, after some changes in the questionnaires, the interviewer skills in the process of the pilot-test were checked as well.

To evaluate our sample we used another similar sample that was taken in 1993 by the Plan and Budget Organization of Fars, one of the branches of the Plan and Budget Organization (PBO) of Iran. The Statistical Centre of Iran is one of the sub-divisions of the PBO. The task of this organization is to plan the social and economic development of the country, and to allocate the budget for the provinces of Iran (Iran Statistical Centre, 1986).

A pertinent task of PBO is to do research on the social, economic, and cultural characteristics

of the population in the provinces of Iran, and to maintain up-to-date information for planning. This sample was conducted among two main confederacies of Fars nomads, the Qashqa'i and the Khamseh. The Khamseh are another nomadic tribe of the Fars province whose main first language is Arabic.

In Table 5.5, the sample taken by PBO of Fars in 1993 is used as a basis for assessing the reliability of our sample in the same year at the place of origin. The comparison between our sample values and the Plan and Budget Organization sample (1087 households) values indicates that our sample is fairly representative in regard to all of the selected indicators.

Table 5.5: A Comparison of Selected Common Indicators  
in the Samples (1993)

Selected indicators	The Plan & Budget Organization of Fars, 1993	Our sample survey data, 1993
	%	%
Literacy (men)	51.1	51
Literacy (women)	21.9	26.5
Marital Status	92.9	93.7
Family Size	7	7.2
Occupation at the place of origin (livestock husbandry)	78.8	78.5

It is seldom necessary to interview all members of a population in order to make reliable statements about the characteristics of that population. Often a sampling of only a small percentage of the total population is necessary for such inferences. Further, the time, cost, and effort put into collecting data from a sample are less than is required to collect the same information from a large population. To that end, the following section discusses our method of sampling the selected population.

### 5.3 Developing a Sampling System

The sample should be representative of the population or universe. Walsh (1990), argues that this is easily accomplished in the physical sciences since one piece of tungsten, for example, is representative of every other piece of tungsten in the universe. However, in the social sciences we must collect samples that are as representative as possible, in order to allow us to generalize about the population of interest (Walsh, 1990). While complete representativeness cannot be guaranteed, various decisions can be made that will increase the likelihood that a specific sample typifies a population.

To develop a sampling system, it is first necessary to define the selected population. There are many ways of sampling, such as random sampling, systematic sampling, stratified sampling, and cluster sampling.

In this study, our population includes all the Qashqa'i people that are distributed in the southern part of Iran in at least six provinces. These provinces are: Fars, Esfahan, Khuzestan, Bushehr, Chaharmahal-e-Bakhtiyari, and Kohgiluyeh. Fars province is one of the largest provinces and accommodates the majority of the Qashqa'i population in Iran.

The Qashqa'i are a minority, and constitute the only Turkish speaking people that are surrounded by Persian speaking populations. As mentioned, the population of the Qashqa'i was approximately 400,000 individuals in 1986. The average growth rate of the population in Iran from 1986 to the sample collecting date in the fall of 1993 was 2.92 percent per annum. By a simple calculation, the total population of the Qashqa'i on the sample survey date in the fall of 1993 should

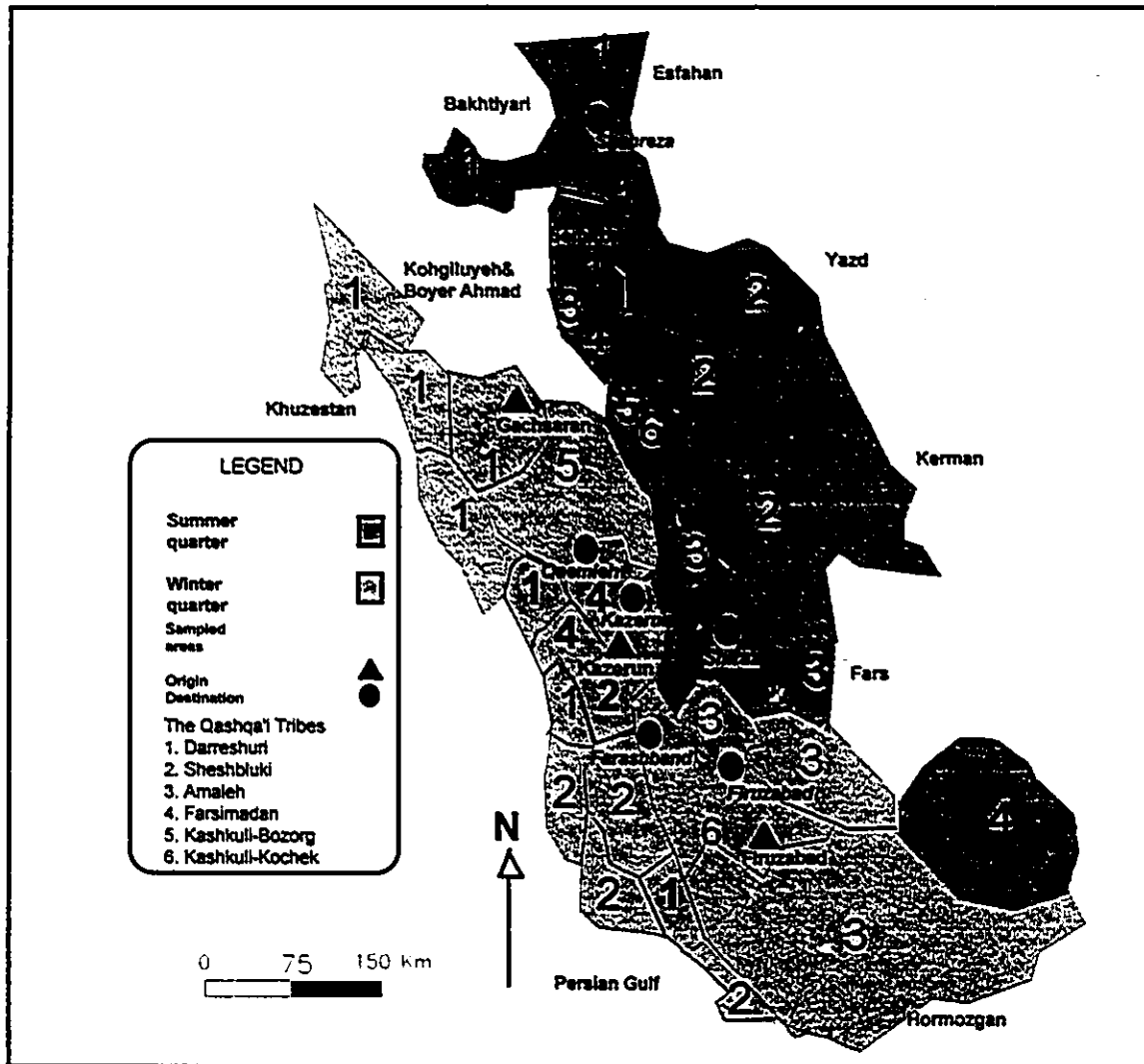
have been approximately 500,000 individuals. Roughly two-thirds of the total population of the Qashqa'i (326,500 individuals) have migrated to urban areas. Our sample was 1.4 % of the total Qashqa'i migrants in the fall of 1993.

The Qashqa'i people have experienced two patterns of migration : migration from nomadic regions to villages, and migration from nomadic regions *and* villages to cities. Since most of the Qashqa'i villages were built in proximity to the traditional nomadic regions, there is little to distinguish between their respective 'locations' in space. Therefore, we consider that movement to 'urban centers' from these areas is the only significant 'migration' as it involves much greater distances and cultural change. Thus, the nomadic regions and villages are the migratory 'points of origin' for the Qashqa'i people. In order to have enough data for a statistical analysis, 1,000 questionnaires were conducted. We divided these questionnaires into two groups: 600 of the questionnaires were administered at the place of destination (almost 1.4 % of the total Qashqa'i population at the place of destination), and 400 were administered at the place of origin (1.7 % of the total Qashqa'i population at the place of origin).

Figure 5.1 shows the distribution of the Qashqa'i tribes in summer and winter quarters, the sampled cities at the place of destination (Shahreza, Shiraz, Firuzabad, Farrashband, Kazerun, and Qaemieh), and the sampled places of origin (Semirom, Gachsaran, Kazerun, and Firuzabad).

The head of the family was chosen to answer the questions. Since the head of the family in the Qashqa'i community plays a major role in the making of family plans, the other members of the Qashqa'i family mostly follow the household leader's decisions. In nomadic communities the

**Figure 5.1: Sampled Areas at the Places of Origin and Destination, and the Qashqa'i Tribes in Summer and Winter Quarters**



Source : Iran Statistical Centre (1986)

husband is usually accepted as the head of the family, but when the husband was absent we were interested in knowing the spouse's ideas. In the absence of parents, other family members responded to our questions during the survey, but these cases were very rare. As mentioned, the head of the family plays a major role in decision-making, but because of the close relationship of family members in nomadic communities, the members almost always had similar opinions.

A **systematic sample** is one in which a sample is selected in some regular way (Ebdon, 1985). The members of the sample are selected systematically from a list of the research population. Clearly in a systematic sample, no individual or family can be picked more than once.

Ebdon (1985) describes the following example. Suppose a 10 % systematic sample is taken from a list of 100 names. If every tenth name is selected beginning with number 1, then the 1st, 11th, 21st, 31st etc. names have a probability of 1.0 of selection. For all the other names on the list the probability of selection is 0.0. In other words, once the first selection has been made, 90 % of the names on the list have lost all chance of representation in the sample. Systematic sampling has certain practical advantages over other types of sampling. In particular, it is usually easier and quicker to obtain a systematic sample than a random one. Thus, we used systematic sampling to survey the Qashqa'i population, both for the places of origin and destination.

Most of the Qashqa'i population in the cities of destination live in certain areas, clearly separated from other urban residents. To do the sample, we tried to distinguish these residential districts as being inside or at the periphery of the cities of destination. Then, we picked some neighbourhoods among the Qashqa'i residential areas by using random sampling in the selected cities. In order to choose the households in the selected neighborhoods of the Qashqa'i, we recorded the names of the head of the family based on the knowledge that we obtained from *Islamic Councils*

of the neighbourhoods. Then, we selected our sample based on systematic sampling. For the selected places of origin, we listed all the heads of the households and also picked them by systematic sampling ( see **Appendix D** for more details on systematic sampling).

One difficulty in undertaking a research survey in developing countries, particularly in nomadic communities, is the lack of detailed information relating to names, maps, and lists of population from which a sample can be chosen. The sampling procedures in our research survey is not exceptional in terms of these problems. In many cases, we had to start from scratch and prepare our own list of names and maps to delineate the universe from which the samples were to be drawn.

#### **5.4 Administering the Questionnaire**

There are four major methods of administering questionnaires or doing interviews. These methods are: the telephone interview, the mail questionnaire, the group self-administered questionnaire, and the personal interview (Stoddard ,1982). Because of the scarcity of phones, the lack of addresses of respondents, and the difficulty of arranging group meetings, the first three types of interviews were practically impossible for us. The personal interview was chosen in this research because it does not depend on the literacy level of the respondent. Further, we had a time limitation and the personal interview was quicker than the other methods.

The **personal interview** is the most effective means to obtain information, both quantitatively and qualitatively. Lousbury & Aldrich (1979) state that the personal interview lets the interviewer control the question sequence and probe for additional details in relation to any or all of the questions in order to improve the quality of the data. Further, the personal interview is not as dependent upon the educational and literacy level of the respondents as the other methods. In the

case of a nomadic population, where the educational level is low, this factor is important. Therefore, we needed to explain our purpose and the questions in more detail. For example, to enjoy greater cooperation from the nomadic people, we explained how their responses can help decision-makers deal with the nomads' migration. By observation during the pretest, we confirmed that the personal interview is a reliable and valid way to obtain knowledge from nomads.

### **5.5 Conclusion**

There were four main stages in the use of a survey questionnaire in this research. The four stages were constructing the questionnaire, testing its reliability and validity, developing a sampling system, and administering the questionnaire. To develop a questionnaire, researchers should decide on the type of response either open or closed, and the level of measurement. After determining the level of measurement, the next steps include: constructing the questions, developing the phrasing, sequencing the questions, designing the answer sheet, and training the interviewers. It is essential that measurements be reliable and valid. To ensure this, the question is translated, pre-tests of the survey are conducted, and the sample is evaluated. A sample may be selected through random sampling, systematic sampling, or hierarchical sampling. The systematic sample was selected for this research. The four major methods for administering a questionnaire are: the telephone interview; the mail questionnaire; the group self-administered questionnaire; and, the personal interview. It is established that the personal interview is the most appropriate way to obtain data from the nomads. Through the use of the survey questionnaire, and by following the above steps, researchers are able to implement a rational methodology for their inquiry.

When the process of collecting data is completed, there is a mass of raw numbers, which

would not tell us much unless the data were arranged and displayed in a meaningful way. Data can be analyzed by using different computer techniques and languages. For example, for the description of the sample, the Statistical Analysis System (SAS) was used to obtain the result of our research through frequency tables, cross-tabulation tables, histograms, and bar graphs. The following chapter describes our sample in more detail.

## **VI. Qashqa'i Population Sample Description**

In this section some general characteristics of our sample are identified. There are many ways of displaying these data. SAS procedures were used to make frequency tables or cross-tabulation tables. For both place of origin and destination, the geographic, demographic, educational, and economic variables of the sampled population are presented and discussed. A general profile of the Qashqa'i people at the places of origin and destination is presented at the end of the chapter.

### **6.1 Sampled Population in Places of Origin and Destination**

As stated in section 5.3, a total of 400 sample questionnaires were administered among two groups of Qashqa'i nomads at their place of origin. The first group sampled were the Qashqa'i villagers who have settled down in their pasture lands over the past several decades. Their livelihood depends primarily upon agriculture. The second group surveyed were the Qashqa'i nomads who still practice traditional migration between summer and winter quarters in search of pasture land. They live in tents, and their livelihood depends mainly on animal husbandry. This latter group lives in Firuzabad, Kazerun, and Gachsaran townships. Since the survey questionnaires were administered during the late fall 1993, the Qashqa'i nomads were in their traditional winter quarters.

### 6.1.1 Geographic setting of the sample

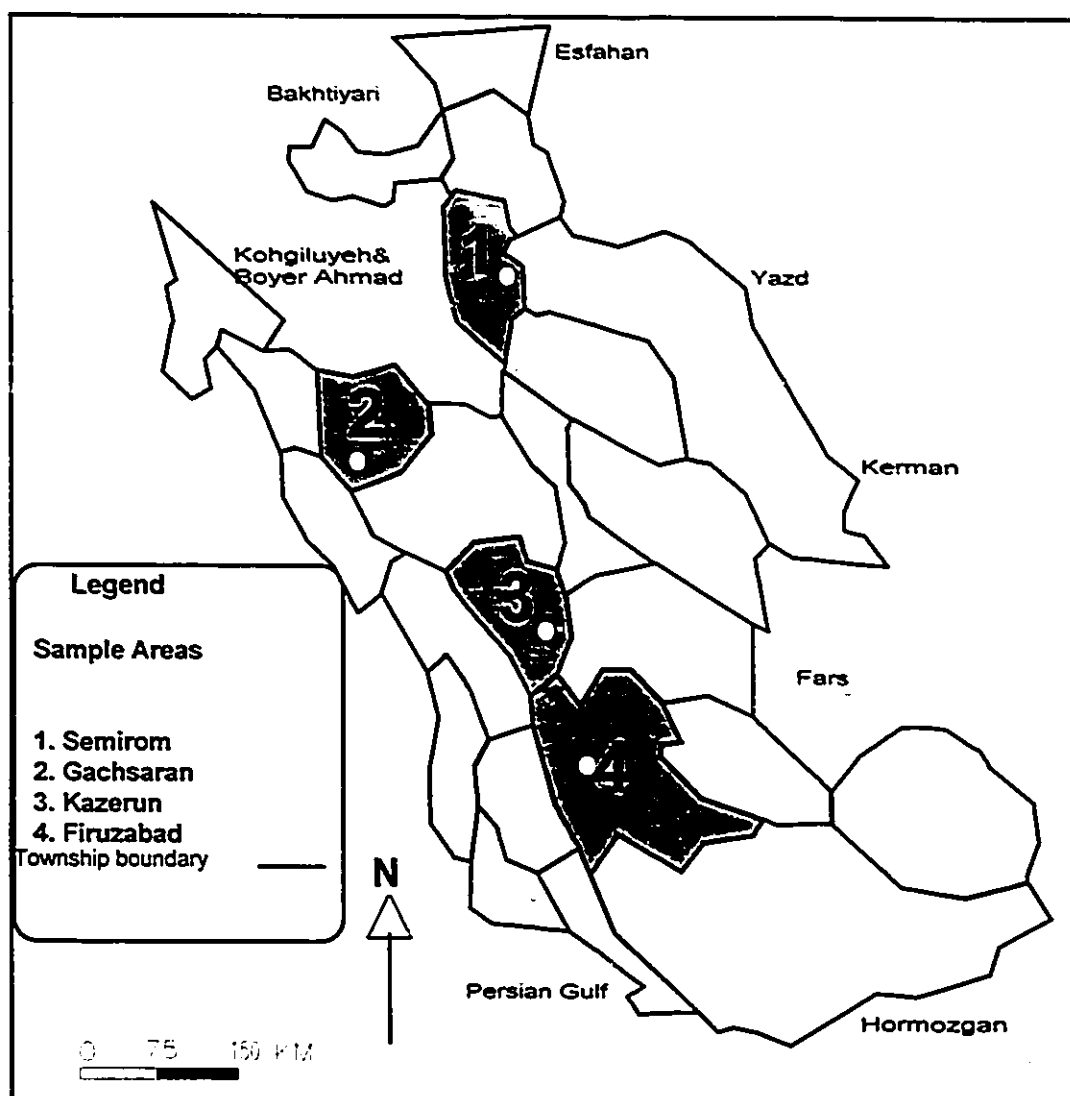
Three out of the six Qashqa'i tribes in our sample, the Darehshuri, the Amaleh, and the Farsimadan, had the majority of their populations at the place of origin. These tribes were chosen because of their varied tribal and geographical situation in the Qashqa'i region.

Figure 6.1 shows the geographical location of the sampled areas at the place of origin. The sample was undertaken in four townships. Semirom township is located in the southwestern edge of Esfahan province, Firuzabad and Kazerun townships are located in Fars province, and Gachsaran township is located in Kohgiluyeh province. Semirom township is located at an elevation of 2500 metres in the Zagros mountains and has a cold winter. The other three townships are located in the southern part of Iran close to the Persian Gulf and have moderate winters.

A total of 600 questionnaires were answered by respondents in six cities (Shahreza, Shiraz, Firuzabad, Farrashband, Kazerun, Qaemieh) at the places of destination. The main reason for choosing these cities was that the majority of each of six Qashqa'i tribes (Darehshuri, Amaleh, Sheshbluki, Farsimadan, Kashkuli-Bozorg, and Kashkuli-Kochek) live in these urban areas. For example, most of the Qashqa'i migrants in the cities of Shahreza, Firuzabad, and Qaemieh belong to the Darehshuri, Amaleh, and Kashkuli-Bozorg tribes respectively. Figure 6.2 shows the geographical location of the sampled cities at the place of destination.

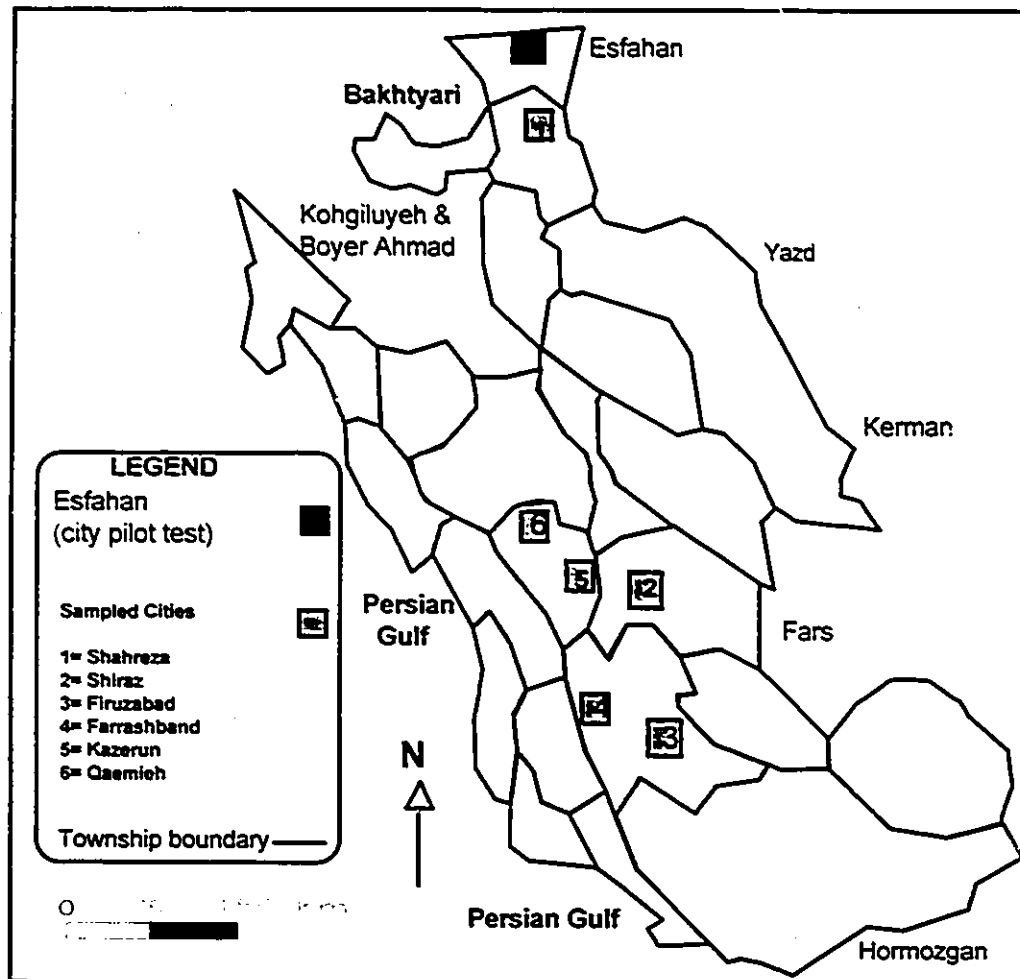
The selected geographic variables in the survey sample consist of place of origin, birthplace, and the population size of each tribe. In the same way, the geographic variables at the place of destination include cities, tribes, provinces, and birthplaces of the sampled population.

Figure 6.1: Sampled Places of Origin



Source: Iran Statistical Centre (1986)

Figure 6.2: Sampled Places of Destination



Source: Iran Statistical Centre (1986)

Figure 6.3 shows the distribution of the selected research sample at the place of origin. As shown in this figure, 36.2 % of the sample was collected from the Semirom township, 24.8 % from Firuzabad, 26 % from Kazerun, and 13 % from Gachsaran township.

**Figure 6.3**

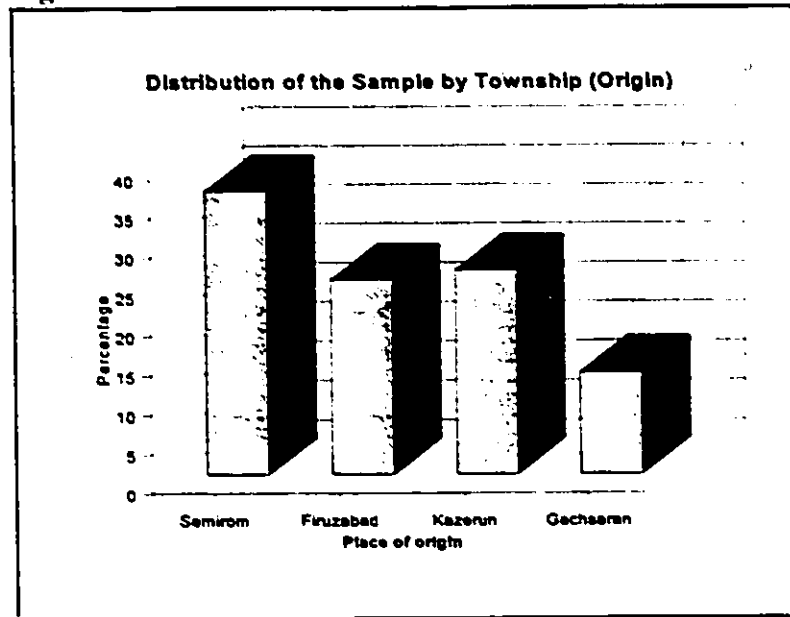


Figure 6.4 shows the statistical distribution of the sample at the cities of destination. Firuzabad city constitutes a quarter of the overall sample (150 questionnaires). The reason is that more than 50 % of the population in Firuzabad are Qashqa'i. Also, this city has the majority of the population of two tribes of Qashqa'i, the Amaleh and the Kashkuli-Kochek. Shiraz offers varied job opportunities for migrants because it is the capital city of Fars province and is the most populous city in southern Iran. Therefore, it is a major destination for nomads. The city of Shahreza was chosen because it is located close to the summer quarters of the Qashqa'i people, particularly the Dareshuri tribe. The cities of Farrashband, Kazerun, and Qaemieh were chosen because they are located close to the nomads' winter quarters, and have served for a long time as areas of commodity exchange for

Qashqa'i people during the winter. In sum, three sampled cities (Shahreza, Firuzabad, and Kazerun) had the majority of the samples at the place of destination.

Figure 6.4

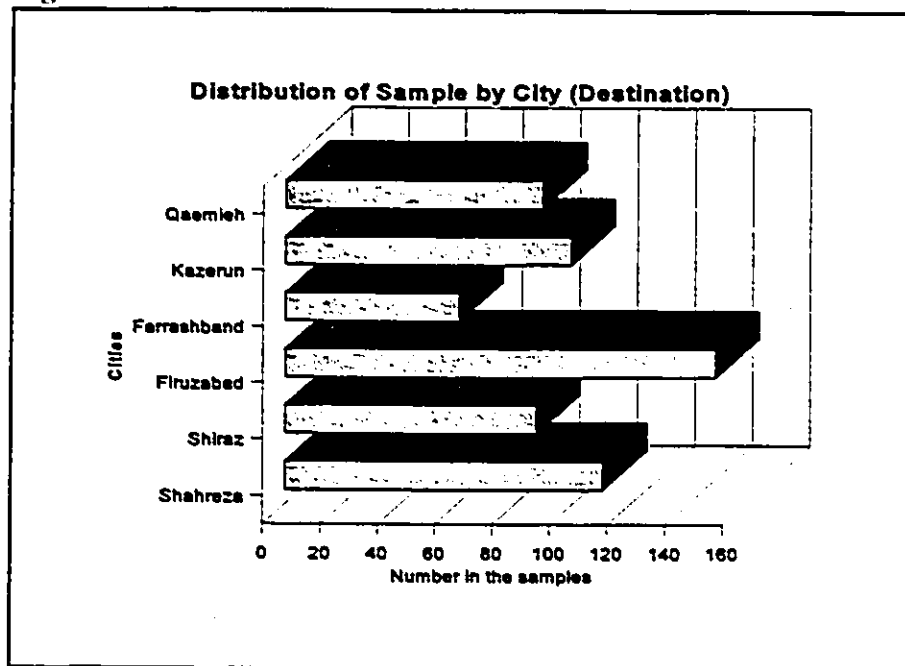


Figure 6.5 shows the distribution of the sample at the places of origin among the six Qashqa'i tribes. Because all tribes were not equally accessible, the majority of samples were taken from three tribes only -the Darehshuri with 49.5 percent; the Amaleh with 19.5 percent; and the Farsimadan with 25.5 percent. The Darehshuri tribe represents the largest part of the sample, because most of the Qashqa'i population close to Shahreza, Semirom, Kazerun, and Gachsaran townships belongs to this tribe.

Figure 6.5

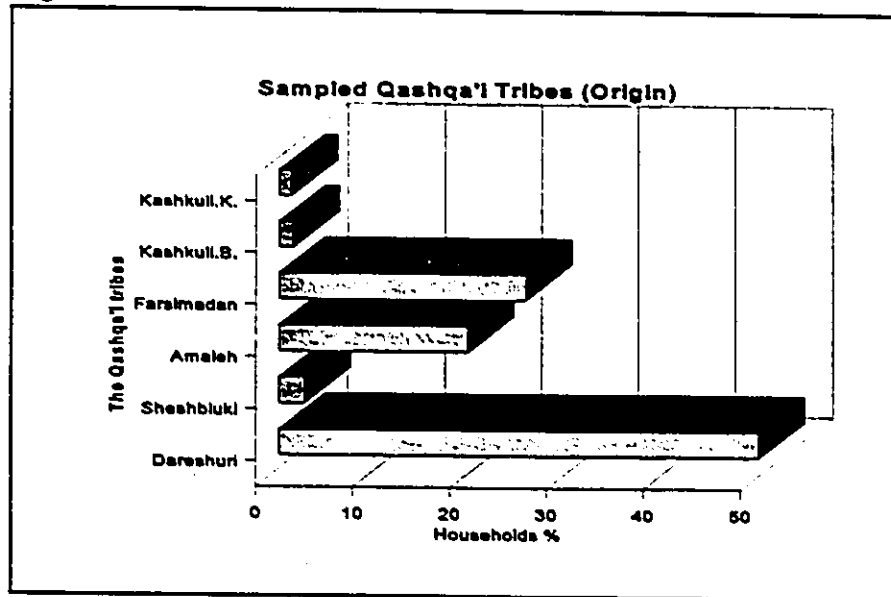


Figure 6.6 represents the distribution of the sample among the six major Qashqa'i tribes at the place of destination. Both the Dareshuri and the Amaleh tribes made up more than 27 % of the sample and perhaps the majority of the Qashqa'i migrants at the place of destination. The Farsimadan tribe has few migrants in the destination cities because most of the population of this tribe lives either in villages or follows the nomadic way of life.

Figure 6.6

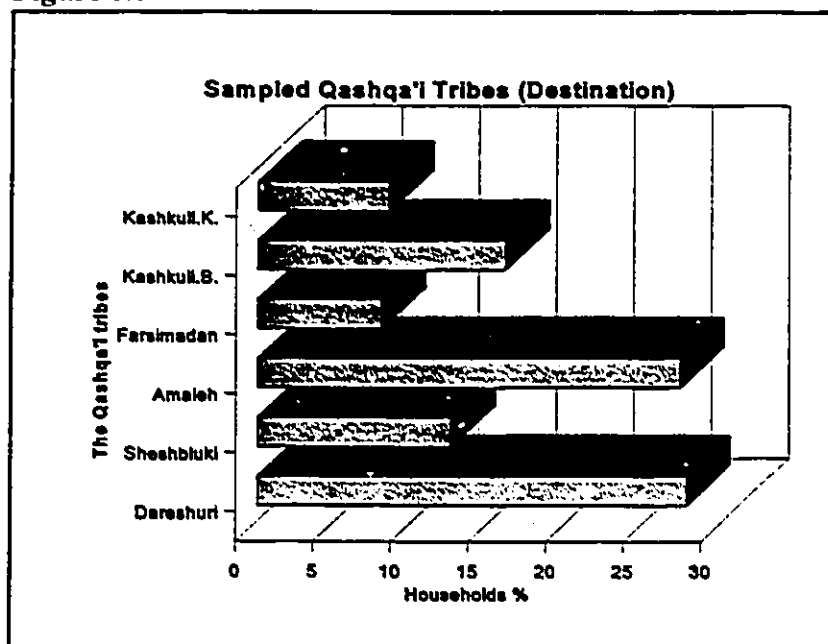


Table 6.1 shows the provinces where the respondents were born. According to this table, 96.2 % of the Qashqa'i respondents were born in the province of Fars. Although nowadays some Qashqa'i live in the provinces of Esfahan, Saheli (Bushehr), and Kohghiluyeh, the Qashqa'i nomads live mainly in Fars and consider it their home.

Table 6.1: Sample by Birthplace at the place of Destination (Provinces)

Provinces	Frequency	Percentages
Saheli (Bushehr)	4	0.7
Esfahan	15	2.5
Fars	577	96.2
Kohghiluyeh	4	0.7
Total	600	100

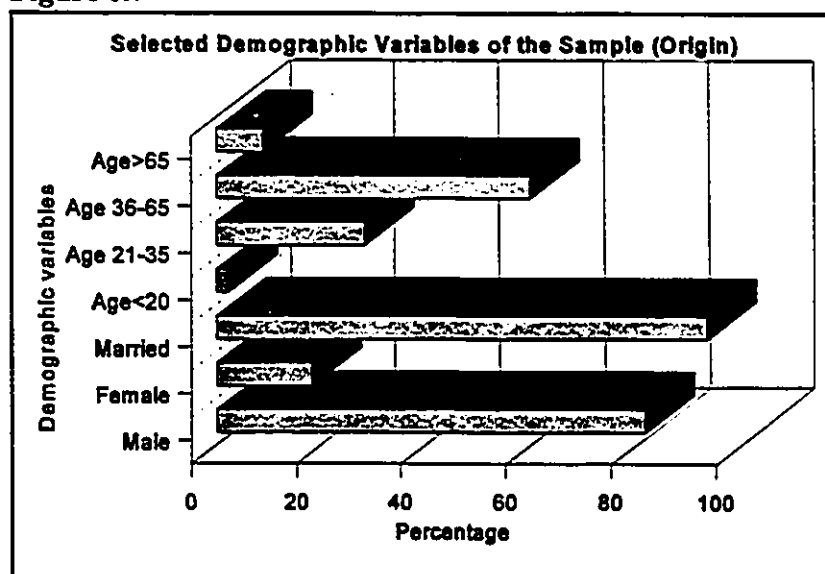
Our data also indicate that 76.3 % of the respondents were born inside nomadic tents at a time when their families followed a nomadic way of life. Nearby a quarter of the respondents (22.8

%) were born in nomadic villages in the winter and summer quarters. Only 0.8 % of the sampled population were born in cities. These data thus reveal that almost all of the sampled population of the Qashqa'i who live in urban areas today, migrated to them from nomadic regions.

### 6.1.2 Demographic description of the sample

Demographic variables at the place of origin include: sex, marital status, age, number of children, and the total family members. Figure 6.7 shows the percentage of selected demographic variables of respondents at the place of origin. Based on Figure 6.7, 81.7 % of the respondents were male, and only 18.3 percent were female. Of this group, 93.7 % of the respondents were married. In terms of age categories, the results show that the majority of the respondents were aged 36 to 65 years (60.2 %). The next largest demographic group was aged 20 to 35 (28.5 %).

**Figure 6.7**



The selected demographic variables included in this survey for the place of destination are the same as at the place of origin: sex, marital status, age, number of children, and total family members. Figure 6.8 displays selected demographic variables of the respondents at the place of destination. Most of the respondents are male (79.2 %), and the Qashqa'i males, as the heads of families, still play a major role in family organization and function. According to this figure, 96.8 % of the interviewees are married. Age categories also reveal that most of the respondents are 36 to 65 years old (67.2 %).

The structure of the sampled population was almost the same for both places of origin and destination. Given this, it is clear that most of the migrants were new in the cities of destination. Therefore, there were no important changes in the demographic variables when we compare place of origin to place of destination.

Table 6.2 compares the age profile of the Qashqa'i to the national population based on Statistical Centre of Iran (1986). It shows that the Qashqa'i population is younger than the national population, and almost 50 % of the Qashqa'i population is in the age category "under 15". In addition, 3 % of the national population is 65 and older, while this rate is reduced to 2.8 % in the Qashqa'i population. The increase in the young and decrease in the old within the age structure seems to suggest that health and social services are poor among the Qashqa'i.

Table 6.2: Age Structure of the Qashqa'i and National Population of Iran

Age Groups	National population		Qashqa'i population (nomads only)	
	Numbers	%	Numbers	%
less than 15 years	22,474,017	45.5	55,185	49.1
15 to 64 years	25,445,562	51.5	54,074	48.1
65 and over	1,501,718	3.0	3,152	2.8
Unknown	23,713	-	19	-
Total	49,445,010	100	112,430	100

Source: Iran Statistical Centre (1986)

Figure 6.8

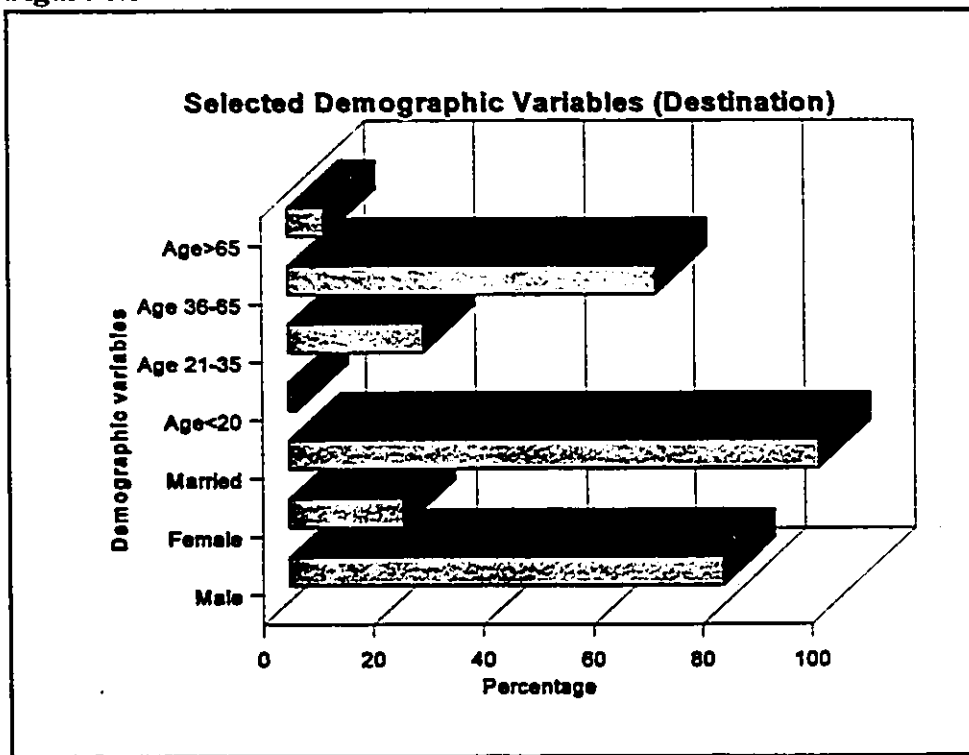


Figure 6.9 shows the variation in the number of children in each household at the place of origin. The sample demonstrates that the average is 5 to 7 children per family, but there can be up to 15 children in a household. Where there are no children in a household, it is often because they have already left home for employment or educational opportunities. The size of the total family ranges from 1 to 17, but most are from 6 to 10 individuals. The size of the family among the Qashqa'i nomads at the place of origin is high (7.2 individuals per family) compared to the size of the family in the national population of Iran which is 5.1 individuals per family (Statistical Centre of Iran, 1986).

Figure 6.10 shows that the most frequent number of children in households range from 4 to 6 at the place of destination. Family size also ranges from 1 to 17 individuals but most are from 6 to 9 individuals. Our results, therefore, indicate that the Qashqa'i have large families at the place of destination as well.

Figure 6.9

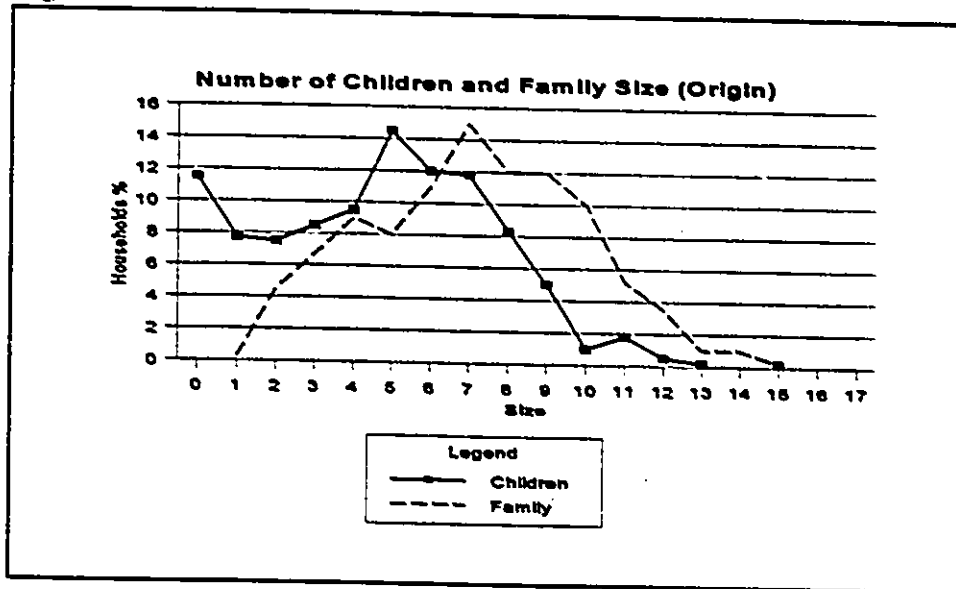
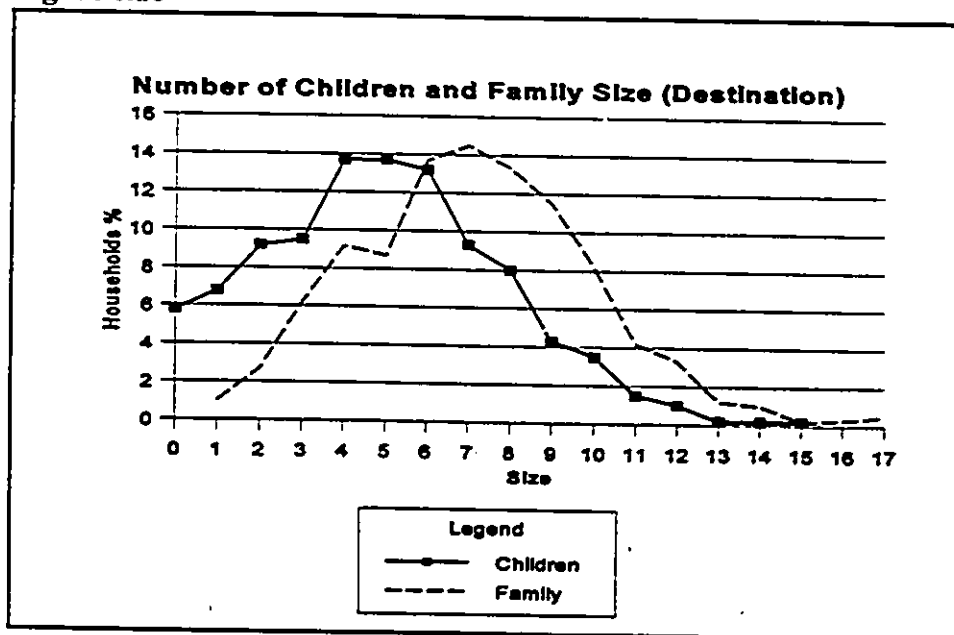


Figure 6.10



### 6.1.3 Description of the sample based on educational characteristics

Educational characteristics are discussed here to show the rate of the literacy among the Qashqa'i nomads and particularly in relation to sex. The educational variables include literacy and level of education of the sampled population. Table 6.3 represents percentage of literacy in both sexes who responded to the questionnaires at the places of origin and destination. This table shows that the rate of the literacy of women is very low at the place of origin. In my opinion, there are several possible explanations for this. First, there are not enough schools in nomadic areas. Second, most of the nomadic communities prefer to send boys to school and care less about girls' education. Third, nomadic women perform more work than men, thus there is no time for them to spend the whole day in school. The rate of literacy of women at the place of destination is higher than at the place of origin, because there are more opportunities and perhaps more time for women to get education inside the destination cities. Nomadic women, like men, also need to be more educated in the cities to get appropriate jobs there.

Table 6.3: Literacy Rates at the Places of Origin and Destination

Sampled population	Rate of literacy	
	Origin	Destination
Men	51	55.4
Women	26.5	40.8

Table 6.4 compares the literacy rate for the nomads with that of the rural and urban population in Fars province and shows that the rate of the literacy for nomadic men in Fars is lower than in the two other communities. The literacy rate of women tends to be lower in all the communities. This table indicates that our sample statistics closely approximate official statistics for male literacy in particular. However, comparing the literacy of nomadic women in Fars province

(Table 6.4) with the literacy of women among the Qashqa'i (Table 6.3), it is clear that the rate of the literacy in Qashqa'i women is higher than in female nomads of Fars province. In general, the literacy rate among nomadic people is lower than the rate in rural and urban populations. The rate of the literacy of nomadic women is the lowest among the three communities.

Table 6.4: Literacy in the Province of Fars

Fars Population	Rate of literacy (%)	
	Men	Women
Nomadic	51.5	21.9
Rural	67.5	43.6
Urban	82.2	69.4

Source: Plan and Budget Organization, 1993.

Table 6.5 shows the level of education for the sampled population at the places of origin and destination. It is evident that the level of education among the nomadic people is very low, since most people do not complete high school and only very few nomadic men or women continue their education to the university level. For both place of origin and place of destination, the percentage of illiterates among the interviewees is high and the level of education among women is lower than for men. Only 7.2 % of the men in the sample at the place of destination have university degrees.

Table 6.6 is based on data from the Plan and Budget Organization of Fars. Few nomadic people complete college or university. The few university-educated Qashqa'i in Iran can rarely find employment in nomadic regions, so they must migrate to cities to look for suitable jobs. Many women have completed elementary school. This can be explained by the fact that very recently the nomadic families prefer to send their daughters to school, even those who missed school in the past.

Table 6.5: Level of Education of Respondents for Places of Origin and Destination

Level of Education	Place of origin		Place of destination	
	Men %	Women %	Men %	Women %
Illiterate	44.5	69.0	43.2	59.0
Read & write	14.3	11.0	13.2	13.2
Elementary school	15.8	11.5	10.5	14.3
Guidance school	7.0	5.0	5.7	6.2
High school	8.8	1.3	9.8	4.0
College	7.7	1.0	10.5	1.7
University	2.0	0.8	7.2	1.7
Total	100	100	100	100

Table 6.6: Level of Education in the Nomadic Population (Province of Fars)

Sex	Total literacy	Read & write	Elementary school	Guidance school	High school	College	University
	%	%	%	%	%	%	%
Men	100	7.8	53.5	20.5	16.9	1.4	0.4
Women	100	2.5	85.5	10.2	1.8	0	0

Source: Plan & Budget Organization, 1990.

#### 6.1.4 Description of the sample based on economic characteristics

Economic characteristics are important indicators of a sampled population. These variables include source of income and net annual family income. Income is generated from livestock sales, agriculture, wage labour (low-paid jobs), employment (salaried jobs), carpet making, and small independent businesses. Figure 6.11 shows the relative frequency of these sources of income among

the sampled populations at the place of origin. As expected, livestock is the main source of income among the Qashqa'i nomads at the place of origin followed by agriculture and carpet making.

**Figure 6.11**

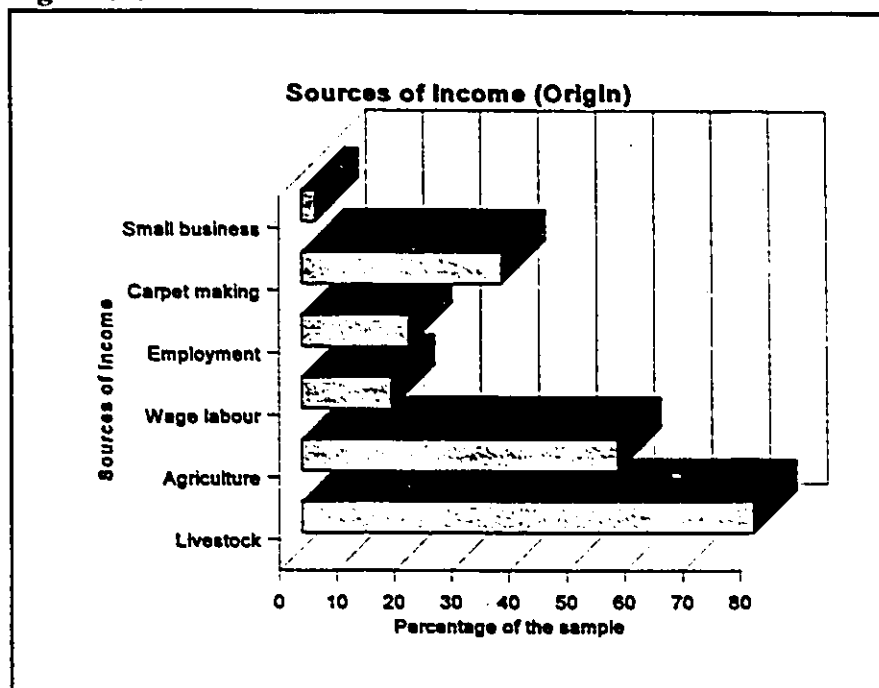


Figure 6.12 shows the source of income in the sample at the place of destination. The sources of income include livestock, agriculture, wage labour (unskilled labour in construction, or other low paid jobs), salaried employment (such as teachers, and drivers that are paid by national government), carpet-making, and small businesses. This figure shows that most Qashqa'i migrants support their families through livestock husbandry, agriculture, and carpet-making even at the place of destination. This suggests that the Qashqa'i migrants still have economic connections to their place of origin. However, 34 % of the respondents are paid as employees by national government, and 22.5 % of people work as wage-earners in low paid jobs at the place of destination.

Figure 6.12

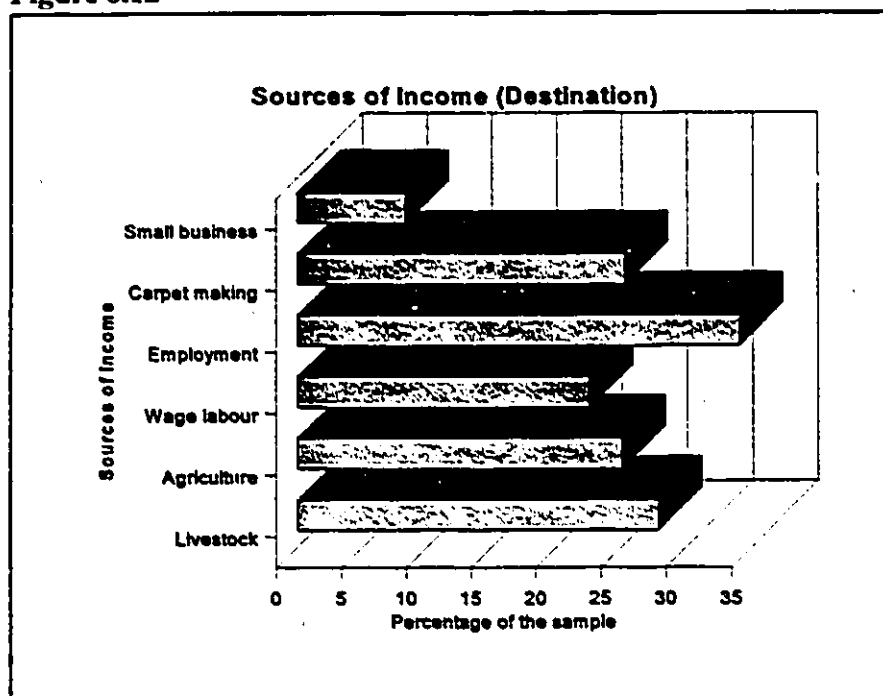


Figure 6.13 shows the net annual family income at the place of origin. The annual income of 29.5 % of the Qashqa'i nomads is equal to or lower than \$ 700 (US). 12.5 % of Qashqa'i families have annual incomes greater than \$ 3,501 (US).

Figure 6.14 represents net annual family income at the place of destination. The annual income of 40.8 % of Qashqa'i migrants in the sample ranges from \$ 700 to \$ 1501( US) and some respondents declared this amount to be less than their annual expenses. Based on the sampled data, Qashqa'i migrants can barely support their families in urban areas.

Figure 6.13

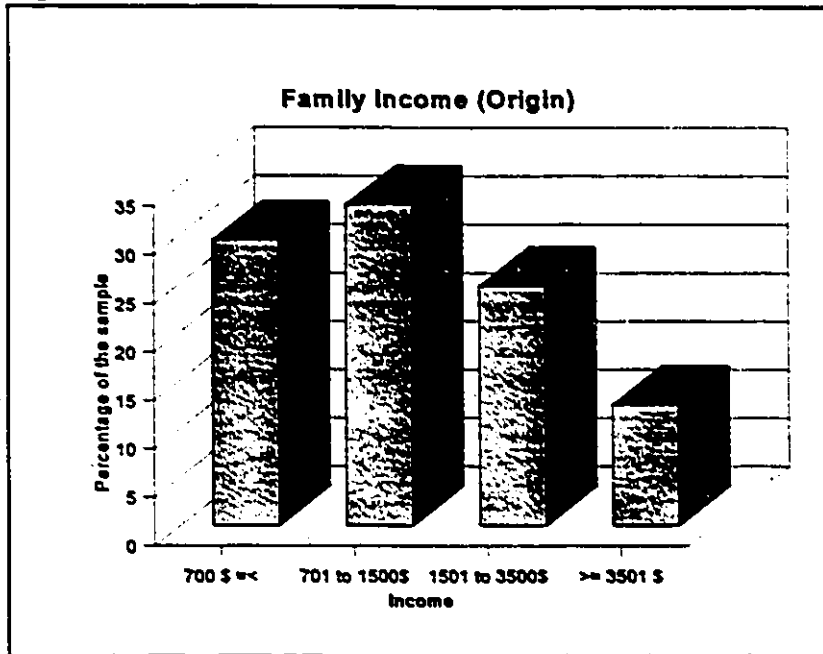
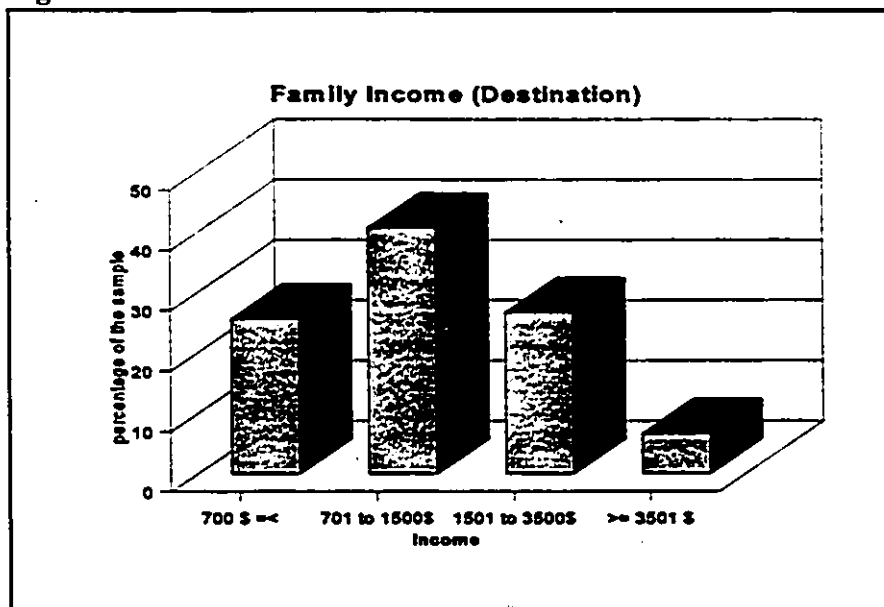


Figure 6.14



## **6.2 Towards a 'General Profile' of Qashqa'i Migratory Groups**

From the point of view of migration, we divided the Qashqa'i population into two groups based on points of origin and destination, and areas of residence. In order to have a better overview of the people at the places of origin and destination, geographic, demographic, educational, and economic variables that are related to both 'locations' were discussed. The description of these variables shows that there was not much difference regarding 'personal factors' among the Qashqa'i in the places of origin and destination. This assertion is made because most of the Qashqa'i who live in urban areas today migrated in recent decades and continue to hold cultural values similar to those of the people at the place of origin.

From the description of the sample, we understand that Qashqa'i people are a minority in Iran with unique language and are scattered in the southern part of Iran. The majority of the Qashqa'i population is located in Fars and, therefore, they consider Fars their home. The Dareshuri tribe, however, lives in Esfahan and Kohgiluyeh provinces, which are geographically situated on the western and northern borders of Fars province. The Qashqa'i people are also distributed among three Iranian communities (nomadic, rural, and urban populations). Although the Qashqa'i were originally nomadic, part of the population has adapted its lifestyle to a non-nomadic or rural community. Other Qashqa'i migrants are trying to adapt their way of life to the urban community in the cities of destination. It is hard to support and serve such a scattered Qashqa'i population even with the help of the national government. Given this, Qashqa'i people are engaged in different types of occupations. Some Qashqa'i practice only animal husbandry, while others pursue agriculture or combine the two activities. Still others have migrated to cities to obtain wage labour or salaried employment.

The demographic variables show that the population of the Qashqa'i is one of the most rapidly growing populations among Iranian communities. Almost 50 % of the population is under fifteen, and only 2.8 % is sixty five and over. The life expectancy of Qashqa'i nomads is 57, a value lower than that of the several non-nomadic population. It is even lower for Qashqa'i women because of the hardships of nomadic life (Gharakhlou, 1989). Most of the Qashqa'i young people marry in their early twenties and tend to marry within their wider 'caste group'. Rapid population growth has had an impact upon their limited pastures and farmlands which may be another factor in the migration of the Qashqa'i to urban areas. The age structure indicates that Qashqa'i men together with their large families migrate to the urban areas, and often have difficulty adapting to the social structure of urban communities.

Formal education of Qashqa'i nomads started in 1954 with Bahmanbegi's 'Tent School Programme'. Before the 1950's almost all of the Qashqa'i were illiterate. The Tent School Programme was one of the Educational Division of the American Government's Point Four plans for developing countries. It was started in Iran by an educated Qashqa'i named Mohammad -E-Bahmanbegi. It was a very successful educational plan among Iranian nomads, particularly the Qashqa'i and increased the rate of literacy among nomads. In recent years, the rate of literacy among Qashqa'i men has been approximately 50 %, while it is about 25 % for nomadic women, and 40 % for Qashqa'i women who have migrated to urban areas. Compared to both rural and urban communities in Fars province, the rate of the literacy among the Qashqa'i is very low. Although education in Iran is free for all Iranians, according to our survey, some children of Qashqa'i families remain totally illiterate. This could be another reason for the Qashqa'i to migrate to urban centres - especially if they are concerned about formally educating their family.

With regard to occupation, the Qashqa'i function in a variety of ways: some are primarily engaged in animal husbandry and/or agriculture. Another group of Qashqa'i work as professional or non-professional labour in cities. Traditional subsistence lifestyles and income generated from craft work have proven to be inadequate for many Qashqa'i causing them to migrate to cities to supplement their incomes and improve their lifestyles. The Qashqa'i who have migrated to cities still have connections with traditional occupations in their place of origin. These connections have often forced Qashqa'i families to migrate back to the place of origin (counter stream) for a short time during the most productive agricultural and herding season. Some urban Qashqa'i also participate in 'marginal' economic activities. For example, some Qashqa'i men have various kinds of illegal jobs such as selling cigarettes and smuggling in urban areas (Taqqisi, 1992). Our survey shows that the income of almost 30 % of Qashqa'i households was equal to or lower than \$ 700 (US) in both places of origin and destination.

We can explain that the Qashqa'i who have migrated to urban areas during the past few decades have done so for a variety of complex soci-economic and political reasons. To go further, it is important to know the major causes and consequences of the Qashqa'i migration to urban areas in regard with pull and push factors, and also to describe the changes regarding cultural practices as expressed in the research questions of this thesis. The next chapter will cover the main pull and push factors related to the Qashqa'i migration process. The effects of these factors upon each of the six Qashqa'i tribes are identified and analyzed.

## VII. Analysis of the Migration Behaviour of the Qashqa'i: Identifying the Important Factors

As stated in Chapter Two, the main research question in this thesis is: *what were the causes of the flow of the Qashqa'i to urban areas, that is to say, does the increased migration result mainly from urban pull factors or nomadic push factors?* To answer these questions, two surveys were conducted, one at place of origin and the other at place of destination (Appendix A, and B). The aim of this chapter is to identify the major factors influencing the recent migration behaviour of the Qashqa'i. This analysis is done in two steps. First, push-pull factors at the place of origin are examined for intended migrants. Intending migrants are defined as those people who live at the place of origin, but would like to migrate to urban areas in the future. In order to understand the characteristics of these potential migrants, the factors explaining the intention to migrate at the places of origin are discussed. In addition, the relationships between some personal characteristics and intention to migrate at the place of origin are investigated.

Second, an analysis is carried out to more clearly understand the factors which influence Qashqa'i migration behaviour at place of destination and to better evaluate the relative importance of these factors for each migrant tribe and destination city. Then, to understand the correlates of migration, comparisons are made based on similar personal characteristics between intending migrants and migrants at the place of destination.

In the last section of this chapter, push and pull factors are analyzed taking into account the

impact of environmental and geographical differentiation at places of origin and destination. The aim here is to evaluate some of the pull factors towards points of destination in order to understand how they may influence the choice of city for migrants. At the end of this chapter, a general profile of Qashqa'i migration process is given in relation to the important explanatory factors that have been identified.

### **7.1 Measuring the Intention to Migrate at the Place of Origin**

In our sample at the place of origin, the answer to question 30 (*Do you intend to leave this location? 1. Yes 2. No*) is used to identify potential migrants from those who want to stay at the place of origin. We think that this question is a good way to identify potential migrants because this question is simple, easy to understand and forces the respondents to give clear answers about their future.

The results of this questions are given in Table 7.1.

Table 7.1: Identification of Potential Migrants at the Place of Origin

Question 30: Do you intend to leave this location?		
Answers	Number of respondents	% of the total
No (intend to stay)	180	45
Yes (intend to leave)	220	55
Total	400	100

This table shows that 55 % of Qashqa'i people at the place of origin intend to migrate to urban areas, and 45 % Qashqa'i want to stay at the place of origin. An explanation of this high percentage, based on field observation is that both Qashqa'i villagers and Qashqa'i nomads at the place of origin have major problems. For example, Qashqa'i villagers must face harsh climate,

limitation of farmlands, and lack of social services such as educational institutions, health services, and public transportation. Qashqa'i nomads have encountered in the recent past, degradation of pastures, water shortages, restriction of traditional migratory routes by rural or urban inhabitants, and destruction of their socio-political organization by the central government. All these problems have produced a difficult lifestyle from which many people want to escape. Also, the influence of Iran-Iraq war, and the expectations nomadic people have to improve their standard of living by migrating to urban areas, combine to increase the intention to migrate toward cities.

This strong desire to leave rural areas is not unique to Iran. For example, during the 1964 - 1973 census period, nearly 60 % of all Colombian townships lost rural population because of a lack of adequate social services, unemployment, few job opportunities outside of agriculture, and government policies which favour spending and focus attention on urban development (Griffin & Williams, 1979). Therefore, Qashqa'i nomads are not the only group which exhibit a high migration rate to urban centres.

## **7.2 Factors Explaining the Intention to Migrate**

In the following sections the intention to migrate will be considered as the dependent variable and will be linked to the independent variables considered to be either push or pull factors. The aim is to better understand why potential migrants intend to leave their place of origin.

### **7.2.1 Identifying important push factors**

In the questionnaire used at the place of origin, there is no section on migration behaviour because people have not gone through the migration process yet. Despite that, it is possible to

understand push factors for intending migrants by using the section of the questionnaire called "description of the environment" (Appendix B). In this section, question 30 (showing the intention to migrate) is considered as dependent variable and is correlated to the important factors that can be identified from questions 26, 27, and 31 (see Table 7.2 ). The absence or presence of these factors could have an important impact on the migration decision so that we may consider them to be push factors. Frequency tables are used to relate the intention to migrate to independent variables such as water, education (guidance school, and high school), health services, transportation, market factors, lack of amenities, and other variables at the place of origin.

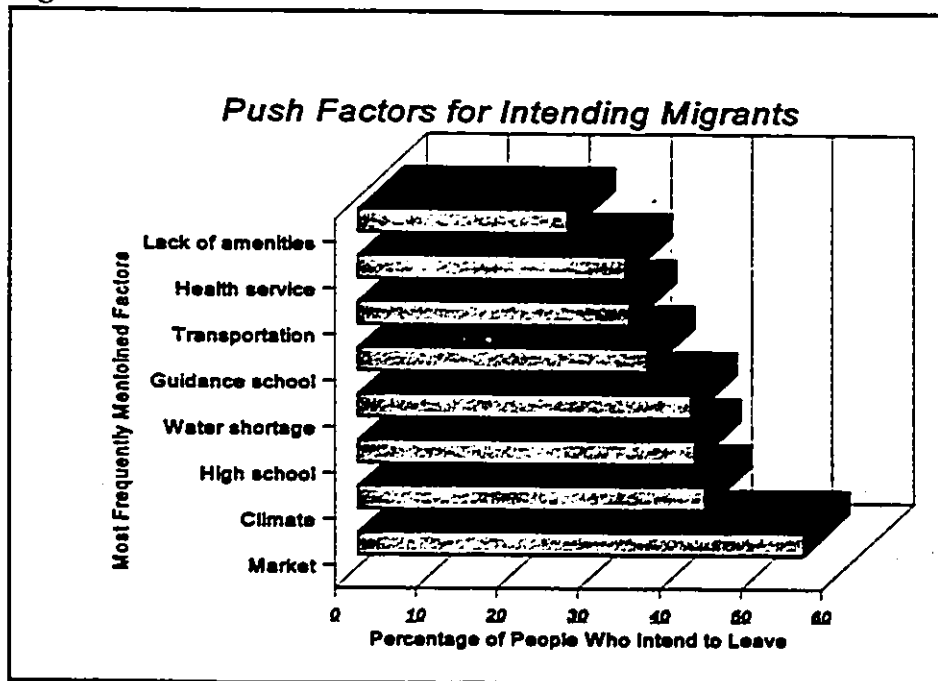
Table 7.2: Push Factors from Questionnaire B (Origin)

Main Questions	Sub-questions (with yes or no possible answers)
26. Do you have access to these commodities and services?	1. Enough water 2. Power 3. Phone 4. T.V 5. Refrigerator 6. Car 7. Road
27. Is your house close to these services?	1. Primary school 2. Guidance school 3. High school 4. Health services 5. Transportation 6. Market
31. If you do not want to stay at the places of origin, why do you intend to leave this location?	1. To seek a better job 2. To get education for children 3. To join family/relative 4. Poor amenities here 5. Hardship of climate 6. Other (specify)

Figure 7.1 illustrates the most frequently mentioned push factors that were identified by intending migrants based on the sample data from the place of origin. It shows clearly that accessibility to a consumer market (55 %) is a very important factor for nomads whether they live in Qashqai villages or follow the traditional nomadic way of life. The explanation is that the

Qashqa'i nomads live in the Zagros mountains or in lowland areas close to the Persian Gulf which removes them from easily accessible markets. The nomadic people and villagers produce red meat, dairy products, wool, carpet, grains, and fruit for their fellow-citizens. They also consume some urban products. Therefore, they need an accessible market. However, in most cases, even nomads who live close to cities do not have good roads or vehicles to reach market centres easily. To put this in a wider migration context, being close to schools banks, shops, a post office, and doctors' surgeries makes people highly dependent to their residential areas (Lewis, 1982). Moreover, Simmons (1968) showed that for those living more than 40 minutes away from work, accessibility contributed significantly to the decision to change residence. Therefore, in the case of Qashqa'i, inaccessibility to the consumer market (bazar) is an important push factor for intending migrants at the place of origin.

Figure 7.1



Climate (42.8 %) is also important for the Qashqa'i who live in the villages. Qashqa'i villages are located either in lowlands with a hot summer climate or in highlands with a cold winter climate. As the Iran Statistical Yearbook (1990-91) shows, the average the temperature in most of southern regions of Iran (such as Gachsaran, Firuzabad, Kazerun, and Qaemieh townships) is 30 degrees Celsius during the summer. On the other hand, the average temperature in Semirom township ranges from -5 to 3 degrees Celsius during the winter. These climates are unattractive for nomads who seek more moderate conditions by migrating between summer and winter quarters. The lack of facilities also contributes migratory behaviour for Qashqa'i villagers. Since refrigerators and air conditioners required for comfortable lowland lifestyles in summer are lacking, as are heaters for winter highland climates. In the similar study, Ogden (1984) argues that poor climate and physical environment are push factors which encourage people to leave their place of origin.

Educational institutions for Qashqa'i children are rare at the place of origin. There are no secondary schools for Qashqa'i who practice nomadic ways of life. There are only a few 'guidance schools' for villagers, and no high schools at all for either Qashqa'i villagers or nomads. Almost all the high schools in Iran are located in urban areas. Of the Qashqa'i at the place of origin, 41.5 % and 35.7 % of respondents, respectively, state that the lack of high schools and guidance schools may cause them to migrate to urban areas. In the same way, Lewis (1982) states that being close to schools is a factor that make people highly dependent to their residential areas.

Water shortage is another factor that influences decisions to migrate. Water is essential for both humans and livestock. In most of the nomadic regions, water shortage is a perennial concern. This is particularly true for Qashqa'i who live in southern Fars where it is usually too dry. As mentioned earlier, in a dry or 'bad' year, it is not surprising for a flock owner to lose 50 % of his

livestock. Therefore, in a dry year, the shortage of water for both villagers and nomads may result in a decision to migrate.

The nomadic people of Iran, and especially the Qashqa'i, are scattered across large areas, either in villages or in tents. Therefore, it is hard for government officials to maintain health services and other amenities for them. Thus, scarcity of health services, and lack of other public services in the Qashqa'i regions are two factors that influence migration decisions.

### **7.2.2 Identifying important pull factors**

Positive forces which attract an individual to a place of destination are called pull factors. The variables related to pull factors for intending migrants at the place of origin are now considered. To identify the pull factors for intending migrants, question 30 in the questionnaire at the place of origin is considered again as a dependent variable (intention to migrate) and correlated to the possible answers of questions 31, 36, and 37 of the questionnaire at the place of origin (Appendix B). Table 7.3 gives these questions with their possible answers. These questions have been chosen to identify the pull factors for intending migrants because their possible answers are related to existing opportunities at the place of destination. Based on frequency tables, the importance of pull factors for intending migrants can be measured.

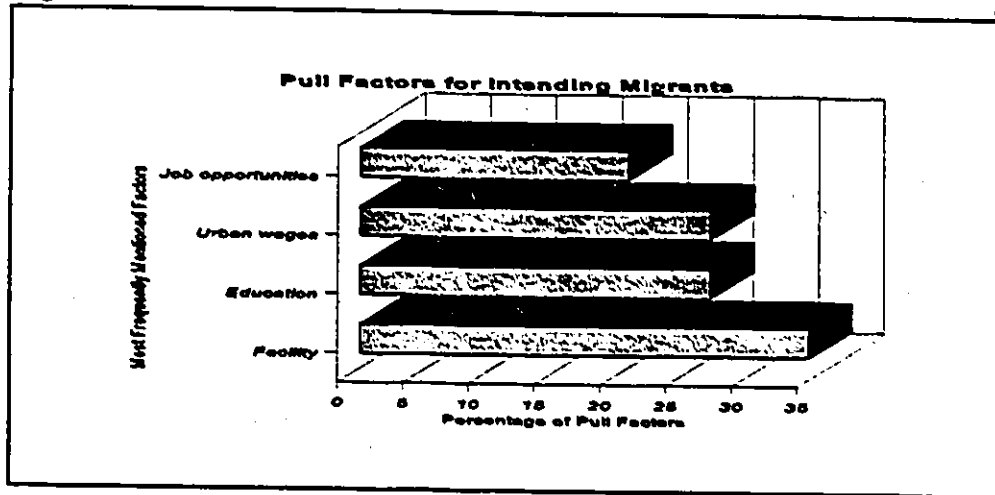
Table 7.3: Pull Factors from Questionnaire B(Origin)

Main Questions	Sub-questions (with yes or no possible answers)
31. If you do not want to stay at the place of origin, why do you intend to leave this location?	<ol style="list-style-type: none"> <li>1.To seek a better job</li> <li>2.To get education for children</li> <li>3.To join family/relative</li> <li>4.Poor amenities here.</li> <li>5.Hardship of climate</li> <li>6.Other (specify)</li> </ol>
36. If you decide to go to the city what kind of location do you plan to choose?	<ol style="list-style-type: none"> <li>1.A city close to the place of origin</li> <li>2.A city close to your relatives</li> <li>3.A city to find a job easily</li> <li>4.A city with more facilities</li> <li>5.Other (specify)</li> </ol>
37.How do you see the future of your community?	<ol style="list-style-type: none"> <li>1.They are going to migrate to urban areas for wage labour</li> <li>2.They are going to keep their traditional way of life for livestock husbandry</li> <li>3.They are going to stay in nomadic village for cultivation</li> <li>4.They are going to migrate to urban areas and to keep their livestock and cultivation at the place of origin</li> <li>5.Other (specify)</li> </ol>

Figure 7.2 illustrates the most frequently mentioned pull factors at the places of origin as given by our sample. The factor “better or more facilities” includes power, water, transportation, and sanitation services. Thirty four percent of the respondents claim that “better facilities” encourage them to migrate to urban areas. Also, 27 % of the nomadic people declared that the existence of educational institutions is another factor pulling people to urban centres.

Urban wages pull the poorer nomads towards urban areas because often there is not enough livestock or farmlands to support their families in the nomadic regions. Thus, they prefer to migrate to the cities even if it means taking temporary low-paid jobs. Almost twenty one percent of respondents identify “job opportunities” as a factor that encourages them to migrate to urban centres for employment. Most of the pull factors seem to be the same for the Qashqa’i and other migrants reviewed in the similar studies.

Figure 7.2



### 7.2.3 The correlates of migration: influence of personal characteristics

As mentioned in the literature review, one of the explanations for internal migration focuses on migration differentials. This refers to the selectivity of certain persons or the tendency of certain groups to be more migratory than others. People of different ages, sexes, skills, and ethnic backgrounds may respond differently to economic challenges at the place of origin and possible opportunities at the place of destination. Clark (1986) states that the probability of middle-age people migrating is much higher than the probability of children or old people migrating. Education is another factor that influences the rate of migration: the higher the level of education of people, the greater the likelihood of them moving. It has also been shown that professional and skilled workers are more migratory than unskilled workers (Clark, 1986).

The influence of personal characteristics on selectivity of Qashqa'i nomads can be examined using cross-tabulation tables. The dependent variable or intention to migrate is correlated to personal variables such as literacy, sex, age, level of education, and family income at the place of origin.

These investigations are used to identify the characteristics of certain groups of people who wish to migrate to urban areas.

Table 7.4 shows the intention to migrate compared to the rate of the literacy. According to this table, almost 58 % of literate people would like to migrate. This is higher than the 52 % of the illiterate population who made the same decision. However, the value of Chi-Square for intending migrants is low and the probability which is related to this value is not significant. This means that the literacy factor doesn't differentiate significantly between the two groups of people (intended migrants, stayers). In other words, literacy doesn't play a significant role in the explanation of intention to migrate.

Table 7.4: Intention to Migrate Correlated with Literacy

Intention to Migrate	Literate		Illiterate		Numbers
	%	Frequency	%	Frequency	
No	42.2	86	48.0	94	180
Yes	57.8	118	52.0	102	220
Total	100	204	100	196	400
Chi-Square Value	1.36				
Probability	0.244				

Gender is another factor which may influence the tendency of certain groups of people to migrate. Table 7.5 shows the intention to migrate in conjunction with gender among Qashqa'i people at the places of origin. In his study, Ravenstein (1889) argues that contemporary evidence in the Western world showed that males were more migratory than females. In contrast, Lewis (1982) states that in the mid-1960's in Sweden, females were somewhat more migratory than males. As the results show the value of Chi-Square for gender is higher than for literacy. Qashqa'i women

seem to have a higher propensity to migrate than the men.

Table 7.5: Intention to Migrate Correlated with Gender

Intention to Migrate	Male		Female		Numbers
	%	Frequency	%	Frequency	
No	47.1	154	35.6	26	180
Yes	52.9	173	64.4	74	220
Total	100	327	100	73	400
<b>Chi-Square Value</b>	3.18				
<b>Probability</b>	0.075				

Age is a factor that in most Western countries is clearly related to migration selectivity. Frey (1992) states that the age relatedness of in-migration, out-migration, and net-migration in Montreal tends to peak for people their early twenties, which coincides with educational and first employment opportunities and amenities that are often attractive to young adults. Danesh (1987) also states that more than 75 % of migrants who settled in Tehran during 1971-1976 were between 15 to 35 years of age.

Table 7.6 shows intention to migrate among the Qashqa'i nomads when related to the age factor. As Table 7.6 shows four classes are used to categorize the age groups of nomadic people at the place of origin. The results of this table shows that the value of Chi-Square is very low and therefore the probability related to this value is not significant. Based on this result, we can say that among the Qashqa'i nomads, age does not differentiate migration behaviour. An explanation can be found in the fact that most of the Qashqa'i nomads migrate with their complete families to urban areas. So, in this case, age becomes irrelevant.

Table 7.6: Intention to Migrate Correlated with Age

Intention to Migrate	Age								Numbers
	Age <20		Age 21-35		Age 36-65		Age >65		
	%	Freq.	%	Freq.	%	Freq.	%	Freq.	
No	44.0	4	43.0	49	46.5	112	41.7	15	180
Yes	55.0	5	57.0	65	53.5	129	58.3	21	220
Total	100	9	100	114	100	241	100	36	400
Chi-Square Value	0.56								
Probability	0.905								

Table 7.7 shows intention to migrate while compared to the level of education at the place of origin. Educational attainment is another factor that tends to influence the rate of migration. Clark (1986) states that the higher their level of education of people, the greater the likelihood that people will move. Hemmasi's study (1971) in Iran states that education is a major explanatory variable of migration in less developed countries. Table 7.7 shows that the value of Chi-Square related to the level of education is very high (15.96), and the probability associated with this value is low (0.014) so that this result is statistically significant. The data indicate that the level of education is important in migration decision among the Qashqa'i of Iran at the places of origin. The intention to migrate among university educated Qashqa'i (86.5 %) is much higher than among those with lower levels of education.

Table 7.7: Intention to Migration Correlated with Level of Education

Intention to Migrate	Level of Education						
	Illiterate	Read & write	E. School	G.school	H.school	College	University
	%	%	%	%	%	%	%
No	45.5	56.1	55.6	32.1	40.00	25.8	12.5
Yes	54.5	43.9	44.4	67.9	60.00	74.2	86.5
Total	100	100	100	100	100	100	100
<b>Chi-Square Value</b>	15.97						
<b>Probability</b>	0.014						

Table 7.8 relates the intention to migrate to annual family income. Todaro (1976) states that for many years the largest percentage of urban migrants were poor, landless, unskilled individuals whose rural opportunities were for the most part non-existent. As this table shows, the value of Chi-square is low and the probability related to this value is not significant. In the case of the Qashqa'i it seems that income doesn't differentiate very well between those who want to migrate and those who want to stay at the place of origin.

Table 7.8: Intention to Migrate Correlated with Family Income

Intention to Migrate	Family Income								Numbers
	700\$=<		701 to 1500\$		1501 to 3500\$		>=3501\$		
	%	Freq	%	Freq	%	Freq	%	Freq	
No	46.6	55	43.6	58	40.4	40	54.0	27	180
Yes	53.4	63	56.4	75	59.6	59	46.0	23	220
Total	100	118	100	133	100	99	100	50	400
<b>Chi-Square Value</b>	2.71								
<b>Probability</b>	0.439								

### **7.3 Factors Explaining Migration Behaviour at Place of Destination**

In the previous section the push-pull factors were distinguished for intending migrants at the place of origin. Here, the push-pull factors are described for migrants at the place of destination. Some factors that are used in the questionnaire A for destination (Appendix A) are not the same as those which were identified in the previous section. First, intending migrants have not experienced migration processes yet, while migrants have already passed through this stage. Because of this, the pull and push factors for intending migrants are derived from the sections "description of the environment" and "view for the future", while for the migrants at the places of destination, they are based on the section "migration behaviour". However, although the factors are identified from different sources in the two questionnaires, it is still possible to compare origins to destinations for the important push/pull factors.

#### **7.3.1 Push factors at place of destination**

To explore push factors for migrants, the possible answers for question 20 in the questionnaire for the place of destination have been analyzed (Appendix A). This question, through its possible yes or no answers, suggests directly some possible causes of migration to the respondent. Table 7.9 gives question 20 and the sub-questions (with yes or no possible answers). To rank the push factors, frequency tables, similar to those for push factors at the place of origin, are used.

Figure 7.3 shows the importance of push factors as indicated by migrants in the cities of destination. According to this figure, the hardship of the nomadic life seems to be the most important factor causing Qashqa'i to migrate to urban areas. Nomads get tired of constantly moving and they prefer to migrate to urban areas for a comfortable living even they may live a present lower

income.

Table 7.9: Push Factors from Questionnaire A (Destination)

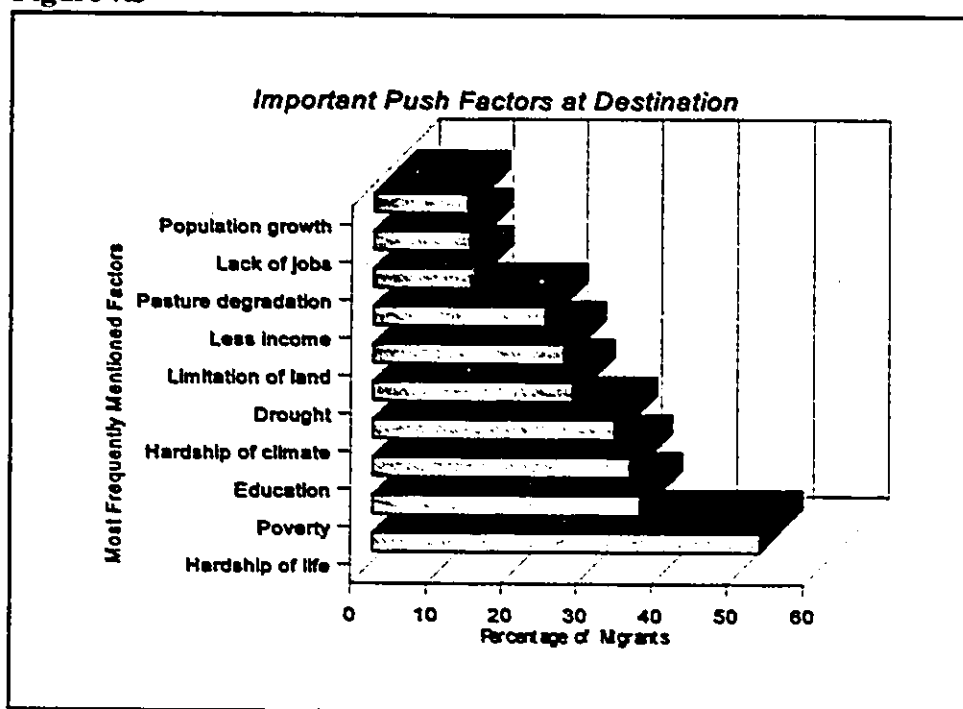
Question	Sub-questions (with yes or no possible answers)
20. What are your reasons for migration?	<ol style="list-style-type: none"> <li>1. Land reform</li> <li>2. Pasture nationalization,</li> <li>3. Drought</li> <li>4. Epidemic diseases</li> <li>5. Poverty</li> <li>6. Population growth</li> <li>7. Pasture degradation</li> <li>8. Limitation of farmland</li> <li>9. Restriction of access to traditional migratory routes by rural or urban inhabitants</li> <li>10. Limitation of pasture by government</li> <li>11. Education of nomads,</li> <li>12. Hardship of climate</li> <li>13. Hardship of nomadic life</li> <li>14. Less income</li> <li>15. Less viable jobs</li> <li>16. Discriminatory treatment of Khan/Kadkhoda</li> <li>17. Discriminatory treatment by government officials</li> <li>18. Mechanization of land</li> <li>19. Other (specify).</li> </ol>

Poverty is another factor that causes the migration of Qashqa'i nomads to urban areas. Poor people among the nomads are those who have little or no livestock, pastures or farmlands. They cannot meet their basic food, clothing, and shelter needs. Having little choice, they move to the poor neighborhoods of cities to find a place to settle permanently. In a similar study, Gaur & Nepal (1962) found that 61.1 % of those interviewed in eastern Uttar Pradesh in India gave poverty at the rural source as the primary reason for moving.

Education in the form of tent schools for the Qashqa'i nomads was established in 1954. In a short time, tent schools covered all the Qashqa'i tribal and sub-tribal areas, even extending to other provinces among other Iranian nomads. From 1954 to 1986 the literacy rate rose from 5 % to 36 % (Gharakhlou, 1989). The education of Qashqa'i nomads opened a new world for potential young migrants who seek better job opportunities and further education in urban areas. Clark (1986) argues

that a person with a college degree is three times as likely to migrate as someone who has a simple elementary school education, and more importantly, is likely to move a greater distance.

**Figure 7.3**



Climate is another factor which has caused sedentary Qashqa'i nomads to move towards cities. For example, in the case of the Dareshuri tribe, the cold climate of the mountainous area of Vardasht-E-Semirom has caused migration to Shahreza city. When the Dareshuri tribe settled down in their summer quarters in Vardasht in 1964, they did not have heating facilities to protect themselves from cold weather. They also had no open roads during the snowy winter to reach to the cities. After a few years, they decided to migrate to Shahreza city to escape winter hardship. Some families migrated back to Vardasht during the spring and summer to work on their farms. Gradually, some of the Dareshuri adjusted to Shahreza and decided to stay there permanently.

Drought is a factor that has always affected migration decisions. In 1962, for example, many

Qashqa'i families had to migrate to cities because of drought. They lost their livestock during the winter because there was no rain and therefore, no grass for livestock. The Qashqa'i experienced a similar drought in the winter of 1993, which also encouraged people to migrate to the cities.

Besides livestock husbandry, Qashqa'i nomads practice cultivation, and these two occupations complement each other. In some cases the migration of nomads can be related to limitations of farmland at the place of origin. Ozyurekli (1970) states that the massive difference between rich and poor in land ownership in Turkey (9% of the population owned 51 % of the land) meant a lower per capita income, which in turn influenced migration. In the Qashqa'i region there is also a big difference in land ownership between rich and poor.

Obviously, income is a major factor in living comfortably. Incomes among the Qashqa'i people are much lower than those of other communities in the urban areas. As shown in our sample, the equivalent annual income of almost 30 percent of the Qashqa'i nomads is equal to or below \$ 700 (US). Thus, one of the main reasons why they move to cities is that they believe that they will increase their incomes and live better. Greenwood (1971) also found in his study in India, that the difference in income between areas of origin and destination were particularly significant in long-term migration.

Degradation of pasture is another push factor that causes migration of the Qashqa'i to urban areas. After the 1960s, pastures became nationalized and in order to keep their lands, the nomads had to change their pastures into farms and orchards. This led to degradation of pastures and over-grazing, which in turn decreased their productivity and caused urban migration. In a similar study, Phillips (1959) indicated that the once fertile but now salinized soils of southern and central Iraq led to increased levels of migration from there to the northern sectors.

Limited employment opportunity is an important factor that pushes the Qashqa'i nomads to urban areas. Lack of jobs for the Qashqa'i villagers who live in mountainous areas during the winter or lowland areas during the summer leads to seasonal migration of adults to urban areas. If they find permanent jobs, the seasonal migrants may settle down permanently at the cities of destination. In a similar study, Lee (1970) found that in Seoul, 17.1 % of those who moved did so for job-related reasons, either looking for or taking a job.

Population growth is another typical reason for migration. As mentioned, family size among the Qashqa'i is high at 7.2 individuals on average, and population growth on land with a limited capacity causes out-migration. Since the Qashqa'i population is increasing more rapidly than agricultural productivity, nomads are forced to move to cities to earn a living.

### **7.3.2 Pull-factors at place of destination**

To discover the important pull-factors at place of destination, question 21 was used (Appendix A). Table 7.10 shows question 21 and its sub-questions with yes or no possible answers. Question 21 is chosen because its possible answers are directly related to the people who have already migrated to urban areas. By using frequency and cross-tabulation tables, the significant pull factors discovered for place of destination are found and they are shown in Figure 7.4.

Table 7.10: Pull Factors from Questionnaire A (Destination)

Main Question	Sub-questions (with yes or no possible Answers)
21. What are your reasons for the choice of destination?	1. Closeness to origin 2. Better job opportunities 3. Better housing conditions 4. Family ties 6. Better facilities 7. Supplementary benefits 8. Secondary activities 9. Accessibility to informal jobs 10. Accessibility to information 11. Accessibility to education 12. Accessibility to health services 13. Comfortable lifestyle.

Family ties are strong among Qashqa'i nomads. For example, in Shahreza there are at least seven Qashqa'i neighbourhoods ( see below, Figure 9.1). In these neighbourhoods, relatives live close together. When some kin migrate to an urban area, other relatives try to join them and build a new neighbourhood there. In their study, Flinn and Converse (1970) reported that in a Bogota shanty town (Colombia) almost 30 % of migrant household heads had friends or close relatives from their area of origin living in the same neighbourhood.

Access to education is another factor that pulls the Qashqa'i nomads to urban areas. As previously mentioned, after 1954 the Qashqa'i became familiar with new systems of education. They decided to move to cities where their children would be able to continue their education at a higher level.

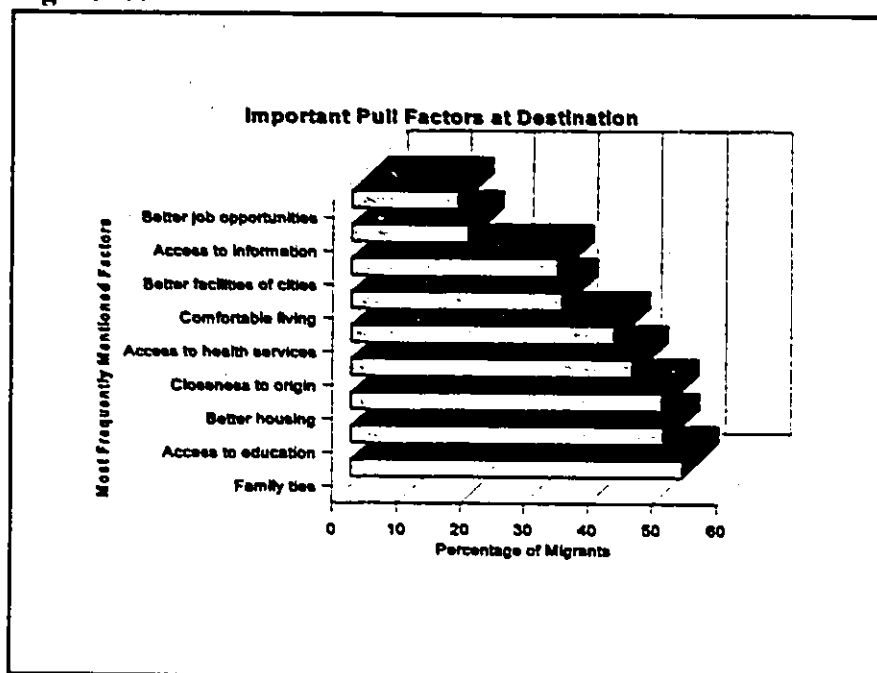
Housing conditions in cities are not comparable with those in tents and villages. The housing conditions of destination cities are more comfortable than those at the place of origin. In urban areas, almost all houses are equipped with electrical power, piped water, natural gas, and cooling and heating systems. These housing amenities encourage the Qashqa'i people to move to urban areas.

Most of the Qashqa'i migrants prefer to live close to the place of origin, because they still

possess farmlands, orchards, and pastures there, and wish to have easy access.

Health services are another pull factor for the Qashqa'i migrants. Almost all major health services in Iran are located in cities. Qashqa'i nomads prefer to go to cities in order to be close to hospitals, physicians, and clinics.

**Figure 7.4**



It is part of human nature to pursue a comfortable lifestyle, and the Qashqa'i people are not exceptions in this respect. In a nomadic way of life, all people, from children to the elderly, suffer during the seasonal migration between summer and winter quarters. Thus, it can be argued that the Qashqa'i people migrate to seek a release from the hardship of nomadic life. Accessibility to the better facilities in cities attracts people to urban areas. Urban facilities such as transportation, markets, health services, educational institutions are all basic needs. Thus, these amenities represent positive elements that attract the Qashqa'i people from places of origin to the cities of destination.

Cities are centres of all types of information. Political, economic, social , and cultural information is available in urban centres because mass media are concentrated there. This concentration of information also attracts migrants. Job opportunities are other pull factors that attract the Qashqa'i nomads toward urban areas. Even unskilled nomads are able to engage in construction, and other similar jobs in the cities.

### **7.3.3 The correlates of migration: a comparison between origin and destination**

Origin and destination are compared here using the same personal characteristics that were used for the origin. These are literacy, sex, age, level of education, and family income. The aim is to see if migrant and non-migrant populations have the same socio-economic and socio-demographic profile. To do that, the Chi-Square test is used to identify significant differences between these two populations.

To start with, the Chi-Square value for the literacy factor is rather low (1.68), the probability attached to this value is high, so it is not significant. Based on Table 7.11, the literacy factor doesn't differentiate between migrants ( at the place of destination) and those who live at the place of origin. Similar results were found between intending migrants and stayers at the places of origin.

Table 7.12 shows the relationship between migration and gender. According to this table there is almost no association between these two variables. Therefore, the Qashqa'i migrants don't seem to be differentiated by gender or by literacy. Again this results is similar to that for intending migrants and stayers at the places of origin.

Table 7.11: Migration and Literacy (Destination)

		Literacy				Numbers
		Literate		Illiterate		
		%	Frequency	%	Frequency	
Migration	Migrants (destination)	61.9	331	57.9	269	600
	Non-migrants (origin)	38.1	204	42.1	196	400
	Total	100	535	100	465	1000
	Chi-Square Value Probability	1.68 0.196				

Table 7.12: Migration and Gender (Destination)

		Gender				Numbers
		Male		Female		
		%	Frequency	%	Frequency	
Migration	Migrants (destination)	59.2	475	63.1	125	600
	Non-migrants (origin)	40.8	327	36.9	73	400
	Total	100	802	100	198	1000
	Chi-Square Value Probability	1.01 0.315				

Age is another factor which can be considered to differentiate between migrants and non-migrants. There are four categories of ages in Table 7.13. According to this table, the value of Chi-Square is a bit higher (5.60) and its associated probability is somewhat lower (0.133) than for literacy

and gender. However, it is still not statistically significant. A group of Qashqa'i whose ages range from 36 to 65 differentiated the migrants somewhat at the place of destination. Contrary to the results we have obtaining for intended migrants and stayers, results on Table 7.13 suggests that the Qashqa'i population between 36 and 65 years old is more migratory than the others.

Table 7.13: Migration and Age (Destination)

		Age							
		Age <20		Age 21-35		Age 36-65		Age >65	
		%	Freq	%	Freq	%	Freq	%	Freq
<b>Migration</b>	Migrants (Destination)	50.0	9	56.5	148	62.6	403	52.6	40
	Non-migrants (Origin)	50.0	9	43.5	114	37.4	241	47.4	36
	Total	100	18	100	262	100	644	100	76
	Chi-Square Value Probability	5.60 0.133							

Table 7.14 confirms that the level of education with a high value of Chi-Square (21.036) and a low probability of 0.002 influences the migration decision at the place of destination. The frequency numbers are not included in Table 7.14 because of space limitations. According to this table, university degree holders with 84 % clearly differentiated the Qashqa'i migrants at the place of destination.

Table 7.15 indicates that contrary to the place of origin where family income do not differentiate the selectivity of the intended migrants, income influences migration behaviour at the place of destination. The value of Chi-square (14.4) and the very low probability (0.002) associated with it show the importance of this factor. The percentages of annual family income in Table 7.15

reveal that most of the migrants at the place of destination were those who had low annual family incomes, and this was also true for intending migrants.

Table 7.14: Migration and Level of Education (Destination)

		Level of Education						
		Illiterate	Read & write	E. School	G. school	H. school	College	University
		%	%	%	%	%	%	%
Migration	Migrants (destination)	59.3	58.09	50.0	54.8	62.8	67.0	84.3
	Non-migrants (origin)	40.7	41.91	50.0	45.2	37.2	33.0	15.7
	Total	100	100	100	100	100	100	100
	Chi-Square Value Probability	21.04 0.002						

Table 7.15: Migration and Family Income (Destination)

		Income							
		700\$=<		701 to 1500\$		1501 to 3500\$		>=3501\$ %	
		%	Freq	%	Freq	%	Freq	%	Freq
Migration	Migrants (destination)	56.6	154	64.8	245	62.0	161	44.4	40
	Non-migrants (origin)	43.4	118	35.2	133	38.0	99	55.6	50
	Total	100	272	100	378	100	260	100	90
	Chi-Square Value Probability	14.42 0.002							

To conclude this section, Table 7.16 shows a comparison between push, pull, and personal factors for intending migrant and actual migrants at the places of origin and destination. In this table, column two under destination shows the factors that have been judged important only at the places of destination. In the same way, column three under origin shows the same information for the places of origin. The factors identified that have been put between columns two and three are important for both places of origin and destination. Education, hardship of climate, and water shortage are three important push factors for both places of origin and destination. Also, better facilities in the cities, job opportunities in the cities, and education are important pull factors for intending migrants and migrants at places of origin and destination. This table also shows that there is only one personal factor (level of education) which clearly differentiate the migratory behaviour of the Qashqa'i in both locations with the same impacts. In addition, there are certain push, pull, and personal factors which are affected differently in the places of origin and destination.

Table 7.16: Comparison of Push, Pull, and Personal Factors (Origin/Destination)

Factors	Destination	Origin
<b>Push factors</b>	1.Hardship of nomadic life 2.Poverty 3.Limitation of farmland 4.Less income 5.Pasture degradation 6.Lack of jobs 7.Population growth	1.Accessible market 2.Health services 3.Transportation 4.Lack of amenities  1.Education 2.Hardship of climate 3.Water shortage
<b>Pull factors</b>	1.Family ties 2.Access to education 3.Better housing conditions 4.Access to health services 5.Comfortable living 6.Access to information	1.Urban wages (Low-paid jobs)  1.Better facilities of cities 2.Job opportunities in the cities 3.A close city to the place of origin
<b>Personal factors</b>	1.Age 2.Sex 3.Family income (different impacts)	1.Age 2.Sex 3.Family income (different impacts )  1.Level of education (same impacts)

#### 7.4 The Role of the Milieu at the Origins and the Destinations

In this section, we answer one of the research questions which is concerned with impact of the milieu on the links between push/pull factors and migration behaviour. In order to take into account environmental and geographical influences on migration, push and pull factors have been ordered by level of importance. For the push factors, the ordering has been done for each one of the six tribes. This allows us to control the impact of different milieux on push factors at the origin. In the same manner, pull factors have been ordered according to their level of importance for each of

the six destinations, to see if particular pull factors are associated with specific destinations.

Table 7.17 shows all the push factors that have been previously identified, ranked by their level of importance, for each tribe. This ranking procedure allows us to compare among the tribes to see if the importance given to the push factors is influenced by the different milieux in which the tribes live.

According to Table 7.17, the hardship of nomadic life, poverty, hardship of climate, and education (factors 13, 5, and 11) can be considered as important push factors that are shared by all the tribes. These can be seen as general conditions which favoure out-migration for the Qashqa'i people. Drought and limitation of land (factors 3 and 8) can be also considered as important push factors except for the Dareshuri and the Sheshbluki. Indeed, drought as a push factor is ranked only 12 by the Dareshuri, while for the other tribes it is much more important. ranking from 1 to 6. Limitation of land is ranked only 11 by the Sheshbluki but 2 to 8 by the other tribes. Other push factors to note are those which have low ranks for all except for 1 or 2 tribes. Land reform (factor 1) for the Sheshbluki, epidemic (factor 4) for the Kashkuli-Kochek, and population growth (factor 6) for the Dareshuri pertain to this category of factors and which seem to be specific to a particular type of milieu.

Table 7.17: Push Factors Ranked According to their Level of Importance as Expressed by Migrants of Different Tribes

Push Factors	Tribes					
	1	2	3	4	5	6
	Dareshuri	Sheshbluki	Amaleh	Farsimadan	Kashkuli-Bozorg	Kashkuli-Kochek
1. Land reform	11	4	18	12	15	11
2. Pasture nationalization	15	12	11	13	13	12
3. Drought	12	2	2	1	6	5
4. Epidemic	17	15	12	16	14	6
5. Poverty	7	1	3	3	4	3
6. Population growth	4	13	13	10	16	13
7. Pasture degradation	5	9	15	8	10	14
8. Limitation of land	2	11	5	7	7	8
9. Restriction of route	10	10	9	14	12	9
10. Limitation of pasture	16	14	10	15	11	15
11. Education	6	6	4	4	1	1
12. Hardship of climate	3	7	7	5	2	4
13. Hardship of life	1	3	1	2	3	2
14. Less income	8	5	6	6	5	7
15. Less viable jobs	9	8	8	9	8	10
16. Bad treatment by Khan	13	17	14	11	9	16
17. Bad treatment by government	18	18	16	17	18	17
18. Mechanization of land	19	19	19	18	19	18
19. Other (specify)	14	16	17	19	17	19

To measure the similarities among the tribes according to the ranks given to the push factors, Spearman's rank-order correlation coefficient is used here. Spearman's rank-order correlation provides a measurement which is based on the differences of ranks between two variables (Clark & Hosking, 1986). The rank-order correlation coefficient is defined as:

$$r_s = 1 - \left[ \frac{6 \sum d^2}{N^3 - N} \right] \quad (2)$$

where:

$r_s$  is Spearman's rank-order correlation coefficient  
 $d$  is the difference in rank between pairs of scores  
 $N$  is the sample size

Table 7.18 allows us to compare each pair of Qashqa'i tribes in order to analyze their degree of similitude. According to this table, Qashqa'i tribes show a high level of similitude. Some tribes such as Farsimadan and Kashkuli-Bozorg, have a very high correlation (0.90). This can be certainly explained by their close and unique geographical locations. Figure 5.3, in Chapter 5 shows that both tribes co-exist with each other in summer and winter quarters. On the other hand, Dareshuri and Kashkuli-Kochek have much lower correlation (only 0.53), because their geographical locations are not close to each other. Therefore, it seems that while the Qashqa'i culture is unique in regard to language, custom and clothing, some tribes, in particular the Dareshuri, show some specific characteristics with respect to the milieu they live in.

Table 7.18: Spearman's Rank Correlation Coefficient Between Each Pair of Tribes

Tribes → ↓	Dareshri	Sheshbluki	Amaleh	Farsimadan	Kashkuli-B	Kashkuli-K
Dareshri	1.00	0.61	0.56	0.75	0.67	0.53
Sheshbluki	0.61	1.00	0.69	0.81	0.70	0.66
Amaleh	0.56	0.69	1.00	0.85	0.88	0.84
Farsimadan	0.75	0.81	0.85	1.00	0.90	0.72
Kashkuli-B	0.67	0.70	0.88	0.90	1.00	0.83
Kashkuli-K	0.53	0.66	0.84	0.72	0.83	1.00

Table 7.19 shows the pull factors ordered by importance for each city of destination. Access to education and health services (factors 11 and 12) and, at a lower level, closeness to origin and better housing conditions (factors 1 and 3) can be seen as pull factors that have played a role for the migrants to all destinations. On the other hand, family ties and comfortable living (factors 5 and 13) are two factors that are not seen in the same way at the different destinations. For example, family ties is an important factor for all the destinations except for Shiraz, where it is ranked only 9. In the same way, factor 13 (comfortable living) differentiates Shiraz, Firuzabad and Kazerun for which this factor is important, from the other cities where this factor is much less important. Finally, factor 4 as well as factors 7 to 10, which are mostly economic factors, were unimportant at all destinations. This seems to suggest that the migration process affecting the Qashqa'i is more social than economic in nature.

Table 7.19: Pull Factors Ranked According to their Level of Importance  
As Expressed by Migrants of Different Cities

Pull Factors	Cities					
	1	2	3	4	5	6
	Shahreza	Shiraz	Firuzabad	Farrashband	Kazerun	Qaemieh
1. Closeness to origin	4	1	5	4	5	4
2. Better job	7	6	6	9	9	9
3. Better housing conditions	6	5	2	1	4	2
4. Higher income	10	8	9	10	11	10
5. Family ties	2	9	1	5	6	1
6. Better facilities	5	7	7	7	7	5
7. Supplementary benefits	11	13	10	11	12	11
8. Secondary activity	13	10	13	12	13	13
9. Access to informal jobs	12	12	12	8	10	12
10. Access to information	8	11	11	13	8	8
11. Access to education	1	3	4	2	1	3
12. Access to health services	3	4	8	3	2	6
13. Comfortable living	9	2	3	6	3	7

Table 7.20 shows Spearman's rank correlation coefficient for each pair of cities based on pull factors. This table shows that five cities have strong correlations with each other in pulling factors. The exception is Shiraz, the capital city of the province of Fars, which offers a vast variety of services to migrants. Firuzabad and Qaemieh have strong correlation (0.91). This again can be explained based on their similar geographical locations in the winter quarters of the Qashqa'i. However, Shahreza and Qaemieh which are a long distance (500 km) apart, also have a strong correlation (0.88). This association seems to suggest that both cities offer the same level of

education and social services to Qashqa'i migrants.

Table 7.20: Spearman's Rank Correlation Coefficient Between Each Pair of Cities

Cities – ↓	Shahreza	Shiraz	Firuzabad	Farrashband	Kazerun	Qaemieh
Shahreza	1.00	0.64	0.72	0.74	0.80	0.88
Shiraz	0.64	1.00	0.67	0.73	0.82	0.64
Firuzabad	0.72	0.67	1.00	0.76	0.74	0.91
Farrashband	0.74	0.73	0.76	1.00	0.85	0.82
Kazerun	0.80	0.82	0.74	0.85	1.00	0.82
Qaemieh	0.88	0.64	0.91	0.82	0.82	1.00

In brief, various push or pull factors affect Qashqa'i migration to the cities of destination. However, the environmental and geographical impact on these factors vary slightly according to tribe and city of destination. This shows that the migration process affecting the Qashqa'i is not a single process in which the same reasons for migration can be invoked for all places of origin and destination.

#### 7.5 A "General Profile" of the Causes and Consequences of Qashqa'i Migration

Our data indicate that migration is a complex and multi-faceted process. There were two sets of factors which influenced Qashqa'i migration patterns. The first group includes those that "pushed" people from their places of origin. The second group includes those that "pulled" people to the place of destination. These push and pull factors were either similar or specific as indicated by respondents at the places of origin and destination.

The push factors revolved around several different processes. Some of them were associated with environmental problems such as harsh climate, degradation of pastures, and water shortages.

Other push factors related to demographic problems such as rapid population growth. Still other factors correlated with the lack of social services such as those concerned with educational institutions, health services, and public transportation. Economic push factors that were of central importance included lack of pastures and farmlands and therefore, lack of income. These multi-dimensional problems often forced the Qashqa'i people to leave their place of origin. When people made the decision to migrate, they examined various opportunities at the place of destination. The closer urban areas were chosen by the majority of the Qashqa'i people as destination points as they had at least two main advantages. First, there were fewer important physical obstacles facing the migrants (such as distance and terrain) which prevented them from moving. Second, the migrants needed to have access to their place of origin in order to take care of their pastures and farmlands which represent a vital source of income even for "urban Qashqa'i".

The pull factors which attracted the Qashqa'i were associated mainly with the location of public services (education, occupation, transportation, and market or bazar) which tend to be urban-based. Most national investments tend to be concentrated in urban infrastructure and services in Iran, which therefore present obvious attractions to potential migrants with fewer socio-economic advantages. In addition to this, neighbouring cities attracted the Qashqa'i people given a long history of co-existence between them and Persian population in these regions. Also, the Qashqa'i and Persian people exchange their commodities in these urban areas.

The personal characteristics or the tendency of certain groups to be more migratory than others have been also identified. Factors like literacy, sex, age, level of education, and family income are often considered to be linked to migration. We have found that the level of education is a factor which highly differentiates the Qashqa'i migrants groups in both places of origin and

destination. However, in the Qashqa'i migration process, different groups of people were involved. For example, people with high education, poor people, men and women, young and old, all migrated to urban areas with different aims. The causes of migration were somewhat different for each tribe given the unique situation and lifestyles of the six tribal groups. In fact, with the exception of Shiraz city, which attracted all tribal groups, urban areas tended to be 'host' to the Qashqa'i tribes which were located in the immediate vicinity. Only Shiraz attracted people from all Qashqa'i tribes because it is a large city and offers a wide variety of services.

The next chapter uses the important push and pull factors which were discussed in this chapter with the help of logit model for the place of origin. Regression models are used to explore relationships between environmental and personal factors and migration behaviour at the place of destination. In addition to push and pull factors, some personal factors which were derived from our survey questionnaires are listed as explanatory factors by using logit models, while the intention to migrate is considered as the dependent variable. The main structural elements which are used in the logit and regression models in the next chapter are listed in Table 7.21.

Table 7.21: The Main Structural Elements of the Logit and Regression Models

Place	Dependent Variable	Model used	Explanatory Factors		
			Push factors	Pull factors	Personal factors
Origin	Intention to migrate	Logit model	1. Market 2. Climate 3. Water shortages 4. Health services 5. Guidance school 6. High school	1. Better facilities 2. Education 3. Urban wage (low-paid jobs) 4. Job opportunities	1. Level of education 2. Marital status (married) 3. Livestock 4. Farm land 5. Car 6. Carpet making 7. Employment
Destination	Migration flows	Regression model	Distance from summer quarters, distance from winter quarters, city size, number of migrants to each city, and total Qashqa'i population at the place of origin		

### VIII. The Prediction of Migration Behaviour of the Qashqa'i: Use of Logit Models

In this chapter, several models are proposed to predict the migration behaviour of Qashqa'i people at the places of origin and destination. Logit models and regression models are proposed as a way to explore relationships between environmental and personal factors, and migration behaviour.

The logit model is used for the place of origin. Two classes of logit model have been fitted. The most basic models are of the form  $F=f(v)$ , where  $F$  is a probability model using a logit that is fitted for each factor ( $v$ ). More elaborated multivariate logit models of the form  $F=f(v_1, v_2, v_3, v_1 * v_2, v_1 * v_3, v_2 * v_3)$  have been used to test the impact of more than one factor and including the interaction between factors.

For the destinations, a set of regression models with dummy variables were used to predict migration flows between origins and destinations. These models have the generic form:

$$F=f(f_1, f_2, \dots, f_p, \dots, f'_1, f'_2, f'_3, \dots, f'_q, f_{ij})$$

where:

$f_i$  for  $i=1$  to  $p$  are the  $p$  push factors measured at the origins.

$f'_j$  for  $j=1$  to  $q$  are the  $q$  pull factors measured at the destinations.

$f_{ij}$  is an intervening factor playing a role between origin  $i$  and destination  $j$ .

Some of these factors can be measured on a nominal scale explaining the presence of dummy variables in the model.

The models which are related to the intention to migrate at the place of origin are presented first. Then, regression models are presented that have been fitted for the flows between

origin and destination. Finally, a general profile of this chapter is given.

### **8.1 Models Predicting Intention to Migrate at the Place of Origin**

In the previous chapter, the important push and pull factors were determined at the places of origin for intended migrants. The important push factors were : *market, climate, high school, water shortage, guidance school, transportation, health service, and lack of amenities*. The important pull factors were: *better facilities of cities, education, urban wages, and job opportunities* in cities. To take into account simultaneously all these factors and to explain migration behaviour, the logit model is used as it was discussed in chapter 4.

#### **8.1.1 Operational definitions for push factors**

Several key push factors were identified in the previous chapter. At this point, it is necessary to discuss how these push factors 'operate' - in other words, their specific relation to migration. In the following paragraphs, the bases for our operational definitions are given.

First, we have to consider that Qashqa'i nomads are located mainly in mountainous areas of the Zagros or in lowland areas close to the Persian Gulf. In these areas, they are far from the *market* centres of major Iranian cities. However, when the market is within *18 km* from the place of origin, nomads are able to go there to buy or sell products. The distance of *18 km* is acceptable in the nomads' culture as this is considered as a 'normal' traveling distance even with animals, to satisfy some basic needs on a daily/weekly bases. The Qashqa'i nomads call this distance *3 Farsakh*, as each Farsakh is equal to *6 km*. Anything beyond this daily interval is regarded as a more difficult distance. Also, in traditional migration (*Kuch*), the Qashqa'i people regularly travel *3 Farsakh* in

taking livestock from lowland to highland pastures. More than 18 km distances necessitates the use of personal vehicles, and the majority of the nomadic population cannot afford this luxury. In addition, in order to take care of their property, the nomads must return home from the market (*bazar*) by dark. They have to watch their livestock during the night as they may be subject to loss by theft or damage by wild animals. Therefore, at a distance of greater than 18 km, the urge to migrate to cities becomes more apparent. This distance is used in our operational definitions to define all the variables related to proximity.

The *climate* impact is important for the nomads who are living in the villages, because they are located either in lowlands with a hot summer climate or in highlands with a cold winter climate. When the temperature rises to more than 30° Celsius in the lowland summer, or falls to less than 0° C in the highland winter, life for the nomads becomes harsh. Take for an example, origin 1, Semirom (see Figure 6.1), which is located 2,500 metres above sea level. During the winter it has a cold climate with snow which causes difficulties in going to cities for supplies. Clearly, these difficult conditions could influence migration decisions and they will be used in our operational definitions to define the climate factor.

*Water* is another key factor in nomadic existence. When people have enough water for their livestock and agriculture there is less necessity to move. In southern Iran, close to Persian Gulf, the climate is dry and hot for most of the year. Because of these conditions, people encounter water shortages. For example, Firuzabad (origin 4) faces shortages of water particularly during spells of drought. Consequently, these shortages of water influences the migration decisions of farmers and herdsmen.

*Health services* play a major role in the well-being of people at the place of origin. Most of

the facilities and specialized medical care are located in urban areas, but there are some clinics in larger rural areas that offer minimum health services to villagers and nomads. When these health services are located by more than 18 km from the place of origin, they are too far away for nomads to use them with ease and regularity. Where the accessibility to clinics and physicians is limited, this encourages migration. In order to satisfy their basic health needs, people may decide to migrate to cities to be closer to these services.

After primary school, the '*guidance school*' is a kind of public school which covers grades six through to nine. In most cases, students do not have public vehicles to go to school. Sometimes, the students have to walk part or all of the distance every day to take part in a guidance school. They need accommodation close to the school during the week and to return home for the weekend. When the distance is more than 18 km, students cannot easily keep in touch with their parents. The children stay with non-family care-givers and their parents have to pay for their accommodation, food, and other requirements. In these cases, people may decide to migrate permanently or seasonally to join their children.

*High schools* in Iran are located in cities. Again, the 18 km 'accessibility rule' is important for families educating their children. In order to keep in touch with their children weekly or monthly, parents prefer high schools which are close to their residential areas. In some cases, parents even provide weekly food and other necessities for their children in high school. In this way, they can reduce family expenses. When the destination city is more than 18 km away, the expenses of the families increase, and the same situation arises that was mentioned in the case of guidance schools. In order to reduce costs, and to be close to their children, families may decide to migrate either permanently or seasonally.

Table 8.1 summarizes the operational definitions for the push factors that are used in our models. As has been previously stated, one set of data was collected in four different places of origin. These places of origin are Semirom (*origin 1*), Gachsaran (*origin 2*), Kazerun (*origin 3*), and Firuzabad (*origin 4*).

Semirom township (*origin 1*) is located among the Zagros mountains in the south-western part of Esfahan province. The elevation of this township is more than 2,500 metres above sea level. The average annual temperature and rainfall in Semirom region are 9.5° Celsius, and 368 mm, respectively. More than 70 % of the total population of the region is engaged in agriculture and livestock husbandry. The sample was taken from the Dareshuri tribe, who are nomadic villagers and reside in the *Vardasht-E- Semirom* region ( see Figure 6.1).

Gachsaran township (*origin 2*) is located in the southern part of Kohgiluyeh province. The average elevation of this township is 700 metres above sea level. This region is located in the oil field areas close to the Persian Gulf. The average annual temperature in this region is 20.7° C and the average annual rainfall is 329 mm. Our sample population in this area was taken from the Dareshuri tribe who practice traditional nomadic lifestyles. In other words, they live inside black tents and pursue livestock husbandry. Black tents are a symbol that shows the practice of pure nomadism in the Middle East (Barth, 1961). When the temperature increases in the late spring and summer, nomads move to the highlands to benefit from the moderate temperature and fresh grass for their livestock.

Kazerun township (*origin 3*) is located in the southern part of Fars province. The average elevation, temperature, and rainfall are similar to Origin 2 (Gachsaran). Our sample in this region was taken from the Farsimadan tribe. They still practice livestock husbandry, and live in black tents.

During the late spring and summer, they move from the lowland to the highland.

Table 8.1: The Operational Definitions for Push Factors at Place of Origin

Name of the Factors	Values	Definition
<b>Market (mkt)</b>	<b>1</b>	If the place of origin is less than 18 km from a major city (presence of a close market)
	<b>0</b>	otherwise (absence of a close market)
<b>Climate (cli)</b>	<b>1</b>	If the weather at the place of origin is cold in the winter (less than zero in the January) or is hot in the summer (more than 30 degrees in August). (presence of a harsh climate)
	<b>0</b>	otherwise (absence of a harsh climate)
<b>Water (wtr)</b>	<b>1</b>	If the place of origin has shortage of water for livestock and agriculture (presence of water problems)
	<b>0</b>	otherwise (absence of water problem)
<b>Health services (hlth)</b>	<b>1</b>	If the nearest minimum health services are located less than 18 km from the place of origin (presence of close health services)
	<b>0</b>	otherwise (absence of close health services)
<b>Guidance school (gscs)</b>	<b>1</b>	If the nearest guidance school is located less than 18 km from the place of origin (presence of close guidance school)
	<b>0</b>	otherwise (absence of a close guidance school)
<b>High school (hisc)</b>	<b>1</b>	If the nearest high school is located less than 18 km from the place of origin (presence of close high school)
	<b>0</b>	otherwise (absence of a close high school)

Firuzabad township (*origin 4*) is located in the southern part of Fars province. Except for shortages of water during drought, the other geographic characteristics of this township are similar to these of Gachsaran and Kazerun. The sample in this region was taken from the Amaleh tribe that still practices livestock husbandry in the traditional way. During the summer, they also move from

lowlands to highlands to take advantage of the natural climatic fluctuations

For clarification of the sampled tribal locations, see Figure 6.1.

### 8.1.2 Operational definitions for pull factors

Pull factors are used to predict the intention to migrate when certain conditions are met outside of the places of origin. The operational definitions of these factors are based on the various 'opportunities' offered at the nearest place of destination. Table 8.2 summarizes the operational definitions for pull factors.

The factor '*better facilities*' relates to a city that meets almost all the basic requirements of people. For example, the nearest city to the place of origin should support essential services such as transportation, markets, health services, and educational institutions. Nowadays, both nomads and villagers visit cities more frequently than in the past. Since transportation and roads have improved, people have become more dependent on cities for social, economic, and political reasons. These services are not comparable with the few services at the place of origin. For example, in the case of Semirom (*origin 1*), the Dareshuri people declare their preference for Shahreza city because it offers a wider variety of services to the urban population.

The factor '*education*' consists of elementary schools, guidance schools, high schools, colleges, and universities. Sometimes the nearest city to the place of origin includes all of these institutions. The dispersion of nomads in vast areas is a reason why they lack educational institutions. Except for primary schools, other levels of education tend not to exist even in populated nomadic villages. Therefore, nomads prefer to migrate in order to be close to schools, to reduce their expenses, and not to split their families into rural and urban components.

Another pull factor in migration is 'urban wages'. People who have no livestock or farmland at the place of origin have to look for jobs in the cities. Unfortunately, these people tend to be unskilled and poor. If the nearest city offers jobs for these groups of nomads, they prefer to migrate. In some cases, the head of the family travels to the city to look for seasonal jobs and keeps his family at the rural place of origin. He works in cities and sends his pay home.

Table 8.2: Operational Definitions for Pull Factors at Place of Origin

Name of the Factors	Values	Definition
<b>Better facilities</b> ( <i>btfaci</i> )	<b>1</b>	If the nearest place or city has essential facilities such as a market, health services, and transportation
	<b>0</b>	otherwise (absence of facilities)
<b>Education</b> ( <i>educa</i> )	<b>1</b>	If the nearest place or city has all levels of educational institutions
	<b>0</b>	otherwise (absence of educational institutions)
<b>Urban wages</b> ( <i>urbwag</i> )	<b>1</b>	If the nearest place or city offers low-paid jobs in construction, small business, etc. for unskilled people.
	<b>0</b>	otherwise (absence of low-paid jobs)
<b>Job opportunities</b> ( <i>jobopp</i> )	<b>1</b>	If the nearest place or city can offer employment for skilled job seekers
	<b>0</b>	otherwise (absence of job opportunities)

'Job opportunities' is a factor that also plays a role in the migration decision. Often, cities close by offer better opportunity for job seekers. For example, Gachsaran city is close to origin 2 and it is located in the centre of the oil fields. This city can offer good opportunities for people who are looking for jobs. Shiraz and Esfahan are two other examples of these kinds of cities, because both of them are capital cities, for the provinces of Fars and Esfahan respectively.

### 8.1.3 Values of push and pull factors at place of origin

Values were assigned to push and pull factors according to the operational definitions based on Tables 8.1 and 8.2. These values are allocated to some of the most important factors assigned to intending migrants at the places of origin. Table 8.3 shows the sampled places of origin, and the value assigned for the factors.

Table 8.3: Values of Push and Pull Factors at Place of Origin

Places of Origin	Push Factors						Pull Factors			
	m k t	c l I	w t r	h l t h	g s c o	h I s c	b t f a c I	e d u c a	u r b w a g	j o b o p p
<i>Origin 1 (Semirrom)</i>	1	1	0	1	1	1	1	1	1	1
<i>Origin 2 (Gachsaran)</i>	1	0	0	1	0	0	1	0	1	0
<i>Origin 3 (Kazerun)</i>	0	0	0	1	1	0	0	1	0	0
<i>Origin 4 (Firuzabad)</i>	0	0	1	0	0	1	1	1	0	1

\*Note the following abbreviations for the factors included in this table (**Appendix E**):

Market	= <i>mkt</i>	High school	= <i>hisc</i>
Climate	= <i>cli</i>	Better facilities	= <i>btfaci</i>
water	= <i>wtr</i>	Education	= <i>educa</i>
Health services	= <i>hlth</i>	Urban wages	= <i>urbwag</i>
Guidance school	= <i>gsco</i>	Job opportunities	= <i>jobopp</i>

### 8.1.4 Univariate models explaining intention to migrate at place of origin (push and pull factors)

As the first step to our analysis, some simple univariate models are fitted to explain the intention to migrate at the place of origin. These models are of the following form:  $\text{logit} = a + by$ , where  $y$  is the explaining factor. To construct the models for intending migrants, we considered the

intention to migrate as the dependent variable and correlated it first to push or environmental factors. In Table 8.4, the level of significance of the parameter value is given by a probability that is specified in the last column. A probability equal to or less than 0.10 indicates a significant impact of the factor on the intention to migrate. The parameter estimate column gives the value of the parameter associated with each factor in the model. The value of the parameter and the sign associated with it give an indication of the intensity of the impact. For example, a positive parameter indicates that the presence of a factor in a place of origin increases the propensity to migrate, and a negative parameter indicates the contrary.

Table 8.4: Univariate Models Predicting the Influence of the Intention to Migrate (Push Factors)

Factors	Parameter Estimate	Probability
Market ( $mkf = 0$ ), absence of a close market	0.5238	0.0001
Climate ( $cli = 0$ ), absence of a harsh climate	0.6917	0.0001
Water ( $wtr = 0$ ), absence of water problem	-0.6763	0.0001
Health services ( $hlth = 0$ ), absence of a close health service	0.6763	0.0001
Guidance school ( $gsco = 0$ ), absence of a close guidance school	0.6355	0.0001
High school ( $hisc = 0$ ), absence of a close high school	0.1753	0.0916

In order to explain the factors in the models, we should keep in mind the operational definitions of the push factors given in table 8.1. As the table 8.4 shows, the *market* factor is positively related to intention to migrate. This means that if the market is located more than 18 km from the place of origin, the propensity to migrate is greater.

The *climate* factor is also positively related to the intention to migrate. By considering the operational definition, it means that even with a good climate at the place of origin people still prefer

to migrate. Perhaps, the majority believes that other factors such as social services, educational institutes, and other facilities are more important factors than climate.

*Water* is a factor that is negatively associated with the intention to migrate. Looking at the operational definition for this factor, the explanation for this is that when people at the place of origin have enough water for livestock and agriculture, the intention to migrate decreases.

According to Table 8.4, the factors *health services*, *guidance school*, and *high school* all are positively related to intention to migrate. Looking at the operational definitions for these factors, the explanation is that when these services are located more than *18 km* from the place of origin, the intention to migrate increases significantly.

Univariate logit models have also been fitted for pull factors, and they reveal that pull factors are significant (except for better facilities) and positively correlated with intention to migrate (Table 8.5). This means that the propensity to migrate among the nomads is greater when the nearest place or city (*18 km* criteria) does not offer the requisite conditions and opportunities for a certain standard of living. When considering all pull factors, the factors of education and urban wages have a stronger effect governing the intention to migrate as compared to the two other factors (job opportunities and better facilities).

Finally, we can generalize that the push and pull factors are mostly significant and positively associated to intention to migrate. The propensity to migrate is greater when the closer places do not offer opportunities for a certain standard of living. In the next section, the impact of some personal factors on the intention to migrate is examined for the places of origin.

Table 8.5: Univariate Models Predicting the Influence of the Intention to Migrate (Pull Factors)

Factors	Parameter Estimate	Probability
Better Facilities ( <i>btfaci</i> = 0), absence of facilities	0.074	0.5213
Education ( <i>educa</i> = 0), absence of educational institutions	0.249	0.1091
Urban wages ( <i>urbwag</i> = 0), absence of low-paid urban jobs	0.524	0.0001
Job opportunities ( <i>jobopp</i> = 0), absence of job opportunities	0.175	0.0916

### 8.1.5 Univariate models explaining intention to migrate at place of origin (personal factors)

At this point in the analysis, it is important to investigate the relationship between personal factors and intention to migrate (dependent variable). The results of seven univariate models are shown in Table 8.6, which reveals high levels of significance for all the factors chosen. These are level of education, livestock, land, car, marital status, employment, and carpet making. Other personal factors which were used in the logit models, such as age, gender, and income have already been discussed in the previous chapter, and are not presented here.

According to Model 1, four of seven educational levels (illiterate, read & write, elementary school, and high school) are negatively correlated with the intention to migrate, but of these, only read and write and elementary school are statistically significant. The explanation is that less, or non-educated people, prefer to stay at their place of origin. During the fieldwork some respondents indicated that they are not well informed of opportunities in the cities, and they would find it hard to accommodate themselves in urban areas. On the other hand, educated nomads such as those who hold college and university degrees indicate that they prefer to migrate to urban areas to take

advantage of better opportunities, including employment.

Model 2 shows that people without livestock and those who have more than 100 livestock both are willing to migrate to urban areas for two different reasons. In the first case, nomads without livestock have no choice but to leave their place of origin and migrate to cities to look for employment to survive. In the second case, nomads who have enough livestock would like to migrate to cities because they already made some profits with their herds. They can even buy a house in the city and invest their money in urban based businesses. On the other hand, people with average herds such as those with 100 or fewer livestock prefer to stay at their place of origin, make financial investments in their herds, due to a perception that employment and housing are difficult to find in cities.

Model 3 indicates that a lack of farmland is positively related to intention to migrate. It is obvious that people without land are more mobile and therefore, prefer to migrate to urban areas to find employment. In contrast, the propensity to migrate among nomads possessing farmland is less, because they can combine agricultural production and livestock to make profit.

Table 8.6: Univariate Models Predicting Intention to Migrate (Personal Factors)

Models	Factors	Categories	Parameter Estimate	Probability
Model 1	Level of education	Intercept	0.5472	0.0038
		illiterate	-0.3567	0.1173 *
		read & write	-0.7941	0.0070 *
		elementary school	-0.7704	0.0070 *
		guidance school	0.2000	0.6089
		high school	-0.1418	0.6833
		college	0.4644	0.2420
		university	1.3987	0.1295
Model 2	Livestock	Intercept	-0.1258	0.2589
		no livestock	0.2171	0.3376
		less than 50	-0.3576	0.0453 *
		between 50 to 100	-0.3489	0.0831 *
		more than 100	0.4894	0.0021 *
Model 3	Land	Intercept	0.2216	0.0529
		no land	0.8771	0.0001 *
		less than 5 hectares	-0.1563	0.3128
		between 5 to 10 hectares	-0.2216	0.2687
		more than 10 hectares	-0.4992	0.0231 *
Model 4	Car	Intercept	0.2839	0.0107
		car for transportation	-0.2050	0.0652 *
Model 5	Marital Status	Intercept	0.6485	0.0068
		married	-0.5042	0.0355 *
Model 6	employment	Intercept	0.3618	0.0068
		employees	-0.2513	0.0604 *
Model 7	Carpet making	Intercept	0.0782	0.4651
		carpet maker	0.4245	0.0001 *

\* Significant probabilities in bold.

Model 4 shows that nomads who possess vehicles tend to stay at their place of origin because they can more easily overcome problems relating to distance and their need to sell their products. Married people also tend to stay at their places of origin more than non-married people (Model 5). People who are engaged in salaried employment at the place of origin such as Tent School Teachers (Model 6), tend to stay there because some they do not want to lose their jobs.

As Model 7 shows carpet-making is also positively related to intention to migrate. It may be that people who have this kind of job prefer to migrate to cities to be closer to their material supplies and consumer markets. Indeed, carpet-making is the kind of job that is easily developed and practiced at a place of destination.

#### **8.1.6 Multivariate logit models predicting intention to migrate at place of origin**

Multivariate models are more powerful than univariate models because they take into account more than one factor. In this section, a combination of certain environmental and personal factors is used to predict the intention to migrate at the place of origin. The results are shown in Table 8.7.

This table includes the following three models:

*Model 1* using market and family incomes;

*Model 2* using water and family incomes;

*Model 3* using market and carpet making.

Model 1 suggests that the absence of a close market as well as low incomes increase the intention to migrate. These results have been already obtained and explained in chapter 7. If both factors are considered at the same time, that is when we have an absence of a market *and* low incomes, the intention to migrate is significantly higher. In the same manner, when we have an absence of a market *and* high incomes, the intention to migrate is reduced significantly. This means

that when these two factors are present at the same time they interact with each other and mutually increase their impact on the intention to migrate.

Model 2 indicates as before that the absence of water shortages decreases significantly the intention to migrate. Family income is linked to the intention to migrate such as those in the first model. However, the interaction between water shortage and family income indicates an interesting response. When no water problems are encountered low income is now negatively related to the intention to migrate. This inversion can be explained by the fact that people who have enough water still have the possibility of increasing their incomes by combination of cultivation and animal husbandry.

Model 3 uses the market factor together with carpet- making to predict the intention to migrate. The impact of the proximity of a market has been already discussed in the first model. Although the factor carpet- making taken alone does not appear to have a significant impact on the intention to migrate, it seems to decrease the likelihood when it is practiced in remote areas.

Table 8.7: Multivariate Models Predicting Intention to Migrate Using a Combination of Environmental & Personal Factors

Models	Factors	Categories	Parameter Estimate	Probability
Model 1	Market	Intercept	0.2561	0.0369
		absence (mkt=0)	0.5814	<b>0.0000 *</b>
	Family income	700\$ =<	-0.2682	<b>0.1660 *</b>
		701 to 1500\$	0.1374	0.4541
		1501 to 3500\$	0.5211	<b>0.0230 *</b>
		>= 3501\$	-0.3902	<b>0.1023 *</b>
	Market*Family income	700\$ =< and (mkt=0)	-0.2681	<b>0.1662 *</b>
		701 to 1500\$ and (mkt=0)	0.0997	0.5868
		1501 to 3500\$ and (mkt=0)	0.6156	<b>0.0072 *</b>
		>= 3501\$ and (mkt=0)	-0.4472	0.0611
Model 2	Water shortage	Intercept	0.5149	0.0011
		absence (wtr=0)	-0.6434	<b>0.0000 *</b>
	Family income	700\$ =<	0.2465	0.4491
		701 to 1500\$	0.0423	0.8474
		1501 to 3500\$	0.3844	<b>0.1409 *</b>
		>= 3501\$	-0.6732	<b>0.0154 *</b>
	Water*Family income	700\$ =< and (wtr=0)	-0.0992	0.7605
		701 to 1500\$ and (wtr=0)	-0.0679	0.7574
		1501 to 3500\$ and (wtr=0)	-0.4721	0.0706
		>= 3501\$ and (wtr=0)	0.6393	<b>0.0215 *</b>
Model 3	Market	Intercept	-0.3002	0.0529
		absence (mkt=0)	0.5652	<b>0.0003 *</b>
	Carpet making	carpet maker	0.0767	0.6208
	Market * Carpet making	market and carpet maker	-0.2409	<b>0.1204 *</b>

\* significant probabilities in bold.

In summary, intention to migrate can be considered as a dependent variable to be correlated with the push, pull or personal factors. To analyze the impact of these factors, univariate models were fitted to predict intention to migrate at the place of origin. Univariate logit models with significant fits were developed for push factors and were positively or negatively correlated to intention to migrate. Univariate models for pull factors also had significant fits (except for better facilities). Univariate models fitted for personal factors indicate a higher propensity to migrate among educated people, and people without farmland and livestock. Multivariate models were used in order to take into account the impact of two types of factor at the same time and to consider their interaction. In these cases, the interaction between factors increased or decreased their specific impacts on intention to migrate.

## **8.2 Models Predicting Migration to the Place of Destination**

In this section, a brief description is given of the geographic situation of the destination cities. Following that, the flow of Qashqa'i migrants to the destination cities is discussed. Then, the relative flow of migrants is studied in relation to various independent variables using regression models. The independent variables used in these models are: tribes, distance from summer and winter quarters, city of destination, size of the city, number of migrants for each tribe in the cities, total number of Qashqa'i migrants in the cities, total population of tribes at the place of origin, and total population of Qashqa'i tribes at both the places of origin and destination.

The locations of the Qashqa'i tribes and their summer and winter quarters are described in chapter 5 (see Figure 5.3 above). A brief description of the destination cities (Shahreza, Shiraz, Firuzabad, Farrashband, Kazerun, and Qaemieh) is given here to allow a better understanding of the

results obtained from the models.

It should be pointed out that there are many other cities - including Abadeh and Mamasani (in Fars province), Gachsaran (in Kohgiluyeh province), Esfahan, Brojen, Dehaghan, and Fuladshahr (in Esfahan province) - that have absorbed numerous Qashqa'i migrants. Given the constraints of this section, only brief descriptions of cities in our sample are provided.

*Shahreza* city is located in south western Esfahan. The annual averages of rainfall and temperature are 124 mm and 13.5° C, respectively. The population of Shahreza city is 73,367 individuals (1986). This city is located 80 km east of the Esfahan city, on the main road linking Esfahan to Shiraz. The major economic activities in this city based on employment are the following: 42.4 % mining & manufacturing, 35 % services, and 22.6 % agriculture (Statistical Centre of Iran, 1986). Shahreza is located close to the summer quarters of the Qashqa'i nomads. It serves as a market for exchanging goods for the nomadic tribes, particularly the Qashqa'i who live nearby. The summer quarters of Dareshuri tribe is located to the south and west of Shahreza city, so most of the migrants to this city belong to this tribe.

*Shiraz* is the provincial capital, and it is located in the south- western part of Fars province. It is the largest city of southern and southeastern Iran. It has 848,289 inhabitants and is ranked as the fifth largest city in Iran. Shiraz was inhabited as early as the Sasanic period ( A.D. 226-642) and is situated among the major Zagros chains at an altitude of about 1,500 metres. The city has a temperate climate with an annual rainfall of 300 mm. In addition to its administrative and military functions for Fars, Shiraz performs a number of social and economic functions. It is a vital point of exchange for nomads, particularly for the Qashqa'i. The Achaemenid Royal Cities of Persepolis and Pazargade are located respectively 60 and 150 km north of Shiraz, which therefore functions as a

tourist city. One of Iran's most important universities, Shiraz University is located in this city. Most of the nomadic institutions of Fars province such as the Nomadic Education Centre, and the Office of Nomadic Organization, can also be found in this city.

*Kazerun* city is located in Fars province about 150 km southwest of Shiraz city. The elevation of the city is about 700 metres above sea level. The average annual rainfall and temperature in this city are 400 mm and 21° C respectively. Total population of the city is 73,444 individuals. It serves as a market for Qashqa'i tribes during their stay in winter quarters, and also for the rural population that is located in villages nearby. Members of three out of six Qashqa'i tribes, the Farsimadan, the Dareshuri, and the Kashkuli-Bozorg, are scattered around Kazerun city. However, the percentage of Qashqa'i migrants to this city, when compared to other cities of destination, is very low because most Qashqa'i have settled in the villages around the Kazerun city.

*Firuzabad, Farrashband, and Qaemieh* cities are located to the east, south, and south-west of Shiraz city respectively. Firuzabad city has 34,433 individuals while Farrashband and Qaemieh have respectively 12,128, and 20,000 inhabitants. The average annual rainfall and temperature for these cities are approximately 300 mm, and 18° C. More than 50 % of the population of these three cities are engaged in agriculture and livestock husbandry. Almost 50 % of the total population of Firuzabad and Farrashband, and more than 50 % of the total population of Qaemieh belong to Qashqa'i tribes. The Amaleh tribe represents the majority group in Firuzabad city as their winter pastures are located in the surrounding hills. The winter quarters of the Sheshbluki tribe are located in the hills and plains surrounding Farrashband. About half of the total population of Qaemieh city are Qashqa'i, while the other half belong to Mamasani and Kohmarreh tribes.

Table 8.8 shows the Qashqa'i migrants by tribes in the six sampled cities of destination. This table also shows the population of the destination cities. Data in Both Tables 8.8 and 8.9 are derived from the Statistical Centre of Iran (1986), and the Plan and Budget Organization of Fars (1993). In addition, some data which were missing from these sources were calculated by the interviewees. Data in Tables 8.8 and 8.9 are used as the main structural elements of the regression models to analyze the impact of distance and other related independent factors on the percentage of Qashqa'i migrants in the destination cities (dependent variable).

Table 8.8: Qashqa'i Population in the Cities of Destination

Cities ⇒ Tribes ↓	Shahreza (1)	Shiraz (2)	Firuzabad (3)	Farrashband (4)	Kazerun (5)	Qaemieh (6)	Total
Dareshuri (1)	8100	4600	0	0	500	3000	16200
Sheshbluki (2)	0	4400	2000	3000	0	0	9400
Amaleh (3)	0	4700	10000	0	0	0	14700
Farsimadan (4)	200	2400	1000	0	1000	0	4600
Kashkuli-B (5)	0	3000	0	0	500	5000	8500
Kashkuli-K (6)	200	900	2000	0	0	0	3100
Total Migrants	8500	20000	15000	3000	2000	8000	56500
Total Pop. of the Cities	73,367	848,289	34,433	12,128	73,444	20,000	

Source: The Statistical Centre of Iran (1986), the Plan and Budget Organization of Fars (1993), and Data Given by Interviewees (1993).

In the questionnaire at the place of destination (Appendix A), question 19 concerned the time

of migration to urban areas. According to our analysis, 31.5 % of the Qashqa'i migrated to urban areas less than 10 years ago, while 44.2 % migrated between 10 to 20 years ago. Another 17.7 % migrated to urban areas between 20 to 30 years ago, and the rest migrated more than 30 years ago.

Table 8.9 contains the basic information used to fit our models. It has been calculated not only for Shiraz but also for all other cities sampled. However, to decrease repetition, it was not judged necessary to display similar tables for each of the sampled cities. One table is enough to show the main structural elements which have been used to analyse the flows of migrants to the place of destination.

Table 8.9: Percentage of Migrants Moving to Shiraz and Distance Between Summer and Winter quarters and Shiraz

Tribes	Tribe's migrants in Shiraz	Tribe's population at place of origin	Total nomadic population	Each tribe's migration to Shiraz (%)	Distance to Shiraz (km)	
					Summer quarter	Winter quarter
Dareshuri	4,600	23,085	39,285	11.7	450	250
Sheshbluki	4,400	26,290	35,690	12.3	300	200
Amaleh	4,700	26,708	41,408	11.3	200	200
Farsimadan	2,400	14,170	18,770	12.8	250	200
Kashkuli-B	3,000	17,167	25,667	11.7	80	150
Kashkuli-K	900	5,010	8,110	11.1	200	150
Population of Shiraz is 848,289 individuals						

Source: The Statistical Centre of Iran (1986), the Plan & Budget Organization of Fars (1993), and Data Given by Interviewees (1993).

Within Table 8.9, the percentage of migrants in each tribe is considered as a dependent variable and is compared to the independent variables: the number of people in each Qashqa'i tribe who have migrated to Shiraz; the total tribe's population at the place of origin (only nomadic

Qashqa'i); the total population of each Qashqa'i tribe (only nomadic Qashqa'i); the distance from summer and winter quarters to Shiraz; and the population of Shiraz.

### 8.2.1 Using the regression model with dummy variables

As previously discussed, the regression model can be expressed by the following equation:

$$F_{ij} = f(k, x_{1j}, x_{2j}, \dots, x_{pj}, x_{ij}, x_{i2}, \dots, x_{im})$$

where:

$F_{ij}$	is the migration flow between origin i and destination j
$k$	is a constant
$x_{1j}, x_{2j}, x_{pj}$	are p factors measured at the destination
$x_{i1}, x_{i2}, x_{im}$	are m factors measured at the origin
$x_{ij}$	is an intervening factor between origin i and destination j (distance)

In the above equation, as has previously been stated the percentage of migrants is considered as a dependent variable and linked to the independent variables of distance from summer and winter quarters, city size, migrants moving to cities, and total nomadic population at the place of origin.

Table 8.10 shows the results obtained from the regression models that have been fitted with Shiraz represented as a dummy variable to underline its specific role in the migration process of the Qashqa'i. As with previous analyses, a probability equal to or less than 0.10 indicates a significant result. The parameter estimate column gives the value of the parameter associated with each factor in the model. The value of the parameter and the sign associated with it give an indication of the intensity of the impact.

Table 8.10 includes the following three models:

*Model 1* using distance from summer and winter quarters

*Model 2* using the variables from model 1 plus two more variables: city size and tribes' population at the origin.

*Model 3* using all variables from model one and two plus one more variable: tribe's migrants in Shiraz

Model 1 suggests that distance from winter and from summer quarters are negatively correlated with the percentage of migrants. The explanation is that when distance from potential destination cities increases, the flow of migrants decreases (Olsson, 1970). There is some difference in the results for distances to summer and winter quarters, and the propensity to migrate. Our data suggest that distance from winter quarters has a greater impact on the flow of migrants. The value of the r-square ( $r^2 = 0.24$ ) is also considerable in model 1 for distance factors. There is usually a close association between distance and the costs associated with migration (Olsson, 1970). In addition, in the case of Qashqa'i migration, people move short distances because they prefer to be closer to their place of origin for economic and cultural reasons. In other words, Qashqa'i migrants tend to move to the closest destination city to retain the benefits of pasture and agricultural land at their place of origin.

Model 2 indicates that the factor *city size* has an impact on migration process, and is positively related to the Qashqa'i migrant mobility. It suggests that Shiraz attracts migrants from the place of origin, given that it is the capital city of Fars and offers a diversity of socio-economic opportunities to migrants. We can speculate therefore that Shiraz experiences higher rates of in-migration than the other cities sampled. Indeed, we may generalize that the greater the size of a city, the greater the attraction for potential migrants as suggested by the gravity model. *Tribal population* at the place of origin also seems positively related to the process of out-migration. As with *city size*, this variable indicates that the greater the size of the tribe's population, the higher the rate of out-migration. However, these two new variables do little to increase the r-square ( $\Delta r^2 = 0.07$ ) value compared to the model 1.

In model 3, the number of migrants in each city is added to variables in model 2. The r-

square value ( $r^2 = 0.83$ ) in model 3 suggests that this new factor has an important impact on the model, and it is positively related to the mobility of Qashqa'i migrants. It means that the higher the Qashqa'i population in a city, the greater the attraction for the new-comers. This is likely to be correct because Qashqa'i nomads usually want to be close to their relatives.

Table 8.10: The Regression Model Explaining the Percentage of Migrants with Correlation to Distance and Size of the Population

Models	Factors	Parameter Estimate	$r^2$
Model 1	Intercept	0.1751	$r^2 = 0.24$
	Distance (winter quarters)	-0.000185	
	Distance (summer quarters)	-0.000241	
Model 2	Intercept	0.1346	$r^2 = 0.31$
	Distance (winter quarters)	-0.0001	
	Distance (summer quarters)	-0.0002	
	City size	$6.41 * 10^{-8}$	
	Tribal population (origin)	$8.55 * 10^{-7}$	
Model 3	Intercept	0.0757	$r^2 = 0.83$
	Distance (winter quarters)	-0.00006	
	Distance (summer quarters)	-0.00004	
	City size	0.0000001	
	Tribal population (origin)	-0.000002	
	Tribe's migrants in city	0.00002	

The validity of the models applied in Table 8.10, is examined through an analysis of the *residuals*. Clark & Hosking (1986) state that examination of the residuals can lead to the refinement of the model in terms of transformations and new variables, and the discovery of unknown influences on the model. It is important to undertake at least some analyses of the residuals when a regression

analysis is performed. In a regression model if the predicted dependent variable is named  $Y'$ , and actual value of dependent variable is called  $Y$ , then the residual  $e$ , can be expressed as:

$$e_i = Y_i - Y'_i \quad (1)$$

Therefore, the difference between the actual value of the dependent variable and the predicted value is known as the residual. Table 8.11 shows the residuals for model 3 which was identified in the previous table.

Table 8.11: Residuals for Model 3

Cities ⇒ Tribes ↓	Shahreza (1)	Shiraz (2)	Firuzabad (3)	Farrashband (4)	Kazerun (5)	Qaemieh (6)
Dareshuri (1)	0.206	0.117	0.000	0.000	0.012	0.076
	0.213	0.130	0.013	0.012	0.015	0.076
	0.006	0.013	0.013	0.012	0.002	0.000
Sheshbluki (2)	0.000	0.123	0.056	0.084	0.000	0.000
	0.016	0.127	0.053	0.077	0.003	0.009
	0.016	0.004	0.003	0.006	0.003	0.009
Amaleh (3)	0.000	0.113	0.241	0.000	0.000	0.000
	0.021	0.138	0.267	0.002	0.005	0.012
	0.021	0.025	0.026	0.002	0.005	0.012
Farsimadan (4)	0.010	0.127	0.053	0.000	0.053	0.000
	0.012	0.102	0.046	0.019	0.060	0.029
	0.002	0.025	0.006	0.019	0.006	0.029
Kashkuli-B (5)	0.000	0.117	0.000	0.000	0.019	0.194
	0.009	0.122	0.020	0.019	0.043	0.161
	0.009	0.005	0.020	0.019	0.024	0.032
Kashkuli-K (6)	0.024	0.110	0.246	0.000	0.000	0.000
	0.034	0.088	0.106	0.045	0.442	0.377
	0.009	0.022	0.140	0.045	0.442	0.377

In Table 8.11, the first cell (1,1) in the top left corner shows the residual for Dareshuri tribe (1) and Shahreza city (1). There are three numbers in each cell. For example, numbers 0.206, 0.213, and 0.006, located in (1,1) show actual, predicted, and residual values respectively. The goal here is to test the validity of the regression model fitted in model 3. As the results show with two

exceptions, there are no big differences among the actual and predicted value (residuals). This means that model 3 fits quite well. Two cells (Kashkuli-Kochek with Kazerun, and Qaemieh) have high residuals. This suggests that when there are no migrants to a destination city or distance is a barrier, the actual value is zero and the model does not fit properly.

The data in Table 8.12 based on our questionnaire confirm that most Qashqa'i migrants have migrated short distances to the destination cities. The data also verify the results of the regression models used to generate Table 8.10. As Table 8.12 shows, 53 % of the total migrants moved less than 100 km, 30 % of the people moved 100 to 199 km, 8 % of migrants from 200 to 299 km, and the rest ( 8 %) moved distances of 300 km or more. Shiraz attracts the most migrants over long distances ( 40 % of all migrants). This may be due to the fact that Shiraz, as a capital city, offers many opportunities for potential migrants.

Table 8.12: The Classification of Distance with Regard to the Place of Origin in Destination Cities

Sampled cities	Dist. <100 (%)	100 ≤ Dist. <200 (%)	200 ≤ Dist. <300 (%)	300 ≤ Dist. (%)	Total (%)
Shahreza	16.35	22.40	8.16	28	18.50
Shiraz	6.60	15.85	36.73	40	14.67
Firuzabad	21.38	29.51	48.98	8	25
Farrashband	15.72	4.37	0	6	10.17
Kazerun	23.58	13.11	0	2	16.67
Qaemieh	16.35	14.75	6.12	16	15
Total	53	30.50	8.17	8.33	100

\*Dist = distance

In brief, based on the regression model, when the distance from potential destination cities increases, the flow of migrants decreases. The size of city, number of migrants to the city, and the

tribal population at the places of origin all influence the migration process of the Qashqa'i. The residual analysis verifies that our models have been properly fitted.

### **8.3 A General Profile of the Qashqa'i Migration Process derived from Logit and Regression Analysis**

Based on the various analyses in this chapter, it is possible to generalize some of the research findings to build up a profile of migration behaviour of the Qashqa'i as influenced by push and pull factors.

Both push and pull factors associated with social services, educational institutions, and environmental issues had significant effects on potential migrants at the place of origin. In light of this, we can suggest that if planners want to slow down nomadic and rural migration to cities they should aim to reduce regional inequality. During the last few decades, inequalities in educational and economic opportunities, and in social services, have led to an increased flow of migrants to urban areas in Iran.

The various forms of social and economic disparity between nomadic regions and urban areas create migration patterns that are specific to the different nomadic groups. In other words, while initial disparity may push nomads to migrate, the causes of that disparity are regionally and culturally specific. For example, some of these specific causes are based on variation in levels of income, size of herds and land-holding, household size, level of education, and contacts in and knowledge about other locations. These and many other variables have a significant influence not only upon whether or not people decide to leave their home areas, but also upon the characteristics of the potential migrant group. Some of those who leave are typically better-educated, younger, more innovative,

and dynamic, whereas others who leave are poor people without land, pastures, livestock, and employment. Our analysis of Qashqa'i nomads and their migration process shows a certain selectivity, which is not always consistent with the 'brain drain' explanation. Some move to be able to take full advantage of the opportunities the city has to offer, while others manage to survive on the margins of an urban existence. Some decide that their interests will be best served by moving permanently to a new location, whereas others attempt to make the best of both worlds by migrating periodically to the city while at the same time continuing to maintain opportunities in their place of origin.

The establishment of networks of contacts within urban areas over a period of several generations is of central importance in both initiating and facilitating migration from nomadic areas. Some cities attract migrants from large distances away, while others pull people from relatively close proximity. Some cities may have clear cultural and linguistic differences with new migrants, whereas others have highly similar cultural and linguistic characteristics. However, our survey suggests that it is quite rare for Qashqa'i migrants to move to a destination about which they know little and have few personal contacts. Most nomads move to a location where they have economic and social connections.

## IX. The Process of Cultural Change Among the Qashqa'i

There are many ways to view cultural change, and most researchers have been involved in the quest to understand the dynamics of this change (Bates & Plog, 1991). However, the underlying factors affecting cultural change vary among different societies. Beck (1981) states that government sponsored change in Iran from the 1950's to the 1970's had a great impact on the Qashqa'i lifestyle. She argues that the dismantling of the *socio-political organization* of the Qashqa'i was one of these factors (see Chapter 2 and Figures 2.2 & 2.3). According to Beck, *land reform*, *pasture nationalization*, and *education of nomad* were three other factors which played a central role in this change. These factors were examined in Chapter 7 as part of the push factors (see section 7.4; Table 7.17). In addition, Bates & Plog (1991) state that handicraft is another way to study the culture of a society. This factor was considered as *carpet-making* in Chapter 8 (see Tables 8.6 & 8.7; models 7 & 3).

As was stated in Chapter Two, question four of this thesis deals with the process of Qashqa'i cultural change when they live in urban areas. Archival records can be used to explain the cultural change processes in relation to migration. In addition, the socio-cultural behaviour of the respondents to questionnaires can be analyzed to answer the same question. By using this method, comparisons can be made between groups of the Qashqa'i at the places of origin and destination in order to understand the rate of Qashqa'i cultural change in the urban areas.

The main purpose of this chapter is to address the processes of cultural change among the Qashqa'i with regard to their migration behaviour. The main elements of traditional Qashqa'i

culture, are explained first. Then, the neighbourhoods of the Qashqa'i migrants are described to show how their 'intensified' traditional cultural practices have shaped separate geographical places in urban areas. In addition, the socio-cultural variables of the survey questionnaire are discussed to contrast changes in the Qashqa'i culture between place of origin and destination. Following this, we look at some common factors among the Qashqa'i such as language, clothing, music, food, hobbies, and carpet design to compare nomadic and urban Qashqa'i. Finally, with regard to a general profile of Qashqa'i cultural change, some anthropological concepts such as segregation, acculturation, integration, and assimilation are outlined as a means to evaluate the current state of Qashqa'i culture.

### **9.1 Factors Affecting the Qashqa'i Cultural Change**

When we speak of a 'cultured' individual, we tend to mean someone with refined tastes in music and arts, a highly educated, well-read person who knows and appreciates the 'best' attributes of his or her society. However, culture refers not only to the music, literature, and arts of a society, but also to all other social features of its way of life: prevailing modes of dress, routine living habits, food preferences, the architecture of houses and public buildings, the layout of fields and farms, division of labour, modes of production, and systems of education, government, and law (de Blij, 1993). Thus, culture is an all encompassing term that identifies not only the 'tangible' lifestyles of a people, but also the prevailing values and beliefs (de Blij, 1993).

Taking this point of view, Qashqa'i nomads have adapted their lifestyles from the purely 'nomadic', to some mixture of nomadism and sedentarism. Traditionally, they were organized into flexible local groups based on ties of kinship, marriage, political alliance and geographic situation. Qashqa'i identity focuses on political leaders and group allegiance, and, on cultural, linguistic, and

territorial criteria. From the 1950's to the 1970's, the Qashqa'i were faced with several external factors that led to the adaptation of their culture toward the dominant Persian culture. The factors precipitating this adaptation included: outlawing traditional forms of Qashqa'i leadership; the implementation of the land use policy in nomadic regions; and the development of 'institutionalized' education among the Qashqa'i (the Tent School Programme).

With respect to the socio-political organization of the Qashqa'i, their leadership were subsumed by a national military power in 1954 (Beck, 1986). Before that time, the Qashqai's people had their own leaders solved their disputes over land allocation, migration regulation, inter alia. In order to obey the new Persian speaking leaders, the Qashqa'i had to adjust their traditional migration patterns and their socio-political organization to the new situation. Also, they had to use Persian to express themselves and their problems. They had to pay Persian literates to write their complaints and demands before sending them to the central government authorities. They had to buy vehicles to visit cities to discuss unexpected problems such as the scheduling of fall or spring migration regulations with the new leaders. All these factors put them in direct contact with the Persian culture, and helped initiate of significant cultural change.

The implementation of land use policies, including, land reform, was another important factor shaping cultural change. Lambton (1966) states that the effects of land reform were drastic for the Qashqa'i. There was no provision in the Land Reform Law, or its many amendments, for seasonal use of pasture land by nomads. Only individuals who had permanent occupancy of land were considered qualified for land distribution programmes (Lambton, 1966). Qashqa'i nomads lacked year-round, regular occupancy of specific units of land and hence could not claim land under the new laws. Therefore, some Qashqa'i lost their land and changed their way of life by migrating to

urban areas. Persian and Qashqa'i villagers were encouraged to engage in the widespread cultivation of land at the expense of maintaining grazing lands in Qashqa'i areas. Previously uncultivated land, outside the range of existing village water supplies that belonged to the Qashqa'i nomads, were donated to individuals offering to practice sedentary cropping. New farmers were assisted through grants of equipment, chemical fertilizers, and motor pumps. The most fertile areas for both grazing and crops passed from pastoral to agricultural use, and therefore many Qashqa'i were forced to change their way of life to adjust to the new political, economic and social realities.

The effects of land reform were combined with other detrimental policies revolving around the Forest and Range Nationalization Law of 1963. According to this law, all natural rangelands except for those surrounding villages now belonged to the government. Lands nationalized included desert and mountainous areas, in addition to actual forests and rangelands, and all uncultivated lands lying outside the service areas of village water supplies (Lambton, 1966). These comprised 76 % of Iran's total land area. Included in the nationalization programme were almost all of the Qashqa'i pastures. The government also began to collect taxes on herd animals sold to state-run slaughter houses on the grounds that grazing had been 'free' on state land (Beck, 1986). Thus, pasture nationalization represented another pressure on the Qashqa'i to change their traditional way of life.

In short, the traditional Qashqa'i mode of production, their social systems and associated cultural values and beliefs were fundamentally altered through the initiation of land reform. Qashqa'i nomads were now required by law to obtain land rights through government channels rather than through traditional tribal rights and customs (Beck, 1986). A diversification of economic activity, particularly in non-pastoral pursuits, resulted from lack of pasture land. The Qashqa'i had to adapt their social and economic base to the new situation, and they had to accept various forms

of the dominant Persian culture owing to greater interaction and reliance upon Persian people and administrators.

Another important development affecting the Qashqa'i between 1954 and 1979 was the creation of a tribal education programme (the Tent School Programme). This programme was part of the government's effort to integrate the Qashqa'i into a rapidly 'modernizing' Iran. In August 1953 some Qashqa'i were chosen by Mohammad Bahmanbegi (Director of Nomadic Educational Programme) to receive teacher training in Shiraz, and in January 1954, seventy-three tent schools were opened among the Qashqa'i (Beck, 1986). In 1957, a Tribal Teacher Training School was opened in Shiraz. Each year numerous students were trained, new schools were opened, and the number of educated youths increased dramatically. As a result of Bahmanbegi's efforts, white or orange canvas tent schools became a distinctive feature of the Qashqa'i landscape beside their black tents (Beck, 1986). Bahmanbegi's initial plans for education concerned only the Qashqa'i, but he gradually added other non-Qashqa'i nomadic people to his programme. By 1979, his schools and teachers served most major tribal groups in Iran. A Tribal High School was established in Shiraz in 1967, and eventually grew into two large campuses with over one thousand students. Bahmanbegi also established a Tribal Carpet Weaving School, a Tribal Technical School, and training programmes for midwives and paramedics (Beck, 1986). All these institutions pulled younger Qashqa'i to Shiraz city and made them more familiar with urban culture.

The education offered in the tent schools represented the standard curriculum found in all Iranian government schools. The late Shah's government required all students in Iran to read and write exclusively in Persian, a national policy aimed at 'Persianizing' and assimilating Iran's multi-lingual and multi-cultural populations (Beck, 1986). The national education programme stressed

Persian culture and civilization to the neglect of contributions made by non-Persians. History texts magnified the exploits of Persian Shahs and ignored the impact of Iran's minorities on Iranian history. These culturally imperialistic policies were intended to reduce the importance of non-Persian influences (Beck, 1986). Teachers in Qashqa'i schools were required to teach in Persian despite the fact that they and their students were Turkish-speakers. The books used in tent schools were those used throughout Iran, and included pictures of urban and rural Persian families performing activities typically found in Persian Iran. Policy-makers believed that in the future, the Qashqa'i and other tribal peoples in Iran would assimilate into a 'modern' life and that this education programme would facilitate the transition process (Beck, 1986).

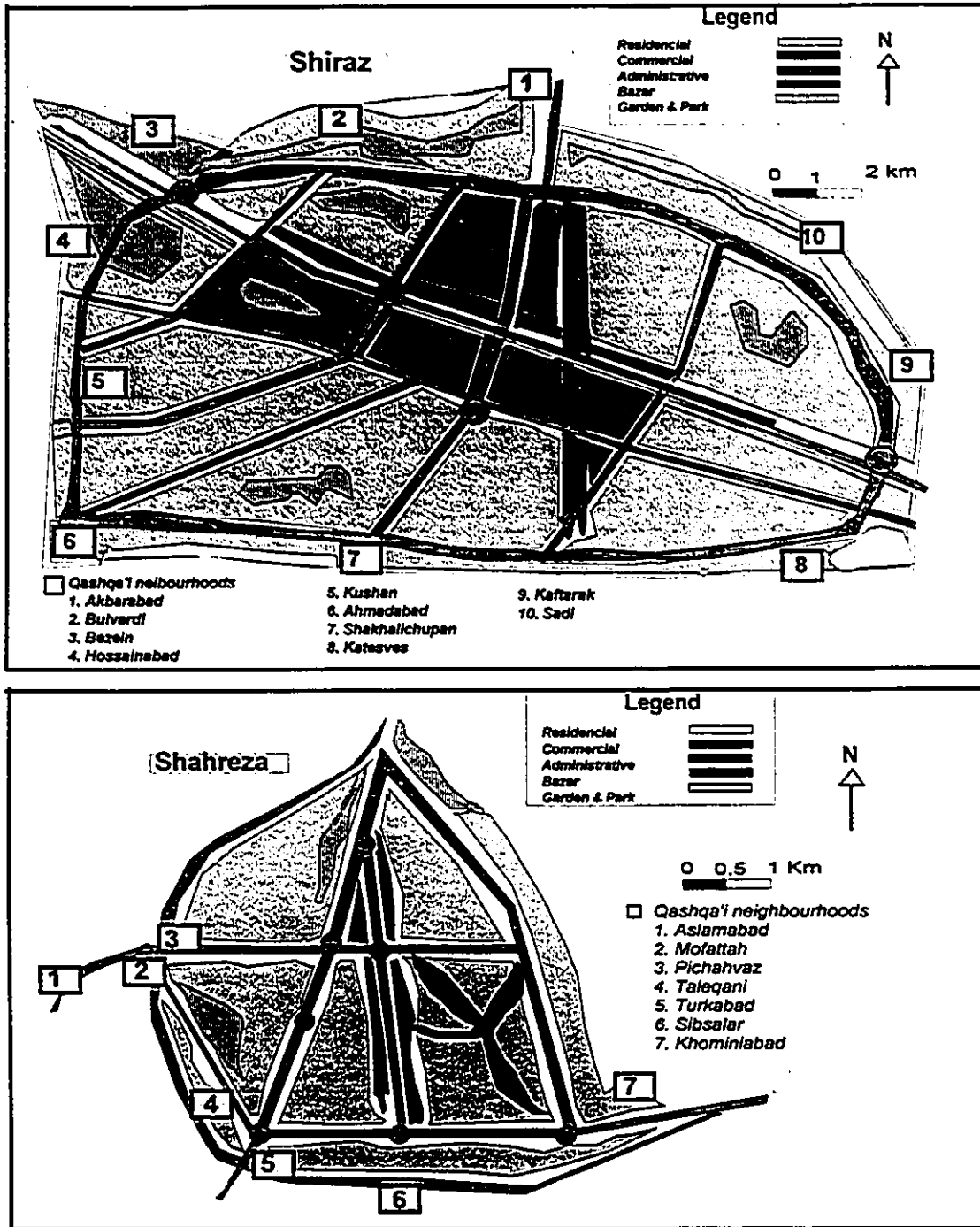
The following section deals with Qashqa'i migrants, and their particular cultural challenges, at place of destination.

## **9.2 Qashqa'i Neighbourhoods in the Cities of Destination**

Cultural or ethnic minorities have often formed self-sufficient communities within urban areas (Hunt & Walker, 1974). To survive in cities, the Qashqa'i migrants have often intensified traditional cultural practices or segregated themselves to form spatially restricted territories. Figure 9.1 shows the spatial focus and extent of geographical dispersion of Qashqa'i neighbourhoods inside two destination cities (Shiraz and Shahreza). Qashqa'i migrants in the other cities of destination show similar tendencies.

**Shiraz**, is located in the center of the Qashqa'i regions and has attracted many Qashqa'i migrants. The major Qashqa'i neighbourhoods in this city as indicated on Figure 9.1 are the following:

Figure 9.1: Distribution of the Qashqa'i Neighbourhoods in Two Destination Cities



Source : Adapted from the Ministry of Information & Tourism, Iran (1978)

1. **Akbarabad** (located in northeast Shiraz)
2. **Bulvardi** (located in north Shiraz)
3. **Bezein** (located in northwest Shiraz)
4. **Hossainabad** (located in west Shiraz)
5. **Kushan** (located in west Shiraz)
6. **Ahmadabad** (located in southwest Shiraz)
7. **Shakhalichupan** (located in south Shiraz)
8. **Katesves** (located in south east Shiraz)
9. **Kaftarak** (located in east Shiraz)
10. **Sa'adi** (located in east Shiraz)

All of these neighbourhoods are located in spatially, economically, and infrastructurally marginal areas of Shiraz. Also, all the Qashqa'i tribes have mixed together to protect themselves in these areas. Some of these neighbourhoods lack basic services such as piped water, fuel, and public infrastructure such as schools, and public transport.

**Shahreza** is located in Esfahan province close to summer quarters of the Qashqa'i. The Qashqa'i neighbourhoods in Shahreza city are populated mostly by Dareshuri tribes. These neighbourhoods are as follows:

1. **Aslamabad** (located in northwest Shahreza)
2. **Mofattah** (located in northwest Shahreza)
3. **Pichahvaz** (located in northwest Shahreza)
4. **Taleqani** (located in west Shahreza)
5. **Turkabad** (located in southwest Shahreza)
6. **Sibsalar** (located in south Shahreza)
7. **Khominiabad** (located in east Shahreza)

All of these neighbourhoods are located in the city's periphery and are low income areas. Many of these neighbourhoods also have major difficulties in providing basic services for the inhabitants.

One interesting difference between Shiraz and Shahreza is the spatial form of the Qashqa'i neighbourhoods. Those in Shiraz are ring-shaped around the city with mixed populations of the Qashqa'i tribes. This city is situated in the centre of traditional Qashqa'i regions which suggests that

the Qashqa'i are more comfortable in locating at various points around the periphery. In other words, any point on the periphery offers them the same access to their traditional place of origin. However, in Shahreza, the Qashqa'i neighbourhoods are located only in the western and southern parts of the city, and comprise mainly Dareshuri people whose summer quarters are situated to the west and south of the city. Therefore, the tribal inhabitants of these neighbourhoods tried to choose places close to their places of origin.

There are several reasons for the Qashqa'i to 'cluster' within their specific cities of destination. The following explanations are based on personal interviews that were conducted with Qashqa'i migrants. As has been previously stated, the Qashqa'i are the only Turkish-speaking people in southern Iran, and their unique language is the main thing that ties them together in the cities of destination. Almost 30 % of the Qashqa'i migrants do not know Farsi upon their arrival in urban areas. Therefore, they prefer to live with their relatives in the cities of destination so as to use their own language.

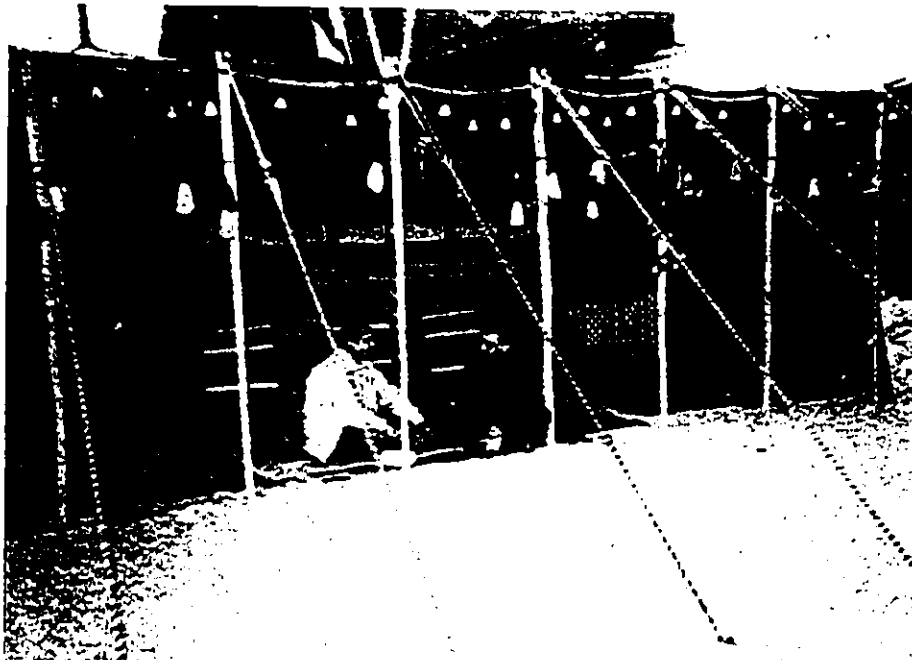
As Figure 9.1 shows, almost all of the Qashqa'i neighbourhoods, regardless of the specific city of destination, are located in urban peripheral areas. Apart from proximity to traditional pastures, land prices for housing are lower in peripheral areas of the cities than in other areas. As distance from the centre of Iranian cities increases, urban services decrease and thus, results in lower prices for land. Most Qashqa'i migrants can neither rent nor buy houses inside the city. Therefore, they are obliged to buy very poor land in marginal 'outer' areas upon which to build their own simple houses. A few Qashqa'i people also believe that factors such as being far from higher crime areas in city centres, supporting their relatives in the case of marriage or death, and maintaining 'old ways' are also reasons for living in clustered neighbourhoods at the place of

destination. It appears that economic and cultural factors both play an important role in separating Qashqa'i neighbourhoods from Persian neighbourhoods.

To have a better idea of the distinctive culture of the Qashqa'i, several photographs depicting scenes of cultural uniqueness are shown here. Photograph 9.1 shows Qashqa'i women with their traditional clothes while dancing at a marriage celebration. Photograph 9.2 shows a black tent and the carpets inside the tent. Photograph 9.3 shows two Qashqa'i musicians with their instruments and Qashqa'i carpets that are located inside a black tent. Photograph 9.4 shows a Qashqa'i migrant in the capital city of Iran, Tehran. It depicts three generations: a mother with traditional clothing, her son, and her son's daughter and wife. Photograph 9.5 shows an announcement of a concert by Qashqa'i musician and singers in Gachsaran city in 1993. According to this advertisement Qashqa'i artists performed for both Qashqa'i and Persian people who were living in the city. This announcement shows that the Persian culture, particularly in Fars province, is also affected in some ways by Qashqa'i culture.



Photograph 9.1: Qashqa'i Women With Their Traditional Clothes



Photograph 9.2: A Black Tent With Carpets



Photograph 9.3: Qashqa'i Musicians With Their Instruments



Photograph 9.4: A Qashqa'i Migrant's Family in Tehran City

یاد دوزخ بزرگ اهل قشقرق میرزا داؤد خان

# تاریخچه

## هنرمندان گرامی

آهنگسازان و نوازندگان  
داؤد خان و دیگران

مقامات و مسئولین  
دیوانه بزرگ و دیگران



**هنرمندان قشقرقی آهنگسازان:**

فرد و فرهاد	استغلی	مورگین	فرخنده	پایان
طهورت	گلگولی	ابراهیم	شیرستان	پایان
کندل	حسن آهنگساز	داؤد	شیرستان	پایان

با سپاسی بی حد از پیشکشان هنرمندان گرامی

رکز آرکسترد و دیگران: خسرو گلپایگان، بیکمیر و اداره فرهنگ و ارشاد اسلامی

قشقرق، شهرت و نامی

Photograph 9.5: An Announcement for the Performance of Qashqa'i Music in City

Qashqa'i carpets represent another facet of the unique culture of this nomadic people. Western researchers call Qashqa'i carpets 'woven gardens'. Qashqa'i women have created some beautiful and varied types of carpets. The previous pictures showed some of these carpets. Qali (rug), Glim, and Jajim are some of the famous carpets among the Qashqa'i people. The pattern and design of each Qali or Glim tells a cultural story about the history of the Qashqa'i people. For example, the pattern of a lion shows the bravery of the Qashqa'i, while gazelles (a small graceful and wild animal resembling a deer) and flowers show the beauty of their nature. Qashqa'i carpet-weavers traditionally used vegetable dyes in making their carpets. These kinds of natural colours give more stability and freshness to the carpets, and are different from man-made dyes that are more commonly used today. The design of Qashqa'i carpets is inspired by Nature and the lives and values of their people. For example, there are some differences between Qashqa'i carpets and Persian carpets. Qashqa'i carpets have a type of two or four legged creature similar to a wild goat in their carpet design whereas Persian carpets do not. Also, some varieties of designs like diamonds with a star are included in Qashqa'i carpet patterns but are not in evidence in Persian carpets. Finally, peacocks are unique to Qashqa'i carpets.

The patterns of Qashqa'i carpets have changed among migrant groups at the place of destination. Given that carpet materials are expensive and supplied mainly by Persian dealers, the Qashqa'i are forced to adopt more 'Persian' designs. In addition, because the physical location of Qashqa'i carpet-makers have changed, new symbols and criteria are used to characterize their new environment.

It should be pointed out that although Qashqa'i migrants live in their own neighbourhoods and practice their own culture in the cities of destination, there is some evidence that their culture

is changing gradually. For example, Qashqa'i students attend the same guidance schools, high schools, colleges, and universities as Persian students. Therefore, in the case of language, clothing, music, and behaviour, Qashqa'i teenagers are affected by Persian speaking students. They listen to Persian music, they wear modern Persian-style clothing, and some of the youths even ignore their nomadic ancestry and feel proud to be 'Persian'. In addition, some families who reside in Qashqa'i neighbourhoods travel to the centre of the city every day for shopping, work, and other services. We also noticed some kinds of sharp negotiations between youths and their parents for following Persian manners in the cities of destination. Some Qashqa'i young men even contradict their parents' ideas about marriage and tradition and choose to marry Persian girls. Therefore, it is difficult for the migrants not to be culturally influenced in some manner.

The next section deals with the processes of cultural change and the differences in rates of change depending on location and other factors differentiating nomadic and urban Qashqa'i.

### **2.3 Factors Relating to Socio-Cultural Behaviour at Places of Origin and Destination**

In this study, we included the same factors (language, clothing, music, food, and factors relating to hobbies) in our surveys of the places of origin and destination. The aim was to consider processes of cultural change among Qashqa'i migrants. Although the official language in Iran is Farsi, the Qashqa'i prefer to speak their mother tongue, Turkish. Language factors consist of total numbers of languages spoken, languages spoken at home, at work, and at school.

Table 9.1 shows the language abilities among the Qashqa'i at their places of origin and destination. Language is of central importance in cultural change. To differentiate Qashqa'i language use between places of origin and destination, the Chi-Square test is used to identify these

two populations. As this table shows, the value of Chi-Square for language spoken at home is high (14.2) and its associated probability is very low (0.000) and significant. According to Table 9.1 almost 97 % of the Qashqa'i speak only Turkish at home at the place of origin, while this propensity is reduced to 91% at the place of destination (urban areas). Some Qashqa'i population cannot speak Farsi when they migrate to urban areas. Once 'settled' in urban areas, only a small percentage of the Qashqa'i had the same problem at the place of destination. Spoken language data reveal that Qashqa'i migrants at the cities of destination are six times more fluent in Farsi than are new urban migrants. Again, looking at both languages spoken at home, 2 % of Qashqa'i speak both Turkish and Farsi at the place of origin, while this tendency is increased to 5 % at the place of destination.

Table 9.1 confirms that the language spoken at work with a high value of Chi-Square (276.8) and a significant probability (0.000) influences the Qashqa'i cultural change at the place of destination. Of the Qashqa'i people at work, 64 % speak Turkish when living at the place of origin, while this tendency is reduced to 17 % at the place of destination. Almost 50 % of the Qashqa'i speak Farsi at work in urban areas, while this requirement is reduced to only 8 % at the place of origin.

The languages spoken at school also shows the same direction of change in favour of Persian. In summary, these data from the place of destination show that Qashqa'i migrants have had to learn Farsi for their education, communication, and employment. This has led to a cultural transformation and gradual 'Persianization' of the migrants.

Table 9.1: Languages Spoken at Place of Origin and Destination

Languages Spoken	Places	Turkish %	Farsi %	Both %	Total Number	Chi-Square (X <sup>2</sup> )
At home	Origin	97.3	0.5	2.3	400	14.2 (0.000)
	Destination	91.7	3.3	5.0	600	
At work	Origin	64.5	8.5	27.0	400	276.8 (0.000)
	Destination	16.8	49.3	33.8	600	
At school	Origin	3.0	67.1	8.0	312	174.7 (0.000)
	Destination	4.7	69.5	25.8	600	

Clothing, music, and food are three other factors associated with socio-cultural behaviour which distinguish Qashqa'i and Persian populations. Qashqa'i clothing is an important visible factor which differentiates them from other Persian communities. Women's clothes in particular are quite different from Persian women's clothes. Photograph 9.1 shows that Qashqa'i women wear multi-coloured long skirts and long shirts, while Persian women dress in a similar style to western women. Table 9.2 shows the statistics relating to clothing, music, and food among the Qashqa'i at the places of origin and destination. The value of Chi-Square for clothing is quite high (69.6) and its related probability is also significant (0.000). Based on this table, 82 % of the Qashqa'i women wear Turkish clothing at the place of origin, while this rate is lower (56 %) at the place of destination. Of the Qashqa'i, almost 38 % wear both Persian and Turkish clothing at the place of destination, while only 15 % of the Qashqa'i use both types of clothing at the place of origin.

Table 9.2: Clothing, Music, and Food among the Qashqa'i

Socio-cultural Factors	Places	Turkish %	Farsi %	Both %	Total Number	Chi-Square ( $X^2$ )
Clothing	Origin	82.0	2.5	15.5	400	69.6 (0.000)
	Destination	56.7	5.2	38.2	600	
Music	Origin	86.3	1.8	12.0	400	16.3 (0.000)
	Destination	76.0	2.2	21.8	600	
Food	Origin	26.0	5.5	68.5	400	16.3 (0.000)
	Destination	21.8	1.5	76.7	600	

Music among the Qashqa'i is very important and it is different from Persian music. Qashqa'i music and are songs associated with their harsh way of life, are poignant, and have slow and fast rhythms compared to Persian music which has mainly fast rhythms and fewer life-style themes. Table 9.2 shows that the Chi-Square value (16.3) for music and its associated probability (0.000) are very high and significant. Of the Qashqa'i, 86 % listen to the Turkish music at the place of origin, while this trend decreased to 76 % at the place of destination. Again, 12 % of the Qashqa'i listen to both Turkish and Persian music at the place of origin, while this propensity increased to 22 % at the place of destination.

Qashqa'i cook a kind of fresh, flat, and thin bread everyday (*Ukkeh*), and use a great deal of dairy products in their everyday meals, while Persians have access to a variety of foods and cook differently. Although Qashqa'i foods are similar to Persian foods, there are slight differences in the types of foods prepared and consumed. Generally speaking, the direction of cultural change in urban Qashqa'i is towards 'Persianization'.

Factors relating to leisure time or hobbies include listening to the radio, watching television, visiting relatives, sports, hunting, and hiking. Table 9.3 shows how participation in hobbies such as radio listening change between the places of origin and destination. The value of Chi-Square for radio is high (20.2) and its connected probability (0.000) is very significant. In the place of origin, Qashqa'i tend to prefer the radio to television because it is handy and easy to carry during traditional migration periods. As this table displays 57 % of Qashqa'i listen to the radio at the place of origin, while this tendency reduces to 43 % at the place of destination.

Table 9.3 also shows the effect of television on the socio-cultural change as a hobby factor. The value of Chi-Square (16.2) and its associated probability (0.000) confirm that television highly differentiates the Qashqa'i culture at both places of origin and destination. The numbers of people who watch television increased from 34 % at the place of origin to 47 % at the place of destination.

Following the socio-cultural rates, our data show a decreased tendency (11%) for urban Qashqa'i to visit their relatives as a form of 'leisure'. Sport, hunting, and hiking also show some variation in participation rates. All these data indicate that daily behaviour, and thus cultural practice, is slowly changing when comparing place of to place of origin.

Table 9.3: Factors Relating to Hobbies at Places of Origin and Destination

Hobbies	Places	No %	Yes %	Total Number	Chi-Square (X <sup>2</sup> )
Radio	Origin	42.5	57.5	400	20.2 (0.000)
	Destination	57.0	43.0	600	
TV	Origin	65.5	34.5	400	16.2 (0.000)
	Destination	52.7	47.3	600	
Visiting relatives	Origin	12.5	87.5	400	18.8 (0.000)
	Destination	23.5	76.5	600	
Sport	Origin	83.8	16.3	400	8.0 (0.005)
	Destination	89.8	10.2	600	
Hunting	Origin	83.0	17.0	400	2.09 (0.148)
	Destination	86.3	13.7	600	
Hiking	Origin	73.3	26.8	400	47.2 (0.000)
	Destination	89.9	10.2	600	

#### **2.4 A 'General Profile' of Qashqa'i Cultural Change**

The Qashqa'i were organized traditionally into flexible local groups based on ties of language, kinship, marriage, political alliance, group allegiance, and geographic situation. During and after the 1950's, various changes affected the Qashqa'i and they have been forced to adapt their lifestyles from purely 'nomadic' behaviour to some mixture of nomadism and sedentarism. The alteration of socio-political organizations, the implementation of new land use policy, and the development of formal education programmes among the nomads led to increased migration rates

among the Qashqa'i to urban areas.

In the urban centres, the Qashqa'i migrants often intensified traditional cultural practices, and segregated themselves by building 'nomadic neighbourhoods' on the periphery of cities. Economic and cultural factors were of central importance in the creation of Qashqa'i neighbourhoods in the cities of destination. Socio-cultural practices such as language, clothing, music, and hobbies among urban Qashqa'i have changed relative to Qashqa'i at the place of origin.

To generalize from our study, and to locate and compare processes of cultural change within a wider context, a brief definition of the ethnic integration process is given here. This discussion follows four main headings that are appropriate to our purposes: segregation, acculturation, integration, and assimilation (Hunt & Walker, 1974).

Hunt and Walker (1974) state that a segregated society is one in which contact between various groups is restricted by law, by custom, or by both. Whether cultural or biological, the group differences are permanent in nature and determine the individuals' social role. The segregated society has to agree with the regulations of the dominant group. The individuals have few rights apart from their ethnic group and so the ethnic groups are unequal. Members of the minority group are allowed to engage only in the type of activities which are seen as useful by the dominant group.

The process of acculturation includes the adoption of the values, attitudes, ways of behaviour, and speech from a host society by migrants into that society. In this process, the ethnic group gradually loses its separate cultural identity and slowly accepts the culture of the larger host community. Acculturation is a slow process of change for immigrant individuals and groups. Even after fashions of dress, food, and customary behaviour have been substantially altered in the new environment, the mother tongue continues to be practiced among minorities (Fellmann et al., 1995).

Integration is defined as a situation where all members of the society, regardless their citizenship or ethnic association, are free to participate in all forms of social interaction. The integrated 'whole' may allow for some degree of cultural diversity, such as toleration of religious differences. However, its basic function refuses any social obligation which maintains ethnic separation (Hunt & Walker, 1947).

Assimilation is similar to integration and includes cultural assimilation and structural assimilation. In cultural assimilation, members of the 'guest' group become acculturated to the cultural patterns of the 'host' society. An example of this would be in changing patterns of religious worship. Cultural assimilation threatens ethnic identity, but does not destroy it. For example, some individuals may have forgotten their ancestral culture but still respect those who wish to maintain it. Structural assimilation involves interaction at the primary group level between members of the 'host' society and those of the 'guest' group, such as face-to-face relationships in clubs, organizations, and institutions of the 'host' society. In sum, assimilation is the basis of an integrated society, but it is often incomplete and may not move at a pace equal to structural and cultural change (Hunt & Walker, 1974).

Referring again to processes of cultural change among the Qashqa'i, migrants have had to change their traditional cultural practices at the place of destination. Our study shows that the Qashqa'i who migrated many years ago to urban areas are interested in their culture because most of them live in the separated neighbourhoods. However, in some cases, their children have lost their mother tongue, and some Turkish words are being replaced with Farsi. Qashqa'i children attend the same educational institutions as Persian students. Contrary to their parent's ideas, some young Qashqa'i men marry Persian women. Others enjoy Persian music, food, clothing, and hobbies more

than 'traditional' leisure activities. Also the pattern of the Qashqa'i carpets has slowly changed among migrants as would be expected given their changed circumstances.

Placing these results in the context of more general processes of cultural change, the pattern of Qashqa'i cultural adaptation does not correspond to 'segregation' because the migrants are not restricted by either law and/or religion in their new urban environments. Their culture is not 'integrated' because they are still concerned with their ethnic affiliations. They are not 'assimilated' because assimilation is the basis of an integrated society. Indeed, the rate of Qashqa'i cultural change is slow and people are hardly aware that it is occurring. Therefore, explanations based on 'acculturation' seem to best describe the situation of the Qashqa'i.

## X. Discussion

This section provides a brief overview of the thesis objectives, main research findings, and the evaluation of push-pull theory. In light of these findings, some critical comments on public policy concerning migration are made. That the research has certain biases (strengths and weaknesses) is also addressed. Finally, some questions about further research in this study area are raised.

### 10.1 Review of Research Aims, and their Relation to Goals

The phenomenon of pastoral nomadism is declining steadily for a number of reasons. First, nomadic groups are being displaced, or absorbed, by more technologically advanced agricultural and industrial societies. Second, national government policies have had significant political and economic influences on the decline of nomadism. Programmes of sedentarization are commonly justified on the grounds of improving the social welfare of nomadic groups. Third, nomadic societies are coming under increasing pressure as a result of competition for land with potential alternative uses (agriculture, settlement inter alia). Finally, as nomads integrate into 'modern life' they gradually lose contact with traditional cultural norms, and do not seek to re-establish the ties to their past lifestyle. However, the settlement of nomads has some benefits. They can take advantage of social services, medical services, clean water, sanitation facilities and educational opportunities. This mix of push and pull factors helps shaped migration patterns by drawing nomads to urban areas.

The Qashqa`i are members of a tribal confederacy of approximately 500,000 people in Iran. The Qashqa`i confederacy consists of six major tribes including the Dareshuri, Amaleh, Sheshbluki, Farsimadan, Kashkuli-Bozorg, and Kashkuli-Kocheh. The Qashqa`i are one of Iran`s many ethnic minorities; they speak Turkish and are Shi`i Muslim. In the 1960`s and 1970`s, the regime of the Shah pressured many Qashqa`i to abandon nomadism and settle in villages and cities. Detailed statistical data for nomads in 1986 revealed that only 112,430 individuals still practice a nomadic lifestyle, and the rest have migrated to villages or urban areas.

Census data does not trace the city-ward movements of nomadic migrants to urban areas, so a survey questionnaire was required for gathering all necessary information. This research relies on the data from 1,000 questionnaires (600 at place of destination, and 400 at place of origin). These data were analyzed using logit models as a means to conceptualize migration patterns. This information is central to building an improved statistical understanding of nomadic settlement behaviour and ultimately aims to contribute to public policy formation. It is hoped that the methods used in this research will provide a basis for further study on nomadic migrants in Iran and other developing countries.

The purpose of this research was to outline the causes and consequences of Qashqa`i migration to urban areas by identifying certain push and pull factors. In addition to this main goal, the research had certain secondary objectives. These secondary goals centred around questions such as: is there some differential effect of "push and pull" factors depending upon the city? and, are the behavioural responses different between tribes depending upon where they migrate? Another aim was to evaluate the processes of cultural change and assimilation on migrants at the places of destination. Finally, this research briefly referred to government policy in Iran with respect to

nomadic migration to urban centres.

The results of this research indicate that migration of Qashqa`i nomads to urban areas has been shaped by complex and multi-faceted processes. There are two principle sets of factors which influence Qashqa`i migration patterns. The 'economic push factors' were of central importance and include lack of pastures and farmlands which leads to low income and poverty. Another push factor correlated with the lack of social services such as educational institutions, health services, and public transportation. Still other push factors are related to demographic issues such as rapid population growth. Finally, environmental determinants such as harsh climate, degradation of pastures, and water shortages shape a difficult lifestyle from which people wanted to escape.

The pull factors which attract the Qashqa`i centre around the desire to improve educational, job, and accessibility criteria. Other pull factors also involve maintaining family ties, and improving housing conditions. Our study indicates that jobs performed by urban Qashqa`i are somewhat related to their traditional occupations at the place of origin. However, while some people are employed full-time in cities, others pursue a variety of activities and are often self-employed.

This research also reveals that Qashqa`i culture is slowly adapting to urban ways, and there is a gradual 'Persianization' of the migrants' language, clothing, music, and hobbies. The best explanation of this change is consistent with the process of acculturation.

## **10.2 Evaluation of Push-Pull Theory**

The push-pull theory was developed by Lee (1966) to explain push, pull, and personal factors at the places of origin and destination of immigrants in Western countries. In Chapter 7, Table 7-16, certain factors are identified to explain the Qashqa`i migration process through the application of this

theory. It appears that Lee's concepts of push, pull, and personal factors are well adapted to the current study. However, the 'intervening obstacles' developed by Lee (such as distance, physical barrier, and cost of movement) seem less determining and can be considered as insignificant in the case of the Qashqa'i migration processes. Our study shows that when the Qashqa'i tribes people decide to move from their places of origin to a destination, they do so without difficulties relating to intervening factors. Indeed, the Qashqa'i often settle in villages, towns, and cities between summer and winter quarters. They migrate short distances to the periphery of the cities, making it easier for them to keep contact with the traditional way of life at the place of origin. Therefore, there appear to be no significant barriers to migration of the Qashqa'i to urban areas. Many Qashqa'i maintain social, economic, and cultural activities at their place of origin while they live at the place of destination.

In this research, Lee's theory was taken as a general approach on which the conceptual framework could be based. Nevertheless, local application of Lee's approach needed readjustment and retailoring in order to include local variations of socio-cultural factors. As discussed in section 7.4 (p.156), the Qashqa'i migration process was more social than economic in nature. For instance, many Qashqa'i wanted to alter their lifestyle from pastoral nomadism to sedenterized mode of production which required them to migrate. However, social and cultural factors and kin influences altered individual desires, decisions and migration. These issues must be taken into consideration for local applications.

### 10.3 A Critique of Public Migration Policy in Iran

To comment on the public migration policy in Iran, we need to be familiar with the main forms of policy approaches and their impact on population movements in developing countries (see Table 10.1).

Table 10.1: A Typology of Migration Policy Approaches

<i>Policy approaches</i>	<i>Rationale</i>	<i>Type of policies and programmes</i>
<b>Negative</b>	Emphasizes the undesirability of migration and seeks to erect barriers to population movement and to forcibly 'deport' migrants	Closed city; pass laws; deportation of beggars, the homeless and those in marginal occupations; bull-dozing of squatter settlement in urban and rural areas; sedentarization of nomads; employment controls; restricted access to housing.
<b>Accommodative</b>	Accepts migration as inevitable, and seeks to minimize the negative effects in both places of origin and destination	Slum up-grading; improving sites and services; urban job creation; labour-intensive industrialization; urban skills training; urban infrastructural investment; improved social welfare; improvements in transportation.
<b>Manipulative</b>	Accepts migration as inevitable and even desirable in some cases but seeks to redirect migration flows towards alternate destinations	Colonization; land settlement; land development; polarization reversal; growth poles; urban, industrial and administrative decentralization; information systems.
<b>Preventive</b>	Rather than dealing with the symptoms of migration, attempts to confront the root causes by tackling poverty, inequality and unemployment at source, and reducing the attractiveness of urban areas to potential migrants.	Land reform; agricultural intensification; agricultural extension; rural infrastructural investment; rural industrialization; rural job creation; improving rural-urban terms of trade; reducing urban bias; increased emphasis on 'bottom-up' planning; propaganda in favour of the rural sector.

Source : Parnwell, M., (1993). *Population Movement and the Third World*, p. 131.

During the regime of the late Shah, there was no clear migration policy in Iran. Most of the national government's plans were concerned with the Persianization of various ethnic groups in Iran by nomadic education. Much of the revenue from petroleum production was spent on rapid industrialization projects in urban areas, while the decision-makers ignored the development of rural and nomadic regions (Katouzian, 1978). This policy bias encouraged large-scale migration of rural and nomadic populations to urban centres but failed to equip nomadic and rural people with the life-skills to live in cities. This uneven regional planning led to the creation of poor neighbourhoods, and shanty towns around large Iranian cities. In the early 1980's, the revolutionary domestic situation doubled the impact of migration on urban areas as both nomads and rural people suffered in an uncertain policy environment. During the later part of the 1980's, the Islamic government had a hard time accommodating migration from rural areas and nomadic regions, as well as the population displaced as a result of the Iraq-Iran war.

In general, this non-systematic policy approach to migration has followed a kind of 'economic manipulation' logic (see Table 10.1). Economic development initiatives seem to occur independently from planned urban growth and social welfare provision. In other words, people respond to ad hoc planning, rather than planning taking place in light of sustained regional development. In the case of Iran, this kind of non-systematic policy has not been effective. Most government officials accept these shortcomings, and now seek to reduce inter-regional imbalance by promoting development in satellite towns around urban centres, as opposed to creating isolated "growth poles". The government also has recently afforded a high priority to the development of rural areas and hopes to reduce people's need to migrate by creating more and varied income-earning opportunities.

Despite these developments, the national government in Iran still does not have a clear policy on nomadic populations. Perhaps the best way to keep nomadic populations away from urban shanty towns is through the development of 'nomadic satellite towns' at the place of origin (either summer or winter quarters). These towns could combine traditional herding activities with some agricultural processing as a compromise between traditional and Persian lifestyles. In this way, the nomads could maintain their culture in their own urban settings and slowly adjust to new technologies and opportunities.

So far, policy-makers have been rather ineffective in terms of slowing the rate of migration in Iran. There are a number of reasons for this. First, policy-makers are often insufficiently aware of the full range of factors which influence migration decisions. Second, policies have often focused on 'single variable solutions' such as improving urban housing, or creating rural jobs when, as we have seen, migration occurs in response to a complex variety of factors and stimuli. Third, migration-specific policies have generally been implemented against a backdrop of broader development programmes which continue to emphasize rapid economic growth which is predominantly city- and industry- focused (Parnwell, 1993). This in turn is having the effect of heightening the conditions of uneven development which causes a considerable volume of movement. Finally, effective policy development and implementation demands appropriate financial and human resources to run programmes. In the case of Iran, the existing resources committed to migrants are not sufficient. Furthermore, external factors such as war, imbalances in international trade and uneven market forces (domestic and international) interfere with consistent policy development.

#### **10.4 Comments on Approach - Strengths and Limitations**

Every research project has its inherent strengths, and limitations. One of the strong points in this study is the familiarity of the researcher with the geographic, social, and cultural situation of the nomadic populations studied. This cultural and linguistic affinity facilitated a quality of research that would otherwise have been difficult or impossible to obtain. In addition, both qualitative and quantitative data were used to generate a balanced picture of nomadic migration behaviour. In the past, the emphasis on migration in Iran has been more qualitative and ethnographic. This research contributed to migration study by incorporating a specifically geographic view of both space and place by comparing points of origin and destination.

A possible limitation of this research related principally to insufficient statistics and data. Another problem was the limitation of time that for field work. Finally, it would have been preferable to verify or test initial findings in a second field study, but the cost of traveling from Ottawa to Iran prevented this.

#### **10.5 Areas for Further Research**

Many aspects of nomadic migration in developing countries in general, and Iran in particular, require further investigation. To begin with, we must better understand appropriate measures to slow rates of nomad or rural-urban migration in the interests of national development. How can regional inequities be reduced as a key part of this solution?

Secondly, little is understood about the impact of out-migration on rural areas. What happens to the population at the point of origin when large portions of Qashqa'i leave? How does it affect the local economy and culture?

The migrants' behaviour in the new environment also deserves substantial attention. Research is needed to determine how nomadic migrants make new friends, find jobs, and create opportunities in their new environment. The complex process that migrants follow in new urban settings is poorly understood.

It must also be admitted that research on the migration of rural and nomadic people is gender-biased, focussing mainly on men as agents of change and decision making. Many sample surveys in developing countries are geared towards the 'head of the household', who is normally male. Hence, detailed information on nomadic women is lacking as their mobility tends to be seen as being dependent on that of men. Women are still often considered as being essentially followers, joining their husbands, brothers, or fathers once the important initial migration has been made. It would be very interesting to do detailed research on those Qashqa'i women who have migrated individually. Also, it would be useful to know how the lives of women have changed once cultural traditions adapt to urban lifestyles. For example, the intra-household dynamics of resource use and control might change in urban settings given that income is derived from different sources. This in turn may have an impact on gender roles and relations.

To conclude this study, I believe that this dissertation has contributed to our understanding of nomadic migration to urban areas in the Middle East, particularly in Iran. In terms of a contribution to existing studies on migration, this research represents one of the first comprehensive, model-based studies designed to improve our statistical understanding of nomadic behaviour. While much has been written from an anthropological or ethno-cultural point of view, little has been done in geography which seeks to explain migration in terms of combined spatial, cultural and economic factors. This research is intended to make an initial effort at addressing that gap. The research

results should also contribute to improved planning efforts designed to cope with migration issues in Iran.

## Bibliography

- Ackoff, Russel I., 1979. The Design of Social Research, The University of Chicago Press, Chicago & London, pp. 90-92.
- Afshar - Sistani, Iraj., 1986. Shenakht-e-Ilat, Vol.1 & 2., Homa Publisher, Tehran.
- Aghajanian, Akbar., et al, 1985. "Research on social problems of marginality", Population Centre, University of Shiraz, Iran. P. 18.
- Ansari, S., 1983. The Impact of the Regional Development Incentives Act Programme in Selected Slow Growth Areas of Canada -An Analysis of Industrial Structural Change and Employment Growth: 1961-1978, a Ph.D thesis, Department of geography, University of Ottawa.
- Bahhady, Faik A., 1981. "Recent changes in Bedouin systems of livestock production in the Syrian steppe", in The Future of the Pastoral Peoples, IDRC-175e, 1981, p. 258.
- Balan, J., et al, 1973. Men in Developing Society: geographic and Social Mobility in Monterrey, Mexico, Austin, Texas, The University of Texas Press.
- Barth, Fredrik., 1961. Nomads of South Persia, the Basseri tribe of the Khamseh confederacy. Little, Brown and Company, Boston.
- Barber, Gerald M., 1988. Elementary Statistics for Geographers, The Guildford Press, New York, London, pp. 202-207.
- Bates, Daniel G. & Plog Fred, 1980. "Yuruk Settlement in Southeast Turkey" in Salzman, Philip C., When Nomads Settle : Processes of Sedentarization as Adaptation and Response, Praeger Special Studies, p. 124.
- Bates, Daniel G. & Plog Fred, 1991. Human Adaptive Strategies, McGraw-Hill, INC.
- Beck, Lois., 1980. "Tribe and state in revolutionary Iran: The Return of the Qashqa'i Khans", in Iranian Studies, Vol. XIII, Nos. 1-4:215-255.
- Beck, Lois., 1981. "Government policy and pastoral land use in southwest Iran", in Journal of Arid Environments, No.4: 253-267.
- Beck, Lois., 1986. The Qashqa'i of Iran, Yale University Press, pp. 6-10.

- Bennett, D. G. & Gade, O., 1979. Geographical Perspectives in Migration Research: A Bibliographical Survey, Chapel hill, university of North Carolina, Studies in Geography No. 12.
- Bernard, Augustin & N. Lacroix, 1906. L' évolution du nomadisme, en Algérie. Alger. A. Jourdan.
- Bilsborrow, R., et al. 1984. Migration Survey in Low-Income Countries: Guidelines for Survey and Questionnaire Design. Croom Helm, London.
- Bilsborrow, R., 1976. Population in Development Planning: Background and Bibliography. Chapel Hill, North Carolina, Carolina Population Centre and Department Biostatistics.
- Bogue, D. J., 1959. "Internal Migration", in Hauser P. M. & Duncan, O. D., eds., The Study of population : An inventory and appraisal, University of Chicago Press, Chicago : 486-509.
- Bogue, D. J., 1969. Principles of Demography. Wiley, New York : 735.
- Brown, L. A., 1970. Migration Flows in Intra-Urban space: Place utility Considerations. Iowa City, University of Iowa, department of Geography.
- Butera Bazimya, P., 1993. The Role of Geographic Factors in Development Initiatives: Lake Victoria Region of Uganda. M.A. Thesis, Department of Geography, University of Ottawa.
- Byerlee, D., 1974. "Rural-urban migration in Africa: Theory, policy, and research implications", International Migration review, Vol. 8, No. 3, pp. 543-566.
- Cameron, N., 1995. Defining and Measuring the Spatial Dimension of Accessibility. M.A. Thesis, Department of Geography, University of Ottawa.
- Capot-rey, Robert., 1953. Le Sahara Français. Paris, Presses Universitaires de France.
- Castello, M. A., 1987. "Slum and squatter areas as entrepots for rural-urban migration in less developed society", in Social Forces, 66(2) : 427-45.
- Cebula, R. J., 1979. The Determinants of Human Migration, Lexington, Mass., and Toronto, Lexington Books, D. C. Heath and Co.
- Clark, W. A. V., 1986. Human Migration, Department of Geography University of California, Los Angeles, Sage publications, Beverly hills, London , New Delhi.
- Clark, W. A. V., & Hosking, P. L., 1986. Statistical Methods for Geographers. John Wiley & Sons, pp. 448-50.

- Clarke, J. I., & Fisher, W. B., eds., 1972. Population of the Middle East and north Africa: A geographical approach. University of London Press, London.
- Cole, D. Powell., 1975. Nomads of the Nomads. Aldine Publishing Company, Chicago, p. 22).
- Courgeau, D., 1976. "Quantitative, demographic and geographic aspects of internal migration", Environment and Planning. Vol. 8, No. 2, pp. 261-269.
- Da Vanzo, j., 1981. "Microeconomic approaches to studying migration decisions", in DeJong and Gardner, op. cit., pp. 90-129.
- Danesh, Abol Hassan., 1987. Rural Exodus & Squatter Settlements in the third world : case of Iran, University Press America, new York. pp. 1-5.
- Daniel, Bradburd., 1987. "Tribe, state, and history in southwest Asia: A review", in Salzman Philip C., eds., Nomadic People, No.23:57-71.
- Das Gupta, B., et al., 1977. Village Society and Labour Use Delhi, Oxford University Press.
- De Blij, H. J., 1993. Human Geography Culture, society, and space, John Wiley & Sons, INC., p.219.
- De Castro Iopo, L. A., 1975. "Theory of internal migration: A review", Geography, Vol. 5, Newcastle, New South Wales, University of Newcastle Research Papers.
- De Jong, G. F. & Gardner, R. W., (eds.), 1981. Migration Decision Making: Multidisciplinary Approaches to Micro-level Studies in Developed and Developing Countries, New York, Pergamon Press.
- Denis, Pierre., 1989. Les Derniers Nomades, L' Harmattan, Paris.
- Despois, Jean., 1949. L' Afrique du Nord, Paris, Presses Universitaires de France.
- Douglas, William O., 1951. Strange Lands and Friendly People, New York : Harper.,pp.133-159.
- Ebdone, Divid., 1985. Statistics in Geography , Basil Blackwell, p. 34-36.
- Elizaga, J. C., 1972. "Internal migration: an overview", International Migration Review, Vol, 6, No. 2, pp. 121-146.
- Engels, Frederick., 1978. "The origin of the family", in Leacock, B. E., ed., Private Property and the State, International Publishers, New York.

- Fasa'i, H., 1895-96a. Farsname-ye-Naseri. Vol. 1 & 2.(Text in Farsi). Sanai Publishers, Tehran.
- Fellmann. et al., 1995. Chapters in Geography, Carleton university, Wm.C. Brown Publishers, P. 7.
- Findley, S. E., 1977. Planning for Internal Migration: A Review of Issues and Policies in Developing Countries, Washington, DC, US Department of Commerce, Bureau of the Census.
- Flinn, W. L., and Converse, J. W., 1970. "Eight assumption concerning rural-urban migration in Colombia: a three-shanty towns test". Land Economic 46, pp.456-466.
- Forcese, D. & Richer, S., 1973. Social research Methods, Prentice-Hall, INC., Englewood Cliffs, New Jersey, p. 142.
- Frey, William H., 1992. "Metropolitan migration in developed countries: a cross-national data base, in Goldscheider, C. (ed.), Migration, Population Structure, and redistribution Policies, West view Press, Boulder, San Francisco, oxford, P.20.
- Galaty, John G., et al, eds., 1981. The Future of Pastoral People: Proceedings a conference held in Nairobi, Kenya, 4-6 August, 1980., Commission on nomadic people, c/o Department of Anthropology, Mc Gill University, Montreal, Canada, IDRC-175e.
- Galaty John G. & Salzman Philip C., eds., 1981. Change and Development in Nomadic and Pastoral Societies, E. J. Brill-Leiden.
- Galaty, John G. And Johnson Douglas L.,eds., 1990. The World of Pastoralism Herding System in Comparative Perspective, The Guildford Press, New York, London.
- Gaude, J., 1976. Causes and Repercussions of rural Migration in Developing Countries: A Critical Analysis, Geneva, ILO.: World Employment Programme research working paper, restricted.
- Gaur, R. S., and Nepal, G. S., 1962. "Causes and consequences of rural emigration in East Uttar Peradesh", Journal of social Research India, 1, p. 143-154.
- Gharakhalou, Mehdi., 1989. The Geographical Problems of Qashqa'i Confederacy : Dareshuri tribe, M. A. Dissertation, University of Tehran, Tehran.
- Goldscheider, Calvin., 1984. "The Tehran, Iran migration study : Background", in Goldscheider, c., ed., Urban Migrants in Developing Nations, patterns and Problems of adjustment, West view Press.

- Geography 5906 (Geographic Data Analyses), Winter 1992, University of Ottawa, Geography Department (Lecturer: Andre Langlois).
- Goodall, Brian., 1987. The Penguin Dictionary of Human Geography. Penguin Books.
- Greenwood, M. J., 1975. "Research on internal migration in the United states: A survey". The Journal of Economic Literature. Vol. 13, No. 2, pp. 397-433.
- Griffin, K., 1976. Land Concentration and rural Poverty. London, Macmillian.
- Griffin Ernest C.&Williams Lyndens., 1979. "Social implications of changing population patterns: the case of rural depopulation in Colombia", (ed.) By Thomas & Hunter in Internal migration Systems in the developing world. P.20
- Hagerstrand, T., 1957. "Migration and Area", in D. Hannerberg et al. (eds). Migration in Sweden. Lund Studies in Geography, Series B, Human Geography, No.13.
- Haggett, P., Cliff, A. D. & Frey, A., 1977. Locational Analysis in Human Geography. Second Edition, Edward Arnold, London.
- Halliday, F., 1979. Iran: Dictatorship and Development. New York: Penguin Books.
- Halperin, W. C., Richardson, G. D., Gale, N. D. & Costanzo, C. M., 1984. "A generalized procedure for comparing models of spatial choice", Environment and Planning A. 16, 1289-1301.
- Harvey, D., 1967. "Models of the evolution of spatial patterns in human geography", Chapter 14, in Chorley & Haggett 1967.
- Harris, J. & Todaro, M. P., 1970. "Migration unemployment and development: a two-sector analysis", The American Economic Review, 60, pp. 126-142.
- Hemmasi, M., 1971. The Determinants of Inter-provincial and Urban In-Migration in Iran. Unpublished Ph.D Dissertation, Indiana University.
- Hocking, J. A. & Thomson, N. R., 1981. Migration and Urbanisation in west Africa, Moray House, Edinburgh.
- Hubert, L. J. & Golledge, R. G., 1981. "A heuristic method for the comparison of related structures", Journal of Mathematical Psychology, 23, 214-26.

- Hubert, L. J., Golledge, R. G. & Costanzo, C. M., 1981. "Generalized procedures for evaluating spatial autocorrelation". Geographical Analysis, 13, 224-33.
- Hunt Chester L. & Walker, Lewis., 1974. Ethnic Dynamics: Patterns of Intergroup Relations in Various Societies. The Dorsey Press, Homewood, Illinois, p. 10-15.
- International Labour Office (ILO), 1976. Employment, Growth and Basic Needs: A One World Problem. Geneva.
- International Development Research Centre (IDRC), 1977. Social Change and Internal Migration: A Review of Research findings from Africa, Asia, and Latin America. Ottawa, International Development Research Centre.
- Iran Statistical Centre., 1992. Year Books. Tehran.
- Iran Statistical Centre., 1986. Census Books. Tehran.
- Jacob, Black- Michaud., 1986. Sheep and Land: The economics of power in a tribal society. Cambridge University Press. Cambridge.
- Javan, J., 1988. Population of Iran and Spatial Setting. Ferdowsi University Press : 42.
- Johnson, Douglas L., 1969. The Nature of Nomadism: A comparative study of pastoral migrations in southwestern Asia and northern Africa. Department of Geography, University of Chicago.
- Johnston, R. J. et al, eds., 1986. The Dictionary of Human Geography. Blackwell Reference.
- Katouzian, M., 1978. "Oil versus agriculture: A case of dual resource depletion in Iran", in Journal of Peasant Studies, Vol. 5 : 347-369.
- Kay, Shirley, 1978. The Bedouin , Crane, Russak & Company Inc. New York, pp.142-145.
- Kazemi, Farhad., 1980. Poverty and Revolution in Iran : the migrant poor, urban marginality and politics, New York University Press, New York and London.
- Khazanov, A. M., 1984. Nomads and the Outside World, Translated by Crookenden, Julia, Cambridge University press, Cambridge : 15-32.
- Khogali, M.M., 1981. "Sedentarization of the Nomads: Sudan", in The Future of the Pastoral Peoples, IDRC-175e, 1981, p. 302).
- Khurmuji, Hajji Mohammad Ja'far Khan., 1859. Fars Nameh, Lithograph. Tehran.

- Kosinski, L. A. & Kawabe, H. eds., 1975. People on the Move: Studies in Internal migration. London, Methuen and Co.
- Kroeber, A. L., 1947. "Culture groupings in Asia", SJA. Vol. 3. No. 4: 322-330. 1984. Anthropology, New York, Haecourt Brace.
- Kulldorf, G., 1955. "Migration probabilities", Lund Studies in Geography, No. 14, Lund University, Sweden.
- Kuznets, S. et al, 1960. Population Redistribution and Economic Growth. United States, 1870-1950, Vol. II. Philadelphia, American Philosophical Society.
- Lambton, A., 1969. The Persian Land Reform 1962-66. Oxford : Clarendon Press.
- Larry, O' Brien., 1992. Introducing Quantitative Geography. Landon & New York. P. 278.
- Lee, E. S., 1966. "A theory of migration", in Demography, No. 3: 47-57.
- Lee, M. G., 1970. Pushing or pulling? Seoul, Seoul National University, College of Liberal Arts, Department of Sociology. (mimeo).
- Lewis, Norman, N., 1987. Nomads and Settlers in Syria and Jordan, 1800-1980, Cambridge University Press, Cambridge, p.187).
- Lewis, G. J., 1982. Human Migration : A geographical perspective, St. Martin's Press., New York.
- Lipton, M., 1977. Why Poor People Stay Poor: A Study of Urban Bias in World Development. London, Temple Smith.
- Lounsbury, J. F. & Aldrich, F. T., 1979. Introduction to Geographic Field Methods and Techniques, Charles E. Merrill Publishing Company, Toronto, pp. 85-105.
- Mabogunje, A. L., 1970. "Systems approach to a theory of rural-urban migration", Geographical Analysis, Vol. 2, No. 1, pp. 1-18.
- Markov, G. E., 1961. Kochevniki Azii: Nomads of Asia. Unpublished Doctoral Dissertation, Moscow.
- Marsden D. J., 1978. "The Qashqa'i tribe and tribal identity", in Occasional Papers and Monographs Series, No.6, University College of Swansea.
- Marx, Emmanuel., 1977. "The tribe as a unit of subsistence: Nomadic pastoralism in the Near East". AA., Vol.79. No.2: 343-363.

- Mohtadi, H., 1986. "Rural stratification, rural to urban migration, and urban inequality : Evidence from Iran", in World Development, Vol.14:713-25.
- Mohtadi, H., 1990. "Rural inequality and rural-push versus urban-pull migration : the case of Iran, 1956-1976., in World development , 18 (6) : 837-844.
- Mohtadi, H., 1982. Internal Migration and urban inequality : An econometric analysis of the Iranian development experience, Ph.D Dissertation, Ann Arbor, Mi : University of Michigan.
- Murdock, George P & Wilson, Susanf, 1972. "Settlement patterns and community organization": cross-cultural codes 3. Ethnology, Vol. XI. No 3:254-95.
- Nagel's Encyclopaedia -Guide, Iran, 1974. Nagel Publisher, Geneva, Switzerland, p.24.
- Oberling, P., 1974. The Qashqali Nomads of Fars., Mouton., The Hague., Paris, pp. 33-35.
- Ogden, Philipe., 1984. Migration and Geographical Change, Queen Mary College, University of London, Cambridge University Press. p.52.
- Olsson, 1970. "Explanation, prediction, and meaning variance: An Assessment of Distance Interaction Models", Economoc Geography, 46, p. 223-233.
- Ozyurekli, O., 1970. "Gecekondü settlements in the metropolitan areas of Turkey. Seminar paper, Storrs, Connecticut, University of Connecticut.
- Parnwell, Mike., 1993. Population Movements and the Third World., London and New York.
- Paydarfar, Ali A., 1974. Social Change in a Southern Province of Iran : A comparative analysis of social, cultural, and demographic characteristics of the tribal, rural, and urban populations of Fars Ostan, Institute for Research in social Science, University of North Carolina at Chapel hill.
- Peek, P., 1981. "Agrarian change and rural emigration in Latin America", in J. Balan (ed.), Why People Move, op. cit., pp.59-70.
- Peters, G. L. & Larkin, R. P., 1993. Population Geography: Problems, Concepts, and Prospects, Kendall / Hunt Publishing Company, pp. 217-220.
- Phillips, D. G., 1959. "Rural to urban migration in Iraq", Economic Development and Cultural Change 7(4), pp. 405-421.

- Plan & Budget Organization.**, 1990. Collection of Economic and Social Articles: The Social and economic Characteristics of the Nomad Settlement in Fars Province. Plan & Budget Organization of Fars Province, Shiraz, Iran (Text in Farsi).
- Plan & Budget Organization.**, 1993. Economic and Social Status of Fars province: The Tendency to Nomadism by Nomads of Fars. South Informatics Development Centre (SIDC), Shiraz, Iran (Text in Farsi).
- Rashid Ibrahim, A.**, 1965. "The influence of industrialization on culture in developing countries" In Robinson, Ronald Industrialization in Developing Countries. Cambridge University Overseas Studies Committee, 1965, p. 187.
- Ravenstein, E. G.**, 1885;1889. "The laws of migration", Journal of the Royal Statistical Society, 48 (1885), 167-237; and 52 (1889), 241-305.
- Ritchey, P. N.**, 1976. "Explanations of migrants", Annual Review of sociology, Vol. 2, pp. 363-404.
- Rohani, F.**, 1992. The Black Tents, a Socio-economic Study of the Qashqais. (Text in Farsi), Jahan Book co.& Arash Publications, Stockholm : 23-29.
- Ronald Skeldon**, 1990. Population mobility in Developing Countries: A Reinterpretation, Belhaven press, London and New York.
- Roseman, C. C.**, 1971. "Migration as a spatial and temporal process", Annals Association of American Geographers. 61, pp. 589-98.
- Safinejad, J.** 1989. A Collection of Articles in Geography, No.4, Compiled and edited by Yazdi, M. H., Islamic Research Foundation of Asian Quads Razavi: Department of Geography, p.64.
- Shafaghi, Sirus.**, 1976. "Il-e-Qashqa'i", In the Journal of Faculty of Humanities, Congress of Iranian Geographers, Tehran, University Press., Tehran, pp.255-265.
- Shaw, R. P.**, 1975. Migration Theory and Fact : A review and bibliography of current literature., Regional Science Research Institute, Bibliography series No. 5.
- Simonsen, P.**, 1972. " The transition from food-gathering to pastoralism in North Scandinavia and its impact on settlement patterns", in Man, Settlement, and Urbanism, ed., by Peter J. Ucko, Ruth Tyingham and G. W. Dimbleby, London, Duckworth: 187-92.
- Simmons, J.**, 1968. "Changing residence in the city: a review of intra-urban mobility", Geographical Review, 58, pp.621-51.

- Sjaastad, L. A., 1962. "The costs and returns of human migration", Journal of Political Economy, 70 (part 2), pp. 80-93.
- Sorre, Max., 1950. Les fondements de la géographie humaine, Vol. II. Partie 2. Paris, Librairie Armand.
- Sous la., eds., 1979. Pastoral Production and Society. Cambridge University Press, Cambridge, London, New York.
- Stark, O., 1979. "Technological Change and Rural-to-Urban Migration of Labour: A Micro-economic Causal Relationship in the Context of Less Developed Economics" IUSSP Papers, No. 11, Liege, Belgium, IUSSP.
- Stea, D., 1980. Psychosocial Studies of Nomads and Squatters.. School of Architecture and Urban planning., University of California, Los Angeles.
- Stoddard, R. H., 1982. Field Techniques and Research Methods in Geography. Dubuque, Iowa, Kendall/Hunt Publishing Company, p. 75-80.
- Swidler, Nina., 1980. "Sedentarization and modes of economic integration in the Middle East", in Salzman, Philip C., ed., When Nomads Settle : processes of sedentarization as adaptation and response, Mc Gill University, J. F. Bergin Publishers, Inc. pp. 30-31.
- Talebi-Bahmanbeglo, A., 1993. "Socio-cultural Characteristics of the Qashqa'i ", in Bulletin Iranian- American Cultural Society of Maryland, Vol.18. No. 4:18-23.
- Tapper, Richard., 1979. Pasture and Politics : Economics, conflict and ritual among Shah sevan nomads of northwestern Iran, London : Academic Press.
- Taqdisi, Ahmad., 1992. The Role of Nomads in Development of Shahreza (Text in Farsi), M. A. Dissertation, Esfahan University.
- Todaro, M. P., 1976. Internal Migration in Developing Countries, International Labour Office, Geneva.
- Todaro, M. P., 1969. 'A model of labour migration and urban unemployment in less developed countries" in American Economic review, Vol. 59.
- United Nations, 1973. The Determinants and Consequences of Population Trends: New Summary of findings on Interaction of Demographic, Economic and Social Factors, New York, Population Studies, No. 50, Vols. I and II.

- Vajnshtein S. I., 1978. "The problem of origin and formation of the economic-cultural type of pastoral nomads in the moderate belt of Eurasia", in Weissleder, Wolfgang, ed., The Nomadic Alternative: modes and models of interaction in the African - Asian deserts and steppes, Mouton Publishers, The Hague, Paris., pp.127-133.
- Varlet, Henri & Massoumian, Jessik., 1975. "Education for tribal populations in Iran", in UNESCO's Prospects, Vol. V, No.2.
- Walizer, M. H. & Wienir, P. L., 1978. Research Methods and Analysis Searching for Relationships, Harper & Row Publishers, New York, pp. 265-67.
- Walsh, Anthony., 1990. Statistics for the Social Sciences With Computer Applications, Harper & Row Publishers, New York, pp. 79-81.
- Weeks, John R., 1989. Population an Introduction to Concepts and Issues, San Diego State University, Wardsworth Publishing Company, Belmont, California.
- White, J. W., eds., 1979. The Urban Impact of Internal Migration, Chapel Hill, University of north Carolina, Institute for research in Social Science, Comparative urban Studies Project, Monograph, No. 5.
- Whitworth Art Gallery., 1976. The Qashqa'i of Iran, World of Islam Festival. University of Manchester, Manchester.
- William F. Hornby & Melvyn Jones., 1993. An Introduction to Population Geography, Cambridge, p.105.
- Wrigley, Nell., 1985. Categorical Data Analysis for Geographers and Environmental Scientists. Long man, London and New York, P. 1-8.
- Yap, L. Y., 1977. "The Attraction of cities: A review of the migration literature", Journal of Development Economics, Vol. 4, No. 3, pp. 239-264.
- Zagarell, H. A., 1978. The Role of Highland Pastoralism in the Development of Iranian Civilization, Ph.D Dissertation, Berlin.

## Appendix A

## QUESTIONNAIRE (Destination)

## PERSONAL DATA (Head of the Family)

1. Which city are you living now? 1. Shahreza 2. Shiraz 3. Firuzabad 4. Farrashband  
5. Kazerun 6. Qaemieh (Chenar-Shahijan)
2. What tribe do you belong to? 1. Dareshuri 2. Sheshbluki 3. Amaleh 4. Farsimadan  
5. Kashkuli- Bozorg 6. Kashkuli-Kochek
3. Is this person male or female? 1. Male 2. Female
4. Which province were you born in? 1. Province....
5. How old are you? .....
6. Are you married? 1. Yes 2. No
7. How many children do you have? .....
8. What is the total number of your family members living together? .....
9. Have you ever been to school? 1. Yes 2. No
10. Level of education? 1. Illiterate 2. Read and write 3. Elementary school 4. Guidance school 5. High school 6. Teacher's College 7. University degree
11. Has your spouse ever been to school? 1. Yes 2. No
12. Level of education of your spouse? 1. Illiterate 2. Read and write 3. Elementary school  
4. Guidance school 5. High school 6. Teacher's College 7. University degree
13. Have your children been to school? (Note the number of children for each degree) 1. Illiterate numbers..... 2. Read and write numbers..... 3. Elementary school numbers..... 4. Guidance school numbers..... 5. High school numbers..... 6. Teacher's College numbers.....  
7. University degree numbers.....
14. What is the source of your income? 1. Livestock 2. Agriculture 3. Wage labour 4. Salary payment  
5. Carpet - making 6. Small business 7. Other (specify)
15. What is your net annual family income? 1. Less than \$700(1,000,000 rails) 2. From \$701 to 1500(1,000,000 to 2,000,000 rails) 3. From \$1501 to 3500 (2,000,000 to 5,000,000 rails) 4. More than \$3501 (5,000,000 rails)

## MIGRATION BEHAVIOUR

16. Where was your place of origin? 1. City 2. Nomadic village 3. Nomadic tent
17. How did you get information on migration? 1. Newspaper 2. Radio 3. Friends 4. Visits to the cities  
5. Other (specify)
18. How far is your place of origin from here? .....
19. How long have you been here? .....
20. What are your reasons for migration? 1. Land reform 2. Pasture nationalization 3. Drought 4. Epidemic (Illness) 5. Poverty 6. Population growth 7. Pasture degradation 8. Limitation of farmland 9. Restriction of traditional migratory route by rural or urban inhabitants 10. Limitation of pastures by government agencies 11. Education of nomads 12. Hardship of climate 13. Hardship of nomadic life 14. Less income 15. Less viable jobs 16. Discriminatory treatment of Khan/kadkhoda 17. Discriminatory treatment by Government officials 18. Mechanization of Land  
19. Other(specify)

21. What are your reasons for the choice of destination? 1. Closeness to origin 2. Better job 3. Better housing conditions 4. Higher income 5. Family ties 6. Better facilities 7. Supplementary benefits 8. Secondary activity 9. Accessibility to informal jobs 10. Accessibility to information 11. Accessibility to education 12. Accessibility to health services 13. Comfortable living
22. Generally, are you satisfied here? 1. Yes 2. No

### SOCIO-CULTURAL BEHAVIOUR

23. How many languages do you speak? 1. Turkish 2. Farsi 3. Both
24. Language spoken at home? 1. Turkish 2. Farsi 3. Both
25. " " " " work? 1. Turkish 2. Farsi 3. Both
26. " " " " school? 1. Turkish 2. Farsi 3. Both
27. What kind of clothes do you or your family wear? 1. Traditional Qashqa'i clothes 2. Persian clothes 3. Both
28. What kind of music do you like? 1. Qashqa'i music 2. Persian music 3. Both
29. What is your main food? 1. Traditional Qashqa'i food 2. Persian food 3. Both
30. How do you spend your free time? 1. Listening to Radio 2. Watching T.V 3. Visiting relatives 4. Sport 5. Hunting 6. Hiking 7. Other (specify)

### DESCRIPTION OF THE ENVIRONMENT

31. Do you own a house, or rent? 1. Own 2. Rent 3. Other(specify)
32. How many rooms does your house have? .....
33. Do you live close to the Qashqa'i communities? 1. Close 2. Far 3. Close and centre of the city 4. Close and Periphery of the city
34. Do you have these commodities and services? 1. Piped water 2. Power 3. Phone 4. T.V. 5. Refrigerator 6. Car
35. Is your house close to these services? 1. School 2. Guidance school 3. High school 4. Health services 5. Transportation 6. Market

### VIEWS FOR THE FUTURE

36. Do you leave your present residence yearly? 1. Yes 2. No
37. If the answer for the previous question is yes, where do you go? 1. To the place of origin for cultivation 2. To the place of origin for livestock husbandry 3. To other cities for wage labour
38. For how long do you or your family leave this location? 1. Do not leave 2. Less than three months 2. Three months 4. Four months 5. Five months 6. Six months 7. More than six months
39. Are you planning to? 1. Stay here 3. Go to the place of origin 4. Use facilities of both places by dividing your family in the place of origin and destination
40. What is the main reason that caused you to return to your place of origin? 1. Low wages/income 2. No job available 3. Fear of losing land/pasture/other property 4. Do not like this place 5. For supplementary income 6. Others(specify)
41. How do you see the future of your community?
1. They are going to integrate and assimilate to urban community
  2. " " " to keep their culture by separation from urban community
  3. Some of them have already been assimilated to urban community
  4. Other (specify)

## Appendix B

### QUESTIONNAIRE (Origin)

#### PERSONAL DATA (Head of the Family)

1. What tribe do you belong to? 1. Dareshuri 2. Sheshbluki 3. Amaleh 4. Farsimadan  
5. Kashkuli-Bozorg 6. Kashkuli-Kochek
2. Is this person male or female? 1. Male 2. Female
3. Where were you born? (Note the name of location) 1. Province.... 2. Township.... 3. City....  
4. Nomadic village.... 5. Persian village.... 6. Nomadic tent ....
4. How old are you? .....
5. Are you married? 1. Yes 2. No
6. How many children do you have? .....
7. What is the total number of your family members living together? .....
8. Have you ever been to school? 1. Yes 2. No
9. Level of education? 1. Illiterate 2. Read and write 3. Elementary school 4. Guidance school  
5. High school 6. Teacher's College 7. University degree
10. Has your spouse ever been to school? 1. Yes 2. No
11. Level of education of your spouse? 1. Illiterate 2. Read and write 3. Elementary school  
4. Guidance school 5. High school 6. Teacher's College 7. University degree
12. Have your children been to school? (Note the number of children for each degree)  
1. Illiterates numbers..... 2. Read and write numbers..... 3. Elementary school numbers.....  
4. Guidance school numbers..... 5. High school numbers..... 6. Teacher's College numbers.....  
7. University degree numbers.....
13. What is the source of your income? 1. Livestock 2. Agriculture 3. Wage labour 4. Salaried  
employment 5. Carpet - making 6. Small business 7. Other (specify)
14. What is your net annual family income? 1. Less than \$700(1,000,000 rails) 2. From \$701 to  
1500 (1,000,000 to 2,000,000 rails) 3. From \$1501 to 3500 (2,000,000 to 5,000,000 rails)  
4. More than \$3501 (5,000,000 rails)

#### SOCIO-CULTURAL BEHAVIOUR

15. How many languages do you speak? 1. Turkish 2. Farsi 3. Both
16. Language spoken at home? 1. Turkish 2. Farsi 3. Both
17. " " " " work? 1. Turkish 2. Farsi 3. Both
18. " " " " school? 1. Turkish 2. Farsi 3. Both
19. What kind of clothes do you or your family wear? 1. Traditional Qashqa'i clothes 2. Persian clothes  
3. Both
20. What kind of music do you like? 1. Qashqa'i music 2. Persian music 3. Both
21. What is your main food? 1. Traditional Qashqa'i food 2. Persian food 3. Both
22. How do you spend your free time? 1. Listening to Radio 2. Watching T.V  
3. Visiting relatives 4. Sport 5. Hunting 6. Hiking 7. Other(specify)

**DESCRIPTION OF THE ENVIRONMENT**

23. Where is your present residence? 1. Nomadic village 2. Nomadic tent 3. Persian village
24. Do you own a house, or rent? 1. Own 2. Rent 3. Other(specify)
25. How many rooms does your house have? .....
26. Do you have access to these commodities and services? 1. Enough water 2. Power 3. Phone  
4. T.V. 5. Refrigerator 6. Car 7. Road
27. Is your house close to these services? 1. School 2. Guidance school 3. High school 4. Health services 5. Transportation 6. Market
28. How many hectares of farmland do you have? .....
29. How many sheep and goats do you own? .....
30. Do you intend to leave this location? 1. Yes 2. No
31. If you do not want to stay, why do you intend to leave this location? 1. To seek a better job  
2. To get education for children 3. To join family/relative  
4. Poor amenities here 5. Hardship of climate 6. Other (specify)

**VIEWS FOR THE FUTURE**

32. Do you leave your present residence yearly? 1. Yes 2. No
33. If the answer for the previous question is yes, where do you go? 1. To the summer or winter-quarters for cultivation 2. To the summer and winter-quarters for livestock husbandry  
3. To cities for wage labour 4. Other (specify)
34. During the year, how long do you or your family leave this location? 1. Not leave 2. Less than three months 3. Three months 4. Four months 5. Five months 6. Six months 7. More than six months
35. Are you planning to? 1. Stay here 2. Go to cities 3. Send your family to cities 4. Divide your family between the place of origin and destination
36. If you decide to go to the city what kind of city do you plan to live in? 1. A city close to the place of the origin 2. A city close to your relatives 3. A city to find a job easily 4. A city with more facilities 5. Other (specify)
37. How do you see the future of your community?  
1. They are going to migrate to urban areas for wage labour  
2. " " " to keep their traditional migration for livestock husbandry  
3. " " " to stay in nomadic village for cultivation  
4. " " " to stay in urban areas and to keep their livestock and cultivation at the place of origin  
5. Other (specify)

## Appendix C

### Pilot-test During the Fieldwork

A pilot sample/pretest is an extended test of data collection procedures used prior to the main data collection.

During this fieldwork fifty questionnaires were prepared to conduct a pretest in Esfahan province. Thirty were conducted among the Qashqa'i tribes people who are in the cities at the places of destination. Twenty were conducted among those who lived in Vardasht-E-Semirom at the places of origin.

The purpose of the pretest was to minimize some difficulties and obstacles one may face during the fieldwork.

- a) I wanted to see the validity of our 'closed answers' assigned to the questions;
- b) it was intended to reduce refusals to the questionnaires if any;
- c) other points considered were to check incomplete questions, questionnaire wording, sequences, and translation;
- d) yet another point was to see the interviewers at work while acting with people.

To conduct the pretest, the trainers were divided into two groups. One group was sent to the place of the destination (Esfahan) with thirty questionnaires. Simultaneously, another group with twenty questionnaires was sent to the place of origin, Vardasht-E-Semirom. The pilot-tests for both places were held in two days. The interviewers were trained to be flexible to the respondents, however, due to population's culture usually the head of the household responded.

During this pre-test, it was learned that some people hesitated to answer fully. For instance, there were three cases of unwillingness in total (one at the place of origin and two at the place of destination) to answer the questionnaires in public. The respondents claimed to be uncomfortable to give information out in public, perhaps for political reasons.

When the pretest was completed, the results of the test were discussed in a meeting with the interviewers. The group came up with the following conclusions:

1. Some correction should be made to reduce repetitions, and some questions had to be omitted (see p.102 & 103).
2. Each interviewer should state the purpose of the research by having a brief introduction at the beginning of each interview in the local language in order to develop a mutual trust.
3. An important observation was that interviews in private were preferred, leaving no chance for refusal.
4. Some changes in wording made the questions more focused.
5. The feedback from the respondents expressed by the interviewers unanimously suggested that the respondents were more focused and comfortable with 'closed answers' questions. Therefore, the pretest helped us to correct the questionnaires, and to use the foregoing guideline to conduct the questionnaires right after the results of pilot-test.

## Appendix D

### The Systematic Sampling

Systematic Sampling is actually a variation of simple random sampling. Considering the time and the cost, this is easier to perform. This kind of sampling system is also good for homogeneous populations like nomads. Therefore, systematic sampling was a good technique to apply to the case at hand.

To start with, one of our sampling places was Shahreza at the place of destination, which contained eight Qashqa'i neighborhoods. Two neighborhoods were chosen randomly from eight Qashqa'i neighborhoods. The names of these two neighborhoods were Islamabad and Taleqani. We wanted to chose 110 households from 660 households in these two neighborhoods.

First we got the number of households from Islamic Councils in the chosen neighborhoods (660 households). Then six hundred sixty were divided by 110 ( $660/110=6$ ). This meant that one of every six could be chosen. Following this method, we were able to list the number of households in six rows such as the following:

1	7	13	19	25	.. ..	637	643	649	655
2	8	14	20	26	.. ..	638	644	650	656
3	9	15	21	27	.. ..	639	645	651	657
4	10	16	22	28	.. ..	640	646	652	658
5	11	17	23	29	.. ..	641	647	653	659
6	12	18	24	30	.. ..	642	648	654	660

To choose the first number, we drew a single random number among 1, 2, 3, 4, 5, and 6. In this way, the other 109 samples were chosen systematically. Our single random number in the above table was 4. Therefore, the numbers located in the fourth row were chosen as the whole samples. When all numbers were picked, we matched the name of households with the chosen numbers.

To interview the chosen households, we collected their addresses based on the name of the head of the households. The addresses were easily located in those neighborhoods by the interviewers because nomadic communities usually know each other very well.

Since the interviewers were natives, the interviewees were Qashqa'i themselves, and the interviews were done in private, we found no refusal to the questionnaires during the fieldwork. Other questionnaires for other sampled population were carried out in the same way (see Figure 6.1 and 6.2 for other sampled places).

**Appendix E**  
**List of the Variables and their Related Codes Using SAS Procedures**  
**(Destination/Origin)**

<b>Codes</b>	<b>Description</b>	<b>Categories</b>
city	sampled cities at the place of destination	1.Shahreza 2.Shiraz 3.Firuzabad 4.Farrashband 5.Kazerun 6.Qaemieh
tribe	the Qashqa'i tribes	1.Dareshuri 2. Sheshbluki 3.Amaleh 4. Farsimadan 5. Kashkuli-Bozorg 6.Kashkuli-kochek
sex	male and female	1. Male 2.Female
prov	provinces where the Qashqa'i live	Fars, Saheli (Bushehr), Esfahan, and Kohgiluyeh
birthp	the place of the birth	1.city 2.nomadic village 3.nomadic tent
age	age	age < 20      agecat=1 20 <= age < 35      agecat=2 35 <= age < 65      agecat=3 age > 65      agecat=4
maritals	marital status	1.yes 2.no
children	the number of children	-
totalfm	total family members	-
literacy	literacy	1.yes 2.no
educal	level of education	1.illiterate 2.read&write 3.elementary school 4.guidance school 5.high school 6.college 7.university
litas	literacy of spouse	1.yes 2.no
educals	level of spouse education	1.illiterate 2.read&write 3.elementary school 4.guidance school 5.high school 6.college 7.university
illtr	number of children who are illiterate	1 = yes 0 = no
randw	number of children who can read & write	1 = yes 0 = no
elmtry	number of children who are in elementary school	1 = yes 0 = no
guidsh	number of children who are in guidance school	1 = yes 0 = no
hschool	number of children who are in high school	1 = yes 0 = no

## Appendix E continued

college	number of children who are in college	1 = yes 0 = no
unvrsty	number of children who are in university	1 = yes 0 = no
livestk	livestock	1 = yes 0 = no
agric	agriculture	1 = yes 0 = no
wlabour	wage labour	1 = yes 0 = no
salpay	salary payment / employment	1 = yes 0 = no
crptrnk	carpet making	1 = yes 0 = no
smbus	small businesses	1 = yes 0 = no
familyin	annual family income	<=\$700 =1 \$701 to 1500 =2 \$1501 to 3500 =3 >=\$3501 =4
infor	information to get to the place of destination	1.newspaper 2.radio 3.friends 4.visits to the cities 5.other (specify)
dista	distance in kilometers	-
year	how many years ago migrants come to cities	-
landr	land reform	1 = yes 0 = no
pastun	pasture nationalization	1 = yes 0 = no
droght	drought	1 = yes 0 = no
epide	epidemic (illness)	1 = yes 0 = no
poverty	poverty	1 = yes 0 = no
populi	population increase	1 = yes 0 = no
pastud	pasture degradation	1 = yes 0 = no
limitf	limitation of farmlands	1 = yes 0 = no
restrr	restriction of the traditional migratory route by rural or urban inhabitants	1 = yes 0 = no
limitg	limitation of pasture by government agencies	1 = yes 0 = no
educan	education of nomads	1 = yes 0 = no
harde	hardship of climate	1 = yes 0 = no

## Appendix E continued

hardnl	hardship of nomadic life	1 = yes 0 = no
lessi	less income	1 = yes 0 = no
lessj	less viable jobs	1 = yes 0 = no
discrik	discriminatory treatment of khan/kadkhoda	1 = yes 0 = no
discrig	discriminatory treatment of government officials	1 = yes 0 = no
mechal	mechanization of land	1 = yes 0 = no
other	other (specify)	1 = yes 0 = no
closeo	closeness to the place of origin	1 = yes 0 = no
betterj	better job	1 = yes 0 = no
betterh	better housing conditions	1 = yes 0 = no
highi	higher income	1 = yes 0 = no
familyt	family ties	1 = yes 0 = no
betterf	better facilities	1 = yes 0 = no
supplb	supplementary benefits	1 = yes 0 = no
seconda	secondary activity	1 = yes 0 = no
acesij	accessability to informal jobs	1 = yes 0 = no
acesinf	accessability to information	1 = yes 0 = no
acesed	accessability to education	1 = yes 0 = no
aceshs	accessability to health services	1 = yes 0 = no
comfortl	comfortable living	1 = yes 0 = no
satisfy	satisfaction at the place of destination	1.yes 2.no
langu	total languages spoken	1.Turkish 2.Farsi 3.both
languh	language spoken at home	1.Turkish 2.Farsi 3.both
languw	language spoken at work	1.Turkish 2.Farsi 3.both
langu	language spoken at school	1.Turkish 2.Farsi 3.both
cloth	women clothing	1.traditional Qashqa'i clothes 2.Persian clothes 3.both

## Appendix E continued

music	listening to music	1.Qashqa'i music 2.Persian music 3.both
food	food	1.Qashqa'i food 2.Persian food 3.both
listenr	listening to radio	1 = yes 0 = no
watchtv	watching T.V	1 = yes 0 = no
visitr	visiting relatives	1 = yes 0 = no
sport	sport	1 = yes 0 = no
hunt	hunting	1 = yes 0 = no
hiki	hiking	1 = yes 0 = no
house	ownership of house	1.own 2.rent 3.other (specify)
room	number of rooms	-
locate	location of the migrants to Qashqa'i neighbourhoods in cities	1.close 2.far 3.close and centre of the city 4.close and periphery of the city
water	enough water	1 = yes 0 = no
power	power	1 = yes 0 = no
phone	telephone	1 = yes 0 = no
tv	television	1 = yes 0 = no
refig	refrigerator	1 = yes 0 = no
car	car	1 = yes 0 = no
eschool	closeness to elementary school	1 = yes 0 = no
gschool	closeness to guidance school	1 = yes 0 = no
hschool	closeness to high school	1 = yes 0 = no
healths	closeness to health services	1 = yes 0 = no
transp	transportation	1 = yes 0 = no
market	closeness to consumer market	1 = yes 0 = no
leavpr	living all year at the same destination	1 = yes 2 = no
originc	going to the place of origin for cultivation	1 = yes 0 = no
originl	going to the place of origin for livestock	1 = yes 0 = no

## Appendix E continued

cityw	going to other cities for wage labour	1 = yes 0 = no
timel	times leaving this location	0=not leave here 1.leave less than three months 2.leave less than three months 3.leave for three months 4.leave for four months 5.leave for five months 6.leave for six months
plan	the plan for the future	1.stay here 2.go to place of origin 3.keep both places of origin and destination
loww	low wages or incomes	1 = yes 0 = no
nojob	no job available	1 = yes 0 = no
losep	fear of losing pasture and other properties	1 = yes 0 = no
hate	do not like this place	1 = yes 0 = no
compi	complementary income	1 = yes 0 = no
assimi	they are going to integrate and assimilate to urban communities	1 = yes 0 = no
separ	they are going to keep their culture by separating from urban communities	1 = yes 0 = no
aassimi	some of them have already been assimilated to urban communities	1 = yes 0 = no
town	township	1 = yes 0 = no
nvil	nomadic village	1 = yes 0 = no
pvil	Persian village	1 = yes 0 = no
tent	nomadic tent	1 = yes 0 = no
land	ownership of land in hectares	land=0 landcat=1 0<land<5 landcat=2 5<=land<10 landcat=3 land=>10 landcat=4
livstk	ownership of the number of livestock	livstk=0 livstkc=1 0<livstk<50 livstkc=2 50<=livstk<100 livstkc=3 livstk=>100 livstkc=4
intmig	intention to migrate	1 = yes 0 = no
job	to seek a better job	1 = yes 0 = no
educat	to get education for their children	1 = yes 0 = no

## Appendix E continued

joinr	to join to their family or relative	1 = yes 0 = no
poora	poor amenities here	1 = yes 0 = no
climat	hardship of climate	1 = yes 0 = no
sandwc	going to the summer and winter quarters for cultivation	1 = yes 0 = no
sandwl	going to the summer and winter quarters for livestock husbandry	1 = yes 0 = no
closo	a city close to the place of the origin	1 = yes 0 = no
closr	a city close to relatives	1 = yes 0 = no
jobf	a city to find a job easily	1 = yes 0 = no
facil	a city with more facilities	1 = yes 0 = no
urbanw	they are going to migrate to urban for wage labour	1 = yes 0 = no
keep	they are going to keep traditional way of life by following livestock husbandry	1 = yes 0 = no
villag	they are going to stay in nomadic village for cultivation	1 = yes 0 = no
uando	they are going to stay in urban areas and to keep their livestock and cultivation at the place of origin	1 = yes 0 = no