CHAPTER ONE
INTRODUCTION

1.1 Introduction

This thesis presents an empirical study of labour and employment in a selection of villages in Northwest Iran, conducted within the disciplinary framework of economic geography. The study employs census data, survey findings, and the results of detailed field observations in the analysis of demographic, economic and social factors which have influenced labour force changes in the study area. The results of this study will contribute towards an understanding of the processes of change in the labour force in the study area and in rural Iran generally, and will add to general understanding of these issues in developing countries. In addition, this study will produce insights to inform policy development with respect to labour force planning and intervention, which will in turn, assist in the achievement of more sustainable development in rural Iran.

In this chapter, some general remarks regarding changes in the rural labour force of developing countries will be presented, together with the aims and objectives of the study. Changes in the rural labour force of developing countries are an initial focus of the thesis because, as will be demonstrated through the present study, rural Iran shares many of their characteristics as identified in the literature. Thus, an overview of the problem in these countries may aid in understanding of the processes that are taking place in rural Iran. This overview, presented in the following section, is followed by an introduction to the specific aims and objectives of the study. The arrangement and organisation of the thesis will be explained in the last section of this chapter.

1.2 The significance of the problem

The intention of this section is to provide an overview of the major processes and dimensions of change which have been identified as affecting the rural labour force in general in developing countries.

High and rising levels of unemployment and underemployment are among the major characteristics of today's developing countries (Lea and Chaudhri 1983; Mukhoti 1985; Bloom and Freeman 1986; Jazairy, Alamgir and Panuccio 1992; Todaro 1992 and 1994). The ILO Medium-Term Plan for the period 1990-1995 foresaw that the 1990s would begin with a large backlog of open unemployment, underemployment and poverty in developing countries (Farooq and MacKellar 1990, pp. 303-4). According to Todaro's estimate (1994, p. 49), rates of open unemployment in the early 1990s averaged 10 to 15 per cent of the labour force in these countries and the total number could be at least twice as large as the number projected by the ILO. Projections to 1990 made by the ILO in 1975 indicated that the total number of unemployed in developing countries would reach almost 90 million (Todaro 1994, p. 226).

The more serious problem in the 1990s is the necessity of absorbing into the labour force the massive 'baby boom' of persons born in developing countries between 1960 and 1980 — 1.2 billion people, a population greater than that of all industrialised countries combined (Farooq and MacKellar 1990, p. 304). Commenting on these trends, Bloom and Freeman noted that 'generating a sufficient number of jobs at reasonable wages to "absorb" their rapidly growing populations into productive employment' is perhaps the greatest challenge that the economies of developing countries are about to face (Bloom and Freeman 1986, p. 381). According to the ILO labour force projections, more than 95 per cent of the total increase in the world's labour force up to 2025 will take place in developing countries and, therefore, most of the needed employment at the global level will have to be generated in these countries (Farooq and MacKellar 1990, p. 304).

Of major importance for the purpose of the present study is the dominance of unemployment and underemployment in the rural areas of these countries. Over 3 billion people live in rural areas and estimates indicate that this figure will rise to almost 3.4 billion by the year 2000. Furthermore, the vast majority (almost 70%) of the world's poorest people are also located in rural areas and engaged primarily in subsistence agriculture (Todaro 1994, p. 281). Regarding rural employment conditions in these countries in the 1980s, the ILO reported that the rural labour force continued

to grow while the relative neglect of the rural economy restricted its labour absorption capacity (ILO 1988a, p. 58).

In addition to a rapid increase in the labour force resulting from high rates of population growth, the development policies which were adopted in the 1950s and 1960s have been responsible for the increasing employment problems. In the 1950s and 1960s the rural sector in developing countries was largely viewed in a passive role as a reservoir of surplus labour for the development of the urban-industrial sector. The main objective of development strategies was the growth of the industrial sector. It was assumed that through this process of industrial growth, the urban sector would absorb surplus labour from rural areas (Douglass and Friedman 1975; Bhalla 1992; Todaro 1994; ILO 1988a). In this strategy, known as heavy industrialisation, it was assumed that rapid growth was the main route to development and that it could be achieved through industrial development, high rates of capital accumulation and capital-intensive technology. As Bhalla summarised, 'The high growth rates were expected to lead to rapid expansion of output, the benefits of which would trickle down to different parts of an economy and among different socioeconomic groups of the population' (1992, p. 5).

The industrialisation strategy was initially based on two strands of thought known as the 'linear stages-of-growth model' and 'theories and patterns of structural change' (Todaro 1994, p. 68). The linear stages of growth model viewed the process of development as:

> a series of successive stages of economic growth through which all countries must pass. It was primarily an economic theory of development in which the right quantity and mixture of saving, investment, and foreign aid were all that was necessary to enable Third World nations to proceed along an economic growth path that historically had been followed by the more developed countries. Development thus became synonymous with rapid, aggregate economic growth (Todaro 1994, p. 68).

Thus the future development of the developing countries was viewed mainly as a recapitulation of the historic experience of the now developed countries (Booth and

Sundrum 1985, p. 1). Historic economic development of these countries has often been described as a continuous transfer of economic activity and people from rural to urban areas. As urban industries expanded, new employment opportunities were created and, over the same period, labour-saving technological progress in agriculture reduced rural manpower needs. On the basis of this experience, it was concluded that economic development in the developing countries, too, necessitated a concentrated effort to promote rapid industrial growth (Todaro 1994, p. 222).

The structural change model, advanced by Arthur Lewis (Bloom and Freeman 1986, p. 392), focuses on the mechanism by which underdeveloped economies transform their domestic economic structures (Todaro 1994, p. 75). According to this model, developing countries' labour markets have a dual nature. One is usually referred to variously as agricultural, rural, noncommercial, peasant, traditional, or backward; the other sector is usually referred to as capitalistic, non-agricultural, commercial, formal, modern, or urban (Bloom and Freeman 1986, p. 391). The model, as Bhalla described it, assumed that:

> the traditional sector (subsistence agriculture) was characterised by large surplus labour, low labour productivity and an absence of capital accumulation. In contrast, the modern sector (large urban industry) was the hub of economic activity and capital accumulation. The rate of capital accumulation in the modern sector determined the rate at which rural surplus labour could be transferred to this sector (Bhalla 1992, p. 19).

The model primarily focuses on both the process of labour transfer and the growth of output and employment in the modern sector. It was assumed that the expansion of the modern urban industrial sector would result in growth of employment opportunities and the transfer of surplus labour from the traditional rural sector (Todaro 1994, pp. 74-5).

To sum up, the strategy of rapid industrialisation, which was of special concern in developing countries in the 1950s and 1960s, focused primarily on increasing the growth of gross national product by rapid industrialisation and by transferring rural 'surplus' population from the traditional rural sector to the industrial and tertiary

sectors. As stated by Lea and Chaudhri, the study of the historical experience of now developed countries 'led the development policy-makers prior to the 1970s to believe that economic development implies urbanization and industrialization, and this assumption ... formed the basis of their development strategies' (1983, p. 6).

Many argue today that this strategy has in many instances failed to bring about the desired result predicted by historical experience (Todaro 1994 and 1992; Lea and Chaudhri 1983; Bhalla 1992; Saith 1992; Koppel and James 1994; Ghosh and Bharadwaj 1992; Mukhoti 1985). Lea and Chaudhri argued that the replicability of the experience of now developed countries was not possible because conditions 'prevailing during the eighteenth and nineteenth centuries are unobtainable in present-day situations' (1983, p. 6), and Rugendyke noted that 'Growth theories had limited relevance to developing countries and were criticised for assuming a base of an already dynamic and wealthy economy' (Rugendyke 1994, p. 11). A large number of developing countries did experience some degree of growth in their GNP, but, in the absence of a distributive strategy, growth maximisation 'did not lead to "trickle down" or widespread sharing of the fruits of growth' (Bhalla 1992, p. 8). The large proportion of the population, especially in the rural areas, was benefiting very little from overall economic growth. As a result, a large and growing number of the population remained in conditions of absolute poverty, unemployment and underemployment (Mukhoti 1985, p. 2). Although industries and GNP rose, so did the number of people living at or below subsistence level (Breman and Mundle 1991, p. xii). As Saith noted, the 'industrial-primacy strategy' failed to generate adequate employment and the relative neglect of agriculture further reduced the labour absorptive capacity of the economy, especially when compared to the rate of expansion of the population of working age (Saith 1992, p. 102).

Although industries did develop, shares of output and employment in agriculture are still substantial (Bhalla 1992, p. 20) and the industrial sector has been unable to generate employment growth at a rate which can make any appreciable impact on the high levels of unemployment (Saith 1991, p. 459). Furthermore, evidence suggests that the pattern of labour transfer in developing countries has been increasingly different

from that established in the past in developed countries. Using Clark and Fisher's findings, Casetti and Pandit noted that:

> ... as a country's per capita GNP grows, decline in the relative demand for agricultural goods, along with rising agricultural productivity, causes the relative employment in agriculture to fall. At the same time, an increasing relative demand for manufacturing goods causes the percentage labour engaged in the sector to rise. In later stages of development, productivity increases in manufacturing, along with an accelerated demand for services, cause the relative employment in manufacturing to fall in favour of services (Casetti and Pandit 1989, pp. 330-1).

Thus, at the early stages of growth in developing countries, employment in the industry sector should absorb much of the labour released from agricultural sector. But, comparing the distribution of the labour force across economic sectors in 1960 with the distribution in 1980 in developing countries, Bloom and Freeman found that 'the relative decline of agriculture coincided mainly with growth in the share of the labour force in the service sector, which already tended to be larger in size than the industrial sector in 1960' (Bloom and Freeman 1986, pp. 399-400). Their study also showed that 'of the regions experiencing the largest declines in the share of agriculture, services tended to gain the most' (Bloom and Freeman 1986, p. 400). Many argue today that the abnormal expansion of marginal employment in services 'is a manifestation of the poverty problem, rather than a sign of economic development' (Koppel and James 1994, p. 291).

All countries focusing on heavy industrialisation, as Jazairy, Alamgir and Panuccio noted, 'tended to neglect rural areas and agriculture. Urban-based industrial activities received a very high share of development resources, and agriculture was squeezed' (1992, pp. 9-10). These shortcomings and the negative impacts of growth maximisation and heavy industrialisation strategies, in particular in rural areas, have led to the development of several challenging approaches. The 'redistributive approach' aimed at benefiting the poor from fruits of economic growth, and the 'basic needs' approach, made popular by the International Labour Organisation, suggested that appropriate measures should be taken to ensure that the basic needs of the poor are

satisfied. These challenges to the industrialisation strategy, however, emphasise only the consumption needs of the poor, rather than their potential role in production (Jazairy, Alamgir & Panuccio 1992, p. 12). As Lipton argued, 'hungry poor people need, not (or at least not only) extra food output or availability, but extra *entitlements* to food — normally from land, employment income, ... — to improve their level of living' (1989, p. 7).

In contrast to these two approaches and to the industry-led strategy, 'agriculture-led development' directly aimed at the development of agriculture and its adoption in many developing countries was a reaction to industry-led strategies (Bhalla 1992, p. 5). The problems of rural poverty were viewed principally as:

> agrarian issues. They were believed to be related to problems of low land productivity and even lower labour productivity, uncertain access to adequate productive resources (land, water, and technology), unstable agricultural incomes, and insufficient government investment in and support for the human resources development that could foster a better understanding and application of new production technologies and information (Koppel and Hawkins 1994, p. 2).

It has been argued that, far from playing a passive, supporting role in the process of economic development, the agricultural sector in particular and the rural economy in general must be the dynamic and leading elements in any overall strategy, at least for the vast majority of contemporary Third World countries (Todaro 1992, p. 253). Addressing the crucial role of agriculture and the rural economy in development processes in developing countries, Francis Blanchard, the then director-general of the International Labour Organisation, stated that 'The main burden of development and employment creation will have to be borne by the part of the economy in which agriculture is the predominant activity, that is, the rural sector' (stated in Todaro 1994, p. 281).

Development of agriculture and the rural sector also plays a significant role in the successful transition to an industrial economy. On the basis of the experience of most developing Asian countries, Koppel and James stated that:

> Without a prior and sustained period of agricultural growth that is reasonably broad based, industrialization tends to stagnate. Developing Asian economies that initially concentrated resources on industrial development and biased macroeconomics policies against agriculture have ended up with less industrial development than others that emphasized the growth and expansion of agriculture and ancillary activities in rural areas and that kept policies more or less neutral (Koppel and James 1994, p. 289).

They further found that 'the rate of structural transformation from an agricultural-based economy to an industrial-based one has been most rapid in Asian countries that have struck a balance between agricultural development and promotion of industry' (Koppel and James 1994, p. 290).

Two sets of programmes were advocated: growth of agricultural output by the introduction of new agricultural technology, and institutional change as a solution to rural unemployment and poverty. These issues are discussed further below.

The new agricultural technology consists of two components: the bio-chemical component and the mechanical component. The bio-chemical component, ie, the High Yielding Variety of seeds (HYVs) and required irrigation and chemical fertilizers and pesticides (often referred to as the Green Revolution) is normally considered to be land augmenting; that is, they improve the quality of existing land by raising yields per hectare. They are also labour-intensive in nature. Therefore, introduction of HYVs is thought to lead to large increases in agricultural output and rural employment. The use of the short-maturing varieties of crops, in association with fertilizers and perennial ground water for irrigation makes, in suitable climatic conditions, more than one harvest possible each year. Thus, they also reduce seasonal unemployment and the usually lean seasons become more active over time (Singh Sidhu 1991, p. 16).

The mechanical component of agricultural technology, or mechanised agriculture, improves the volume of output per worker, especially where land is extensively cultivated and labour is scarce. It can also augment labour demand if combined with irrigation and increased fertilizer use. Similarly, increased fertilizer use

may in itself have limited impact on labour use, yet it can increase demand for labour considerably if combined with increased irrigation (ILO 1988a, p. 56).

But the introduction of new agricultural technologies may also have negative impacts on the rural poor and the labour markets if growth maximisation is the only aim. They may generate tendencies towards a greater concentration in landholding and a growing incidence of landlessness. 'Insecure tenants may be evicted; and very small farmers, unable to adopt the new technology, may be forced into distress selling' (ILO 1988a, p. 56). Further, although the bio-chemical component of agricultural technologies, unlike mechanical components, are scale-neutral and thus can be applied both in small and large farms, as Todaro noted, 'the social institutions and government economic policies that accompany their introduction, are *not* scale-neutral. On the contrary, they often merely serve the needs and vested interests of the wealthy landowners' (Todaro 1994, p. 312). As Lea and Chaudhri argued, large farmers and landowners 'can achieve higher yields and output through greater use of machines and other inputs rather than by significantly increasing the use of local labour' (1983, p. 11).

Reports prepared by the ILO indicated that the uneven distribution of land and uneven access to resources in Latin America 'have prevented the benefits of rapid agricultural growth centred on the larger farms from reaching the landless and marginal farmers' (ILO 1988a, p56). Findings of Koppel and James also clearly reflect these adverse impacts of the adoption of new agricultural technologies in places where considerable inequality exists in rural areas and where access to resources is uneven. They found that in South and Southeast Asia:

> ... The absence of unimodal distribution of farms and a high incidence of tenants and landless rural labour meant that the introduction of new production technologies, even if widely diffused across small and large farms alike, could widen rural inequalities. ... In the worst case, in which successful adoption of HYVs was limited to larger commercial farms ... the profitability of modern varieties could (and did) induce landowners in South and Southeast Asia to expand their holdings and increase the ranks

> of landless rural workers and submarginal peasants by replacing tenant farmers with hired wage labour (Koppel and James 1994, pp. 291).

Based on empirical studies undertaken by Ishikawa, Misra and Amerasinghe in East and South Asia, Hasbullah (1989, pp. 67-8) concluded that technological innovation (biological, chemical and mechanical) in agricultural activities gradually changed the traditional labour inputs; labour absorption increased in some types of agricultural activity, particularly in transplanting and harvesting. These changes occurred in the earlier stages of the 'Green Revolution' period. In the long term, however, the new developments in agriculture often negatively affected labour absorption in agriculture. The introduction of new seeds and fertilizer increased the 'input cost' of agricultural activities. The new seeds require access to complementary inputs such as irrigation, fertilizers, insecticides, credit, and agricultural extension services. As Todaro noted, only a small minority of large landowners, with their disproportionate access to these complementary inputs and support services, were able to gain competitive advantages over small holders and to eventually drive them out of the market (Todaro 1992, p. 273).

The mechanical components of agriculture, on the other hand, reduce the labour absorption potential of agriculture. In areas with abundant labour and small parcels of land, mechanized agriculture, 'is not only ill suited to the physical environment but, more important, often has the effect of creating more rural unemployment without necessarily lowering per-unit cost of food production' (Todaro 1994, p. 312). Here again, the uneven distribution of land and resources may result in a further reduction in employment opportunities. According to an ILO report, in Latin America 'technological biases following mechanisation in modern agriculture are an important determinant of lack of employment creation. Removing these biases and adapting technologies to the requirements of smaller farmers is seen as a vital instrument for the alleviation of rural poverty' (ILO 1988a, p. 56).

Thus, it has been argued that an agriculture-led development strategy in developing countries, in addition to output growth, should also address the two major issues of rural employment creation and poverty alleviation. Experiences of

East Asian countries suggest that an even distribution of land and progressive modernization of family farms, plus the expansion of non-agricultural activities, are of vital importance in attaining such goals (Mukhoti 1985, p. 2). For Todaro, the following three basic elements are required for an agricultural -and employment- based strategy of economic development:

> (1) accelerated output growth through technological, institutional, and price incentive changes designed to raise the productivity of small farmers; (2) rising domestic demand for agricultural output derived from an employment-oriented urban development strategy; and (3) diversified, nonagricultural, labour-intensive rural development activities that directly and indirectly support and are supported by the farming community (Todaro 1994, pp. 282).

Small farms tend to use more labour and to produce more output per unit of land. Thus, with more concentration of landholdings, both the labour absorption capacity of agriculture and the output per unit of land declines (ILO 1988a, p63). In contrast, as Mukhoti (1985, p. 2) argued, growth of agricultural output and widespread increase in income and employment 'can be attained by promoting the progressive modernization of small-scale family farms that predominate in a developing country.' Rising domestic demand expands the market for agricultural products, which promotes income and employment opportunities in the rural sector. Diversification of the rural economy plays an increasingly important role in employment creation in rural areas and, due to its relevance to the purpose of present study, will be discussed further hereafter.

Diversification of rural employment

One of the dominant trends in the labour force of developing countries is a shift from agricultural to non-agricultural employment. This trend is occurring in two forms. The first is associated with the transfer of labour from rural to urban areas and has resulted in major problems at both ends of the migration chain. Rural-urban migrants in

developing countries put strain on urban labour markets, characterised by widespread unemployment and underemployment. They also contribute to escalating demand for urban housing and services already considered inadequate (Gugler 1986, p. 195). In the meantime, because of the high proportion of educated young people among the migrants, migration depletes the rural areas of valuable human capital (Todaro 1994, p. 261).

The second form of labour shift, which is the main topic of this section, is taking place within rural areas resulting in rural employment diversification. The discussion will focus mainly on the trend in Asian countries because of both its geographical relevance to the present study, and the increasing importance of non-farm and off-farm employment in the rural areas of these countries (Mukhopadhyay and Lim 1985; Shand 1986). In many cases, the shift of labour is not a recent development, but the scope and composition of processes often have contemporary implications that suggest the processes are qualitatively different than those that may have existed previously (Koppel and James 1994, p. 297).

The diversification of rural employment may be assumed in part to be a positive dynamic whereby economic growth enables a shift in employment from agriculture to industry and then to services. However, as a World Bank study of 1980 pointed out:

> the relative expansion of non-agricultural employment in rural areas is susceptible to favourable or unfavourable interpretation. Does it reflect an involutionary pattern, as increasingly impoverished rural households try to maintain their incomes through increased participation by household members in a broader spectrum of low productivity activities? Or does it result from 'positive' diversification associated with higher productivity and increased levels of consumption? (Quoted in Harris 1991, p. 432).

The importance of growth in rural non-farm activities has so far been attributed to its role in employment creation and poverty alleviation. In a context in which there is considerable doubt as to the extent to which it is possible for agriculture to absorb large increases in the labour force, and it is believed that there is little possibility that these increases can be absorbed in urban industry, attention has been focused on the

rural non-farm sector as an alternative source of productive employment (Mukhopadhyay and Lim 1985, pp. 18-9). But, as a study by Saith suggested, '... in many Asian countries (which account for a significant proportion of the world's rural poor), a high incidence of rural poverty *coexists* with a high degree of participation by the rural population in such non-farm activities' (Saith 1991, p. 458). This view has been supported by the study of Ghosh and Bharadwaj in the Indian context. They noted that, 'in many cases, the spread of non-agricultural employment reflects the growing desperation of the rural poor for income generating opportunities' (Ghosh and Bharadwaj 1992, p. 154).

However, studies of East Asian countries such as Japan, Taiwan, and Korea, suggest a growing dynamic and productive category of rural non-farm activities (Oshima 1984; Mukhoti 1985; Harris 1991; Saith 1991 and 1992; Koppel and Hawkins 1994). Mukhopadhyay and Lim identified two different categories of rural non-farm (RNA) activities in terms of labour productivity and incomes:

> (I) The RNA sub-sector 1 which comprises of products and/or activities exhibiting the following traits: enterprises run on a more or less stable basis with an eye on surplus generation and growth, using hired labour (perhaps over and above family labour), and a certain degree of technical sophistication.
>
> (II) The RNA sub-sector 2 comprising of products and/or activities which are often, though not always, seasonal, which are run solely with the help of unpaid family labour, using rather primitive technology catering mostly to the local market and responding more to the supply side of the labour market than market demand for output (Mukhopadhyay and Lim 1985, pp. 18-9).

They stated that it appeared to be the case that RNA category 1 was dominant in East Asian countries like Korea, Taiwan and Japan. The RNA category 2 seemed to be 'distinctly the predominant type in South Asia, however, with RNA incomes often lower than prevailing agricultural wages' (Mukhopadhyay and Lim 1985, p. 18). Islam put forward a similar argument, with particular reference to rural manufacturing,

though without drawing out the regional differentiation proposed by Mukhopadhyay and Lim. He reported that in general, 'the non-traditional industries are found to be associated with higher productivity' (Islam 1987, p. 8), and noted that this related in turn to higher capital intensity and the nature of the product.

Thus, two major questions in this regard are: is the present diversification indicative of a development? And under what conditions does it indicate deterioration? Koppel and Hawkins, at the outset of their detailed study of work in rural Asia, suggested two broad trajectories: The first, often associated with the experiences of Japan, Korea, and Taiwan, can be called a developmental trajectory. It is characterised by a relatively egalitarian distribution of land and a low incidence of rural households without access to land. The rising agricultural income and productivity generate savings, investment in education, and increased demand for non-farm goods. Wages for non-farm income gradually match and then grow higher than agricultural wages.

A second trajectory — often associated with stagnant agricultural productivity growth, skewed distribution of access to land, and a significant number of landless rural households (described especially in South Asia) — can be called a deterioration trajectory. It is marked by an increasing incidence of non-farm employment and income, reflecting the increasing difficulties agrarian households face in maintaining their basic welfare. Wages for non-farm income tend to be low, and occupational diversification within the non-farm sector tends to be confined to unskilled positions (Koppel and Hawkins 1994, p. 1).

The literature identifies potential linkages between the agricultural and non-agricultural sectors. Based on the interpretation of the East Asian experience, it has been argued that agricultural development creates favourable conditions for the expansion of productive non-farm rural employment (Mukhoti 1985; Koppel and James 1994; Todaro 1994). This approach, based on the linkages between agriculture and non-agricultural activities, places high priority on agriculture-led development for employment generation in rural areas of developing countries. Koppel and James stated that as agriculture develops, it 'potentially contributes savings that can be invested in raising agricultural productivity further or in nonagricultural productive assets. ... And

as farm incomes rise, the market for goods and services produced by other sectors increase' (Koppel and James 1994, p. 290). The expansion of markets and increasing 'demand translates into employment through the investment and operating decisions of private business, governments and, to a small extent, charities. Business survives in the long term if it can make an adequate profit' (Sorensen 1993, p. 215).

The overall trends would seem to underline strong linkages between agricultural and non-agricultural employment in rural areas. While there has been success in some developing countries in the expansion of productive rural non-farm activities, the savings and supply of raw materials required for the expansion of such activities generally depends on a healthy performance of the agricultural sector (ILO 1988a, p. 57). Thus, among other conditions affecting the growth of productive rural non-farm activities, the development of agriculture is one of particular importance (Harris 1991, pp. 431). With regard to the growth of low productive rural non-farm activities in many Asian countries, it appears that the issue is not increasing the size of this sector, but creating conditions that enable the rural non-farm sector to perform its employment creation and poverty alleviation function. As Saith stated, 'to get this sector really moving, the two main, and mainly ailing, sectors of the economy have to be in good health in the first place' (Saith 1992, p. 113).

Iran, as a developing country, and as will be shown in Chapter 2, encounters many of the problems discussed in this section in its rural areas. However, as yet, no comprehensive study has been undertaken to ascertain the extent and nature of changes in the supply of, and demand for, rural labour in the country. In view of the previous discussion, this study aims to explore these changes in a sample region in province of Eastern Azarbaijan in Northwest of the country (Map 1.1). The specific aims and objectives of the study will be outlined in the section below.

1.3 Specific objectives of the study

The main aim of this study is to describe and explain the characteristics and composition of the labour force, its changes over time, and the availability of employment opportunities for the labour force in a sample of villages in the subdistrict

Map 1.1: Islamic Republic of Iran: Administrative Divisions

Source: Adapted from SCI 1993b

of Dowlat Abad in Northwest Iran. In addressing this particular aim, the study embraces the following specific objectives:

(I) to describe work practices and labour force characteristics in a sample of villages in the subdistrict of Dowlat Abad of the county of Marand in 1994;

(II) to compare and contrast changes in work practices and labour force characteristics in the sample villages in the period 1986 - 1994;

(III) to account for the observed diversity and changes in work practices and labour characteristics in the sample villages.

Fulfilment of these aims will, as declared on page 1, contribute to understanding of labour force characteristics and change in rural Iran.

1.4 The organisation of the Thesis

This thesis has nine chapters and consists of three parts. As a background to the subject, following the present chapter, a brief review of the literature on the rural labour force in Iran and changes in the labour force will be presented in Chapter 2. The research methodology is discussed in Chapter 3, with particular emphasis being placed upon the sampling of villages and households.

In the second part, the current situation pertaining to the supply of, and demand for, labour in the study area will be studied. This part consists of three chapters and will include a discussion of the diverse patterns of socio-economic changes and the labour force characteristics in the sample villages. Chapter 4 provides a broad overview of the demographic and economic structure in the county of Marand and a more specific description of the area and the villages in which this study took place. Chapter 5 will address issues associated with labour force participation. The characteristics of the workforce, its sectoral composition and changes in the contribution of economic sectors to employment will be discussed in Chapter 6.

The last part of the thesis will address the employment potential of the farm and the non-farm sectors in the study area. The factors behind labour transfer between the economic sectors are of particular concern in this part. Agricultural resources and labour absorption by this sector will be discussed in Chapter 7. Chapter 8 will address employment opportunities in the non-farm sector. By examining the types of employment available for the labour force in this sector, attempts will be made to identify the forces behind the shift of labour from the farm to the non-farm sector. Finally, Chapter 9 provides a summary of the findings of the study. This chapter also identifies further lines of research.

CHAPTER TWO

SOCIAL AND ECONOMIC CHANGES IN RURAL IRAN – AN OVERVIEW

2.1 Introduction

Rural Iran has undergone major socio-economic changes in recent decades. Forces behind these changes are diverse, among which plans and policies adopted by government and the rapid increase of the population have played crucial roles (Azkia 1991; Lahsaeizadeh 1993b). The latter has been the main factor affecting the supply side of the rural labour market, while the former have affected working conditions as well as the demand for labour. Literature about socio-economic changes in rural Iran mainly traces recent changes back to land reform which began in the early 1960s (Hooglund 1982; McLachlan 1988; Azkia 1991; Lahsaeizadeh 1990 and 1993a). Implementation of the Land Reform which aimed, among other objectives, to redistribute land and reorganise the production relations in the agricultural sector, was itself a part of a programme which was designed to accelerate the process of industrialisation. Land reform aimed to facilitate the transfer of capital and labour from land in rural areas to urban centres and also to expand the internal market toward rural areas which was restricted because of the dominance of subsistence agriculture (Najafi and Soltani 1983; Lahsaeizadeh 1990b; Azkia 1991).

In accordance with an industry-led strategy, investment was concentrated in urban centres. It was believed, as in many other developing countries, that the problem of 'underdevelopment' could be solved by becoming as much as possible like western industrialised countries, which 'seemed to suggest that the royal road to "catching up" was through an accelerated process of industrialisation' (Friedmann and Weaver 1979, p. 91). As a result, the rural areas received very low attention in the Development Plans and consequently, imbalances between rural and urban development deepened

(Hesamian, Etemad, and Haery 1984, pp. 57-62; McLachlan 1988, pp. 3-9; Saeidi et al. 1991, pp. 4-7).

The overshadowing of rural areas in the Development Plans, together with the rapid growth of population due to high fertility and to the relatively low death rate, increased the gap between the growing supply of labour force and available employment opportunities in these areas. This has been an important factor in rural out-migration in Iran (Adibi 1977; Hosseinzadeh 1992), a phenomenon which is a major problem in many of the developing countries (Gugler 1986; Todaro 1994).

The distribution of the workforce between different production sectors in rural areas has also undergone notable changes, and there is a considerable transfer of workforce from agriculture to non-agricultural activities, such as cottage and rural industries, trade, transportation, and rural services (Lahsaeizadeh 1993a).

This chapter describes and explains the supply of, and demand for, labour in rural Iran. It provides a general picture of the broader labour market conditions within which the labour force of the study area functions. Thus, the chapter is not a detailed study of rural transformation in Iran. Nor is it a theoretical analysis of change processes in rural labour markets. Such studies, although significant, are beyond the scope of the present chapter for each involves a major undertaking. This chapter will focus on three major aspects of rural employment: the growth of the rural labour force; the labour absorption capacity of agriculture; and the growth of the rural non-agricultural activities. The main focus is on policies and programmes directly relevant to the labour absorption capacity of agriculture. This choice of focus is justified, not only because agriculture is the major source of employment in rural Iran, but also because rural non-farm enterprises cannot in fact flourish if agriculture stagnates (ILO 1988a, p 61).

2.2 Population growth and labour supply

As discussed in the preceding chapter, employment-related problems are common in developing countries. These problems are closely related to rapid population growth which

results in a rapid increase in the number of people seeking jobs on the one hand, and the slow growth of employment opportunities to absorb the growing labour force, on the other. Iran's experience of population growth, economic performance and employment creation within the last few decades is characterised by these features (Amirahmadi 1990; Azimi 1992; Amuzegar 1993). This section will review trends in population growth as the major source of labour supply in rural Iran.

With an average annual growth rate of over 3 per cent, Iran's population more than doubled in the 25 years from 1966 to 1991. Between 1966 and 1976, the total population of the country grew at an average annual rate of 2.7 per cent — from 25.8 million to 33.7 million, but the rate of growth began to slow owing to a decline in fertility (Aghajanian 1991, pp 710).[1] During the next ten years, from 1976 to 1986, this downward trend in fertility was reversed and the rate of population growth once again accelerated. The size of the population rose from 33.7 million in 1976 to 49.4 million ten years later in 1986, implying an average annual growth rate of 3.9 per cent.

According to the data from the 1991 population census, the population of the country reached 55.8 million in that year, implying a considerable decline in the average annual growth rate of population in a short period. However, although the estimated annual growth rate of 2.5 per cent for this period is lower than the growth rates of the previous periods, it indicates that the population of the country is still growing rapidly.[2]

One component of the huge population increase in the 1976-86 period was the influx of refugees from Afghanistan. An estimated 1.8 million refugees were included in the 1986 population census (Aghajanian 1991, p 711). If the refugee population is excluded, the average annual population growth rate during the decade falls to 3.4 per cent, still a higher rate of growth than the figure of 2.7 per cent estimated for 1966-76 (Table 2.1).

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[1] According to census data, the annual average growth rate of the population between 1956 and 1966 was 3.12 per cent. The average annual growth rates of rural and urban population in the same period were 5.1 per cent and 2.1 per cent respectively.

[2] Detailed data from the latest national census of population and housing that was conducted in October 1996, are not available so far. According to the summary results announced recently by the Statistical Centre, the growth rate of the population declined further from 1991 till 1996. According to this data, the total population of the country reached 60,055,488 in 1996, indicating a growth rate of 1.96 per cent per annum from 1986 till 1996 (Mirzadeh 1997, p. 13).

Table 2.1
AVERAGE ANNUAL GROWTH RATES OF URBAN AND RURAL POPULATION FROM 1966 TO 1991 (%)

	1966-76	1976-86	1986-91	1966-91
Country	2.7	3.9	2.5	3.1
Urban areas	4.9	5.4	3.5	4.8
Rural areas	1.1	2.4	1.2	1.6

Source: SCI 1993b.

Nevertheless, the increase in the annual growth rate of population in the 1976-86 period was mainly due to the neglect of population growth control policies in the early years after the revolution in 1979 on the one hand, and to the distribution of ration coupons and housing allocation policies in accordance to the size of family on the other (Aghajanian 1991; Amuzegar 1993; Amirahmadi 1995). However, controlling the rapid growth of population has been of major concern in recent years. In the First Development Plan of the Islamic Republic of Iran, covering the 1988-93 period, it was considered vital to control population growth, since rapid growth led to increased consumer demand and to an unmanageable expansion of the labour force (Amirahmadi 1995, p. 12).

The birth rates fell dramatically in the Plan period. Prior to the Plan, the population growth rate was 3.3 per cent, which when compared with the rate of 3.9 per cent (including emigration) for the decade from 1976 to 1986, indicates a decline in the late 1980s. The Plan aimed to continue the downward trend, reducing the growth rate to 2.9 per cent per year, to reach 2.3 per cent by 2011 (Plan and Budget Organisation 1990, p. 17). In the course of the Plan, however, the rate fell to 2.2 per cent. While government policies such as the provision of clinical and health services and family planning clinics, encouragement of literacy among women, campaigns for birth control, and the repatriation of Afghan and Iraqi refugees have contributed considerably to a declining population growth rate, gloomy

economic forecasts, inflation, and falling government subsidies seem also to have played an important role (Amirahmadi 1995, pp. 13-9).

The changes in the size of the population of the country have been accompanied by a continuous decline in the share of the total population in rural areas in recent decades. As is evident from Table 2.2, the proportion of the total population in rural areas dropped from almost 69 per cent in 1956 to about 43 per cent in 1991.[3] While the population of the urban areas increased more than three-fold, from less than 10 million in 1966 to almost 32 million in 1991, the increase in the rural population of the country was only about 50 per cent -- from about 16 million to 24 million. Average annual growth rates of population for country, urban and rural areas from 1966 till 1991 have been estimated as 3.1 per cent, 4.8 per cent, and 1.6 per cent respectively (see Table 2.1).[4]

Several factors explain the sharp decline in the proportion of rural people in the total population of the country in recent decades. First, the boundaries of some cities expanded to include the surrounding villages and rural areas, so that a portion of the rural population became urbanites without actually having migrated. Second, the population of some villages has been considered to be urban because of an increase in their population to surpass the 5,000 mark in the 1966 and 1976 censuses, or because of the establishment of a municipality in the 1986 and 1991 censuses.[5] Finally, the urban population increased more rapidly due to the rapid and continuous migration from rural areas (Adibi 1977 and 1989; Kazemi 1980; Katouzian 1981; Najafi and Soltani 1983; McLachlan 1988; Hosseinzadeh 1991). According to Kazemi's estimation

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[3] According to the summary data from the latest census, the proportion of the rural population declined to 39 per cent in 1996 (Zali 1997, p. 13).

[4] The proportion of the rural population would be even lower in 1986 and 1991 if the definitions of "rural" and "urban" were not changed in these two censuses. In previous censuses, the term "urban" would include all county centres and all places with a population of more than 5,000, while in the 1986 and 1991 censuses, the term covered all places with a municipality. By employing the new definition in the 1986 census, a total of 192 places each with more than 5,000 inhabitant were considered as rural, and 84 places each with a population of less than 5,000 but with a municipality were considered as urban. The former group included a total population of 1,740,000, while the latter included only 249,000 population (Zanjani 1991, p.17). In other words, if the same definitions were employed in the 1986 census, the rural population would be 1,491,000 less than the reported figure. Therefore, the proportion of the rural population would be 42.7 per cent –against an estimated 45.7 per cent– and its average annual growth rate from 1976 till 1986 would be only 1.7 per cent –against an estimated 2.4 per cent.

[5] In the 1966 and 1977 censuses, all places with 5,000 or more inhabitants were considered to be towns or cities, whereas in the 1986 and 1991 censuses, the criterion was having a municipality.

(1980, p. 13), the numbers added to urban population through these processes from 1966 till 1976 were 380,000, 891,000, and 2,111,000 respectively. This includes over 55 per cent of the total number added to the urban population in this period.

Table 2.2

CHANGES IN THE NUMBER AND PROPORTIONS OF URBAN AND RURAL POPULATION FROM 1956 TO 1991 (numbers in thousand)

Census years	Urban and rural population	Urban population		Rural population*	
	Number	Number	Proportion (%)	Number	Proportion (%)
1956	18,955	5,954	31.41	13,001	68.59
1966	25,789	9,794	37.98	15,995	62.02
1976	33,709	15,855	47.03	17,854	52.97
1986	49,445	26,845	54.29	22,600	45.71
1991	55,837	31,837	57.02	24,000	42.98

**Includes unsettled population*

Source: SCI 1993b.

Labour force participation

Generally speaking, the labour supply forthcoming from any population depends on the size of the population, broken down into various sex and age groups, and on the participation rates for each of those groups. Whereas population size by age and sex is directly determined by the history of fertility, mortality and migration patterns, participation rates tend to be determined more by economic and cultural factors. Nevertheless, labour force participation rates are themselves influenced by the same

fertility, mortality, and migration patterns that determine population size (Bloom and Freeman 1986, p. 383).

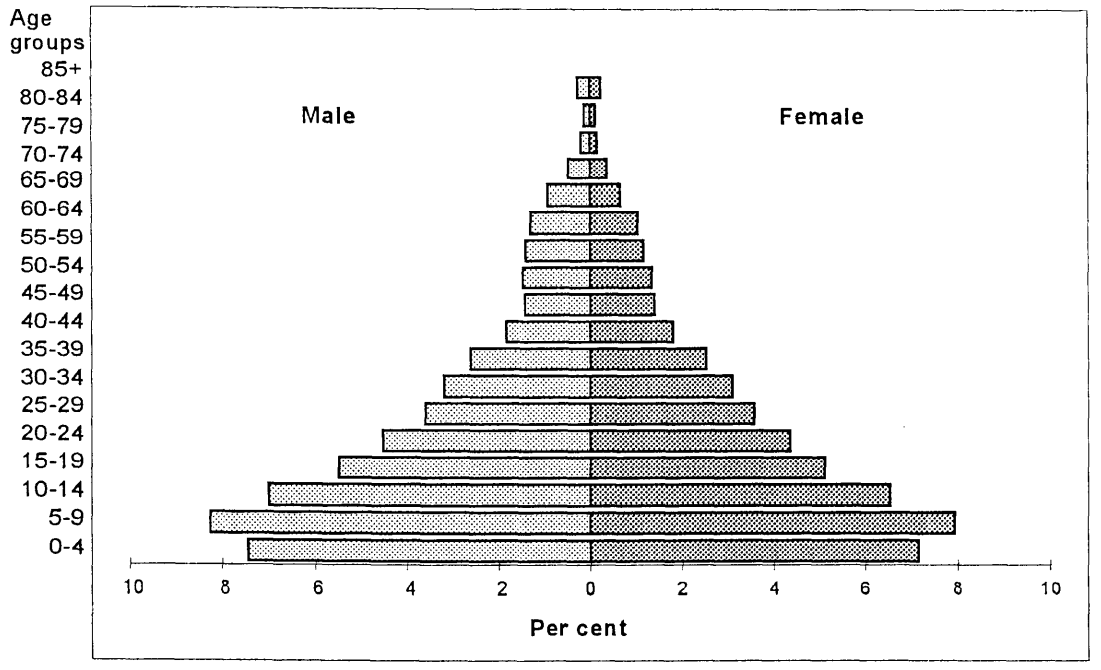
Population growth tends to have a lag effect on labour supply, whose extent depends on the factors underlying the growth. For example, if population growth is the result of relatively high fertility or of an age distribution that is heavily concentrated in the childbearing years, the growth in any year will have its impact focused at age 0 of the age distribution. Thus, it will take at least 10 to 15 years before the effect of a particular year's population growth even begin to be felt in the labour force.

On the other hand, if population growth is mainly the result of substantial in-migration, its principal effect on labour supply will not lag, since the propensity to migrate tends to be relatively low before the teenage years. Population growth resulting from an excess of births over deaths in the rural portion of an economy may create pressure for migration to urban areas. To the extent that the migrants tend to be of working age, population growth in the urban areas will have an immediate, as opposed to a lagged, effect on labour force growth. Similarly, outmigration will have an immediate negative effect on the domestic labour supply (Bloom and Freeman 1986, p. 384).

From the general discussion presented in the previous section, it can be concluded that the high fertility rate is the major factor contributing to increase in the rural population in Iran. This factor, plus migration of people of working age from rural areas (Kazemi 1980; Hooglund 1982; Hosseinzadeh 1992), have resulted in a higher proportion of population under the age of 15 in rural areas (Table 2.3 and Figures 2.1 and 2.2). Hooglund noted that a majority of migrants from rural areas were young men in the age group fifteen to twenty-nine. On the basis of sample surveys, it was demonstrated that about 70 per cent of young men had migrated to urban centres by 1978 (Hooglund 1982, p.119). The population aged under 15 accounted for almost 47 per cent of the rural population in 1991. The corresponding figures for the total population of the country and for the urban population were about 44 per cent and 42 per cent respectively.

Figure 2.1

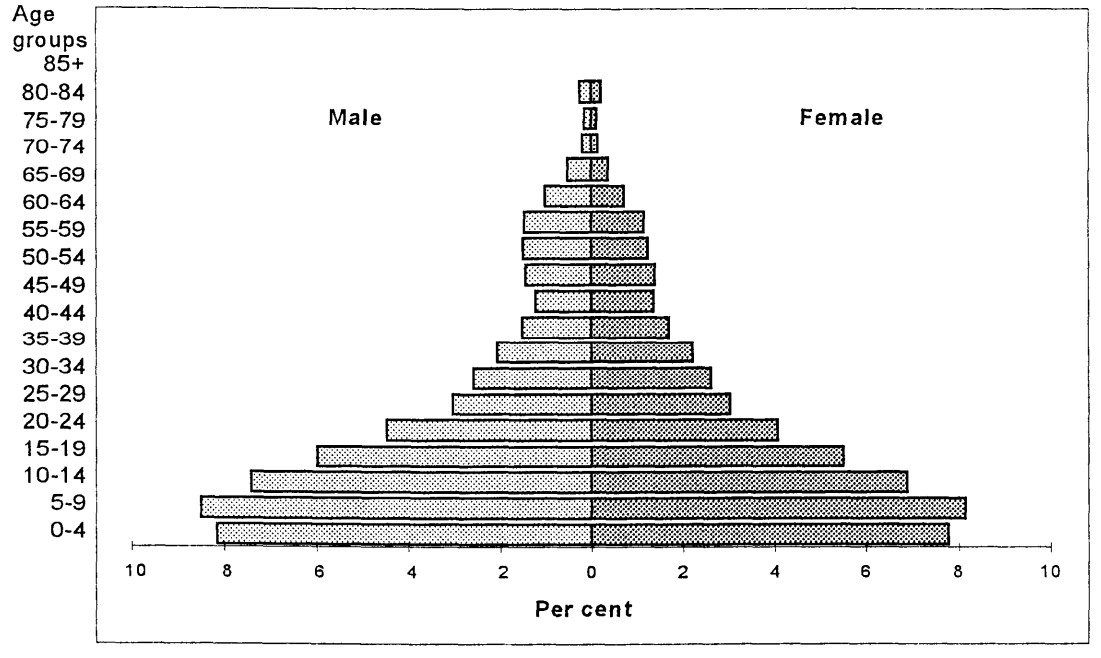
POPULATION PYRAMID FOR IRAN (URBAN AND RURAL AREAS), 1991



Source: SCI 1993b.

Figure 2.2

POPULATION PYRAMID FOR RURAL AREAS, 1991



Source: SCI 1993b.

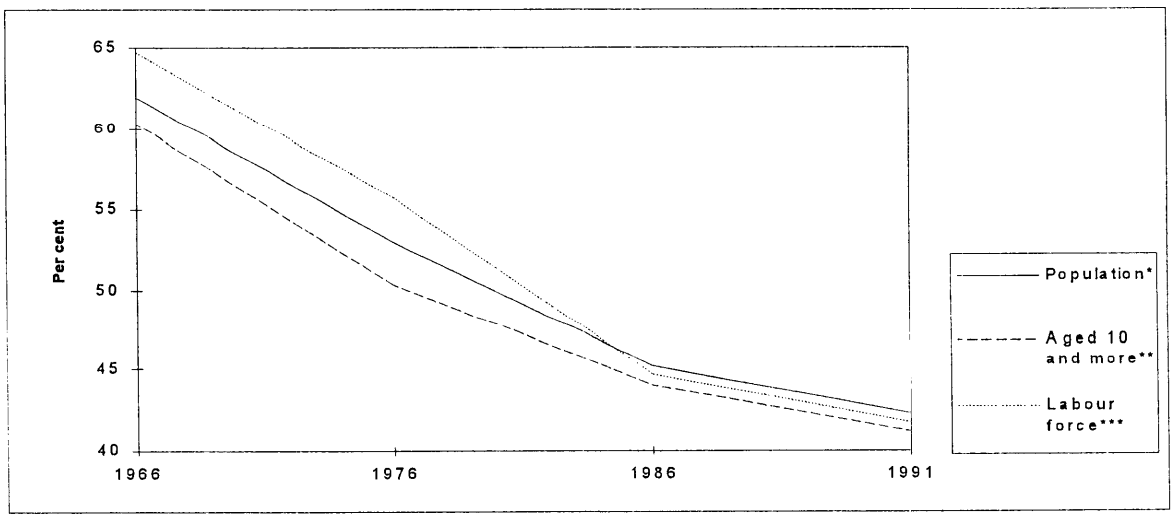
Table 2.3
RURAL AND URBAN POPULATION BY MAJOR AGE GROUPS IN 1991 (%)

Major age groups	Country	Rural areas	Urban areas
Less than 15 years old	44.28	46.92	42.29
15 to 64 years old	52.23	49.38	54.38
65 years old and over	3.49	3.70	3.33
All age groups	100.00	100.00	100.00

Source: SCI 1994a.

Due to the migration of population of working age from rural areas, plus the declining rates of labour force participation (Table 2.4), the impact of population increase on the rural labour market was less than is suggested by the rate of population increase (Figure 2.3). Because of the young age structure of the population, the dependency ratio, although declining in recent years, is still very high (Table 2.4).

Figure 2.3
CHANGES IN PROPORTIONS OF RURAL POPULATION, RURAL POPULATION AGED 10 AND MORE, AND RURAL LABOUR FORCE FROM 1956 TO 1991



** Proportion of rural population of the total population of the country.*
*** Proportion of rural population aged 10 and more of the total population age 10 and more.*
**** Proportion of rural labour force of the total labour force of the country.*
Source: SCI 1993b.

The decline in the rates of economic activity among the rural population from 1976 till 1991 was considerable: from over 47 per cent in 1976 to 38.63 per cent in 1991. The decline in the participation among lower age groups seems to be even greater (Figure 2.4) but, as is apparent from Figure 2.5, a relatively higher

Table 2.4
DEPENDENCY RATIOS AND PARTICIPATION RATES IN RURAL IRAN IN 1976, 1986, AND 1991

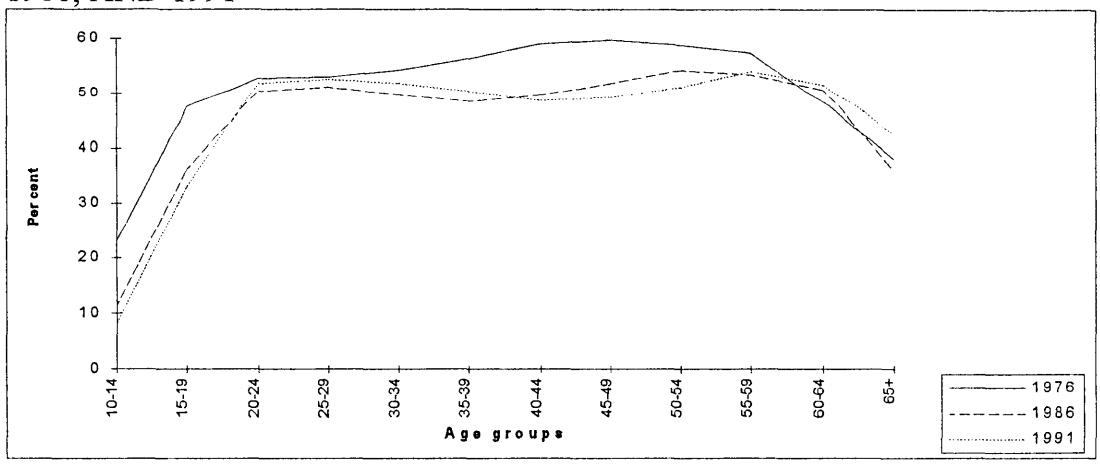
Census years	Dependency ratio*	Participation rate**	Unemployment rate***
1976	105.59	47.18	14.17
1986	104.76	39.70	12.91
1991	99.41	38.63	12.12

**Dependency ratio = 100 * (P_{0-14} + P_{65+})/P_{15-64}*
*** Participation rate = (Economically active / P_{15-64})* 100*
**** Unemployment rate = (Unemployed / Economically active population)* 100*
Source: SCI 1980, 1993f and 1994a.

proportion of the rural labour force still belongs to younger age groups. Rising rates of school attendance among youth explain the lowered labour force participation rates of the young population. While only 34.32 per cent of rural population aged 10 to 19 were attending school in 1976, this proportion increased to 43.12 per cent in 1986 and then to 55.57 per cent in 1991. However, in addition to the decline in participation rates among the younger age groups, there has also been a decline in the participation rates of the population aged 35 to 54. As discussed hereafter, this could be attributed to a variety of factors such as economic development, changes in social values and attitudes towards participation of women in economic activities.[6]

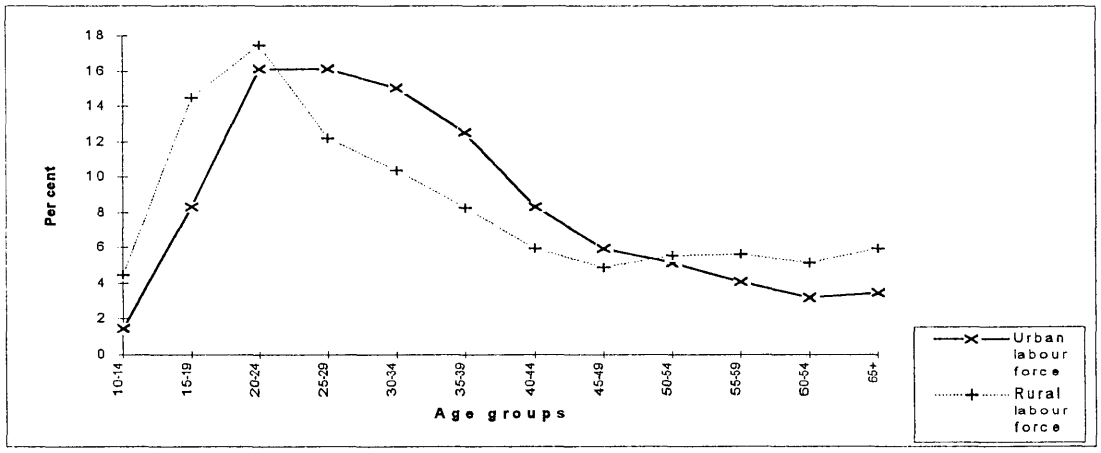
[6] The actual labour force participation rates in 1986 and 1991 were probably higher than the reported figures and classifying a relatively large number under 'others' seem to have inversely affected the number of rural labour force in these two censuses. Of total rural population aged 10 and more, 6.7 per cent in 1986 and almost 5 per cent in 1991 were classified as 'others', while the corresponding figure for 1976 was only

Figure 2.4
AGE SPECIFIC RURAL LABOUR FORCE PARTICIPATION RATES IN 1976, 1986, AND 1991



Source: SCI 1980, 1993f and 1994a

Figure 2.5
AGE STRUCTURE OF THE RURAL AND URBAN LABOUR FORCE IN 1991



Source: SCI 1993b.

Economic development and rising income may facilitate the reduced participation rates of the young and old population alike by lessening the need of the mass of low-income heads of families to keep their dependents in employment to provide supplementary family income (Bartsch 1970, p. 7). Further investigation is

1.7 per cent. Studying the changes in number of labour force in Iran from 1956 till 1966, ILO reported that those classified as 'others' were most likely unemployed (Bartsch 1970, p.6).

required to assess the extent to which the recent decline in participation rates in rural Iran is related to changes in income levels. Meanwhile, changes in social values seem to have inversely affected the participation of women in economic activities since the revolution (Hemmasi 1994). While the male labour force in rural areas increased by 16 per cent from 1976 till 1986, the female labour force declined by almost 41 per cent during the same period (see Table 2.5). The female labour force increased from 1986 till 1991, but the number was still less than that in 1976.

Table 2.5
CHANGES IN THE MALE AND FEMALE LABOUR FORCE IN RURAL IRAN FROM 1976 TO 1991

Gender	Number of rural labour force			Changes (%)*		
	1976	1986	1991	1976-86	1986-91	1976-91
Both sexes	5,460,492	5,794,286	6,248,082	6.1	7.83	14.4
Male	4,500,784	5,227,691	5,576,982	16.2	6.7	23.9
Female	959,708	566,595	671,100	-41.00	18.4	-30.1

**Note that when comparing changes recorded for inter-census periods in these columns, the length of time covered in each column should be taken into consideration.*

Source: SCI 1980, 1993f and 1994a.

However, as is apparent from Table 2.4, although the participation rates have been declining in rural Iran in recent decades, the overall supply of labour has increased. Nevertheless, in comparison to the increase in the size of the rural population, the increase in the rural labour force has been small. While the rural population increased by 34.4 per cent within 15 years from 1976 till 1991, the increase in the rural labour force was only 14.4 per cent in the same period. In other words, if in 1976 one working person had to support 3.2 persons, this figure increased to 3.9 persons in 1991.

The increase in the labour force in excess of the growth of employment opportunities has resulted in growing unemployment and underemployment and has been one of the characteristics of the economy for most of the last two decades (Amirahmadi 1990, p. 187; Amuzegar 1993, pp. 64-5). According to the available census data, the increase in unemployment rates has occurred mainly in urban areas. Unemployment rates in rural areas declined steadily (from 14.17 per cent to 12.91 per cent) from 1976 till 1986, but the increase in unemployment rates among the urban labour force was very rapid (from 5.1 per cent to 15.27 per cent). In absolute terms, while the number of the rural unemployed population in 1986 was about 28,000 less than the number in 1976, the number of unemployed in urban areas increased by over 822,000. According to 1991 census data, the unemployment rate in rural areas fell to 12.17 per cent in that year, about two per cent less than the 1976 figure (Table 2.4). One of the main reasons for this decline in the rural unemployment rate is probably that those unable to find job near their place of residence migrated to urban areas in search of work (Ministry of Jihad-e Sazandegi 1992, p. 10).

However, available census data on rural unemployment covers only the openly unemployed population and those who were reported as without work and seeking work in the week preceding the day of the census. As it was stated at the 75th Session of the International Labour Conference, available estimates of 'open unemployment in rural areas are typically low, usually lower than in urban areas, and too much significance should not be attached to them' (ILO 1988a, p 28). Therefore, the data only partly reveals the real extent of unemployment in the country (Bartsch 1970, p 23). To have a real picture of the employment problem, as Todaro writes, '... we must take into account, in addition to the openly unemployed, the larger numbers of workers who may be visibly active but in an economic sense are grossly underutilized' (Todaro 1994, p 228). Reliable data about the number and proportion of underemployed population are not available. According to Amirahmadi, around 20 per cent of the active population at the national level in 1986 were actually underemployed (Amirahmadi 1990, p. 187). Given the seasonality of agricultural work, the rate should be even higher in rural areas.

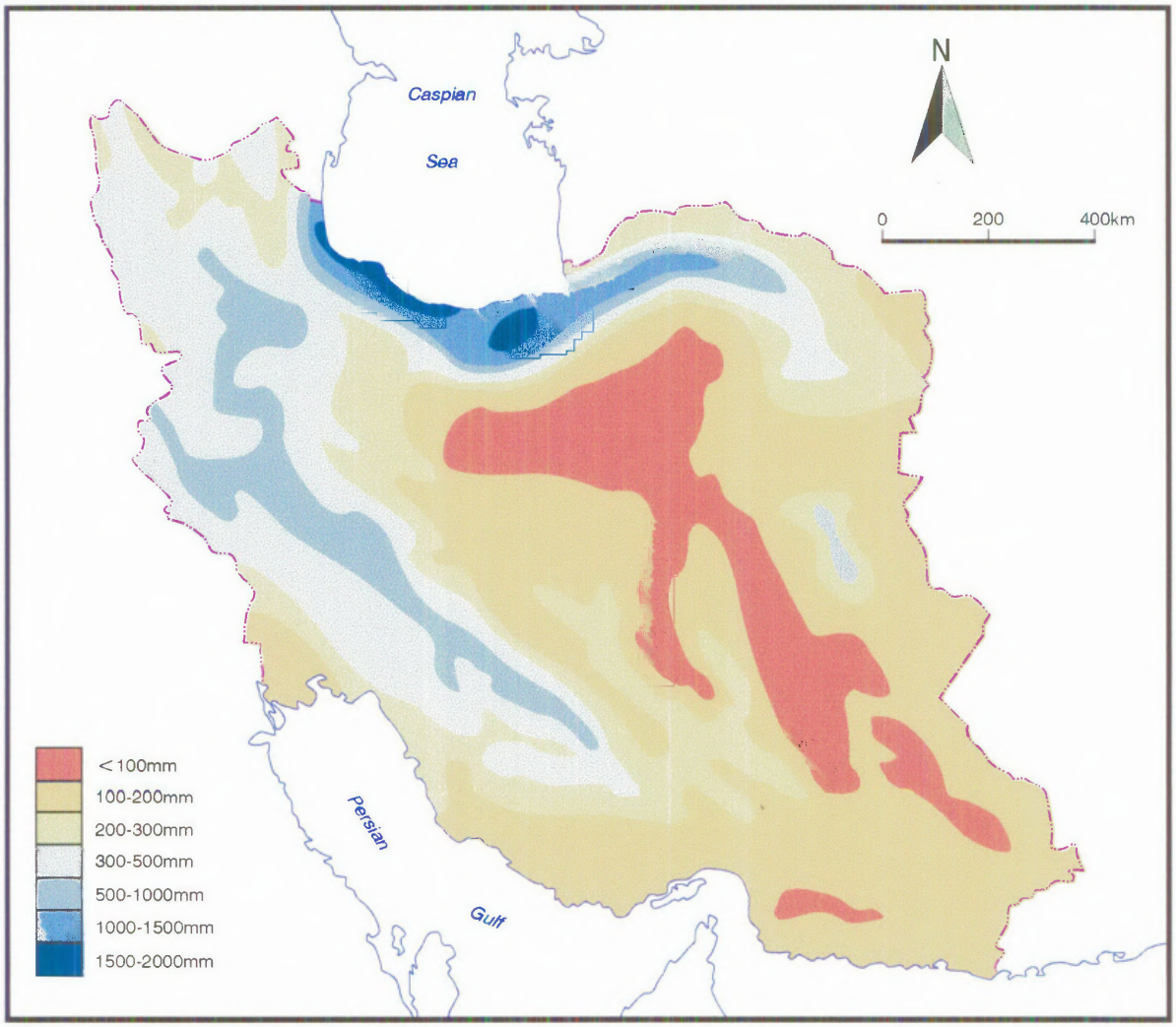
2.3 Agricultural sector performance

Iran covers a surface area of 1,648,000 square kilometres but the combination of geology, climate and soils has the effect of making some three-quarters of the country of little value to agriculture, herding or forestry (Maps 2.1 and 2.2). Indeed, as a result principally of environmental constraints, less than 10 per cent is under cultivation of any kind in any one year. According to the latest available data, total arable land under cultivation and fallow amounted to 17.7 million hectares in 1992, of which only about three-quarters was under cultivation and the remaining left as fallow. Furthermore, of the area under cultivation, only about 42 per cent (5,415,000 hectares) was irrigated (SCI 1994b, pp. 14-5).

Nevertheless, agriculture has traditionally made a significant contribution to Iran's economy. But the history of change in agriculture's role in the structure of the national economy up to late 1970s was one of accelerating comparative decline (McLachlan 1988, p. 178). As late as 1959, the agricultural sector comprised 32 per cent of the Gross National Product. Throughout the 1960s and 1970s, low rates of growth in the agricultural sector in comparison to movements in other areas of the economy diminished its importance at an accelerating rate. By 1968, the sectoral contribution of agriculture declined to 23 per cent and then dropped to 9.4 per cent by 1976 (Kazemi 1980, p. 32). While the gross national product rose by an annual average of about 10 per cent during the late 1960s and early 1970s, agriculture grew at an annual average of under 4 per cent during the same period.

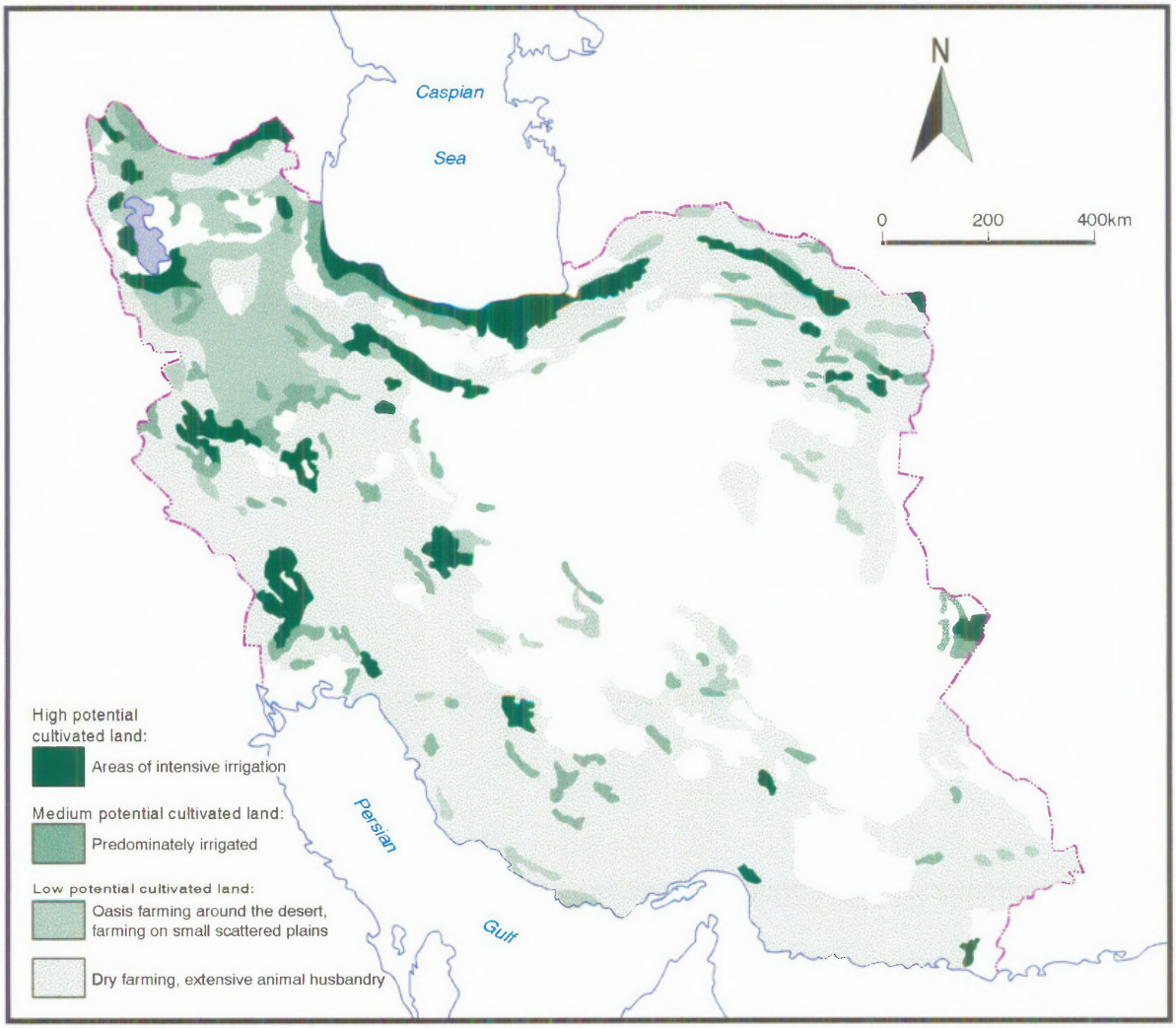
Indeed, the accelerating rate of decline in the contribution of agriculture to the national economy was in close relation to the increase in oil revenues and its contribution to the national economy (Katouzian 1981; Najafi and Soltani 1983; McLachlan 1986 and 1988). However, agriculture also lost importance as a major contributor within the non-oil sector of the economy as well (Azkia 1991, p. 158). The contribution of the sector to non-oil GDP dropped from 36 per cent in 1959 to 14 per cent in 1976.

Map 2.1: Annual Precipitation in Iran



Source: Amid 1990

Map 2.2: Distribution of Cultivated Areas in Iran



Source: Adapted from Nattagh 1986

During the postrevolutionary period, the agricultural sector performed better than it had before the revolution and also outperformed the other sectors of the economy (Amirahmadi 1990 and 1995; Ghasimi 1992; Amuzegar 1993). This is partly due to the fact that, as Ghasimi (1992, p. 602) noted, shortages of skilled manpower, capital, and high-technology-intensive goods did not adversely affect the sector. Furthermore, agriculture was accorded the highest priority by the government with the aim of attaining food security and agricultural self-sufficiency. Therefore, in addition to the expansion of the area under food grains, the increase in productivity through the generous use of fertilizers and pesticides, subsidised utilisation of farm machinery, guaranteed prices, crop insurance, and other incentives were also a feature of change (Amuzegar 1993, p. 54-5).

The contribution of agriculture to the national economy has shown a steady improvement since the revolution and, with an increase of more than 50 per cent in 10 years, it reached 17.7 per cent in 1987. The sector's actual average annual growth rate was a moderate 4 per cent a year, slightly higher than the decade preceding the revolution. The contribution of the sector to the national economy has further increased in recent years and, according to data published by Central Bank of Iran, it reached over 23 per cent in 1992 (Central Bank of Iran 1992, p. 33).

The declining share of total employment in agriculture as compared to other economic sectors has also been considerable. Although the contribution of the sector to the country's GDP has shown some increases since the late 1970s, the contribution of the sector to total employment has declined continuously. As is apparent from Table 2.5, the rates of change in employment by various economic activities were very uneven. Employment by agriculture has experienced an absolute decline (Table 2.6 and Figures 2.6a, 2.6b, 2.6c, and 2.6d) and, as in many other developing countries, there was a notable shift of the employed population out of agriculture. The greatest percentage gains were made in services, where the number employed by the sector in 1991 was more than three times greater than in 1966. On the other hand, employment in agriculture showed a decline over the same period and its share of total employment dropped from 47.5 per cent in 1966 to under 25 per cent in 1991.

However, what is important for the purpose of the present study is that, not only has agriculture lost its importance as the main sector providing employment for the labour force at the national level, but its importance is declining in rural areas as well. In spite of a rapid movement of labour from rural areas, the rural workforce has been increasing steadily, with a 21.8 per cent increase from 1966 till 1991, reaching 5,487,745 in that year. However, the number of workforce employed by agriculture in 1991 was 343,984 (10.8 per cent), less than the number employed by the sector 25 years before. The sector's share of total rural employment fell from over 70 per cent to under 52 per cent during the same period (Table 2.7 and Figures 2.6b and 2.6d). It is also important to note that in comparison with the national level, the decline in the contribution of agriculture to total employment in rural areas has been more rapid during the corresponding period (10.8 per cent against 5.1 per cent). During the 1986-1991 inter-census period, while the workforce employed by the sector at the national level showed an increase of 14,666, there was a decline of over 40,000 in rural areas. The total number of employed in rural areas increased by about 8.7 per cent during the same period. In other words, agriculture has not only been unable to absorb the added number in the rural labour force, it has even lost some of its previous workforce. As the result, the sector's contribution to rural employment dropped from 57 per cent in 1986 to 51.7 per cent in 1991.

The importance of agriculture as both the main contributor to the national economy and to employment inevitably declined with the rise in oil production, but the extent and rapidity of agricultural decline in Iran would also seem to have resulted from inconsistent policies and government negligence. As McLachlan noted, neglect of:

> ... the farming population compounded the adverse features brought about by the development of the oil economy. ... Poor prospects for agricultural development made it unattractive to investment, and appeared to lead successive governments to the conclusion that personnel and other resources were best diverted to other sectors. ... Once traditional agriculture had become secondary to changes elsewhere in the economy in the mid-1960s it followed that government intervention would be either to establish new farming structures that would be more responsive to government needs or to

exploit the countryside for the benefit of the urban population. ... Interference was capricious, episodic and partial but almost damaging (McLachlan 1988, pp. 2-3).

Table 2.6
CHANGES IN THE SECTORAL COMPOSITION OF THE WORKFORCE FROM 1966 TO 1991 (numbers in thousands)

Economic sectors	1966		1976		1986		1991		Changes from 1966 till 1991	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Agriculture	3380	47.5	2991	34.0	3191	29.0	3206	24.5	-174	-5.1
Industry	1887	26.5	3012	34.2	2781	25.3	3616	27.6	1729	91.6
Services	1710	24.0	2721	30.9	4670	42.4	5713	43.6	4003	234
Not classifiable	139	2.0	75	0.9	360	3.3	562	4.3	NA*	NA
Total	7116	100	8799	100	11002	100	13097	100	5981	84.1

Note that the table includes only population aged 10 and more. In the 1986 census, figures included population aged 6 and more. In order to make the data comparable, population aged 6-9 has been deducted from 1986 census figures.
**NA = Not applicable*
Source: SCI 1970, 1980, 1993f and 1994a.

Table 2.7
CHANGES IN THE SECTORAL COMPOSITION OF THE RURAL WORKFORCE FROM 1966 TO 1991 (numbers in thousands)

Economic sectors	1966		1976		1986		1991		Changes from 1966 till 1991	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Agriculture	3182	70.6	2761	58.9	2879	57.0	2838	51.7	-344	-10.8
Industry	841	18.7	1449	31.9	1018	20.2	1219	22.2	378	44.9
Services	407	9.0	450	9.6	1037	20.5	1163	21.2	756	185.8
Not classifiable	76	1.7	26	0.6	115	2.3	268	4.9	NA*	NA*
Total	4506	100	4686	100	5049	100	5488	100	982	21.8

Note that the table includes only population aged 10 and more. In the 1986 census, figures included population aged 6 and more. In order to make the data comparable, population aged 6-9 has been deducted from 1986 census figures.
**NA = Not applicable*
Source: SCI 1970, 1980, 1993f and 1994a.

Figures 2.6a, 2.6b, 2.6c, and 2.6d

CHANGES IN THE SECTORAL COMPOSITION OF THE WORKFORCE (1966-1991)

Figure 2.6a: Total country (per cent)

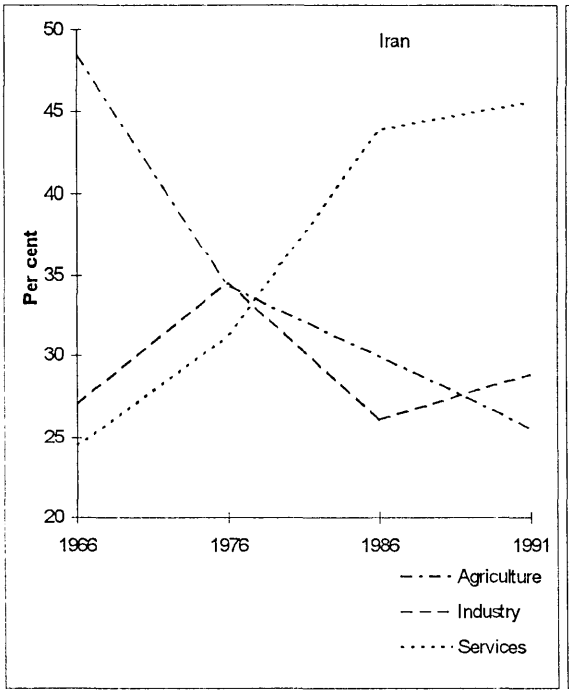


Figure 2.6b: Total country (number)

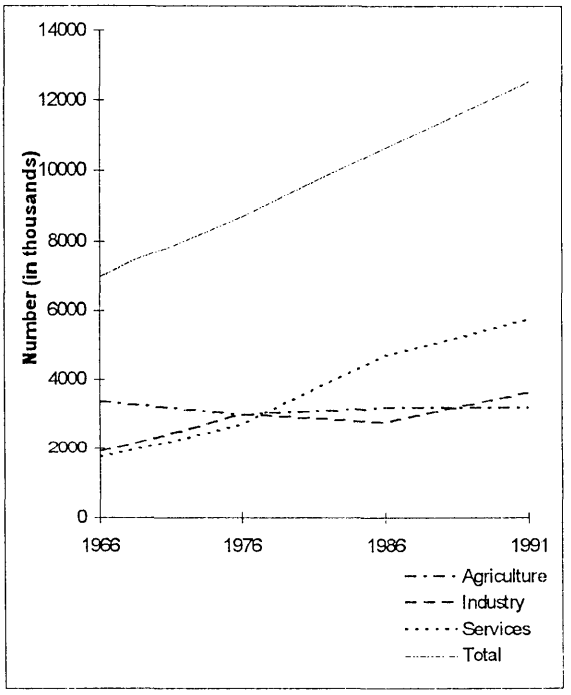


Figure 2.6c: Rural areas (per cent)

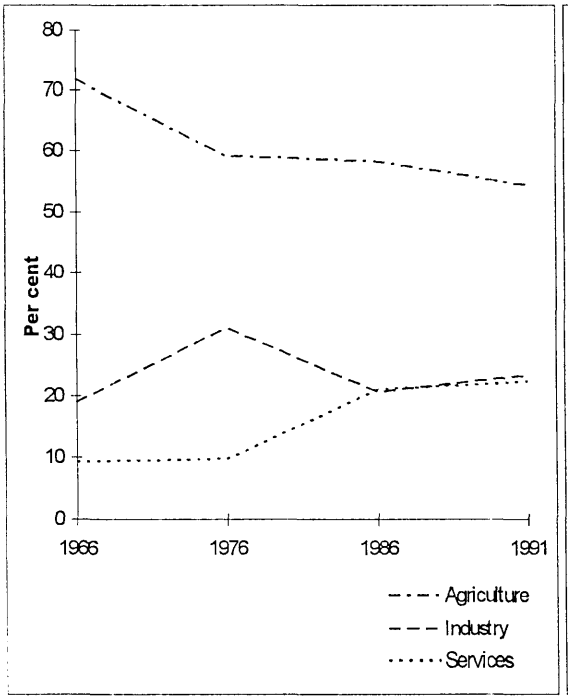
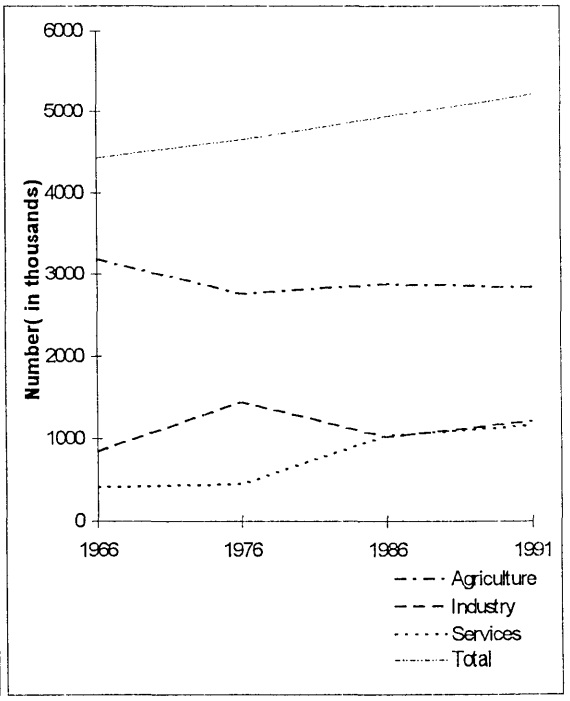


Figure 2.6d: Rural areas (number)



Source: SCI 1970, 1980, 1993f and 1994a.

Walton (1980, p. 273) has used Iran's economic development experience in the 1960s as an example of the failure of the development strategy of the 1950s and 1960s with its undue emphasis upon maximal growth and industrialisation at the expense of better balanced growth. He noted that 'hasty industrialisation in quest of quick and easy profits inevitably created acute geographical and sectoral imbalances. The agricultural sector, which in 1966 accounted for over 47% of the country's employed labour force, grew at an average by less than one third of the growth of the industrial sector' (Walton 1980, p. 281). As McLachlan has argued, in even more cases progress in the industrial and urban service sectors beguiled commentators to believe that 'either low agricultural production was of little importance or that poor performance in agriculture could be made good once other urgent priorities in petroleum and manufacturing industry had been attended to' (1988, p. 5).

Land reform

The most important of the government policies concerning the agricultural sector was the implementation of the Land Reform programme in the early 1960s. Before the implementation of the land reform programme, the most important feature of land ownership was the large scale proprietorship of whole villages (McLachlan 1968; Khosravi 1978; Najafi and Soltani 1983; Lahsaeizadeh 1993a). In terms of proprietorship, villages were broadly of three kinds: *omdeh maleki* (large proprietorship), *khordeh maleki* (small proprietorship), and villages of mixed ownership (Vadiei 1973; Khosravi 1978). The first group involved four kinds of properties: *Khaleseh* (state owned) lands; *Saltanati* (crown owned) lands; *Vaqf* (religious endowment) lands; and *Arbabi* (private ownership) (Lahsaeizadeh 1993a, p. 28). As is apparent from Table 2.8, the majority of agricultural land before the implementation of land reform were of *omdeh maleki*. In contrast to the European experience, the large landowners generally did not live in the village and were mostly town and city residents (Lambton 1969, p. 20; Karshenas 1990, p. 141). As Karshenas writes:

> Absentee landlordism was the dominant form of land ownership – where more than 55 per cent of the cultivated land was owned by 1 per cent of the

> population residing in the cities. The large landlords were practically the rulers of their villages and kept rigid control over the social and economic life of the peasantry ... . Thanks to their control over 65 per cent of the population residing in the rural areas, the landlords also mustered substantial political power at the regional and national levels ... (Karshenas 1990, p. 141).

The most powerful group of landowners consisted of 400-450 families, some of whom are reputed to have owned as many as 300 villages (Halliday 1979, pp. 106-7). Due to the absence of landlords from rural areas, the cultivation of their lands had to be conducted and supervised by a group of resident villagers who constituted the bulk of the country's rich peasantry.

The rural peasantry was formed of three broad classes of rich, middle, and poor peasants. The rich peasants' ownership of land was based on the exploitation of wage labour and their own frequent participation in farmwork. The middle peasants were the smallholders who owned and cultivated their own land by the help of their family labour. The poor peasants were the sharecroppers who cultivated the land that belonged to the landlords. This group did not own land, but was given the right to cultivate (*nasaq*) portions of the land owned by the landlords for a specified or unspecified time on the basis of either written or oral contracts (Kazemi 1980, pp. 32-3).

Table 2.8
ESTIMATES OF THE DISTRIBUTION OF LAND OWNERSHIP BEFORE THE IMPLEMENTATION OF LAND REFORM

Type of ownership	Per cent of all land owned	Number of villages	Per cent of all villages
Large proprietors	56	13,569	34.43
Small proprietors	10-12	16,522	41.93
Royal domain	10-13	812	2.06
Religious endowment	1-2	713	1.81
State domain	3-4	1,444	3.67
Other holdings	13	6,346	16.10

Source: Adapted from: McLachlan 1988, p. 122

In spite of this high degree of concentration of land ownership, large scale farming was not common prior to land reform. The large landowners usually managed their agricultural properties through *mubashir* (bailiffs) who contracted with the farmers to undertake cultivation in return for a specified share of crops, or a fixed rent to the landowner. However, as is evident from Table 2.9, sharecropping was far more common than fixed-rent tenancy (Amid 1990, p. 33). The arrangements between peasants and landowners for cultivation of land provided the latter with the largest share of the harvest and left the peasants amounts barely adequate for subsistence (Hooglund 1982, p. 10).

Table 2.9
NUMBER AND AREAS OF HOLDINGS BY TYPE OF TENURE IN 1960

Type of tenure	Number		Area	
	Number (thousands)	Per cent	Area (thousand hectares)	Per cent*
Sharecropping	919	48.96	7,021	61.83
Owner-operated	692	36.87	3,353	29.53
Fixed-rent tenancy	266	14.17	982	8.64
Total	1,877	100	11,356	100

**Discrepancies are due to rounding of percentages*

Source: Adapted from Amid 1990, p. 34

Rural society prior to land reform in Iran included a fourth category of residents who neither owned land nor were given the right to cultivate another's property. This group, known as *Khoshneshinan,* comprised about 40 per cent of the rural population of the country in 1960 (Hooglund 1982, p. 28). *Khoshneshinan* consisted of three distinct groups. The first group included an elite minority of middlemen, who comprised about 6 per cent of *Khoshneshinan.* A second group, including about 10 per

cent of the *Khoshneshinan* population, were the non-agricultural workers. The third group were mainly agricultural workers, and comprised the overwhelming majority of the *Khoshneshinan* population. They were hired to perform agricultural labour during the peak farming seasons and survived on their meagre income by doing farmwork and related tasks (Kazemi 1980, p. 33; Hooglund 1982, p.18).

The implementation of the land reform included three stages and took about a decade from 1962 till 1972, aiming to reorganise land ownership by transforming sharecropping peasants into owner-cultivators. It is beyond the scope of the present study to investigate the purposes of this transformation,[7] but whatever its main purposes, it deeply affected the work conditions and employment opportunities in agricultural sector.

The implementation of the first phase of the land reform started in 1962. The aim was to distribute large holdings belonging to absentee landowners and to limit individual land ownership. The main legal constraints relating to the distribution of land in this phase were the limitation of the size of the individual holdings to one six *dang* village (equal to one whole village) and the redistribution of the lands among *nasaq* holder peasants. Mechanised agricultural lands and fruit orchards were exempted from the reform. These exemptions, plus inadequate definitions related to mechanised farms, became barriers to the redistribution of lands among peasants (Lahsaeizadeh 1993a, p. 136). It has been estimated that the implementation of this phase of the reform affected some 432,043 sharecroppers (about 25 per cent of the total) throughout the country (Lahsaeizadeh 1993a, p. 139).

The second phase of the reform (passed on 25 July 1964) broadened the alternatives open to the landlords. The landlords could choose any one of the following five options: 1) lease of the land to the peasants; 2) sale of the land to peasants; 3) division of land according to the traditional division of product; 4) formation of a

[7] It has been argued that the land reform in Iran was a political decision which aimed to serve such purposes as: to strengthen the central government by reducing the political influences of the landlords in rural areas; to gain support from the masses of rural dwellers; to allow intervention of central government agents in rural areas; and to respond to some foreign pressures. For more information see Lambton 1969; Katouzian 1978; Hooglund 1982; Najafi and Soltani 1983; McLachlan 1988; Karshenas 1990; and Lahsaeizadeh 1993a.

shareholding agricultural unit; 5) purchasing peasants' cultivation rights (Lambton 1969, pp. 194-206). Out of these five options, the landlords opted for tenancy provision in the overwhelming majority of cases. About 1.3 million peasants became tenant farmers and some 300,000 peasants benefited from the other four options (Najafi and Soltani 1983, p. 151). The effect on the large majority of villages in the country was to establish tenancy arrangements as a major form of agricultural tenure by the middle of the 1960s. The landlords favoured tenancy provisions 'on the grounds that enabled them to continue to receive revenue from rents, while still preserving their property rights and titles' (Hakimian 1990, p. 73).

The new tenancy relationship resulting from the implementation of the second phase caused growing dissatisfaction among peasant families. There was also dissatisfaction with the progress in agricultural productivity. Towards the end of implementation of the second phase of land reform, as McLachlan noted, 'agriculture was developing the least rapidly of all sectors of the economy, yet accounted for approximately a quarter of all national economic activities by value and almost two-thirds of all employment' (1988, p. 117). The third phase of the reform that started in 1969, was an attempt to improve the situation by eliminating tenancy relations and coincided with the government's interest in formulating, as will be discussed later in this chapter, various agricultural development policies (Hooglund 1982, p. 68; Lahsaeizadeh 1993a, p. 146). The third phase sought to terminate the arrangements for tenancy agreements by extending the provisions for sale and division of land. According to Halliday (1979, p. 112), only about 730,000 out of 1.3 million eligible families in fact acquired land, and about 592,000 families lost the position they had acquired under phase two.

It has been estimated that, through the implementation of the three phases of land reform, about 1,7 families received land, which was only about 58 per cent of the total number of rural families in Iran (Azkia 1991, p. 117). Many of the peasants who did get plots of land under the reform received amounts that were too small to be viable (Halliday 1979, p. 112). Furthermore, about 40 per cent of the rural population, the agricultural labourers known as *Khoshneshinan,* obtained no land at all. According to an estimate by Adibi, wage labourers and family workers who formed 14.4 per cent and

33.1 per cent of the total rural workforce respectively, were not affected by either phase of land reform (Adibi 1977, p. 176). Thus, when land reform was declared to be officially completed in 1971, as Hooglund has noted:

> ... the overwhelming majority of villagers were in no better economic situation than they had been prior to implementation of the program. Indeed, the evidence suggests that the relative economic position of thousands of rural families actually worsened during the "revolutionary" decade of land reform. Not surprisingly, the frustrations of trying to earn a living from agriculture encouraged villagers to consider improving their conditions through migration (Hooglund 1982, p. 115).

The pattern of land distribution after the land reform reflected the already highly unequal distribution of holdings from the pre-reform era. Government policies, such as the exemption of mechanised farms and fruit orchards from redistribution, further exacerbated the unequal distribution of land holdings. According to calculations made by Karshenas (1990, pp. 159- 62), from new land brought under cultivation within 14 years from 1960 till 1974, about 84 per cent was concentrated in the top 20 per cent of the largest holdings, with the bottom 60 per cent of holdings accounting for only 4.1 per cent of the increment. According to this estimate, the bottom 40 per cent actually lost land in the process (see Table 2.10).

Furthermore, farmers received several pieces of agricultural land. Land in villages was divided into different categories with regard to factors such as soil quality, suitability for various crops, distance from settlement areas or water resources and each *nasaq* holder family had cultivation rights on each land category (Vadiei 1973). The land reform provision that each *nasaq* holder peasant would receive the land to which he held use rights during the year in which the reform was implemented, meant that each *nasaq* holder family received many pieces of land (Najmabadi 1987, p. 133). Given the small amounts of total land received by the majority of peasants, fragmentation meant tiny plots for each of this group of peasants. This is an important problem in Iranian agriculture and it is being accentuated by further division of the land according to inheritance law (Najafi and Soltani 1983). Table 2.11, which is based on a sample survey, gives an indication of the extent of this problem.

Table 2.10
DECILE DISTRIBUTION OF LAND BY HOLDING CLASS 1960-1974

Holding class	Size of holdings (hectare)*	Share of cultivated land		Share of the increase in cultivated land
		1960	1974	
Lowest 40%	Less than 2	5.1	3.4	-0.4
Lowest 60%	Less than 5	14.0	10.9	4.1
Second 40%	2-10	28.7	25.0	16.7
Lowest 80%	Less than 10	33.8	28.4	16.3
Top 20 %	Greater than 10	66.2	71.6	83.7
Total		100.0	100	100.0

**The sizes of holding groups are approximations, since there is generally an overlap between decline and size classification.*
Source: Karshenas 1990, p. 160

Table 2.11
NUMBER OF PLOTS PER HOLDING, BY SIZE OF HOLDING

Size of holding (ha.)	No. of plots per holding	Average size of each plot (ha.)
< 1	3.4	0.1
1 to <2	5.7	0.3
2 to <5	8.6	0.4
5 to <10	12.5	0.7
10 to <50	17.5	1.2
50 to <100	18.3	4.2
100 and over	14.6	16.6
Country average	8.5	0.8

Source: Najmabadi 1987, p.134

Another aspect of agricultural development over this period was the weakness of the employment generation effect of agricultural growth. Despite an increase in the area of arable land during the 1960s, employment in the agricultural sector remained stagnant. As is evident from Tables 2.5 and 2.6, between 1966 and 1976 employment in

the agricultural sector at the national level actually declined by 11.5 per cent. The decline in employment by the sector among the rural population was even greater. The number employed by the sector in rural areas declined by 13.2 per cent during the same period (see Table 2.7). According to Karshenas, in spite of an increase in the land/labour ratio by the mid 1970s, landless labourers and very poor peasant farmers with casual seasonal employment formed more than 60 per cent of the rural households. Karshenas also noted that they 'formed a substantial reserve labour which was continuously drawn upon by the urban sector throughout the period of rapid investment of 1963-1977' (Karshenas 1990, p. 162). Agriculture, as McLachlan writes:

> ... came to be seen as a drag on the performance of the economy at large that was polarizing the country between a modern urban sector and a backward countryside. The government, largely driven on by those with little sympathy for the farming community and with patchy knowledge of the impact of earlier land reforms, came to the decision that more upheaval was necessary, this time to consolidate the ownership and management of land into larger units that would permit rapid mechanization and an accelerated rate of growth in value added (McLachlan 1988, p. 117)

Thus, from the mid-1960s onwards there was a trend in government policies to supersede individual ownership with larger-scale farming. Halliday argued that 'phase three of land reform was, in part, a preparation for this new process which aimed above all to consolidate rural holdings' (Halliday 1979, p. 113). This trend led to the emergence of two new types of agricultural enterprise in Iran, which will be reviewed in the following section.

New agricultural enterprises

Belief in the advantages of large-scale and mechanised farming, led the government to adopt new policies towards the formation of new large-scale farm

enterprises. Government authorities believed that the main problem in the rural sector was not land distribution or the transfer of ownership to peasants. Their main concern was the achievement of higher productivity levels. (Nattagh 1986, p. 42). Thus, as Katouzian concluded, 'the original land reform had been intended to distribute land among the majority of peasant households, ... and then effectively reversed, for the sake of creating farm corporations and agri-businesses' (Katouzian 1981, p. 308). In the meantime, the problem of unemployment, although apparent, was of little concern to the authorities (Fallah 1982, p. 102). Therefore, high priority was given to the creation of large-scale mechanised farms to achieve growth targets in the agricultural sector.

The second and third stages of land reform were directed towards the formation of large farm corporations in which individual peasant households would own shares according to the size of their holdings (Katouzian 1978, p.358). According to Article One of Law, the farm corporations had aimed, *inter alia*, to increase output by widespread provision of facilities for farm mechanisation; to create all possible opportunities for the use of farming machinery and to make maximal efforts to establish the most modern methods of operation; to prevent the division of the land into small and uneconomic portions; to increase production by expanding the area of land under cultivation in the region of operations, by making use of infertile, uncultivated and waste land; and to increase the standard of living of the members of farm corporations (Lahsaeizadeh 1993a, p. 196).

The peasants who had surrendered their lands would become shareholders of corporations which would be managed by a state official. The idea was to consolidate small and scattered plots into large farms, along with mechanised farming (Jazayeri 1988, p. 83). Once the land was consolidated, peasants would lose their ownership of land and, while shareholders, they could also work for corporations as wage labourers. Each farm corporation could include two to 20 villages and according to available data, the average agricultural land area of the corporations was 3,500 hectares (Salmanzadeh 1980, p. 226). Theoretically, for the formation of corporations, the votes of 51 per cent of farm households were required. However, in practice, the establishment of corporations in selected areas was compulsory and they were situated wherever the government felt the land was suitable for them (Lahsaeizadeh 1993a, p.197).

The small shareholders, who formed the majority of the members, were normally dissatisfied with the performance of the corporation and many of them would have preferred to cultivate their own land rather than become shareholders of the corporation (Khosravi 1978). There were also several other reasons behind their dissatisfaction and anger. Their income had been reduced and, in spite of the promises made that they could work for a corporation if they so chose, due to the heavy use of agricultural machinery, many of the shareholders became unemployed (Jazayeri 1988, p. 83). More importantly, given the differences in sizes of the land owned by various participants, they received unequal numbers of the shares from the corporation and in some cases, the shares of the different participants varied from one to 200 (Khosravi 1978). Lahsaeizadeh (1990b, p. 201) noted that in one of the corporations in Western Iran, only 9 per cent of all shares belonged to 42 per cent of the members, while 70 per cent of the shares were allocated to 12 per cent of the members. In fact, this new institution perpetuated the old economic and social structures of the villages in new ways (Lahsaeizadeh 1990b, p 201). Furthermore, the formation of farm corporations paved the way for the concentration of shareownership, since small shareholders began to sell to the large ones. Hence, as Katouzian wrote, 'a reform policy which had begun with the express purpose of breaking up large ownership in land was – in a few years – converted into one which favoured concentration' (Katouzian 1978, p. 358).

Perhaps the most damaging effect of the formation of farm corporations was the uncertainty that they caused throughout the countryside (Khosravi 1978; Najafi and Soltani 1983; McLachlan 1988), for: 'The spread of uncertainty was out of all proportion to the number of corporations set up, and reached the stage where farmers were disinvesting in case they lost their assets to the government-run corporations. Rural families lost their faith in their future on the land and directed their children away from agriculture and the village' (McLachlan 1988, p. 120).

Fourteen farm corporations were established in 1968. By 1978, the number of farm corporations had risen to 92 with some 35,097 share holders and covering 851 villages with some 411,144 hectares. Of the total area covered by farm corporations, 326,308 hectares were agricultural lands, of which only about one-third would be

cultivated each year. After the revolution in February 1979, most of the farm corporations were dissolved and by 1986, only five of them were active. They included 23,000 hectares of agricultural land with about 2,000 shareholders (*Ettela-at* 4 April 1986).

The change of policy in favour of the concentration and modernisation of agriculture took yet another turn, with the strategy of setting-up large agro-industrial complexes described as 'agro-business' or 'agri-business'. There was a belief at the time that agro-industry was an ideal vehicle for modernisation, using an integrated organisation of large-scale farming and associated crop-processing industry (McLachlan 1988, p. 134). This policy was intended to create large-scale capitalist farms in the lands lying in the service area of the major water storage dams. The agri-business companies were to be financed by domestic and foreign private and public capital, to apply modern technical inputs, and to operate entirely on the basis of wage labour (Katouzian 1978, p. 360).

The peasants in the project areas were compelled to sell their land at the administrative prices set by the government. In reality, peasants received little or nothing for their lands, because the money due from the sale of their lands was used to repay their debts to the state and to cover building accommodation for their resettlements. Thus, as a result of the agro-businesses, 55,000 in Khuzistan 'lost their lands, their homes, their cultural and sociological entities, etc., by one stroke' (Katouzian 1978, p. 361). In the meantime, as stated by McLachlan (1988, p. 136), peasants had no role whatsoever in such agricultural enterprises.

According to Lahsaeizadeh (1993a, p. 214), by the mid-1970s, there were 213 agri-businesses operating on 236,000 hectares of land. Out of these numbers, 7 units with 134,000 hectares were government owned; 202 units with 40,000 hectares were privately owned; and finally, 4 units were jointly owned by government and the private sector, covering 62,000 hectares. The greatest amount of land allocated to agri-businesses was located in the Southwest of the country where potentially irrigable land became available by the implementation of irrigation projects during the Fourth and Fifth Plan periods (Nattagh 1986, p. 44). After the revolution in 1979, almost all of the

private agri-businesses were declared dissolved and the land was taken over by the government (*Ettela-at* 4 April 1986). A few years after the revolution, concern about promoting agricultural production encouraged the establishment of new agri-businesses, so that by 1988 the number of public and private owned agri-businesses reached 3,526 (Lahsaeizadeh 1993a, p. 280).

By the late-1970s, only 10 years after the adoption of the agri-businesses as a principal vehicle for agricultural 'modernisation', agricultural production in the reclaimed areas was somewhat less than had been the case before the project began. According to the study by Etemad Moghaddam, nearly all the indexes of performance, e.g., labour productivity, land productivity, total productivity, etc., were higher in the case of peasant farming than farm corporations, which in turn have performed better than agribusiness companies (Etemad Moghaddam, stated in Katouzian 1978, p. 361).

Furthermore, studies indicate that, as mentioned earlier, the overwhelming majority of the agricultural population of the affected areas not only did not gain from these projects, but lost their land and even their homes. A minority of investors clearly became the beneficiaries of land, large-scale irrigation, credit and marketing facilities. Part of the agricultural economy and social structure was subordinated to an externally geared, export oriented market economy. The natural consequences of this approach was massive rural impoverishment. The establishment of the agri-businesses denied the growing rural population access to land and contributed to the spread of the wage earning class (Lahsaeizadeh 1993a, p. 226).

The new projects introduced after the first stage of land reform, such as farm corporations and agri-businesses, were divorced from Iranian reality and were poor imports in many cases (McLachlan 1988, p. 157). Furthermore, they were 'expensive but ineffective in themselves, and unfortunately carried the additional cost of causing far-reaching damage to the traditional village farming system' (McLachlan 1988, p. 157). The main emphasis of agricultural policies was on extensive farming with highly capital intensive methods, which in some instances even involved the displacement of peasant farmers. Furthermore, as Karshenas noted 'government policy of encouraging mechanisation in agriculture also reduced the employment generation effect of

agricultural growth' (Karshenas 1989, p. 89). Other measures could have been introduced to increase labour absorption in the agricultural sector. The large areas of new lands which were brought under cultivation below the dams could have been converted into 'viable peasant holdings' instead of mega-sized agro-business concerns (Karshenas 1990, p. 164).

On the contrary, the policies for agriculture were designed to increase the rates of investment and productivity where the easiest short-term gains could be obtained. To achieve increased productivity, those involved in the process were to be brought together in large management units and all others were to be ignored. Emphasis on such policies when there was clear evidence of the 'increasing seriousness of the unemployment problem, the magnitude of rural-urban migration and the increasing inequality in income distribution' (Thorbecke 1973, p. 405), could only worsen the situation. The net result of such agricultural planning and policy was to greatly increase the marginality of large segments of the rural population. Moreover, the spread of agricultural mechanisation, which was designed to increase labour productivity, had the inevitable side effect of reducing the number of villagers needed for farmwork (Kazemi 1980, p. 41).

It is beyond the scope of this study to investigate further the extent of changes in agrarian structure brought about by revolution in 1979. However, it is worth mentioning that agriculture gained a high priority in government policies and has been performing relatively better than other sectors. Land redistribution became a major issue in the early years of the revolution and the new Land Reform Bill, approved by the Council of Revolution in 1980, remained a controversial issue between the Parliament and the Council of Guardians until the mid-1980s. The issue settled in 1985, when a revised version of the Land Reform bill was passed (Amirahmadi 1990, p. 151). According to available data, total land turned over by Seven-Member Committees of Land Devolution (SMCLD) include some 157,954 hectares of lands which had belonged to big landlords, plus 471,926 hectares barren lands and 52,882 hectares national resources lands (*Ettela-at* 14 April 1986).

Land was mainly given to groups of villagers consisting of 5 to 15 households that would form agricultural productive cooperatives known as *mosha*. The total number of *mosha* cooperatives was reported to reach 12,399 by 1986, which included some 87,243 rural households operating on 682,766 hectares of allocated lands (*Ettela-at* 14 April 1986). On average, each *mosha* covers 7 households with a combined total of 50 hectares of land.

2.4 Growth of rural non-agricultural activities

Changes in the sectoral composition of the workforce in rural Iran seem to be in accordance with the dominant trend of diversification in rural employment in developing countries (cf. pp. 12-5). In contrast to the changes in employment trends in agriculture, available data suggest a rather high rate of increase in the proportion and number of those employed by the non-agricultural sector, which implies rural employment diversification. However, little work has been undertaken to investigate the forces behind the recent trend of diversification of rural employment in the country.

The involvement of the rural workforce in non-agricultural activities is not a new phenomenon in the country. Iranian farmers have always looked for additional sources to supplement their agricultural income (English 1966; Vadiei 1973; Safinezhad 1987; McLachlan 1988; Lahsaeizadeh 1990a). Safinezhad argues that, due to physical constraints and limited agricultural resources, rural residents of arid and semi-arid parts of the country had always tried in the past to supplement their limited income from agriculture through involvement in craft industries (Safinezhad 1987, p. 328). In an environment with physical restrictions on farming, survival was managed through the diversification of the rural economy. Multiple incomes were generated to enable the household's subsistence, through participation in craft industries such as carpet weaving, hawking products outside the village in the off-seasons, and seasonal migration to a workplace outside the region (McLachlan 1988, p. 238). However, there has been a rapid growth in the diversity and extent of non-agricultural activities in

recent decades, resulting from factors such as land reform, from changes in agricultural practices, and from an increase in the size of the labour force.

As discussed earlier in this chapter, about 40 per cent of the rural population, known as *Khoshneshinan,* were ignored in land reform programmes and received no land at all. Many of the peasants who did get land under the reform received it in amounts that were too small to be viable. As is evident from Table 2.12, the average size of 26 per cent of agricultural holdings is only 0.38 hectare and, about one-third of agricultural holdings include less than 5 hectares of land. This land area is less than the figure accepted by Iranian agronomists of 7 hectares as a minimum average amount of land required to support one village family of five members at a basic subsistence level for one year (Hooglund 1982, p. 93). The large number of households without access to land, and the small size of the land held by the majority of farmers, means that other forms of employment are required for subsistence.

Table 2.12
NUMBER AND AREA OF AGRICULTURAL HOLDINGS BY SIZE GROUPS (1988)

Size of holdings (hectare)	Number (thousands)		Area (thousand hectares)		Average size of holdings (hectare)
	No.	%	Area	%	
< 1	755	26.77	285	1.66	0.38
1 to <2	420	14.89	544	3.17	1.30
2 to <5	688	24.40	2107	12.29	3.06
5 to <10	482	17.10	3238	18.88	6.72
10 to <50	442	15.67	7758	45.24	17.55
50 to <100	22	0.78	1427	8.32	64.86
100+	11	0.39	1791	10.44	162.82
Total	2820	100.00	17150	100.00	6.08

Source: SCI 1993b

Furthermore, agricultural plans and policies aimed to increase the growth rates in the agricultural sector rather than employment opportunities for the rural labour force. Thus, the introduction of mechanised and labour-saving farming further reduced employment opportunities for landless labourers. As a result, the number of wage and salary earners in agriculture declined by 170,000 within the 10 years from 1966 to 1976, including almost 20 per cent of such jobs (Hakimian 1990, p. 129). Therefore, it is not surprising that the shift of labour from Iranian agriculture through both the diversification of the rural economy and rural-urban migration recorded unprecedented figures in the decade of the implementation of these programmes. There was in fact a decline in the agricultural labour force in rural areas in absolute terms of about 13 per cent from 1966 till 1976 (see Tables 2.13 and 2.14). In a comparative study of changes in rural employment in some Asian countries, Karshenas noted that this was not seen even in East Asian countries such as Taiwan in the post-1950s period when the agricultural labour force remained more or less unchanged (Karshenas 1989, p. 89).

Nevertheless, the considerable increase in employment in the non-agricultural sector has not been a unified trend. Manufacturing was the only major contributor to rural non-farm employment in 1966, but its importance as a major employer has declined since then. In spite of about a 13 per cent increase in the sector's workforce from 1966 till 1991, its share has declined over the same period (see Tables 2.13 and 2.14).[8] Meanwhile, the increase in the number of the workforce employed by this sector has not been consistent. After a 36 per cent increase from 1966 till 1976, employment by the sector declined by over 38 per cent during the following decade. It is noteworthy that there seems to have been an inverse relationship between changes in employment by the two sectors of agriculture and manufacturing. The decline in employment by agriculture has coincided with an increase in employment by manufacturing and vice versa (Table 2.14).

[8] This sector in rural Iran mainly includes handicraft and home-based industries and it would probably be better to categorise them as 'rural industries' or 'cottage industries'. The characteristics of such industries will be discussed in Chapter 8.

Table 2. 13
SECTORAL COMPOSITION OF THE RURAL WORKFORCE, 1966-1991

Economic sectors	1966		1976		1986		1991	
	No.	%	No.	%	No.	%	No.	%
Agriculture, animal husbandry, hunting, ...	3182288	70.6	2761280	58.9	2878520	57.0	2804646	51.9
Mining	17907	0.4	35630	0.8	18723	0.4	28541	0.5
Manufacturing	575140	12.8	782966	16.7	482319	9.6	652213	12.1
Electricity, gas & water	5419	0.1	9459	0.2	20215	0.4	21488	0.4
Construction	242763	5.4	621412	13.3	497084	9.9	513791	9.5
Whole sale & retail trade, ...	132360	2.9	128205	2.7	132855	2.6	178294	3.3
Transport, communication & ...	55807	1.2	100937	2.2	165800	3.3	190496	3.5
Financing, insurance, real estate, ...	N*	N*	4074	0.1	6628	0.1	14307	0.3
Community, social & personal services	218909	4.9	216447	4.6	731614	14.5	776032	14.4
Activities not classifiable	75620	1.7	26374	0.6	114762	2.3	224793	4.2
Total	4506213	100	4686784	100	5048520	100	5404601	100

* *N= Not known*

Sources: SCI 1980, 1993f and 1994a.

Regarding the nature and type of dominant activities included in the rural manufacturing sector, it appears that the members of the workforce are being pushed as much as they are pulled into these activities. According to the 1986 census which provides detailed data on employment, almost 39 per cent (188,000) of the workforce employed by the manufacturing sector in the rural areas were employed in carpet weaving. Of these, some 75 per cent were either working on their own account or were unpaid family workers. Therefore, the expansion of this type of industry-related activity

does not seem to reflect any 'rural industrialisation' drive, but primarily the expansion of carpet weaving which is the main 'employer' of this sector. As Bartsch noted, the modest capital equipment and finances required in home workshop production 'have made self-employment in this activity a common means by which to gain some sort of income for those in the rural areas unable to find more profitable employment' (Bartsch 1970, p. 19).

Table 2.14
CHANGES IN THE SECTORAL COMPOSITION OF THE WORKFORCE, 1966-1991

Economic sectors	1966-1976		1976-86		1986-91		1966-91	
	No.	%	No.	%	No.	%	No.	%
Agriculture, animal husbandry, hunting, ...	-421008	-13.2	117240	4.3	-73874	-2.6	-377642	-11.9
Mining	17723	99.0	-16907	-47.5	9818	52.4	10634	59.4
Manufacturing	207826	36.1	-300647	-38.4	169894	35.2	77073	13.4
Electricity, gas & water	4040	74.6	10756	113.7	1273	6.3	16069	296.5
Construction	378649	156.0	-124328	-20.0	16707	3.4	271028	111.6
Whole sale & retail trade ...	-4155	-3.1	4650	3.6	45439	34.2	45934	34.7
Transport, communication & ...	45130	80.9	64863	64.3	24696	14.9	134689	241.4
Financing, insurance, real estate ...	4074	NA*	2554	62.7	7679	115.9	NA*	NA*
Community, social & personal services	-2462	-1.1	515167	238.0	44418	6.07	557123	254.5
Activities not classifiable	-49246	-65.1	88388	335.1	110031	95.9	149173	197.3
Total	180571	4.0	361736	7.7	356081	7.1	898388	19.9

**Not applicable*

Source: Calculated from Table 2.13

The other sector which has experienced considerable increase in its workforce is community, social and personal services. The growth of this sector is often a product of the expansion of services such as health, education, security, and other services in rural areas. The sector first showed an absolute decline in its workforce from 1966 till 1976, a period during which, as mentioned earlier, rural areas experienced considerable change.

Thus, the rapid changes in rural areas do not seem to have been associated with a notable expansion of rural services. The sector experienced a sharp increase in its workforce in the next decade. As is evident from Table 2.14, the size of the workforce employed by the sector increased by more than half a million (with an increase rate of 238 per cent) within the 10 years from 1976 till 1986. The increase could be partly related to the expansion of rural services which were of major concern to the government after the revolution (Hooglund 1995, Azkia 1991). However, as Zanjani noted, the major increase in the size of the workforce in this sector is due to the increase in the number of personnel in defence forces following the outset of the imposed war with Iraq (Zanjani 1991, p. 37). According to 1991 census data, the number in the defence forces included almost 17 per cent of the rural non-agricultural workforce in that year.

Further research is required to investigate the forces behind rural employment diversification in Iran. However, as this discussion has demonstrated, it seems that, unlike some suggested ideas (see Hakimian 1990, p. 132), the shift of workforce from agriculture to rural non-agricultural activities has not only been because of the attraction of these activities.

2.5 Conclusion

The focus of this chapter was on changes in three major aspects of rural employment in Iran in recent decades. First, discussion on the supply side of the rural labour force demonstrated that, in spite of the rapid migration of the rural population to urban centres, there has been a considerable increase in the supply of rural labour.

Second, the inappropriate agricultural policies adopted since the early 1960s were an additional limiting factor in the labour absorption capacity of agriculture, exacerbating further the imbalances between the supply and demand sides of the rural labour markets.

Implementation of the land reform demolished the traditional sharecropping system but had little effect on improving the standards of life among the masses of landless and small holder families. The introduction of the new forms of large and mechanised farm enterprises, aiming at the 'growth' targets, further reduced the employment opportunities for rural labour in the agricultural sector. The trends in growth in non-agricultural activities were the third aspect of rural employment discussed in this chapter. Further research is required to investigate the forces behind the growth of the non-agricultural sector in rural Iran. However, the discussion in this chapter does not suggest a developmental trajectory, such as that outlined in Chapter One.

CHAPTER THREE

SURVEY METHODOLOGY

3.1 Introduction

This study focuses on the current situation and patterns of change in the supply of, and demand for, labour in a sample of villages in Northwestern Iran. This is a comparative study of the labour force in sample villages and of changes occurring from 1986 till 1994. The concentration of the study at the village level reflects the author's conviction, as Hardjono wrote, that 'micro studies can identify and analyse the processes currently occurring at village level more accurately than can macro studies, in which distance from the subject not infrequently leads to excessive generalisation' (Hardjono 1984, p. 21).

The original intention of the study was to study four villages as a unit and to investigate the changes in their labour force from 1966 till 1986. In the processes of data collection and analyses, this original intention was changed for two reasons. First, initial analysis of the data revealed a great degree of diversity between the villages both now and in the patterns of labour force changes which had occurred over time. The diversities among the sample villages, as well as the factors resulting in different patterns of growth, seemed to warrant more attention. Secondly, the year 1966 was chosen as the original start of the period because it was the year in which the first census after commencement of the land reform was conducted. Thus, the 1966 Census data could provide information about the area's labour force at the beginning of the period of rapid changes brought about by the land reform (see Chapter 2). The year 1986 was chosen to end the period to be covered by the study because the latest census covering the entire population of the country was conducted in that year.[1]

[1] According to a decision made by SCI (1994a, p. two), detailed data from the 1991 census that covered only a portion of the population and was conducted through sampling throughout the country, would not be available at village level.

However, detailed study of changes over times in the villages using census data was not possible because detailed census data on the labour force at the village level was only available from the 1986 census but from none conducted earlier. This meant that it was not possible to acquire data on the labour force of the sample villages from the 1966 and 1976 censuses. Thus, the time period covered by the present study had to be limited to 1986-1994. Therefore, to explore any changes in the labour force, the 1986 census data will be compared with the data collected for this research through the household survey in the summer of 1994.

The main aim of the Thesis is to describe and explain the characteristics and composition of the labour force, its changes over time, and the availability of employment opportunities for the labour force in the sample villages. This chapter explains the methods used in collecting data required to achieve the objectives of the study. Section 3.2 introduces the sources of information for the study and section 3.3 explains the reasons for, and process of, the selection of sample villages. Survey design and the methods used in selecting the sample households are discussed in section 3.4. The conduct of the survey, which was administered in three weeks using two separate interview schedules, is the subject of section 3.5. The problems associated with the survey are then outlined and finally, some concluding comments are made about the strengths of the methodologies used.

3.2 Sources of information

The study utilises three main sources of information: primary survey data, secondary data, and intensive field observation. The last item includes the work experience of the author in the study area. The primary data were obtained through conducting household and enterprise surveys using two separate interview schedules. The information obtained through the interview schedules provides a perspective at the household as well as the individual levels in both quantitative and qualitative terms. The secondary data give an overall picture at village level and are, of course, primarily quantitative in nature. Intensive and focused field observations helped to develop an

understanding of processes which may not have been detected in the primary data. Field observation played an important role in providing qualitative information later used to check on, and in explanation of, the quantitative data.

Apart from these three sources of information, data were also collected through special in-depth but unstructured interviews with key individuals, both in the villages and in selected government institutions. The interviewees were involved with rural affairs and were considered able to provide detailed information about the processes being studied in the sample villages. Those interviewed, in addition to members of the Islamic Councils and the other key and informed individuals in the villages, included: officials in the Agricultural Administration in Marand; the head of the Administration of Rural Co-operatives in Marand; the head of the Rural Guidance Plans Unit of the Foundation of Islamic Revolution in Tabriz; the head of the Rural Development Unit of Organisation of Jihad-e Sazandegi in Tabriz; and officials in the Economics Unit in the Plan and Budget Organisation of the Province of Eastern Azarbaijan. Informal and unstructured, but in-depth, interviews were also conducted with ordinary citizens in the sample villages.

3.3 The process of selection of the sample villages

Selection of the four villages under study was the first step in a two-stage stratified sample design. In the second stage of the design, households from the selected villages were sampled. In selecting sample villages, the main criterion was to select villages that could represent the general trends of socioeconomic changes in rural Iran. However, rural Iran includes over 60,000 villages with diverse physical, social, and economic conditions. Therefore, patterns of changes in one single village, or even a group of villages in one area, may not represent the patterns of changes throughout the rural areas of the country. Yet, for pragmatic reasons, it was important to select a small number of villages so that in-depth study of the issues could be possible. It was also important to select villages that could be accessed relatively easily to conduct the field survey. Villages very close to urban centres were not appropriate because they may act

as dormitories or second homes for urban dwellers and could not represent accurately patterns of changes in the labour force in rural areas.

A preliminary study of the subdistricts of the County of Marand showed that subdistrict of Dowlat Abad included seven villages that would suit the purpose of the study.[2] The subdistrict, although small in so far as the number of villages is concerned, consisted of a diverse range of villages which could make it possible to study different types of villages within a small area. Diversity was apparent in the following ways:

a) access: the subdistrict included villages with easy access as well as villages facing problems of access;
b) size: the subdistrict included one larger, two medium-sized, and four small villages[3];
c) spatial location: two of the villages were located in mountainous areas, two in foothills, and three on a plain (see Map 3.1);
d) patterns of changes: according to available census data at the time of selection, the subdistrict included villages with a very rapid growth of population, as well as villages experiencing depopulation. Whereas two of the villages had an average growth rate of over 3.5 per cent per annum from 1976 till 1986, two other villages showed an average negative growth rate of about -1.5 per cent per annum during the same period;
e) economic activities: a diverse ranges of economic activities were observed in the subdistrict. While subsistence agriculture seemed to be a dominant sector contributing to total employment in some villages, cottage and small industries seemed to have a dominant role in employment in some others.

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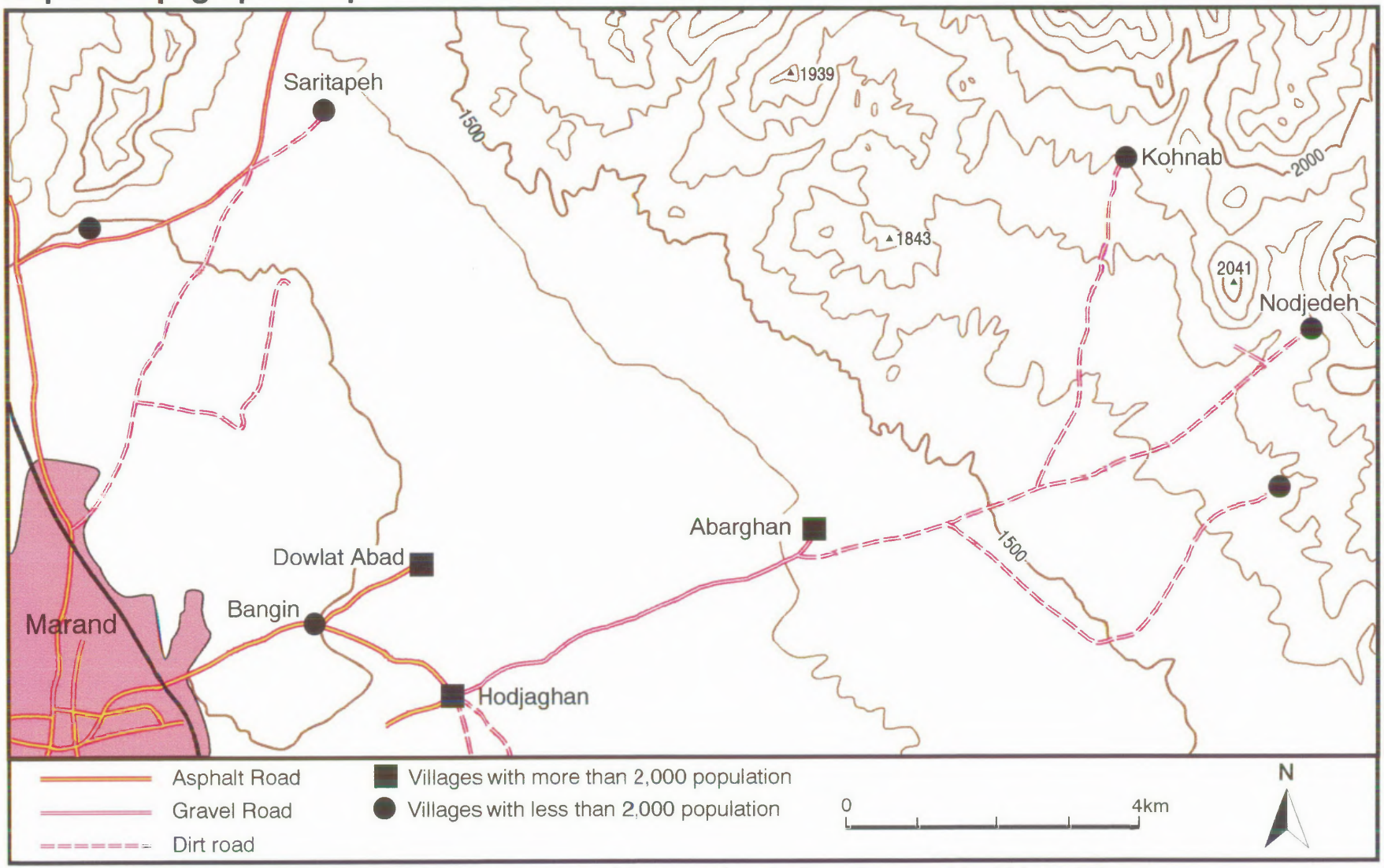
[2] The selection of the study area in the county of Marand in general, and the subdistrict of Dowlat Abad in particular, was also influenced by two other factors. The author was familiar with the rural areas of Northwest Iran through his work experience. Teaching rural geography for over 10 years at the University of Tabriz (located in the metropolitan city of Northwest Iran), which included field trips with students to rural areas, provided familiarity with these areas. Involvement in five separate research projects as a basis for Guidance Plans for five subdistricts in the province of Eastern Azarbaijan, necessitated a relatively detailed study of the rural areas in the three counties of Tabriz, Bonab, and Marand. The selection of the study area from the county of Marand was also of special interest to the author since this was his birth place.

[3] Out of the total population of 156,498 living in rural areas of the county in 1986, 33,108 lived in 101 small villages with less than 1,000 inhabitants, 77,479 lived in 46 medium size villages with population between 1,000 and 2,500, and 45,911 lived in 11 bigger size villages with more than 2,500 population (calculated from SCI 1989, pp. 12-9).

Map 3.1:Topographic Map of the Subdistrict of Dowlat Abad



Source: Adapted from Plan and Budget Organisation of Eastern Azarbaijan, Geographical Map of Ostan

For pragmatic reasons, and in order to make the study size manageable, the number of villages to be covered by the study was reduced in the second stage of selection. One of the villages, Bangin, was omitted from the list as it was located only two kilometres away from Marand and seemed to be a neighbourhood of this town rather than a separate village. The three villages of Kohnab, Nojedeh, and Saritapeh seemed to have common characteristics. They were small in size, with less than 1,000 inhabitants each, and had experienced decline or a very low rate of growth in their population. All three villages were located in mountainous areas and faced similar problems of access to other settlement centres. The other common characteristics seemed to be the dominance of subsistence agriculture in the economic structure of these three villages. Therefore, only one village, Kohnab, was selected out of these three villages.

Three other villages of the subdistrict were also selected because each seemed to represent a particular type of village. Dowlat Abad was chosen as the centre of the subdistrict and because it acts as an administrative centre for the other 6 villages. Hodjaghan seemed to be typical among the 7 villages of the subdistrict in terms of its economic activities. As seemed to be common in these villages, the textile industry had shown rapid growth and its contribution to the total employment of the labour force seemed to be significant. Finally, the other medium-sized village of the subdistrict, Abarghan, seemed to present different characteristics in terms of its economic activities compared to the other villages of the subdistrict. While agriculture had the dominant share of the economy of the village, the involvement of households in cottage industry seemed to be very common. Thus, the four villages of Dowlat Abad, Abarghan, Hodjaghan, and Kohnab were selected as the case study for the present research.

3.4 Survey design

The survey method involved the use of interview schedules. Considering the low level of literacy among the target population[4], self-administered questionnaires did not

[4] According to the 1986 census data, only 45.83 per cent of the population aged 6 and more in the four selected villages were literate (SCI 1989).

seem to be appropriate. As Dixon and Leach have suggested, where the study is particularly concerned to include members of the population who are less educated or people unlikely to fill in forms without personal encouragement, the presence of an interviewer may be essential (Dixon and Leach ?1978, p. 9). Therefore, an interviewer personally approached each sample household and conducted the interview.

Selection of sample households

Due to the large number of households, the survey covered only a sample from each of the villages. This selection of the households from the sample villages was the second step in sample design and took place through random sampling. The use of stratified random sampling on the basis of criteria such as land ownership or occupation of the heads of the households was not possible, since no information was available at this level. In order to select the samples representative of the entire population of the villages, selection on the basis of residential addresses appeared to be most suitable for the purposes of this research. Since no map was available for any of the sample villages to enable a random selection of dwellers, sample selection was carried out on the ground.[5] An appropriate 'skip interval' on the basis of the number of the total households for each village was selected. Because of the different size of the villages, and in order to ensure a reasonable representation from each village, it was decided to choose small portions from large settlements and large portions from small settlements. So, the skip interval adopted included 10, 8, 7, and 5 for Dowlat Abad, Hodjaghan, Abarghan and Kohnab respectively. For example, households in every tenth dwelling in Dowlat Abad, or in every fifth dwelling in Kohnab were selected to be interviewed. Since there was, on average, more than one household living in each dwelling, it was decided that the first respondent approached would be interviewed in such cases.[6] If one selected household refused to be interviewed, the household in the next dwelling would be chosen instead. In summary, the sample covered 20.2 per cent of households

[5] There were of course maps available for Dowlat Abad but the residential units were shown as blocks rather than as units in these maps.

[6] According to the survey conducted earlier in Dowlat Abad, there were on average 1.25 household living in each residential unit in this village (Sadr Mousavi, Hadili & Zahedi 1992).

in Kohnab, 9.5 per cent in Abarghan, 9.2 per cent in Hodjaghan, and 7.4 per cent in Dowlat Abad (see Table 3.1).

Table 3.1

NUMBER AND PERCENTAGE OF HOUSEHOLDS COVERED BY THE SURVEY

	Total number of households*	Number of sample households	Sample households as a percentage of total number of households**
Dowlat Abad	796	59	7.4
Abarghan	369	35	9.5
Hodjaghan	436	40	9.2
Kohnab	89	18	20.2
Total	1690	152	9.0

**This column includes data from 1986 census. Data from 1991 Census was not available at the time of the survey.*

*** These percentages do not match with the selected intervals since there were on average more than one household living in each dwelling.*

3.5 Conducting the survey

Interviewing the sample households was carried out over a three week period in August 1994. Considering the relatively large number of households and enterprises to be surveyed, assistance from three field workers was used to conduct the interviews. One of the interviewers was a student in the Department of Geography and Urban Planning at the University of Tabriz. He had previously assisted a team of researchers in data collection from the same area and had some degree of familiarity with the locality. The two others were local and resident in Dowlat Abad. One of them was a geography student at the Open Islamic University of Marand and the other was a teacher in Hodjaghan. Two days were spent in Dowlat Abad training the interviewers before commencing the survey. The training was concerned primarily with explaining the terms

and purposes of the survey. In the third day, a pilot survey was conducted in the village of Bangin, which is located in the subdistrict of Dowlat Abad but was not included in the sample.

The pilot survey aimed to serve two purposes: to check the suitability of questions to obtain the desired information; and to provide practice for the interviewers. The pilot survey turned out to be very useful. In addition to being a practice for interviewers, it revealed that a few of the questions in interview schedules needed to be revised. The same questions as those included in the 1986 census were initially included in the household interview schedules designed for the survey in 1994. As a result of checking the piloted interview schedules, and drawing on the two research assistants' knowledge of the surveyed population, it appeared that some of the student population who worked during the week before due to summer vacations, were included among the economically active population of the village. To minimise distortions caused by such occurrences, it was decided to ask additional questions. As recommended by the Thirteenth International Conference of Labour Statisticians (ICLS) (Rao and Mehran 1990), these concerned the activity status of the individuals over a relatively longer period.

According to the resolution adopted by ICLS in 1982, there are two useful measures of the 'economically active population': the 'currently active population' which is measured in relation to a short period such as one week or one day; and the 'usually active population' which is measured in relation to a longer period such as one year (Rao and Mehran 1990, p. 61). Thus, the population reported as economically active during the pilot survey could be regarded as 'currently active population', rather than 'usually active population'. The latter is intended, as Rao and Mehran stated:

> ... to be measured when the aim is to obtain data reflecting the dominant pattern of activity and where there is a significant seasonal pattern of activities and the data collection programme does not permit repeated measurements in the course of a year (1990, p. 61).

Thus, in order to collect data that could reflect the usual activity status of population of the sample villages, questions relating to the activity status of individuals, and to their main and second jobs during the year before the survey, were also added to the interview schedules. Therefore, the respondents were asked to state the activity status and main and second job of their household members both in the week before as well as the year before the survey. Chapters Five and Six of this study which deal with the activity status and the occupation of the surveyed population, are based on the usual activity status and main and second job of the household members, rather than on the current ones.

Since the goal of the survey was to obtain information about all members of the household who were aged 10 and over, as well as to obtain information about various social and economic aspects such as agricultural land, types and amounts of crop production, animal husbandry and involvement in craft or household industries, it was felt that more valid information could be obtained from the heads of the households.[7] The head of the household in rural Iran, usually male, is often the main breadwinner of the household (Taghavi 1995). The head also often manages the farm and non-farm activities undertaken by the household, and thus, is a better source of information pertaining to these activities. For this reason, apart from a very few cases where the heads of the households were not available, interviews were conducted with the heads of the sample households. Respondents other than the heads of the households constituted only about 5 per cent (in 8 out of 152 households) of total interviewees.

All three field workers simultaneously conducted interviews with the respondents from the sample households in one village. Each village was divided into three segments and each interviewer was responsible for conducting interviews in one segment. The results of preliminary observations indicated that the heads of the households generally spend most of their day time at the work place. Therefore, it was

[7] The same definition of the household as was introduced by the Statistical Centre of Iran in the 1986 census, was employed in the survey. According to this definition, a household consists of persons who live together in one residence, share their living expenses, and usually eat together (SCI 1993f, p. one). In this census, persons such as students and military and disciplinary forces who lived in collective households, were also enumerated within their regular households. The head of the household is defined as one of the household members who has been known as the head in the household. Should the household members be unable to designate the head, the oldest member of the household is considered to be the head of the household (SCI 1993f, p. four).

decided to conduct interviews late in the afternoons and in the evenings when the heads of the households would return home from their work place. If the head of one of the sample households was not available on the first visit, a message would be left and the household code and address would be recorded. The interviewer would visit the same household later on that day or on the following day to conduct the interview.

In order to maximise responses from the target population, before starting the survey, the purpose of the study was explained to some key individuals and to the members of the Islamic Councils in each of the sample villages. Their co-operation was sought in encouraging the residents to participate in the survey. The purpose of the survey was also explained to individuals in personal contacts in public places before the commencement of the survey.

The familiarity of the interviewers and the researcher with the residents, the use of personal contacts to explain the purpose of the research prior to the survey, and the co-operation of the village councils in encouraging the households to participate, resulted in a very good response rate to the survey. Out of 152 selected households, 140 of them (over 92 per cent) agreed to respond to the questions. To replace the 12 households that refused to be interviewed, households resident in neighbouring dwellings were interviewed.

The completed interview schedules were checked every day by the author. The interview schedules with incomplete or confusing responses were completed by the relevant interviewer using a second approach to the relevant interviewee. The selection of two local research assistants who were familiar with the area had positive benefits. Nevertheless, it appeared that the selection of local research assistants could have some negative effects as well. Checking of the completed interview schedules on the first day of the survey revealed that, in spite of earlier training, one of them had taken answers for some of the apparently simple questions for granted and did not try to get accurate responses from respondents.[8] Such interview schedules were sent back for correction with a further approach to the respondent household on the following day.

[8] In interview schedules conduced by this local interviewer on the first day of the survey, all of the students in households involved in carpet weaving were recorded as 'carpet weavers'. After discussing the issue with

After the completion of interviewing, the completed interview schedules were sent back to the University of New England for coding and entry into a data base. After the data had been coded and entered, it was checked against the interview schedules for errors. This process of coding and data entry took almost three months.

Due to the descriptive nature of the research, plus the small size of the samples, statistical analysis has not been used in this study. Information from the data base has been translated into tables and graphs which will appear in the text as percentages.

Household interview schedules

The household interview schedule (see Appendix 1) was designed to obtain comprehensive information from responses to 103 questions grouped into six groups of socio-economic variables. These covered the following areas:

1) general demographic data about household members such as: sex, age, marital status, and literacy level;
2) information concerning the activity and employment status of the household members, including their major and secondary employment, the location of their employment and the duration of their work;
3) migration, including information about the migration of previous household members;
4) information about agricultural land, agricultural practices, animal husbandry and household members' involvement in farm-related activities;
5) craft and household industries such as: type of industry or craft, the extent of household members' involvement, raw materials, market for products;
6) ambitions regarding employment.

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the relevant interviewer, it became evident that he had assumed, according to his own understanding, all students in such households as being involved in carpet weaving in the summer vacations.

The interview schedules were first prepared in English and then translated to Farsi. The interviews were conducted in Azari, the native language of the people in North-western Iran, but were recorded in Farsi. All three interviewers are very fluent in both Azari and Farsi. Thus, errors in translations and subtlety of meaning should have been minimal.

Enterprise survey

The enterprise survey aimed to collect mainly qualitative data about the types of non-agricultural activities practised in the study area.[9] The information has been used to supplement the data collected through the household survey. The intention of this survey was to obtain information which could help to describe the types and characteristics of the expanding non-agricultural activities in the area as well as explaining the factors contributing to this expansion.

The interview schedule for enterprises (see Appendix 1) contained 54 questions and was designed to collect information in the following areas:

1) general information about the enterprise such as: type and date of establishment, previous job of the owner, source of fund for establishment of the enterprise, skill requirements, etc.;
2) questions concerning machinery and equipment being used;
3) raw materials;
4) questions about labour such as: number of employees, their sex, age, literacy level, and employment status, their relationship to the owner, their previous form of employment;
5) marketing of the product;
6) involvement of the enterprise owner in farm-related activities and ownership of agricultural land.

[9] For the purpose of the survey, an enterprise was defined as a permanent place where economic activities were regularly carried out to produce non-agricultural goods or to provide particular types of services.

Enterprises in the study area were of diverse types. Considering the fact that some of the enterprises were home-based, located inside the households' place of residence, preparing a list of all enterprises would require a census which covered, in addition to non-home-based enterprises, all households in the study area. Therefore, for pragmatic reasons and, given that the purpose of the survey was to provide data to support information collected through the household survey, it was decided to select samples on the basis of available information and of the author's personal observations from the field.

Preliminary observations and data collected through conversations with residents, revealed that carpet weaving was being carried out in most of the households in the two villages of Abarghan and Kohnab, and to a relatively lower extent in Dowlat Abad and in Hodjaghan. According to data available in the Health House of Hodjaghan, there were about 100 wick weaving workshops active in this village. Other major non-agricultural enterprises in the sample villages included about 60 shops, 10 coffee shops, 5 repair shops, 5 blacksmiths, 3 bakeries, 4 public baths, 5 carpenters and a few other small enterprises. Given the similar work practices in each kind of enterprise in all four villages, the considerable variations in the number of each kind from one village to another, and the purposes of the survey, all enterprises in the study area were considered as a single sample frame. Enterprises were chosen according to their kind regardless of their village of location. In addition, the dominant kind of enterprises in each village, in terms of number of enterprises and their work force, was identified.

Following this selection process, 50 enterprises were surveyed, of which 19 enterprises were from Dowlat Abad, 10 from Abarghan, 19 from Hodjaghan, and 2 from Kohnab. These enterprises included 17 carpet weaving workshops, 15 wick weaving workshops, 7 shops and one from each of the other types of enterprises. All interviews were conducted by the author and respondents were chosen among the owners of the enterprises. The survey covered only private enterprises. Data from public services such as schools or health centres were collected separately.

3.6 Problems encountered

Access to the 1966 and 1976 census data on the labour force at the village level was the major problem encountered during data collection. As discussed earlier in this chapter, this problem forced the time period covered by present study to be limited.

Meanwhile, it should be mentioned that there is probably some degree of limitation in comparability of census data and the data collected through the household survey in summer of 1994. This relates to the different times of the year in which the 1986 census and the field survey were conducted. The reason for conducting the survey in summer was to avoid any problem of access to the two villages of Kohnab and Nojedeh due to their location in a mountainous area.[10] As will be discussed in Chapter 4, access to these villages is limited in the wet weather that starts early in Autumn. Additionally, since the 1966 and 1986 census data were intended to be used for studying the quantitative changes in the labour force, the 1994 survey was planned to provide qualitative, as well as quantitative data that could be used to explain the changes. It was expected that conducting the survey in summer would not have any significant effect on the information collected to provide this explanation.

Nevertheless, even though the survey was conducted almost two months before the time of the year that the 1986 census was conducted, the author is convinced that the effect of this difference on the comparability of survey data with those from 1986 census is minimal. The 1986 census was conducted nation-wide from 8 to 22 October 1986 (SCI 1990b, p. I) and the field survey for the present study from 1 to 20 August 1994. As will be discussed in Chapter 7, the peak period of agricultural activities in the area covers the four months from April till July of each year. By the end of July, the harvesting of crops such as wheat — the main crop in the area — and barley is almost over, but summer crops and fruit orchards still require work. By the beginning of Autumn (21 September), the slack season for these activities starts, but the preparation of land and sowing of the main crops for the following year take place until mid-

[10] Nojedeh was omitted from the list in a later stage when it was decided to include only four villages from the subdistrict in the study.

autumn. Therefore, there is not much change in demand for labour by the agricultural sector from mid-summer – when the field survey started, till the end of the first month of Autumn – when the conduct of the 1986 Census ended.

Hence, should there be any influence caused by the difference in timing of the surveys, it could have an agricultural bias, resulting in the appearance of increased work force in this sector. As will be discussed in Chapter 6, this was not the case, for the survey indicated a shift of labour from agriculture to other sectors of the economy.

A second related problem arose. As responses to questions about the involvement of household members in farm and craft activities revealed, respondents seemed to be reluctant to provide accurate data about the activity status of female members of the households. This was in part related to the sex of the respondents, who were generally male and, as Anker noted, in developing countries they 'are more likely than female respondents to understate the labour force activity of females' (Anker 1990, p.127). However, the understatement of the participation of females in economic activities seemed to be related also to cultural factors. A third factor is that the work practices of women in most cases, in spite of its important contribution to household income, is not considered by many respondents to be economic activity. These issues will be discussed in more detail in Chapter 6.

A further problem related to obtaining accurate data about household assets such as land and animals, and in particular, about the household's income. Problems of obtaining accurate data on households' income are partly related to the 'socially undesirable' nature of the topic (Foddy 1993, p. 118). Nevertheless, due to such factors as diverse income sources, the number of breadwinners and, more importantly, the subsistence or semi-subsistence nature of some activities, it is very difficult for the respondents themselves to give an aggregate estimation of their households' income. Therefore, any comparative study or cross-tabulation of household income on the basis of aggregate estimation would possibly be misleading.

3.7 Conclusion

The methods used in the field research resulted in a good response rate to the survey. Co-operation of the target population in responding to the interviewers, plus in-depth observation and informal contacts with the residents, provided credible data on which the main part of the present study is based. After the following chapter which aims to introduce the study area by using the census data, discussions in Chapters 5 to 8 are mainly based on the survey data. To document changes in the labour force participation and in the characteristics of the work force from 1986 till 1994, comparison will be made with the 1986 census data. These are subjects of the discussions at the end of Chapters 5 and 6 respectively. Before presentation and analysis of survey data however, the following chapter will provide a general picture of socio-economic life in the study area.