

CHAPTER FOUR

INTRODUCTION TO THE STUDY AREA

4.1 Introduction

This chapter provides a general picture of socio-economic life in the four villages selected for the case study. All four villages are located in Northwestern Iran and, in terms of administrative divisions, belong to the Central District of the county of Marand. To give a general picture of the area where the sample villages are located, the present chapter begins with an overview of the socio-economic features of the county of Marand. This discussion is followed by a brief review of the villages' spatial context.

Two types of data are used to describe and explain demographic changes in the sample villages. Changes in the size and structure of the population during the 25 years from 1966 till 1991 come from census data. Iran has experienced a massive and historically unprecedented movement of people from rural to urban centres over the past few decades (Kazemi 1980; Ayremlo 1984a; Hesamian, Etemad and Haery 1984; Hosseinzadeh 1992; Lahsaeizadeh, 1993b). In the context of the study area, this will be demonstrated by using data from the field survey. Infrastructure and provision of services will also be discussed to show the extent of the availability of needed services for residents on the one hand and the diversity among sample villages in terms of access on the other. This part of the chapter is based on field observations and data collected from interviews with local informed people. The final section of the Chapter concludes the discussion.

4.2 Study area in administrative divisions

The four villages selected for the study of socio-economic changes are situated in the Dowlat Abad Subdistrict of the county of Marand in the province of Eastern

Azərbaycan (Map 4.1). The Village (*roosta*) is the principal unit of administrative division of the country in the Islamic Republic of Iran. Each *roosta* is comprised of at least 20 households or 100 inhabitants either in compact or dispersed form. The Subdistrict (*dehestan*) is the smallest unit in the administrative divisions of the country. With specified geographical borders, it includes several adjacent villages, places, and farms that are homogeneous in terms of physical environment, of cultural, economic and social aspects and it provides possibilities for service provision and planning within a single system and network (Interior Ministry of Islamic Republic of Iran 1984, p. 2).

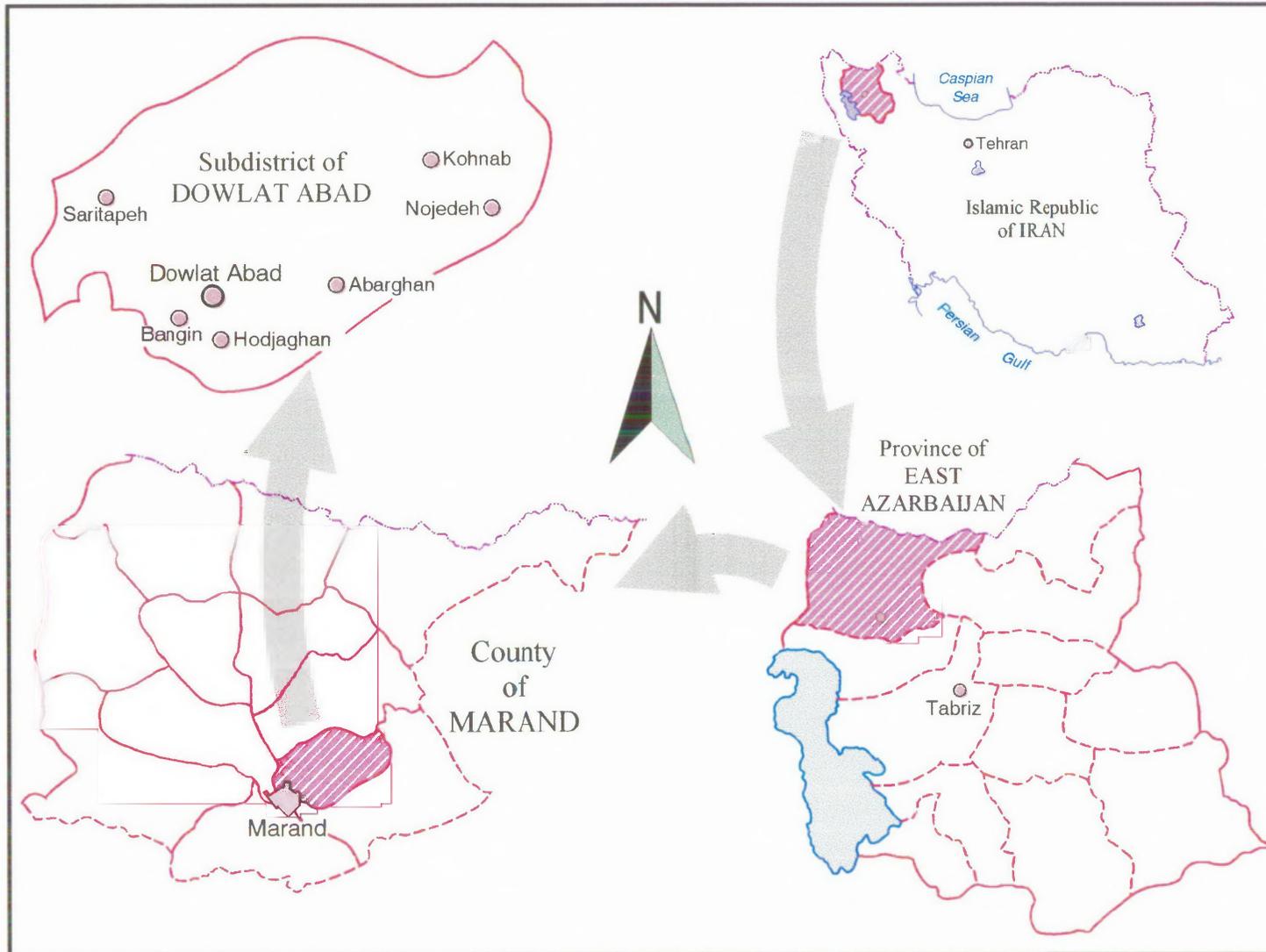
The subdistrict of Dowlat Abad lies east of the city of Marand and includes 7 villages. The village of Dowlat Abad is its administrative centre. In order to provide a general picture of the bigger area in which the study area is located, before discussing the socio-economic characteristics of the sample villages, a brief introduction to the county of Marand will be presented.

4.3 An introduction to the county of Marand

The county of Marand is one of the 12 counties of the province of Eastern Azarbaijan, and borders the two independent republics of Azarbaijan and Armenia in the north. With an area of 44,677 square kilometres, which accounts for 2.71 per cent of the total land area of the country, the province of Eastern Azarbaijan includes 12 counties, 31 cities and towns, 30 districts, 130 subdistricts, and 3098 *abady* (Plan and Budget Organisation of the province of Eastern Azarbaijan, 1994b, pp. 3-5)¹. According to the latest available census data, the province of Eastern Azarbaijan had a population of 3,278,718 in 1991 of whom 44.9 per cent lived in rural areas.

¹ 'Abady', which means an inhabited or habitable place in Farsi, is used by the Statistical Centre of Iran to describe non-urban areas. 'Abady (rural point) ... is composed of one or more contiguous places and lands (agricultural or non-agricultural) located outside the city limits with independent registered or conventional boundaries. Any village inhabited by one or more households at the time of enumeration is considered to be an 'inhabited village'. Otherwise, it is considered as an 'uninhabited village' (SCI 1989, p. two). Data at village level for the total county was not available for 1991 but, according to 1986 census data, the county of Marand included 176 villages in that year, of which 18 were reported to be uninhabited.

Map 4.1: Study Area in Administrative Divisions



Source: Adapted from Plan and Budget Organization of Province of Eastern Azarbaijan n.d.

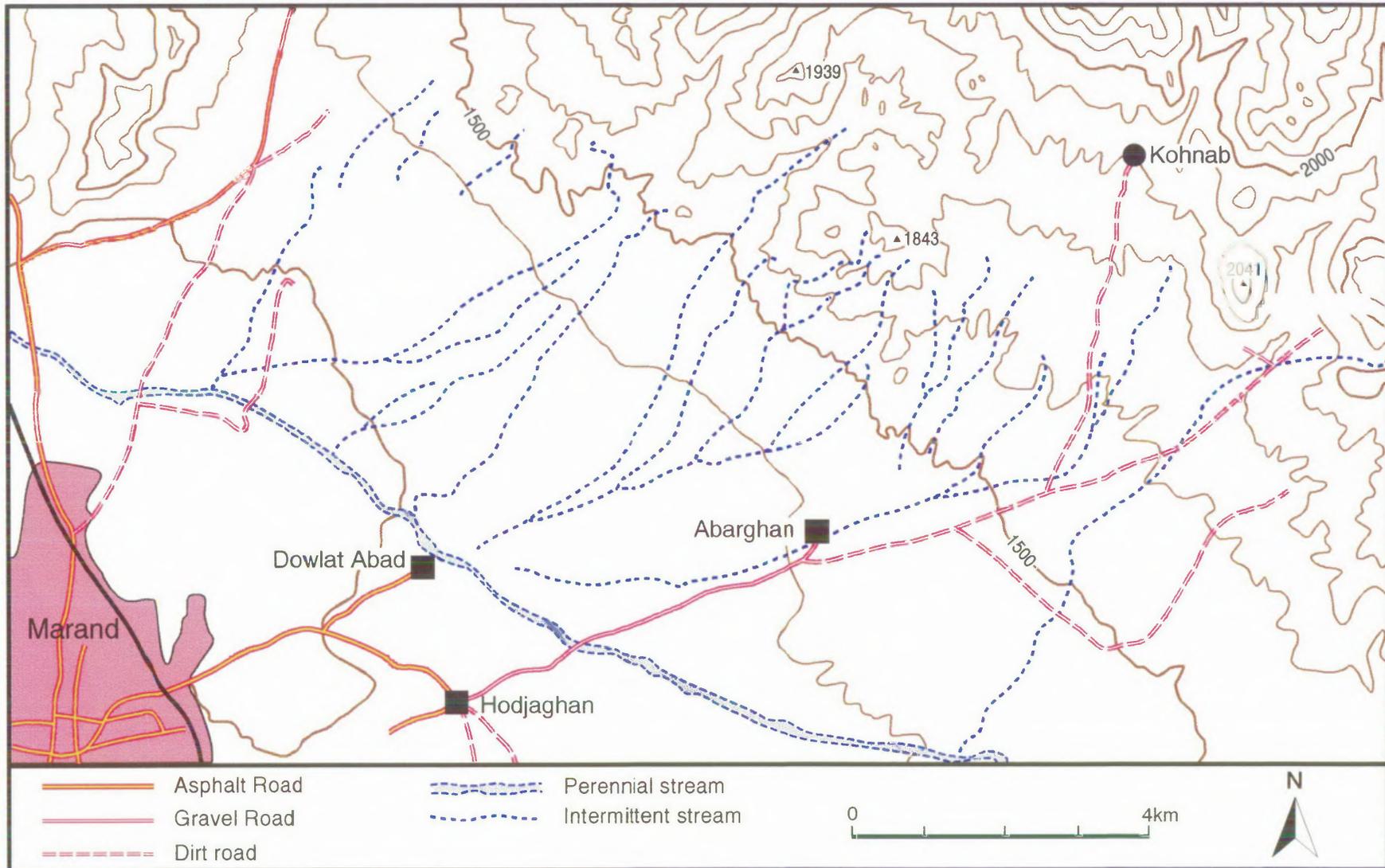
The county of Marand covers 3843.5 square kilometres (8.6 per cent of the land area of the province) and includes four towns, two districts, 12 subdistricts, and 194 *abady* (Plan and Budget Organisation of the province of Eastern Azarbaijan 1994a, p. 15). According to the 1991 census data, the county had a population of 276,836 in that year, which included 8.4 per cent of the total population of the province. Despite rural-urban migration in the county, that is apparent from its growth rates, 56.2 per cent of the population live in rural areas. As a result of rural-urban migration, the share of the rural population has been declining in recent years. Whereas the urban population of the county increased by an average annual growth rate of 5.1 per cent from 1976 till 1986, the rural population had an average growth rate of 2.03 per cent during the same period. The average growth rate of the whole population was 3.14 per cent per annum. As Table 4.1 shows, the average growth rate in both rural and urban areas declined in the 1986-1991 period. This can be attributed first to a declining fertility rate as a result of expanded birth control programs and, second, to increasing out-migration from the county (Sadr Mousavi, Hadili and Zahedi 1992, pp. 18). The average annual growth rates of the whole population, the urban and the rural areas of the county during the 1986 to 1991 period were 1.75, 3.17 and 0.71 per cent respectively.

Table 4.1
TRENDS OF GROWTH AMONG URBAN AND RURAL POPULATION OF THE COUNTY OF MARAND

	Share of total population(%)			Average annual growth rate (%)	
	1976	1986	1991	1976-1986	1986-1991
Urban areas	32.72	39.89	43.8	5.1	3.17
Rural areas	67.27	60.19	56.2	2.03	0.7
County	100	100	100	3.14	1.75

Sources: Calculated from SCI 1979a, 1988b and unpub.j

Map 4.2: Topographic Map of the Study Area



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

4.4 Location of the selected villages

The study area is located to the east of the city of Marand and includes four villages of different sizes and location. Dowlat Abad (Plate 4.1) is situated in a flat area at about 1,300 metres altitude and 5 kilometres distance from Marand towards the East (Map 4.2). The distance from Tabriz, the metropolitan city of Northwest Iran and capital of the province of Eastern Azarbaijan is 80 kilometres. This village is the administrative centre of the subdistrict of Dowlat Abad, and the largest among the sample. The smallest village among the selection is Kohnab (Plate 4.2), with 419 inhabitants in 1991. It lies 20 kilometres from Marand to the Northeast of Dowlat Abad. This village is located in a mountainous area at about 1,800 metres above sea level. Although the distance from Marand is not great, access to other settlement areas and service centres is restricted due to its location in a mountainous area and the minor road connecting it to Abarghan. Access becomes more difficult in rainy seasons and almost impossible in winter whenever snow covers the ground.

Two other villages, namely Hodjaghan and Abarghan (Plates 4.3 and 4.4), are medium sized and located between Dowlat Abad and Kohnab. Hodjaghan is situated to the south of Dowlat Abad and is almost the same distance as Dowlat Abad from Marand. It is located in a flat area at about 1,310 metres altitude. Abarghan is situated 7 kilometres distance from Hodjaghan to the East, in foothills with an altitude of about 1,400 metres.

4.5 Major demographic characteristics

Available census data, in addition to data collected through the survey, will be used to describe the demographic characteristics of the sample villages. Although the Statistical Centre of Iran has conducted a census of population and housing at the national level every 10 years since 1956, the amalgamation of small villages into nearby big villages in the same area in the 1956 census results (Zanjani 1991, p. 22), means that 1966 census data are the oldest available census data for each village individually.

Plate 4.1



Village of Dowlat Abad, the main square of the village. The shutters conceal shops and workshops.

Plate 4.2



Village of Kohnab. The mountain pastures are grazed by livestock in summer.

Plate 4.3



Village of Hodjaghan, the main road passing through the centre of the village connects Abarghan and Kohnab to Marand.

Plate 4.4



Village of Abarghan. Note that the roofs of buildings are used to store winter fodder.

Trends in population growth

Table 4.2 includes the size and growth rates of the population of the sample villages in the census years since 1966. As it was mentioned earlier, the sample includes villages with different sizes of population. Patterns of population growth also differ. The total population of the four sample villages was 5394 in 1966 and reached 9353 in 1991, showing an average annual growth rate of 2.22 per cent. As it can be seen in the Table, the average annual growth rate of the total population was 2.22 per cent between 1966 and 1976 censuses (the same figure for the whole period and only the third decimal is different), and then increased to 3.34 per cent in the next 10 years, covering the period from 1976 till 1986. With a very sharp decline in the next period, which covered 5 years from 1986 till 1991, the average annual growth rate dropped to almost zero (0.07 per cent). This pattern of increase and decline in growth, although with different rates, can be seen in the rural population of entire country and the county of Marand as well. They too, experienced the highest rate of growth in 1976-1986 period, and relatively low rates of growth in the 1986-1991 period. The average annual growth rate of the rural population of the country was 2.27 per cent from 1976 till 1986 and 1.12 per cent from 1986 till 1991. Corresponding figures for the rural population of the county of Marand were 2.03 per cent and 0.7 per cent respectively (Table 4.2).

Meanwhile, each of the four villages of the sample experienced varying patterns of changes in their populations during this period. Patterns of change not only varied from village to village, but also differed across different census periods in each village. Kohnab, the smallest among the sample, experienced a net decline in its population from 1966 till 1991, with an average negative growth rate of -1.2 per cent per annum. The village showed a relatively low rate of growth (compared to the other three villages but still higher than the rural population of the county) from 1966 till 1976, and then a decline over the next two census periods.

Table 4.2
CHANGES IN POPULATION OF SAMPLE VILLAGES FROM 1966 TO 1991

	Population in census years				Annual average growth rates (%)			
	1966	1976	1986	1991	1966- 1976	1976- 1986	1986- 1991	1966- 1991
Dowlat Abad	2074	2758	4295	4204	2.89	4.59	-0.43	2.87
Abarghan	1287	1674	2204	2367	2.66	2.79	1.44	2.47
Hodjaghan	1462	1668	2288	2363	1.33	3.21	0.65	1.94
Kohnab	571	619	533	419	0.81	-1.48	-0.49	-1.2
All sample villages	5394	6719	9320	9353	2.22	3.34	0.07	2.22
County of Marand	-	-	-	-	0.16	2.03	0.7	0.86
Country	-	-	-	-	1.57	2.27	1.12	1.76

Sources: Statistical Centre of Iran, Census results for relevant years.

The two villages of Dowlat Abad and Hodjaghan represent different patterns of change in the size of their population — a very rapid increase from 1978 till 1986, and then a sharp decline of the growth rate in the following period. Dowlat Abad, the biggest among the sample, had a growth rate of 4.59 per cent per annum from 1976 till 1986, very close to the growth rate of the urban population of the country in the same period. The village experienced decline in the absolute number of inhabitants during the next period. It is noteworthy that the village became the administrative centre of the subdistrict in this period.² Trends in change in the size of the population in Hodjaghan have followed approximately the same pattern in Dowlat Abad. Although the village did not experience a negative growth rate in 1986-1991 period, the average growth rate of its population was only 0.65 per cent per annum, compared to 3.21 per cent in the previous period.

² Dowlat Abad was selected as the administrative centre for the subdistrict of Dowlat Abad after a new administrative division of the province of Eastern Azarbaijan in 1987. According to the new division, the 7 villages of Abarghan, Bangin, Dowlat Abad, Hodjaghan, Kohnab, Nodjedeh-e Sheykhlar, and Saritapa which belonged to subdistrict of Homeh in the past, formed the new subdistrict of Dowlat Abad. Although the village of Dowlat Abad is the administrative centre, and has been projected as the service centre for five villages in the Guidance Plan, the short distance of the villages to the City Marand (the same distance to Dowlat Abad and even shorter in one case), means that its influence over the de jure hinterland has been minimal in practice.

Abarghan, the other medium-sized village, represents quite different patterns of change. The rise and decline in its growth rates have followed the national average. The average annual growth rate of the population of Abarghan was 2.47 from 1966 till 1991, with the highest rate of 2.79 per cent per annum in the 1976 - 1986 period and the lowest rate of 1.44 per cent per annum in the 1986 - 1991 period. The highest and lowest annual rates of growth of population of Dowlat Abad during the same period were 4.59 per cent and -0.43 per cent respectively. The varying trends of the growth of population of the sample villages in different periods, as well as among the villages, can be attributed to the different patterns of fertility and out-migration across time and among villages. The impacts of these two factors will be discussed later in this chapter.

Household size

The mean household size in the four sampled villages was 5.67, with no considerable differences between the villages. Unlike western rural societies, where declining fertility rates as well as age selective out-migration have meant decreasing sizes of rural households (Rolley and Humphreys 1993, p. 246), and despite out-migration, household size has been increasing in the sample villages. Lahsaeizadeh found the same trend in his study of changes in household size during the 22 years from 1966 till 1988 in 18 villages in Fars Province (Lahsaeizadeh 1993b, p. 225).

Table 4.3 illustrates mean household sizes in the sample villages and changes since 1966. Since the household is the smallest unit of production in a peasant economy and household members are involved in farm and non-farm production processes carried out by the household (Lahsaeizadeh 1990b, pp. 82-196), household size is significantly important for the farm population of the country. All members of the household, from small children to retired elders, work in the farmwork of the household and earn for the family (Lahsaeizadeh, 1993a, p. 68). Guest (1987), through his study in four Javanese villages found that the size and structure of the household can affect the ability of the household to allocate labour to different sectors and also, with a larger number of household members, the possibility of engaging in many sectors increases.

Smaller households, with limited supplies of labour, do not have the range of options in allocating labour compared to larger households (Guest 1987, p. 151). Hasbullah notes that family members, regardless of age or sex, contribute to the household income in rural Asia (Hasbullah 1989, p. 30).

Since data from the 1991 census about household size were not available, data from the field survey for this study have been used instead.³ All villages showed continuous increase in the mean size of their households since 1966, except Dowlat Abad, which showed a decline in its household size in the first period (Table 4.3). Household size in this village declined from 4.90 in 1966 to 4.59 in 1976, and then increased to 5.59 persons in 1994. A sharp increase can be seen between 1966/76 and 1976/1986, when the rate of increase of population was also high. This probably implies that high fertility has been the main cause of the rapid increase in the number of persons living in each household. This is also apparent from the age structure of the population. This will be discussed in more detail later in this section.

Table 4.3
HOUSEHOLD SIZE IN SAMPLE VILLAGES IN 1966, 1976, 1986, AND 1994

	1966	1976	1986	1994
Dowlat Abad	4.90	4.59	5.40	5.59
Abarghan	4.93	5.38	5.97	5.66
Hodjaghan	4.35	4.69	5.25	5.60
Kohnab	5.14	5.90	5.99	6.11
All villages	4.77	4.89	5.51	5.67

Sources: Column 1 to 3 calculated from Plan and Budget Organisation of province of Eastern Azarbaijan 1992. Data from the field survey has been used for column 4.

³ As mentioned in the previous chapter, according to decision made by SCI (1994a, p. two), detailed data from the 1991 census that was conducted through sampling, would not be available at village level.

The mean size of households in all four villages increased from 4.77 in 1966 to 5.67 in 1994. An interesting case has been presented by Kohnab, where household size has increased while the absolute number of inhabitants in the village has declined. The number of households in this village declined from 111 to 89 from 1966 till 1986, whereas the average size of the households increased from 5.14 to 5.99 during the same period. The total number of the inhabitants declined from 571 to 533. The increase in the mean size of the household while the population has decreased or the growth rate has been very low, could be an indication of a process in which out-migration of families rather than individuals is dominant. It may also indicate that an increase in mean size of the household is occurring as a consequence of high fertility. In other words, large household size in the area is likely to be related to the presence of more children. This is evident from the age structure of the population of the villages and will be discussed later in this Chapter.

Sex structure of the population

In the study area, the gender ratio of the population (which is defined as the number of males per 100 females (Plane and Rogerson 1994, p. 44), is relatively high compared with both the rural areas of the country and the country as a whole. The gender ratios in the study area, in rural Iran, and in the country were 107.15, 105.68, and 106.28 respectively. As it can be seen in Table 4.4, gender ratios vary from 104.23 in Abarghan to 108.75 in Hodjaghan. It is noteworthy that the gender ratio in Kohnab, which has been losing its population since 1976, is higher than the that of Abarghan, the village that had the highest rate of growth among the sample from 1986 till 1991. The gender ratio in Kohnab is even higher than the one of rural Iran. It is also interesting to note that the population of Dowlat Abad, with a negative growth rate from 1986 till 1991, presents a much higher gender ratio compared to even the urban population of the country. Considering the fact that the proportion of male emigrants from rural areas in the country is higher than that of the female (Kazemi 1980), it is logical to expect a lower gender ratio in villages experiencing outmigration.

It is beyond the scope of this study to investigate the reasons behind this gender structure of the population of the sample villages. However, given the fact that the gender ratio among rural population of the county of Marand is higher than among the urban population of the county (see Table 4.4), there seem to be factors other than migration that have influenced the gender structure of the population. For Plane and Rogerson (1994, p. 45), in addition to migration, the biological characteristics of population and differential mortality of males and females also affect the gender structure. Taghavi (1995) noted that in traditional rural societies, boys are given priorities and are better looked after in comparison to girls. He added that the relatively higher literacy level and the lower death rates among boys in comparison to that of girls in these societies are mainly related to this social attitude (Taghavi 1995, p. 70).

Table 4.4
GENDER RATIOS AMONG THE POPULATION OF THE STUDY AREA,
COUNTY OF MARAND AND THE COUNTRY IN 1991

	Gender ratio*
Dowlat Abad	108.02
Abarghan	104.23
Hodjaghan	108.75
Kohnab	106.40
All sample villages	107.15
County of Marand	106.14
Rural areas	106.76
Urban areas	105.32
Country	106.28
Rural areas	105.68
Urban areas	106.71

* *Gender ratio = male population / female population * 100*
Source: *SCI unpub.i, unpub.j and 1993b.*

Age structure of the population

The population of the sample villages is very young and the age group under 15 years old has the highest share in the total population. The higher share of the young population is often related to the high fertility rate. Out-migration also affects the age structure of the population (Lahsaeizadeh 1993b, p. 227). Table 4.5 and Figures 4.1 and 4.2 indicate the age and sex structure of the population in the sample villages. Two major characteristics relating to the age structure of the population of developing countries, i.e., the higher share of persons aged less than 15 and the lower share of people over the age of 65 (Todaro 1994, p. 49), can be seen in the table.

Over 45 per cent of the total population of the sample villages in 1991 was under 15 years of age. This is relatively low compared to the share of this age group in the rural population of the country, but high when compared to the rural and urban population of the country as a whole. The share of population aged 65 and over is low compared to both the rural and the total population of the country.

A close look at the changes in the lower age group in the sample villages from 1986 till 1991 reveals new trends in the age structure of the population. Table 4.6 indicates changes in the number and share of the population aged less than 5 years from 1986 till 1991. All sample villages experienced a decline in the absolute number and share of this age group in their population. Column 5 of the table indicates percentage changes in the number of children aged less than 5 in this period. Decline of this age group in Hodjaghan was sharper than other villages of the sample, followed by Dowlat Abad. Hodjaghan witnessed 31.57 per cent decline in number of people aged less than 5 years and the share of this age group declined from 18.14 per cent in 1986 to 12.02 per cent in 1991. The number of this age group in Abarghan, the only sample village with a relatively high rate of average annual growth rate in its population, also declined by 20.65 per cent in this period. An interesting case is presented by Kohnab, where, with over 23 per cent decline in the number of the children aged less than 5 years, the share of this age group declined very little – from 21.01 per cent to 20.53 per cent. The share of this age group in Kohnab's total population is the highest among the sample.

Table 4.5

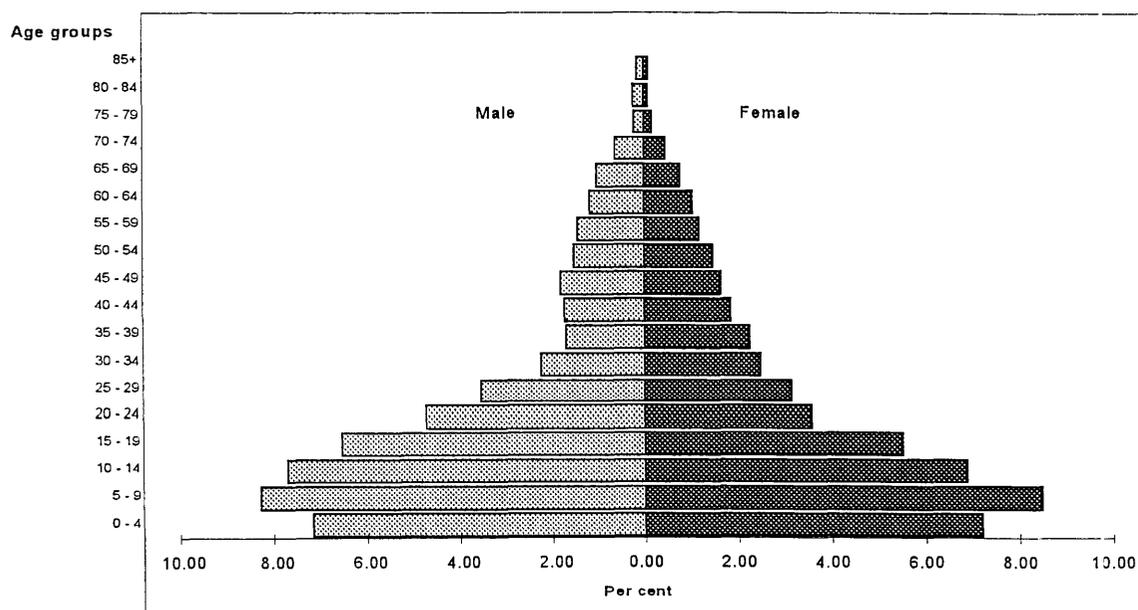
AGE AND SEX STRUCTURE OF THE POPULATION OF THE SAMPLE VILLAGES IN 1991

	> 15 years old	15 - 24 years old	25 - 34 years old	35 - 44 years old	45 - 54 years old	55 - 64 years old	65 + years old
<i>Both sexes</i>							
Dowlat Abad	46.05	20.53	11.77	7.26	6.19	4.59	3.62
Abarghan	45.83	20.27	11.62	7.86	5.75	5.28	3.35
Hodjaghan	44.95	19.98	10.66	8.12	7.61	4.31	4.35
Kohnab	45.83	20.77	10.98	4.77	5.49	7.16	5.01
All villages	45.72	20.34	11.41	7.52	6.41	4.82	3.82
<i>Male</i>							
Dowlat Abad	23.48	11.56	5.78	3.55	3.19	2.43	1.95
Abarghan	22.85	10.73	6.04	3.34	2.75	3.13	2.13
Hodjaghan	22.68	11.18	5.62	3.51	4.19	2.28	2.62
Kohnab	23.63	11.70	5.01	2.15	2.63	3.10	3.34
All villages	23.13	11.26	5.77	3.42	3.31	2.60	2.25
<i>Female</i>							
Dowlat Abad	22.57	8.97	5.99	3.71	3.00	2.16	1.67
Abarghan	22.98	9.54	5.58	4.52	3.00	2.15	1.17
Hodjaghan	22.27	8.80	5.04	4.61	3.42	2.03	1.73
Kohnab	22.20	9.07	5.97	2.62	2.86	4.06	1.67
All villages	22.59	9.08	5.64	4.10	3.10	2.22	1.57

Source: SCI unpub.h.

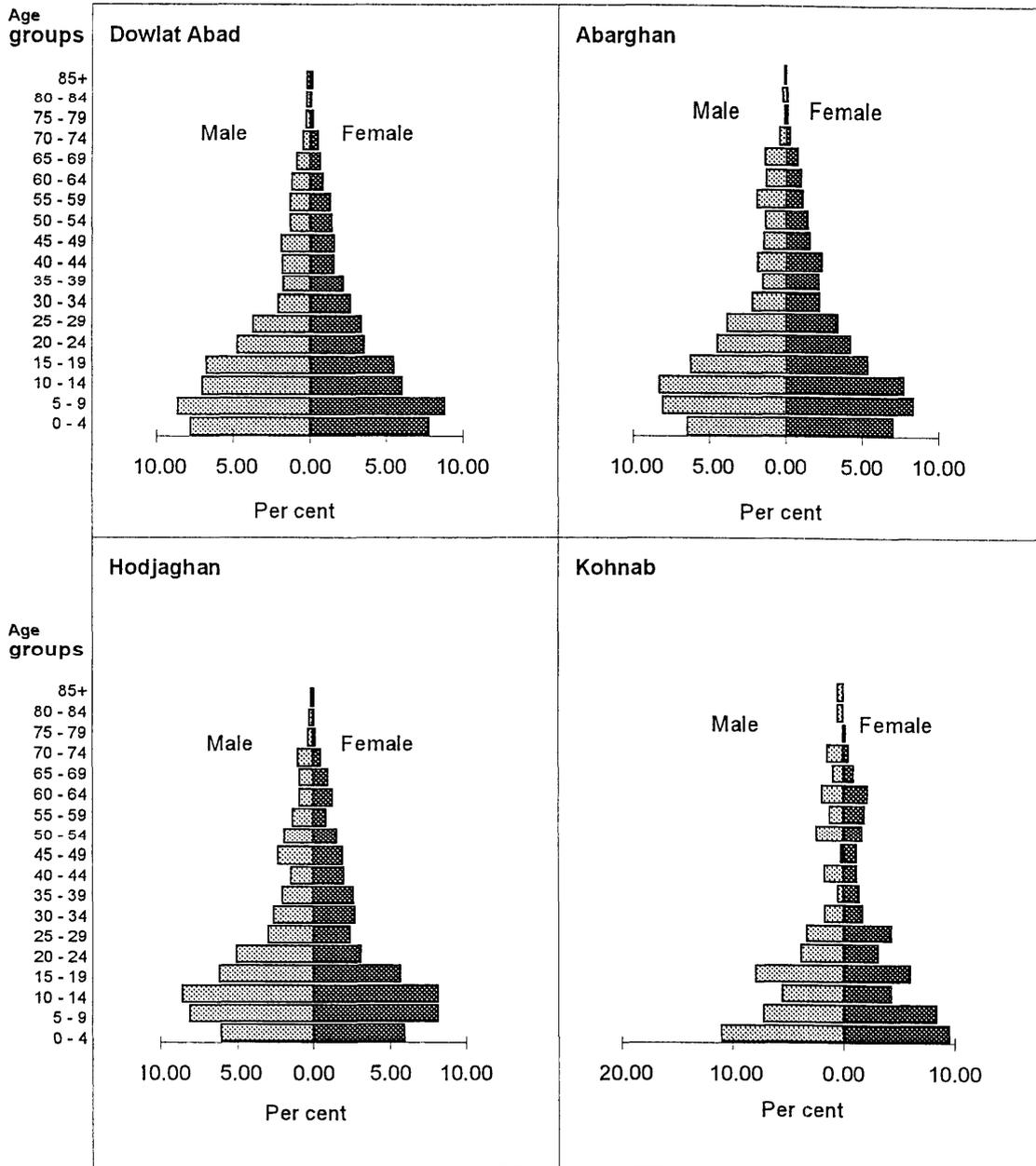
Figure 4.1

POPULATION PYRAMID FOR THE STUDY AREA, 1991



Source: SCI unpub.i.

Figure 4.2
POPULATION PYRAMID FOR THE SAMPLE VILLAGES, 1991



Source: SCI unpub.i.

Table 4.6

CHANGES IN NUMBER AND SHARE OF THE POPULATION AGED LESS THAN 5 YEARS FROM 1986 TO 1991

	1986		1991		Changes from 1986 till 1991	
	Number	Share of total (%)	Number	Share of total (%)	Percentage change in number	Changes in percentage share
Dowlat Abad	863	20.09	655	15.58	-24.10	-4.51
Abarghan	402	18.24	319	13.48	-20.65	-4.76
Hodjaghan	415	18.14	284	12.02	-31.57	-6.12
Kohnab	112	21.01	86	20.53	-23.21	-0.48
All villages	1792	19.23	1344	14.37	-25.00	-4.86

Source: *SCI unpub.a and unpub.h.*

The decline in absolute number, as well as the share of lower age group in the study area, is not surprising since the total population of the country witnessed a relative decline in the fertility rate following the implementation of extensive birth control programs in both urban and rural areas. In the study area too, the crude birth rate, which is defined as the yearly number of live births per 1,000 population (Todaro 1994, p. 48), seems to have dropped from 1986 till 1991.⁴ Since data for yearly live births in the sample villages are not available, the number of children less than one year old has been used to show the approximate changes in fertility rates. The number of less than one year old per 1,000 population in the area dropped from 37.02 in 1986 to 24.27 in 1991. Although figures in columns 8 and 9 of Table 4.7 do not show the exact fertility rates, they suggest a considerable decline in the fertility rate in the area. All villages experienced a decline in the number of less than one year old per 1,000 population. Figures in column 9 indicate the lowest fertility rate, with 20.74 per 1,000

⁴ General fertility rate is defined as the number of live births per 1,000 women of childbearing age. (P'ane and Rogerson 1994, p. 82)

population in Hodjaghan, and the highest, with 40.57 per 1,000 population in Kohnab. These figures also suggest that Dowlat Abad, which had the highest average annual growth rate of population among the sample from 1976 till 1986 and a negative growth rate from 1986 till 1991, showed the most rapid decline of fertility in its population

A change in marriage age could also affect the fertility rate. There are not any data available for the sample villages in this regard, but data available for rural areas at the national level indicate a decrease in the number of registered marriages. Marriages in rural areas declined from 162,726 in 1989 to 145,525 in 1990 and 137,831 in 1991 (SCI 1993b).

However, it seems that the declining fertility rate, along with out-migration from the sample villages, have been the most important factors resulting in declining growth rates of the population in the area. Out-migration from sample villages will be discussed later in this chapter.

Table 4.7
CHANGES IN SHARE OF CHILDREN AGED LESS THAN ONE YEAR IN TOTAL POPULATION FROM 1986 TO 1991.

	Less than one year old		Total population		Less than one year old per 1,000 population		
	1986	1991	1986	1991	1986	1991	Changes from 1986 to 1991
Dowlat Abad	180	117	4295	4204	41.91	27.83	-14.08
Abarghan	72	60	2204	2367	32.67	25.35	-7.32
Hodjaghan	69	49	2288	2363	30.16	20.74	-9.42
Kohnab	24	17	533	419	45.03	40.57	-4.46
All villages	345	243	9320	9353	37.02	25.98	-11.04

Source: Calculated from SCI unpub.a and unpub.h.

Educational attainment

In spite of decades of having compulsory education laws and of extension in the provision of education facilities since the early 1980s, literacy levels among the population are low. The percentage of literate population by educational level for each sex in the sample villages is displayed in Table 4.8. Only 52.58 per cent of population aged 10 years and over in the study area is literate.

Table 4.8
LITERACY LEVEL AMONG SAMPLED POPULATION AGED 10 AND MORE BY GENDER (%)

	Literate	Elementary	Orientation	Secondary	Higher education	Literacy Campaign
<i>Both sexes</i>						
Dowlat Abad	56.07	55.22	21.64	11.19	2.24	9.70
Abarghan	43.26	72.13	21.31	3.28	-	3.28
Hodjaghan	61.21	50.50	26.73	14.85	0.99	6.93
Kohnab	40.00	96.67	3.33	-	-	-
All villages	52.58	60.74	21.47	9.82	1.23	6.75
<i>Male</i>						
Dowlat Abad	65.04	58.75	18.75	13.75	3.75	5.00
Abarghan	55.56	62.50	27.50	5.00	-	5.00
Hodjaghan	73.26	50.79	22.22	19.05	1.59	6.35
Kohnab	53.58	95.24	4.76	-	-	-
All villages	63.75	60.78	20.10	12.25	1.96	4.90
<i>Female</i>						
Dowlat Abad	46.55	50.00	25.93	7.41	-	16.67
Abarghan	30.43	90.48	9.52	-	-	-
Hodjaghan	48.10	50.00	34.21	7.89	-	7.89
Kohnab	25.00	100.00	-	-	-	-
All villages	40.67	60.66	23.77	5.74	-	9.84

Source: Field survey, summer 1994

There are large differences between villages, as well as between the sexes in terms of levels of education. Kohnab and Abarghan display much lower levels of education in their population. As it has been shown on the table, 60 per cent of the population in Kohnab and 56.74 per cent of the population of Abarghan did not attend any form of formal education and could be classified as illiterate. Hodjaghan and Dowlat Abad represent relatively high literacy levels compared to the other two villages. The share of illiterate people in Hodjaghan and Dowlat Abad were 39 per cent and 46 per cent respectively.

There are differences between villages in the educational attainment of their populations. Hodjaghan and Dowlat Abad perform relatively better in terms of levels of education attained compared to Kohnab and Abarghan. Higher portions of the population in Kohnab and Abarghan have attained lower levels of education compared to those attained by the population in Hodjaghan and Dowlat Abad. Over 96 per cent of the literate population in Kohnab and 72 per cent in Abarghan attained only an elementary level of education. About half of the literate population in Hodjaghan and about 55 per cent in Dowlat Abad had only an elementary level of education. The percentage of literate who had attended Literacy Campaign courses is highest in Dowlat Abad, followed by Hodjaghan. Only 3.28 per cent of population in Abarghan and no one in Kohnab had attended this level. The literacy Campaign, which was introduced soon after the revolution, aimed to tackle the illiteracy problem among elderly people and among those who had not had access to formal courses of education while at school age.

Another point to be made concerning literacy and levels of educational attainment in the sample villages, is the existence of large differences between the sexes. The percentage of literate is much higher among males than among females. This is in contrast to what Clout states about 'a clear cultural bias in many developed countries in favour of educating country girls to higher level of education than boys' (Clout 1972, P. 28). Only 40.67 per cent of the female population in sampled households in the study area were literate compared with 63.75 of the male population.

Literate females have attained lower education levels than males. There were no females with higher education among the sample. Only 5.74 per cent attended secondary school and the remaining attended only lower levels of education. This marked differences in literacy levels among males and females seem to be related to cultural factors and the priority that boys enjoy in traditional rural societies (Taghavi 1995, p. 70).

In conclusion, what the figures in Table 4.8 reveal about literacy and educational levels in the study area, is that not only are literacy levels low, but also, there are many differences between villages as well as between sexes. The highest literacy rate belongs to the male population in Hodjaghan (over 73 per cent), and the lowest belongs to the female population in Kohnab (25 per cent).

4.6 Migration:

Data from the field survey will be employed to discuss migration in the area. The aim of this section is to provide an overview of the general trend of migration as a factor affecting the supply of labour in the study area. Thus, the section is not a detailed study of migration or the factors causing it in the sample villages. While acknowledging the significance of such studies, it is beyond the scope of the present research to make a detailed investigation of the issue for it requires a major undertaking.

As mentioned in the previous section, there are marked differences in trends in demographic changes between the sample villages and it was suggested that, along with varying fertility rates, out-migration in varying scales is occurring from the villages. Given the sex structure of the population, it was also suggested that out-migration of families rather than individuals is dominant in the area. This supports Kazemi's findings in his study of a sample of migrants to Tehran. He found a tendency among migrants to migrate with family and, even those who migrate alone, initially make arrangements for their families to join them as soon as they are reasonably settled (Kazemi 1980, p. 44).

However, this is in contrast to the experience of some other countries. For example, in his study of mountain villages in Japan, Knight noticed that, whereas the population of the villages in Hongu had fallen by over half from 1955 till 1985, the decline in the number of households was around 20 per cent (Knight 1994, pp. 250-1). He concluded that this indicated that depopulation had been due to the out-migration of young people, rather than of whole families (Knight 1994, p. 251). In contrast, the decline in the number of population and in the number of households in Kohnab was almost at the same rate (about 15 per cent) from 1976 till 1986. The decline in the number of households was even sharper than the decline in number of inhabitants from 1966 to 1986.

However, in spite of the likely dominance of family migration, lack of adequate data means that the following discussion on migration will mainly focus on individual migrants. Access to out-migrant households was not possible and local investigation could not determine the exact number and characteristics of such families over a long period. Thus two types of data collected during the field survey for this study have been used here.

The first type includes information concerning out-migrant families that was collected through a survey of local people and from data obtained from Rural Health Centres of the villages. This included numbers of, and general information about, out-migrant families who had migrated within the past two years. The second type, on which a major part of the present discussion will be based, includes information that was collected from a survey about the out-migrant members of the households over the last 10 years. The reason for choosing the period of 10 years was to avoid any possible confusion by respondents regarding household members.⁵

The data collected through questionnaires, as well as census data that were discussed earlier in this chapter, suggest that, like most other rural areas in the country

⁵The time period was not limited in the pilot questionnaires. In conducting a pilot survey, I noticed that some respondents found it difficult to distinguish their present households from their possible household of origin (their parents or brothers and sisters in their households of origin). To avoid this confusion, it was decided to ask about members leaving the village not long ago, and to try to explain to them what was meant by '*household members*' for the purpose of the survey.

(Kazemi 1980; Hesamian, Etemad and Haery 1984; Zanjani 1991; Hosseinzadeh 1992; Lahsaeizadeh 1993b), the sample villages are experiencing out-migration in varying degrees.

Data from the Rural Health Centre and from the survey of local people suggested that total of 20 families migrated from the four sample villages within the two years from 1992-93 till 1993-94. There are differences between the sample villages in the levels of household mobility as well as the destination of out-migrants. Given the estimated number of households in the sample villages in 1994⁶, out-migration of households from Kohnab was on a larger scale than from the other villages. The corresponding figures for Dowlat Abad, Abarghan, Hodjaghan, and Kohnab were 1.07, 0.68, 1.16, and 4.41 households per 100 households respectively.

Marand, the centre of the county and the nearest town to the sample villages, absorbs most of the migrant families as well as individual migrants. Almost 65 per cent of migrant families and over 60 per cent of individual migrants from the sample villages during the reference period had moved to this town. The town offers better employment opportunities, higher income, better health and better educational facilities to its residents than the small villages of the county (Sadr Mousavi, Hadili and Zahedi 1992). These attractions act as strong pull factors for residents in the scattered villages of the county who have access to relatively poor rural facilities. According to 1986 census data, over 35 per cent of the population of the town were born in rural areas of the county. Due to the short distance from the sample villages, the effects of pull factors become very influential. Marand not only attracts out-migrants from many villages of the area, it also offers employment opportunities for residents of the surrounding villages. There is considerable daily movement of labour between Marand and sample villages as commuters, which point will be discussed later in this section. Before moving to an analysis of the demographic characteristics of individual migrants and to a review of the spatial movement of labour as commuters, the characteristics of the heads of migrant households within the reference period will be provided.

⁶The number of households for each village in 1994 was calculated by using estimated population and the mean size of the households in that year. To estimate population in 1994, the average annual growth rate of population from 1986 till 1991 has been employed. The estimated household numbers for Dowlat Abad, Abarghan, Hodjaghan, Kohnab were 742, 436, 430, and 68 respectively.

All of the heads of the 20 out-migrant households were male. Although almost all were reported to have some kind of employment before leaving, two seemed to have no full-time job. They were both casual construction workers but had not worked for sometime before migrating. Heads of the out-migrant households had varying types of occupation, but the majority of them were from landless households. Hesamian, Etemad and Haery (1984) noted that the overwhelming majority of migrants from rural Iran are landless villagers who are mainly agricultural workers. Since they are wage labourers and may compare their wages with their urban counterparts, they have more motivation to leave the village (Hesamian, Etemad and Haery 1984, p. 110).

Considerable differences exist between the villages in terms of the occupation of heads of out-migrant households as well as in their destination. Heads of out-migrant households from Kohnab were either farmers or carpet weavers, whereas, those from Dowlat Abad came from diverse occupational groups. Heads of two out of five out-migrant households from Hodjaghan were wick weavers⁷.

Migrants from Kohnab and Abarghan all moved the short distance to Marand, whereas some of the migrants from Hodjaghan and Dowlat Abad moved relatively longer distances to their destinations. This could be partly related to the relatively high literacy and skill levels at these two villages. The literacy level in Hodjaghan is higher and there is a relatively higher percentage of skilled labour in Dowlat Abad in comparison to Kohnab and Abarghan. Having more contact with other places could also affect their choice of destination. The contact with other places enables them to have more information about places and their higher level of literacy and skill may strengthen their hope of finding a better job with higher income in bigger places (Kazemi 1980, p. 43). This also implies that the attraction of bigger places (pull factors) is at work, as well as push factors from the sample villages. Kazemi states that besides the push factors in rural Iran, the wide gap and perceived differences between

⁷One of them migrated to Marand and the other one migrated to Tehran. It is noteworthy that both of these heads of households are involved with their previous job in their new destination. The one who moved to Marand has established a new workshop there, removing machinery and equipment from his old workshop in the village. The other one in Tehran is involved in retailing wick products, mainly those produced in the village of origin.

rural and urban incomes have been the most important factor contributing to migration towards cities (Kazemi 1980, p. 42).

Another reason for the migration of some households from Hodjaghan and Dowlat Abad relatively longer distances, and in particular to Tehran, could be related to personal contacts. Information obtained from the survey shows that there have been some families from these two villages residing in Tehran and Tabriz for a relatively long time. Local investigation indicated links between these families and their relatives and friends resident in the village. Kazemi found that most of the migrants surveyed in Tehran

... had relatives and friends who were already settled in various corners of Tehran. They could, therefore, easily learn about their city of destination through prior communication. ... Relatives and friends were the most important sources of information on employment opportunities' (Kazemi 1980, p. 44).

Also, as it can be seen on the Table 4.9, single migrants from these two villages migrated longer distances compared to those from Kohnab and Abarghan.

Almost 70 per cent of individual migrants were male. Although there was some variation among sample villages, the share of individual female migrants did not reach 50 per cent in any of the villages. This supports the previous findings that women in Iran usually follow the family in migrating from their localities. Hemmasi stated that an overwhelming proportion of Iranian women 'are usually "associated migrants" or "tide movers" for the purpose of accompanying or joining the male primary migrant' (Hemmasi 1994, p. 223). The existence of a small proportion of females among individual out-migrants from the study area seems to differ from the dominant trend in many other developing countries. Todaro distinguishes two types of 'associated' and unattached female migration in developing countries and believes that the latter type of migration is increasing most rapidly (Todaro 1994, p. 264). Hemmasi notes that women's economic dependence on the adult working men of the family in Iran affects their spatial mobility more than any other condition (Hemmasi 1994, p. 2).

Table 4.9

EMIGRANTS FROM SAMPLE HOUSEHOLDS BY SEX AND MARITAL STATUS (%)

	Households with emigrant members	Male migrants	Single migrants
Dowlat Abad	15.25	90.00	80.00
Abarghan	20.00	66.67	55.56
Hodjaghan	17.50	57.14	71.43
Kohnab	12.22	57.14	57.14
All villages	17.76	69.70	66.67

Source: Field survey, summer 1994

In terms of age structure, the overwhelming majority of individual migrants were young and more than four-fifths of them were 15 to 34 years old. Only about 3 per cent of migrants were aged over 35 and about 12 per cent of individual migrants were under age 15. This latter group mainly include children who accompanied out-migrant parents.⁸

The activity status and occupation of the migrants from households support the previous suggestion that along with seeking jobs, seeking better jobs and higher income are also important factors affecting decision-making by migrants. Nattagh (1986, p. 59) notes that the prime incentive to migrate is unsatisfactory employment and the income situation in Iran. Over one in five of the individual migrants from sample households were not in the labour force (including children and homemakers). About 30 per cent of the migrants left the village seeking jobs. This group included those who were unemployed, as well as school leavers seeking further education or employment opportunities in bigger places. Almost half of the migrants had some sort of job in the village before they left.

⁸ Data from sample households showed that some of the migrants from households were associated migrants. This group included wives and children who used to live with their father in extended households with grand-parents. Presence of married people, as well as persons aged less than 15, among the migrants from households partly reflects this type of migration.

Table 4.10
**BASIC CHARACTERISTICS OF EMIGRANTS FROM SURVEYED HOUSEHOLDS
 WITHIN PAST TEN YEARS BEFORE SURVEY (%)**

Description	Dowlat Abad	Abarghan	Hodjaghan	Kohnab	Total
Major age groups					
> 15 Years old	-	22.22	-	28.57	12.12
15 - 24 Years old	80.00	44.44	57.14	28.57	54.55
25 - 34 Years old	20.00	33.33	42.86	28.57	30.3
35 Years old and more	-	-	-	14.29	3.03
Total	100	100	100	100	100
Date of migration					
>1 Year	20.00	11.11	-	-	9.09
1 to 5 Years	60.00	55.56	42.68	75.71	60.61
6 to 10 Years	20.00	33.33	57.32	24.29	30.30
Total	100	100	100	100	100
Occupation before					
Not in labour force*	10.00	33.33	14.29	28.57	21.21
Student	30.00	11.11	14.29	28.57	21.21
Unemployed	10.00	11.11	14.29	-	9.09
Carpet weaver	20.00	11.11	14.29	28.57	18.18
worker**	20.00	22.22	42.86	14.29	24.24
Cleric	10.00	-	-	-	3.03
Tailor	-	11.11	-	-	3.03
Total	100	100	100	100	100
Destination					
Marand	40.00	66.67	42.86	100.00	60.61
Tabriz	20.00	-	14.29	-	9.09
Tehran	40.00	22.22	42.86	-	27.27
Others	-	11.11	-	-	3.03
Total	100	100	100	100	100
Educational attainment					
Elementary	50.00	77.78	42.86	57.14	57.58
Orientation	-	11.11	42.86	-	12.12
Secondary	40.00	-	14.29	-	15.15
Literacy Campaign	10.00	11.11	-	-	6.06
Illiterate	-	-	-	42.86	9.09
Total	100	100	100	100	100
Income***					
Less than	12.50	-	-	-	5.00
Same as	12.50	20.00	-	-	10.00
More than	62.50	60.00	75.00	33.33	60.00
Much more than	12.50	20.00	25.00	66.67	25.00
Total	100	100	100	100	100

* Includes homemakers and children. For the purpose of the study, students who left the village for educational purposes or seeking job, have not been included in calculation.

** Includes agricultural, construction, and service workers.

*** Income of the migrants in destination compared to what they could earn if they had stayed in the village. Calculation includes only those economically active in destination.

Source: Field survey, summer of 1994.

Those migrants employed in the village before leaving belonged to the lower income groups in the village. Workers and carpet weavers included more than 42 per cent of all migrants and over 70 per cent of those who were employed before leaving. This demonstrates the importance of urban pull factors as well as rural-urban disparities in the country. Nattagh stated that urban-rural disparity in terms of income have been one of the main factors contributing to the increased rate of migration in Iran (Nattagh 1986, p. 61). It also supports the previous findings that inadequate income and unsatisfactory employment are among the major push factors in rural Iran (Kazemi 1980, p. 44).

The responses of the heads of households to a question concerning the income of the migrant members at their destination compared with the income the migrant would have had in the village, reflects the perceptions held by the people in the study area about urban incomes. Although there are differences in the responses among the sample villages, 85 per cent of heads of households believed that the migrants from their households would earn more income at their destination than they could earn if they stayed in the village. The responses varied from 75 per cent in Dowlat Abad to 100 per cent in Kohnab. Responses of heads of households in Kohnab also reflect the low income levels in this village compared to other villages of the sample. Two-thirds of the heads of surveyed households with migrant members believed that the migrant members would earn much more income at their destination, while only 12.5 per cent in Dowlat Abad held this opinion. The corresponding figure for the total area was 25 per cent (see Table 4.10).

The levels of educational attainment of migrants are shown in Table 4.10. One of the most consistent findings about rural-urban migration is the positive correlation between educational attainment and migration (Todaro 1994, p. 264). The findings of Lahsaeizadeh (1993b, p. 246) and Kazemi (1980, p. 44) about rural-urban migration in Iran confirm this positive correlation. As is evident from the table, over 90 per cent of the migrant population were literate, which is much higher than the total population of the sample villages. Only 52.58 per cent of the surveyed population in the study area were literate.

In terms of the spatial movement of the population in the area, another interesting aspect is the inter-village movement of the population. Although inter-village movement is not dominant and there was only one such case, three villages of the sample received migrant families from other villages in the area within the reference period. The number of in-migrant households and their general characteristics are shown in Appendix 2. Dowlat Abad received the highest share, followed by Hodjaghan. Kohnab has been a net loser and didn't receive any migrant families.

Migrants came from the small and poorer villages of the area. Most of the characteristics of the out-migrant households can be seen among the in-migrant households. The only major difference seems to be in terms of the occupation of the heads of the households, which were more diverse among out-migrants. Only two of the heads of the in-migrant households were farmers and the remaining were either carpet weavers or workers. The presence of in-migrants among the population of the sample villages when out-migration is taking place, supports the suggestion made earlier in this section that out-migrants are being attracted by pull factors in urban areas and, they are seeking access to better jobs and better income and services.

Table 4.11
NET FLOW OF POPULATION FROM SAMPLE VILLAGES WITHIN TWO YEARS

	Individual emigrants	Emigrants with families	Total out-migrants	Total in-migrants	Net flows	Net flows per 100 inhabitant
Dowlat Abad	38	41	79	20	59	1.42
Abarghan	24	20	44	13	31	1.25
Hodjaghan	22	28	50	18	32	1.33
Kohnab	8	10	18	-	18	4.36
All villages	92	99	191	51	140	1.49

Source: Field survey, summer 1994

Net flows, defined as arrivals less departures (Sorensen and Walmsley 1993, p. 56), are shown in Table 4.11. Net flows were calculated by taking into account the total number of in-migrants and out-migrants within the last two years, either by families or by individuals. All of the sample villages experienced a net flow of population. Even Abarghan, which had the highest rate of growth of population among the sample from 1986 till 1991, was a net loser through spatial movement of population. Taking into account the estimated population of the villages in 1994, it appears that the net flow has been much higher in Kohnab and it has been losing its population more rapidly.

4.7 Infrastructure

Of the four villages under study, all except Kohnab have no problem with access to the city of Marand. Dowlat Abad and Hodjaghan are located within five kilometres distance and an asphalt road connects them to the centre of the county. It takes only about 10 minutes by car to get from each of these two villages to Marand. Abarghan is located on the east of Hodjaghan and it takes no more than 10 minutes to travel the distance between these two villages. Public transport is abundant and plentiful. There are regular bus services between Marand and these three villages. In the summer of 1994 there were 4 minibuses in Dowlat Abad, three in Hodjaghan, and three in Abarghan, all making regular services to Marand. Access to other cities and towns is possible through this city. The motorbike is also a common mode of transport between Marand and these villages for young males. Some of the young males also use bicycles to travel the distance between Dowlat Abad, Hodjaghan, and Marand.

Communication between Kohnab and the other settlement areas is restricted to a minor road which connects the village to Abarghan on the Southwest. Although the village is only 8 kilometres away from Abarghan, it takes more than 30 minutes to drive the distance by a four wheel-drive car. The only public transport facility in the village is an old car that belongs to one of the residents. It

makes one return service to Marand every day, leaving the village in the morning and coming back in the afternoon. Due to the very poor condition of the road connecting the village to Abarghan and the location of the village in a mountainous area, access is particularly limited in wet weather. On snowy winter days, the village is cut off from the outside world.

The three villages of Dowlat Abad, Hodjaghan, and Abarghan are connected to the telecommunication network. Although there are no connections to commercial or residential places, telecommunications between the villages as well as long distance calls are possible through switch boards which are located in each of these three villages. Residents of Kohnab have no access to a telecommunications network in the village and have to visit Abarghan for this purpose.

Postal offices are not available in any of the sample villages, but mail delivery to and from each of the three villages of Dowlat Abad, Hodjaghan, and Abarghan is possible through certain shops. These shops provide mail delivery services under the supervision of the post office located in Marand.

All four villages have access to electricity. It first became available to the residents of Dowlat Abad and Hodjaghan in 1971. Abarghan was connected to the network in 1980, but electricity in Kohnab was not available until 1993. Electricity has been connected to almost all the residential units in all four villages and can be used for lighting and other purposes. Access to electricity was vital for the development of wick weaving activities in Hodjaghan.

None of the sample villages had access to piped drinking water until the early 1980s. It became available first in Dowlat Abad in 1982 and then in Hodjaghan in 1983. A project for a network of drinking water supply was also implemented in Abarghan in 1990. Almost all of the households in these three villages have access to drinking water in their residential units. Piped drinking water is not available in the residential units in Kohnab. Only a simple piped water network was installed in 1993 to provide drinking water for residents from a

stream, which is also being used for irrigation purposes. Residents have access to drinking water through a few taps installed in certain places in the village.

4.8 Provision of services:

Education

Education is compulsory for children of school age in Iran and it is the government's responsibility to provide everyone with free schooling up to high school level (Rahin et al. 1992, p. 12). By the time of the survey in the summer of 1994, formal education available to children at school age in the study area was restricted to only primary and guidance education levels.⁹ Education at the elementary level is being provided in all of the sample villages. Orientation level of education is available in three villages of Dowlat Abad, Hodjaghan and Abarghan, but children from Kohnab have to attend schools at Abarghan or other places such as Marand for education of orientation level.

According to the regulations in the Islamic Republic of Iran, girls and boys should attend separate schools. Thus, there are specific schools for each gender. As is apparent from Table 4.12, no school in any of the sample villages provided education at secondary school level in 1994. Children of secondary school age from the sample villages have to travel daily to Marand to attend high school. Although the distance from Dowlat Abad and Hodjaghan to Marand is not great, lack of school transport services means this daily trip usually brings associated costs. In addition, the cold winter creates problems for the children travelling (Sadr Mousavi, Hadili and Zahedi 1992, p. 85). The establishment of one high school in Dowlat Abad and one in Hodjaghan was suggested in the Guidance Plan in 1992. However, in Dowlat Abad the enrolment of boys for the first year of high school only started in September 1994.

⁹ The pre-college education system in Iran is divided into four stages: Preparatory, duration one year; Elementary or Primary education, duration five years; Orientation or Guidance education, duration three years and; Secondary school, duration four years.

Table 4.12
ORIGIN OF STAFF IN FORMAL EDUCATIONAL INSTITUTIONS IN THE SAMPLE VILLAGES

Educational institutions ⇒ Origin of staff ↓	Elementary school		Orientation school		Evening school	Literacy Campaign		Total
	For boys	For girls	For boys	For girls	For boys*	For men	For women	
Dowlat Abad								
<i>Native</i>	2	1	4	1	7	1		16
<i>Non-native</i>	20	17	13	11	4	2	2	69
Abarghan								
<i>Native</i>	-	-	-	-				-
<i>Non-native</i>	13	12	9	7				41
Hodjaghan								
<i>Native</i>	4	2	1	-				7
<i>Non-native</i>	16	16	14	11				57
Kohnab								
<i>Native</i>	-	-	-	-				-
<i>Non-native</i>	2	2	-	-				4
All villages								
<i>Native</i>	6	3	5	1	7	1		23
<i>Non-native</i>	51	47	36	59	4	2	2	171

* There was no evening school for girls in any of the sample villages.

Source: Field survey, summer of 1994

Table 4.12 also shows the number and origin of staff providing education at the schools in the sample villages. As the table shows, over 80 per cent of the staff are non-native, an indication of the shortage of skilled workforce in these villages. There are also marked differences between the villages in terms of local labour available to provide educational services. There were no local teachers in Kohnab and Abarghan among the educational service workers, but about 10 per cent in Hodjaghan and almost 20 per cent in Dowlat Abad were native to the village. Although the non-existence of locals among educational service workers by itself does not necessarily imply that the

two villages of Kohnab and Abarghan lag behind the other two villages in terms of skilled labour, it becomes more likely when the low rate of literacy in these two villages is considered as well. This issue will be discussed in more detail in Chapter 6.

Most of the non-native staff are resident in Marand and make daily trips to work every day. Only in Kohnab, where the daily trip becomes almost impossible in winter, do non-native staff stay in the village.

Literacy campaign classes are only available in Dowlat Abad. This level of education, which is aimed for elderly illiterate people and those who have not attended formal schooling at school age, was also available in Hodjaghan and Abarghan until a few years ago. But, because of low attendance rates, the courses were discontinued in those two villages.

Health care services

Health and treatment services in rural Iran are being provided through a central operational network. In this network, the Health Houses are the most accessible to villagers so far as health care needs are concerned. The role of these Health Houses include the most basic and primary needs of the rural community (Rahin et al., 1992, p. 6). Each Health House, depending on its geographical location, road networks, and population distribution, may cover one or more villages with about 1,500 inhabitants (SCI 1993b). Next to the Health Houses stand the Rural Health and Treatment Centres that act as the only unit rendering simple treatment services for rural dwellers. Rural Health Houses and Rural Health and Treatment Centres refer rural clients to urban medical centres for higher levels of medical services. According to the latest available figures, there are 10,666 Health Houses and 2,059 Health and Treatment Centres active in rural areas of the country (SCI 1993b, 102).

Dowlat Abad is the only village among the sample with a Health and Treatment Centre. The Centre started providing services in 1992, but the Health House has been active in the village since 1989. There is also one Health House active in each of the

medium-sized villages of the sample. The first started providing services in Hodjaghan in 1991 and the second in Abarghan in 1992. There is no Health House in Kohnab and only one medical staff from Marand visits the village every Saturday for vaccination and for provision of primary health care services.

4.9 Conclusion

This chapter commenced with a brief review of the major socio-economic characteristics of the county of Marand in order to give a general picture of the county where sample villages are located. As an introduction to the study area, discussion was focused on the major characteristics of the population as well as on patterns of change in the size and mobility of the population of the sample villages. An age structure dominated by high levels of youth, along with low rates of educational attainment and high levels of out-migration can be seen, in varying degrees, in all four villages. The provision of services in the sample villages is poor and does not seem to be adequate to meet the requirements. The characteristics of the population in Kohnab, along with the poor infrastructure of the villages, reflect problems of remoteness, poor rural facilities, and of access. This village has been losing its population in the past two decades and it seems that the trend will continue. The two villages of Dowlat Abad and Hodjaghan represent a relatively better picture in comparison to Kohnab and Abarghan. The decline in the growth rate of the population of these two villages in recent years can be attributed to declining fertility rates as well as to out-migration.

Meanwhile, the population of all four villages is dominated by the young. Consequently, higher youth dependency ratios and lower participation rates are dominant. These issues will be explored further in the following chapters.

CHAPTER FIVE

LABOUR FORCE PARTICIPATION

5.1 Introduction

This thesis is concerned with labour and employment in a sample of villages in North-west Iran. Chapter 4 discussed the trends in changes in the population as a major factor affecting the labour supply in the sample villages. The aim of this chapter is to examine the levels of participation of the population in economic activities. The discussion focuses first on the dependency ratio. The census data is used in section 5.2 to examine the extent to which the population of the sample villages have a large or small percentage of persons of an economically active age. The discussion on labour force participation in section 5.3 examines the extent to which persons of working age actually are working or trying to find work.

One of the major problems of using census data to study labour force participation in developing countries is the underestimation of economic activities of women in statistical data collection (Dixon 1982; Anker 1990; Feldman 1994). Data from the field survey will be used to illustrate in section 5.4 that much of the work that women perform in the sample villages are economic activities, but they rarely appear in the census data. Section 5.5 examines the unemployment problem in the study area and then section 5.6 concludes the discussion.

5.2 Dependency burden

As discussed in the preceding chapter, the population of the sample villages is very young and the age group under 15 years old has the highest share of the total population. The young age structure of the population means that the share of the population at working age is limited, and consequently, there is a higher proportion of

dependent population in these villages (Table 5.1). A high dependency ratio,¹ which is one of the dominant features in developing societies (Todaro 1994; Razzaghi 1988), means that a given number of workers supports a larger population (Sorensen 1993, p. 215).

Table 5.1
DEPENDENCY RATIOS AMONG THE POPULATION OF THE SAMPLE VILLAGES
IN 1991

	Dependency ratio*	Youth dependency ratio**	Elderly dependency ratio***
<i>Both sexes</i>			
Dowlat Abad	98.68	91.49	7.28
Abarghan	96.92	90.27	6.87
Hodjaghan	97.25	88.65	8.84
Kohnab	103.40	93.20	9.86
All villages	98.07	90.53	7.69
<i>Male</i>			
Dowlat Abad	95.96	88.60	7.67
Abarghan	96.42	87.97	8.77
Hodjaghan	94.47	84.68	10.37
Kohnab	109.71	96.12	12.39
All villages	96.27	87.75	8.85
<i>Female</i>			
Dowlat Abad	101.70	94.71	6.87
Abarghan	97.44	92.67	4.90
Hodjaghan	100.35	93.10	7.23
Kohnab	97.09	90.29	7.00
All villages	100.04	93.58	6.47

* Defined as: $100 * (P_{0-14} + P_{65+}) / P_{15-64}$

** Defined as: $100 * P_{0-14} / P_{15-64}$

*** Defined as: $100 * P_{65+} / P_{15-64}$

Source: SCI unpub.i.

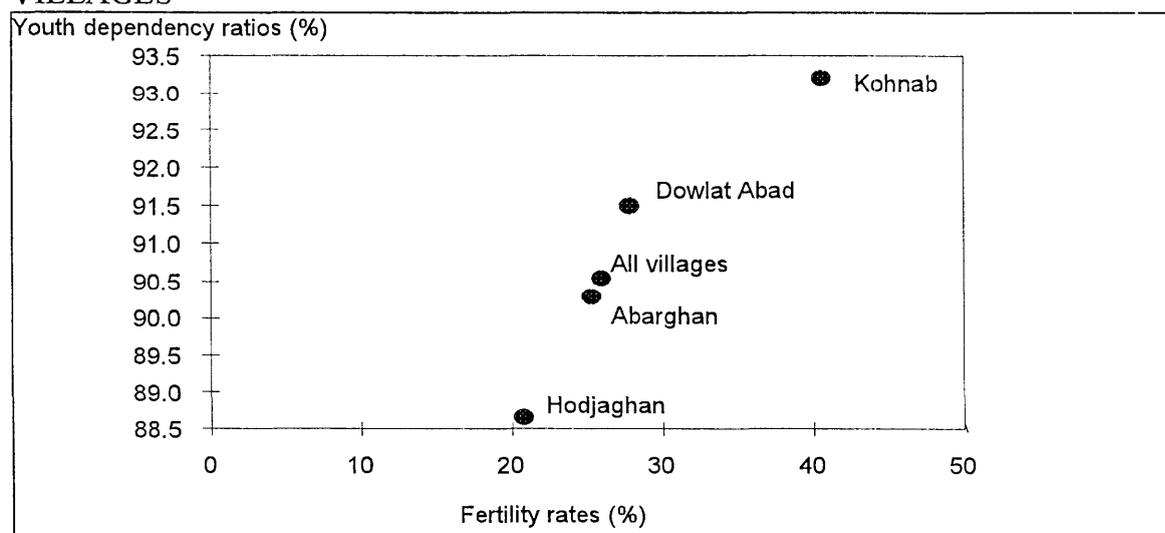
¹ Defined as: $DR = 100 * (P_{0-14} + P_{65+}) / P_{15-64}$, 'compares the youth and elderly population to the population of working age' (Plane and Rogerson 1994, p. 42).

As displayed in Table 5.1, there are differences in dependency ratios among the sample villages as well as among the male and female population. The dependency ratio is highest in Kohnab and can be attributed mainly to the high rate of out-migration of population of working age from this village. Since the out-migrants are dominated by male population of working age, as was previously discussed in Chapter 4 (see pp. 101), the dependency ratio is much higher among the male population of the village

However, the high dependency ratio among the population of the sample villages seems to be mainly because of the younger age structure of the population. This is evident from the higher youth dependency ratio among the dependent population that has been illustrated in Table 5.1. Since the young age structure of the population of the sample villages, as discussed earlier, is mainly because of the high fertility rates, the higher the fertility rate, the higher the dependency ratio. As Figure 5.1 displays, the highest youth dependency ratio can be seen in Kohnab, where the fertility rate was also the highest among the sample villages. Hodjaghan, on the other hand, presents the lowest fertility rate as well as the lowest dependency ratio among the sample. Since the high current youth dependency ratio means a rapidly expanding future labour force (Todaro 1994, p. 227), Kohnab will experience a higher increase in the relative number of people entering the labour force over the next 10 years.

Figure 5.1

FERTILITY RATES AND YOUTH DEPENDENCY RATIOS IN THE SAMPLE VILLAGES



Source: Calculated from SCI unpub.i. on the basis of the discussion presented in Chapter 4 (see p. 93).

5.3 Labour force participation

In the previous section we noted that a relatively small portion of the population is in the economically active age group. The aim of this section is to measure the extent to which persons in the traditional working years are working or trying to work. As Galenson writes (1992, p. 28), a growing population does not necessarily imply a growing labour force. The link between them is the participation ratio which depends on such factors as age structure, the availability of employment, and local customs, among the others. In general, a higher ratio represents a fuller utilisation of the population for production purposes (Galenson 1992, p. 28).

To show the level of participation of the population in economic activities, activity rates and participation rates in the sample villages will be discussed here.²

Both activity rates and participation rates among the population of the sample villages are very low.³ Since the activity rate measures the ratio of economically active population to total population (Rao and Mehran 1990, p. 75), its low rate in the sample villages can be attributed, in the first place, to the younger age structure of the population of these villages.

As Figure 5.2 indicates, there are differences between the sample villages in terms of activity rates. Considering the younger age structure of the population of Kohlab in comparison to the other three villages, one should expect the lowest activity

² By definition, an economically active population includes all persons reported as employed or unemployed.

Activity rate = $100 * (\text{Economically active population} / \text{Total population})$.

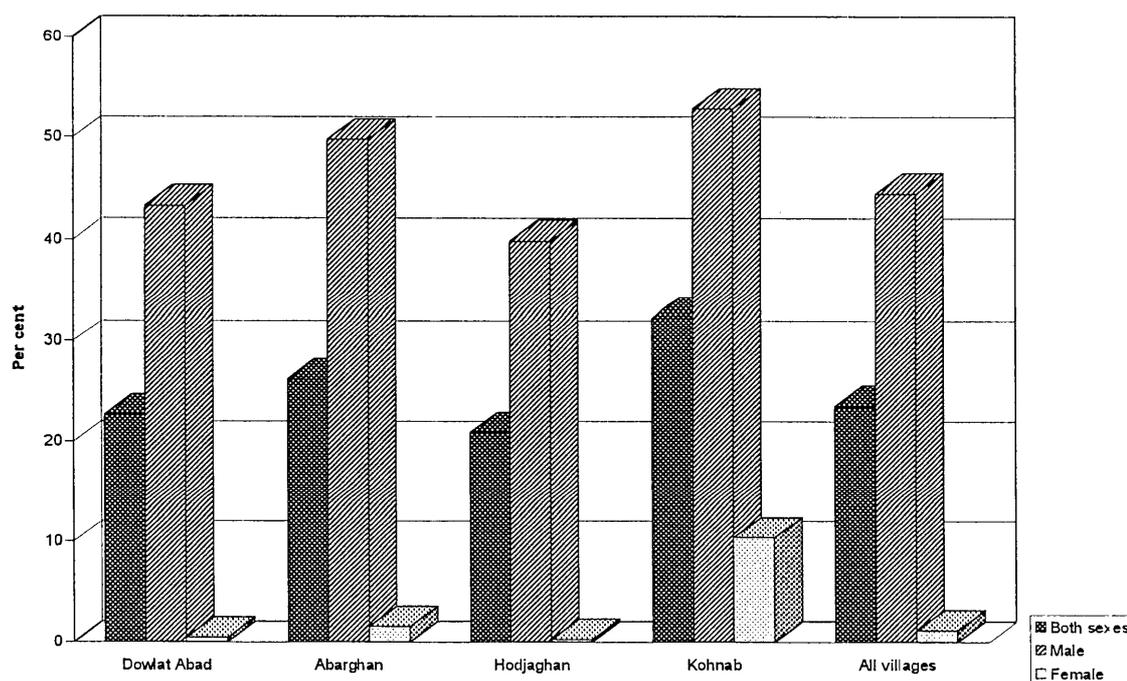
Participation rate = $100 * (\text{Economically active population} / \text{Population aged 15 and more})$.

³While the crude activity rate was 26.39 percent among the population of the country and 26.21 per cent among the population of the county, it was only 23.52 per cent among the population of the sample villages. Labour force participation rates for the population aged 15 to 64 in the country, county of Marand, and the sample villages were 46.45 per cent, 45.04 per cent, and 42.69 per cent respectively. It is noteworthy that in comparison to even developing countries, participation of the labour force of the country itself is very low. Participation of labour force in five East Asian countries of South Korea, Malaysia, Philippines, Taiwan, and Thailand in recent years have been estimated as 62.1 per cent, 66.7 per cent, 62.3 per cent, 60.1 per cent, and 83.6 per cent respectively (Galenson 1992, p. 28).

rate in this village.⁴ However, this village presents the highest activity rate among the sample villages for both the males and the females. The lowest rate of the activity can be seen in Hodjaghan. This implies that there are additional factors influencing activity rates in these villages as well.

Galenson (1992, p. 29) suggests that there is a relationship between the structure of the economy and the level of labour force participation. In studying levels of labour force participation in five Asian countries, he notes that in an agricultural economy most able-bodied people of working age are employed, though most of them may be unpaid family workers. Galenson further suggests that a declining agricultural sector tends to lead to a reduction in overall participation, but increasing employment opportunity in manufacturing and services has an opposite effect (Galenson 1992, p. 29). Analysis of data from the field survey reveals that differences in the types of economic activities have affected the activity rates and the participation rates in the sample villages.

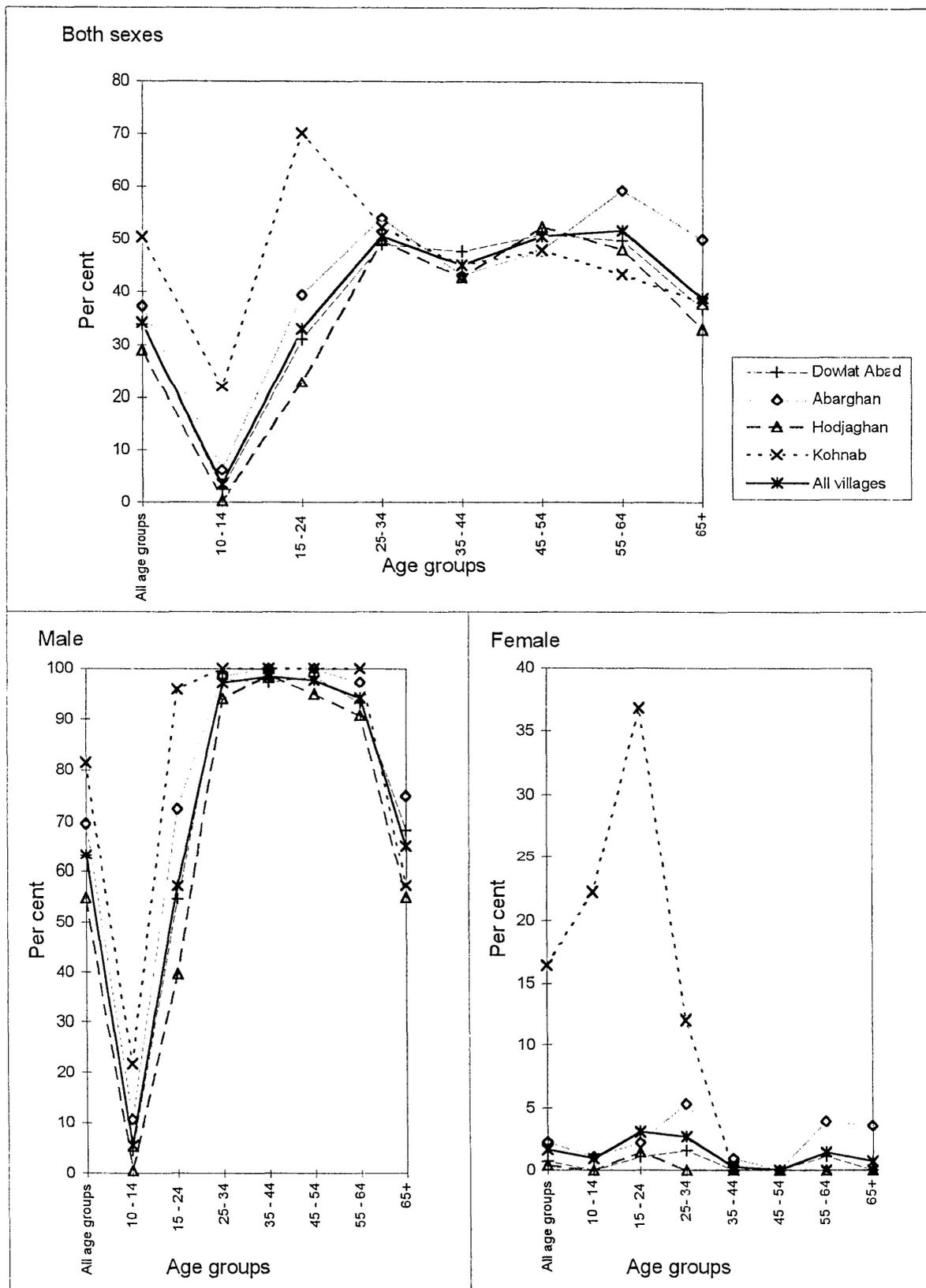
Figure 5.2
ACTIVITY RATES AMONG POPULATION OF THE SAMPLE VILLAGES, 1991



Source: SCI unpub.i.

⁴According to the 1991 census data, share of the population aged less than 10 in Dowlat Abad, Abarghan, Hodjaghan, and Kohnab, were 32.99 per cent, 29.83 per cent, 28.27 per cent, and 36.04 per cent respectively.

Figure 5.3
AGE-SPECIFIC RATES OF PARTICIPATION IN THE SAMPLE VILLAGES, 1991



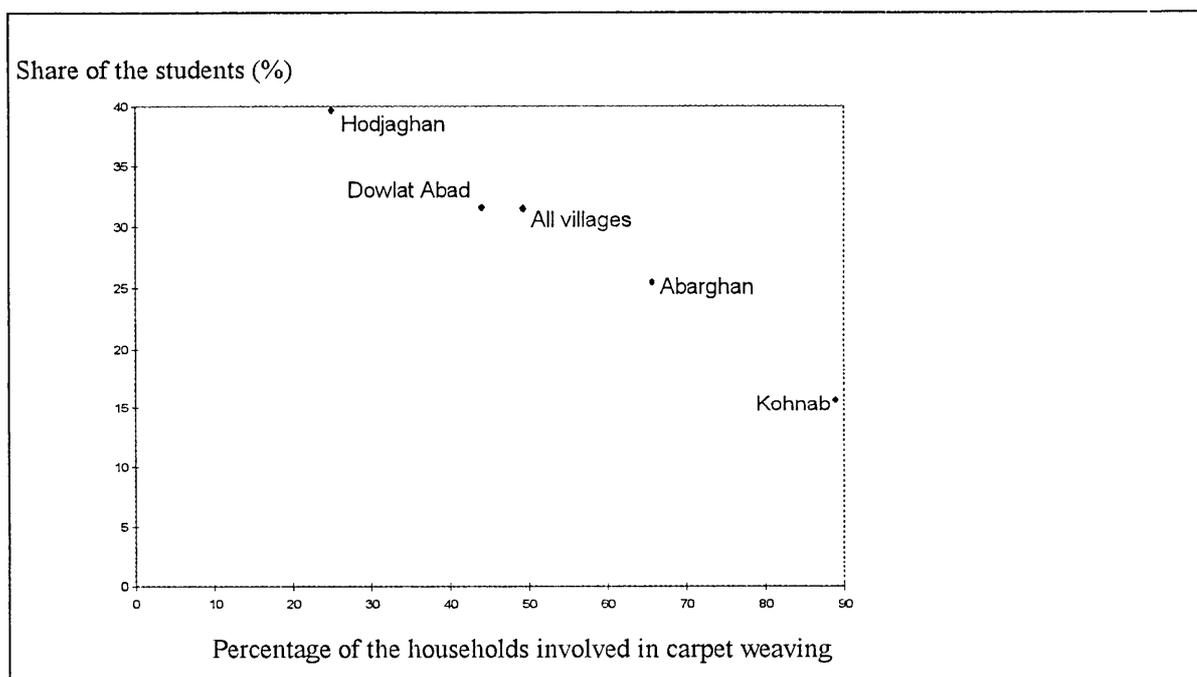
Source: SCI unpub.i.

As will be discussed in more detail later in Chapter 6, agriculture has the highest share of employed population in the two villages of Kohnab and Abarghan, while industry has the dominant share of employed population in the two other villages. As is evident from Figure 5.1 and Figure 5.2, the participation rates and the activity rates are higher in the two villages of Kohnab and Abarghan, and relatively lower in Dowlat Abad and Hodjaghan.

Meanwhile, data from the field survey reveals that not all the industry-related activities in the sample villages have led to a reduction in labour force participation. On the contrary, activities such as carpet weaving seem to have had a positive effect on the participation rates and there is a close relation between the level of involvement of households in carpet weaving and the participation rates in the sample villages. The nature of this activity is such that young children may take part and add to the household's income. This is particularly important for the households with limited land or other income sources.

Data from the field survey reveals that the households involved in carpet weaving tend not to let their children attend further schooling. Thus, as is apparent from Figure 5.4, the share of the students in the total population aged 10 and over is lower in villages with a higher percentage of households involved in carpet weaving. The highest percentage of involvement of households in carpet weaving was seen in Kohnab. Here the share of the students in the total population aged 10 and over was the lowest among the sample. Hodjaghan presents quite a different picture as, with the lowest percentage of households involved in carpet weaving, the share of the students in its total population aged 10 and over is the highest among the sample villages. Corresponding figures for households' involvement in carpet weaving and the share of students in the total population aged 10 and over were 88.89 per cent and 15.67 per cent in Kohnab, and 25 per cent and 39.71 per cent in Hodjaghan respectively.

Figure 5.4
 PERCENTAGE OF THE HOUSEHOLDS INVOLVED IN CARPET WEAVING AND
 THE SHARE OF STUDENTS IN POPULATION AGED 10 AND OVER IN 1991

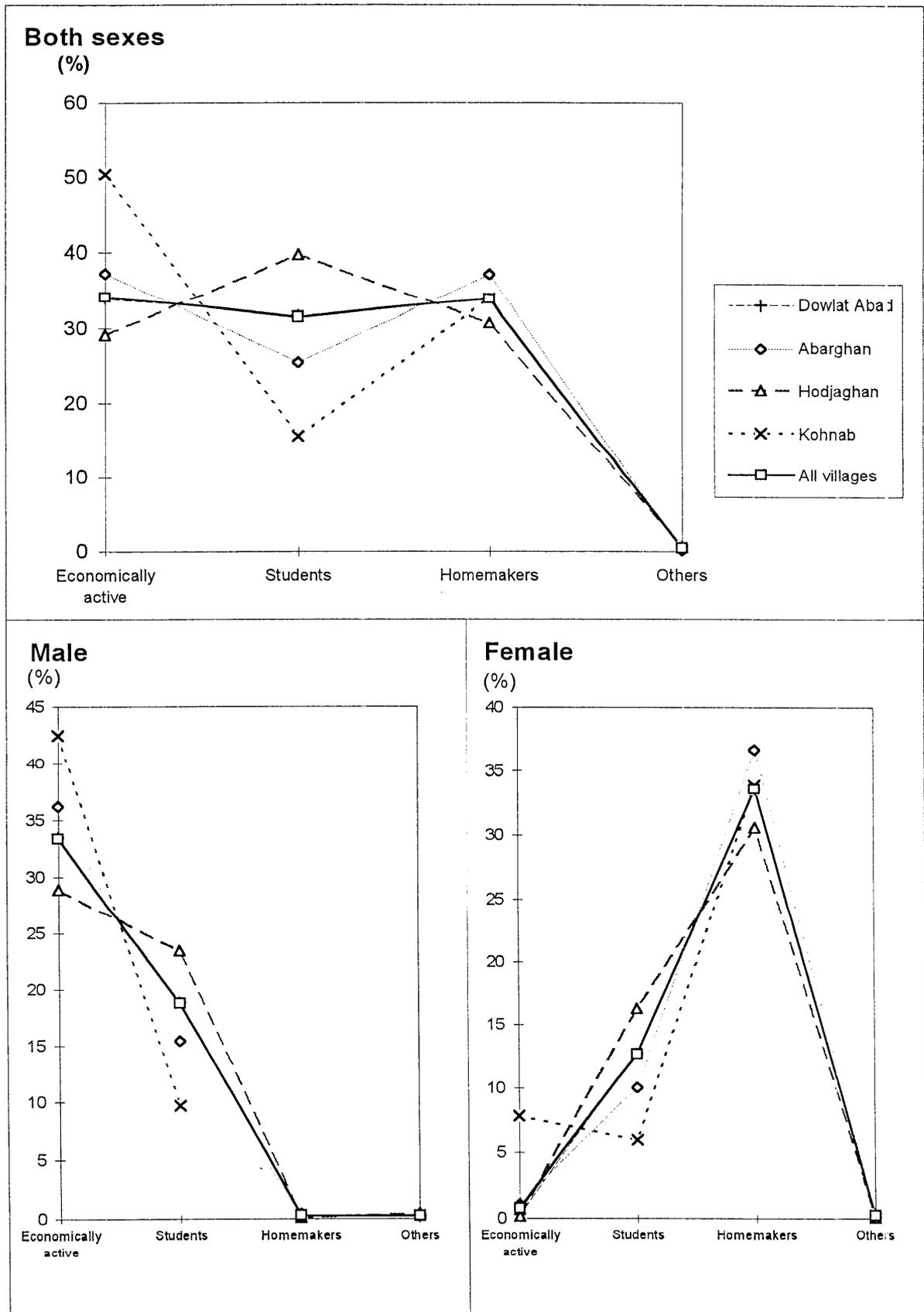


Source: SCI unpub.i. for students' share in total population in 1991, and data from field survey for the households' involvement in carpet weaving

The same pattern can be seen in the activity status of the population aged 10 and over. Kohnab has the highest share of the economically active and the lowest share of the students in its population aged 10 and over among the sample villages. Hodjaghan, on the other hand, presents the lowest share of the economically active and the highest share of the students in its population aged 10 and over among the sample villages (Figure 5.5).

There seem to be great differences among the males and the females in terms of activity rates and the participation rates in the sample villages. According to the 1991 census data, the participation rate among the female population in the sample villages is very low (Figure 5.3). While the participation rate among the male population was over 63 per cent, it was only 1.67 per cent among the females.

Figure 5.5
 ACTIVITY STATUS OF POPULATION AGED 10 AND OVER IN THE STUDY
 VILLAGES, 1991



Source: SCI unpub.i.

Although not very great, there are differences among the sample villages in terms of female participation rates. The highest rate of participation among the female population can be seen in Kohnab, and the lowest in Hodjaghan. This pattern, too, seems to have some relationship to the extent of the households' involvement in carpet weaving. As it will be discussed in Chapter 8, this activity in the sample villages is carried out inside the home and women and the younger female members of the family may take part without having to leave home.

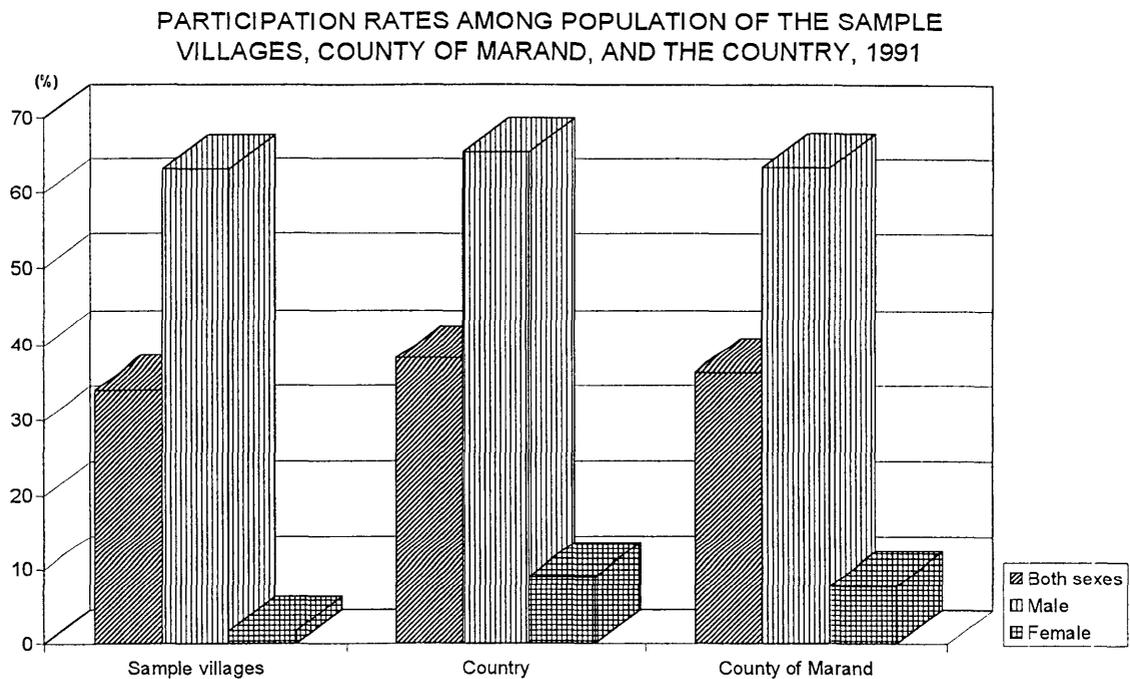
The low participation of the women in economic activities seems to be the main reason for the overall low rate of labour force participation in these villages. This becomes more apparent if we compare their participation rates with the county of Marand and the country as a whole (see Table 5.2 and Figure 5.6). Concerning participation rates by sex, the participation of the male labour force in the sample villages and also in the county of Marand in comparison with the national level is only slightly low, but great differences can be seen among the participation of the female labour force of these areas. Whereas female labour force participation at the national and at the county level was 8.93 per cent and 7.67 per cent respectively, it was only 1.72 per cent in the sample villages. It is noteworthy that female participation throughout the country is very low in comparison with male rates, as is apparent in Table 5.2.

Table 5.2
PARTICIPATION RATES AMONG THE POPULATION OF THE SAMPLE VILLAGES, COUNTRY, AND THE COUNTY OF MARAND IN 1991

	Both sexes	Male	Female
Country	38.03	65.45	8.93
<i>Urban areas</i>	38.19	65.29	9.15
<i>Rural areas</i>	37.81	65.67	8.62
County of Marand	36.35	63.40	7.67
<i>Urban areas</i>	37.16	62.80	9.95
<i>Rural areas</i>	35.69	63.88	5.84
Sample villages	33.88	63.16	1.72

Source: SCI 1994a, unpub.k. and unpub.i.

Figure 5.6



Source: *SCI unpub. i.*

The low rate of participation of the female labour force in rural Iran in general and in the sample villages in particular, seems to be related mainly to two major factors, as will be discussed in the next section.

5.4 Participation of women in the labour force

As mentioned in the previous discussion, according to the available census data, female participation in economic activities in the sample villages seems to be low and this could be attributed to two major factors. First, census data generally understate the real participation of women in economic activities. Second, factors such as cultural norms or engagement of women in household maintenance and childcare may restrict their participation in economic activities.

There is considerable evidence suggesting the understatement of women's participation in economic activities in rural areas of developing countries (Dixon 1982; Guest 1987; ILO 1988a; Bharadwaj 1989; Anker 1990; Clark and Anker 1990; Koppel and Hawkins 1994; Todaro 1994). Dixon (1982) suggests that women in rural societies of developing countries are 'invisible workers' whose work participation is systematically excluded in the statistical collection of data about rural labour resulting in a consistent underestimation of female labour. In their detailed study of a village in Rajasthan in India, Sharma and Vanjani (1994) found that women do all the work that men do, except ploughing, and men do none of what is considered women's work. Despite this, wage labour is the only area in which women have become visible in formal statistics (Sharma and Vanjani 1994, p. 81). Feldman, emphasising the significance of women's participation in economic activities in Bangladesh, stated that the 'proportion of females in the labour market has been systematically miscalculated by estimates that exclude or under-represent the labour of women engaged as household workers, petty commodity producers, and casual and daily labourers in farm and non-farm work' (Feldman 1994, p. 100).

In the sample villages, too, it seems that women's participation in economic activities is much higher than what the census data shows. Responses to the questions concerning work performed by the household members in any of the three dominant activity areas, i.e., household farms, animal husbandry, and the handicraft or household industries (FAH), indicate that a higher portion of the female population is engaged in activities that can be regarded as 'economic'. Regarding the 1982 resolution adopted by the Thirteenth International Conference of Labour Statisticians (ICLS) which forms the new international standards on statistics of the economically active population, employment and under-employment (Rao and Mehran 1990, p. 59), these three activities can be considered as 'economic'. Therefore, people practising work in these areas in the sample villages can be regarded as 'economically active'. Under the new international standards, the economically active population includes:

all production and processing of primary products, whether for the market, for barter or for own consumption, the production of all other goods and services for the market and, in the case of households that produce such

goods and services for the market, the corresponding production for own consumption (Rao and Mehran 1990, p. 60).

Anker, on the basis of ILO recommendations, suggests that many of the activities in which Third World women are engaged should be regarded as 'economic' in nature and therefore as labour force activities. 'Examples are animal husbandry (tending, milking, etc.) and activities for own consumption such as processing food for storage (pickling, grinding meal, flour-making) and sewing clothes for family use' (Anker 1990, p. 130).

Goods produced through farming and animal husbandry in the sample villages, are both for market and home consumption, although the portion of the product consumed by the households or sold varies between households as well as between villages. Goods produced through handicraft activities or household industries, dominantly carpet and, in a few cases, wick products, are all market-oriented products.

A comparison of the responses to the question related to household members' activity status and the data obtained through the question regarding their engagement in any of the three dominant activities carried out by the households, supports the view that women's economic activity is underrepresented or understated by formal statistics. The number of people engaged only in these three activities, that are 'economic activities' as discussed earlier, is more than the total number of the household members reported as economically active (Table 5.3).

A comparison of the percentage of male and female household members working the week before the survey (and therefore currently active (labour force)), with the percentage of male and female household members engaged in FAH reveals an interesting point. The percentage of male members reported as working in the week before (currently active) of the survey in the sample villages was almost two per cent higher than the male household members engaged in FAH. But, the percentage of female members engaged in FAH was almost six times greater than the percentage of

Table 5.3

CURRENT AND USUALLY ACTIVE POPULATION AND POPULATION ENGAGED IN FAH IN THE SAMPLE VILLAGES BY SEX

	Total surveyed population	Population engaged in FAH*	Population usually active	Population currently active
<i>Both sexes</i>				
Dowlat Abad	239	64.02 (153)**	38.08 (91)	43.10 (103)
Abarghan	141	77.30 (109)	43.26 (61)	49.65 (70)
Hodjaghan	165	58.18 (96)	33.94 (56)	38.79 (64)
Kohnab	75	92.00 (69)	50.67 (38)	57.33 (43)
All villages	620	68.87 (427)	39.68 (246)	45.16 (280)
<i>Male</i>				
Dowlat Abad	123	72.36 (89)	68.29 (84)	73.98 (91)
Abarghan	72	79.17 (57)	77.78 (56)	86.11 (62)
Hodjaghan	86	70.93 (61)	65.12 (56)	72.09 (62)
Kohnab	39	92.31 (36)	79.49 (31)	87.18 (34)
All villages	320	75.94 (243)	70.94 (227)	77.81 (249)
<i>Female</i>				
Dowlat Abad	116	55.17 (64)	6.03 (7)	10.34 (12)
Abarghan	69	75.36 (52)	7.25 (5)	11.59 (8)
Hodjaghan	79	44.30 (35)	0.00 (0)	2.53 (2)
Kohnab	36	91.67 (33)	19.44 (7)	25.00 (9)
All villages	300	61.33 (184)	6.33 (19)	10.33 (31)

*Household's farm, animal husbandry, and handicraft or household industries

**Figures in brackets indicate the numbers

Source: Field survey, summer of 1994.

those reported as currently active. Taking into account the male household members working in other sectors, the understatement of male work practices does not seem to be very great, but it is the female labour force that is mainly being underreported during the surveys. Anker (1990) suggested that respondents in Third World countries are often overly anxious to please, answering questions in the way they believe the interviewer would like. This bias answers towards socially accepted norms. 'In

countries where a family's social status is negatively affected by a female member working, it is generally believed that the respondent tends to understate the labour force activity of female household members' (Anker 1990, p. 127).

There seem to be great differences in terms of women's participation in the labour force among the sample villages. The percentage of the female population reported as currently active in Kohnab was almost 10 times greater than the one in Hodjaghan (Table 5.3). Differences between the sample villages in the percentage of female household members engaged in FAH also shows the same pattern. About 44 per cent of female household members were engaged in FAH in Hodjaghan, which is less than half of the percentage of females engaged in these activities in Kohnab. Corresponding figures in Dowlat Abad, Abarghan, and Kohnab were 55.17 per cent, 75.36 per cent, and 91.67 per cent respectively.

The low rates of participation of women in Hodjaghan and Dowlat Abad in comparison with Abarghan and Kohnab suggest an interesting point. Recent studies in Asian countries indicate that the growth of non-farm activities in rural areas has been associated with an increase in participation of women in economic activities and that 'the feminization of rural non-farm labour may be highly correlated with recent growth of the rural service economy' (Koppel and James 1994, p. 281). In contrast to these findings (as will be discussed in detail later in Chapter 6) the service sector's contribution to total employment in Kohnab is lower than in any other village in the study area. It is also noteworthy that the service sector does not employ even one female labourer in this village. The sector's contribution to total female employment in the two villages of Abarghan and Kohnab is also almost zero and only in Dowlat Abad does it make a little contribution to total employment. The contribution of sectors to total employment in the sample villages will be discussed in more detail later in Chapter 6.

The varying level of female engagement in FAH in the sample villages could probably be related to the economic status and income level of the households in these villages. Anker (1990) states that 'The truth is that among the Third World poor virtually all adults and most children engage in "economic activities" to help the family

to meet its basic needs' (Anker 1990, p. 131). As it has been shown in Figure 5.7, women are more engaged in carpet weaving which (as will be discussed in more detail in Chapter 8) has a supplementary role in providing households' income in the sample villages as well as in most other parts of the rural Iran (Guha 1974, p. 238; Safinezhad 1987, p. 328; Taghavi 1995, p. 115).

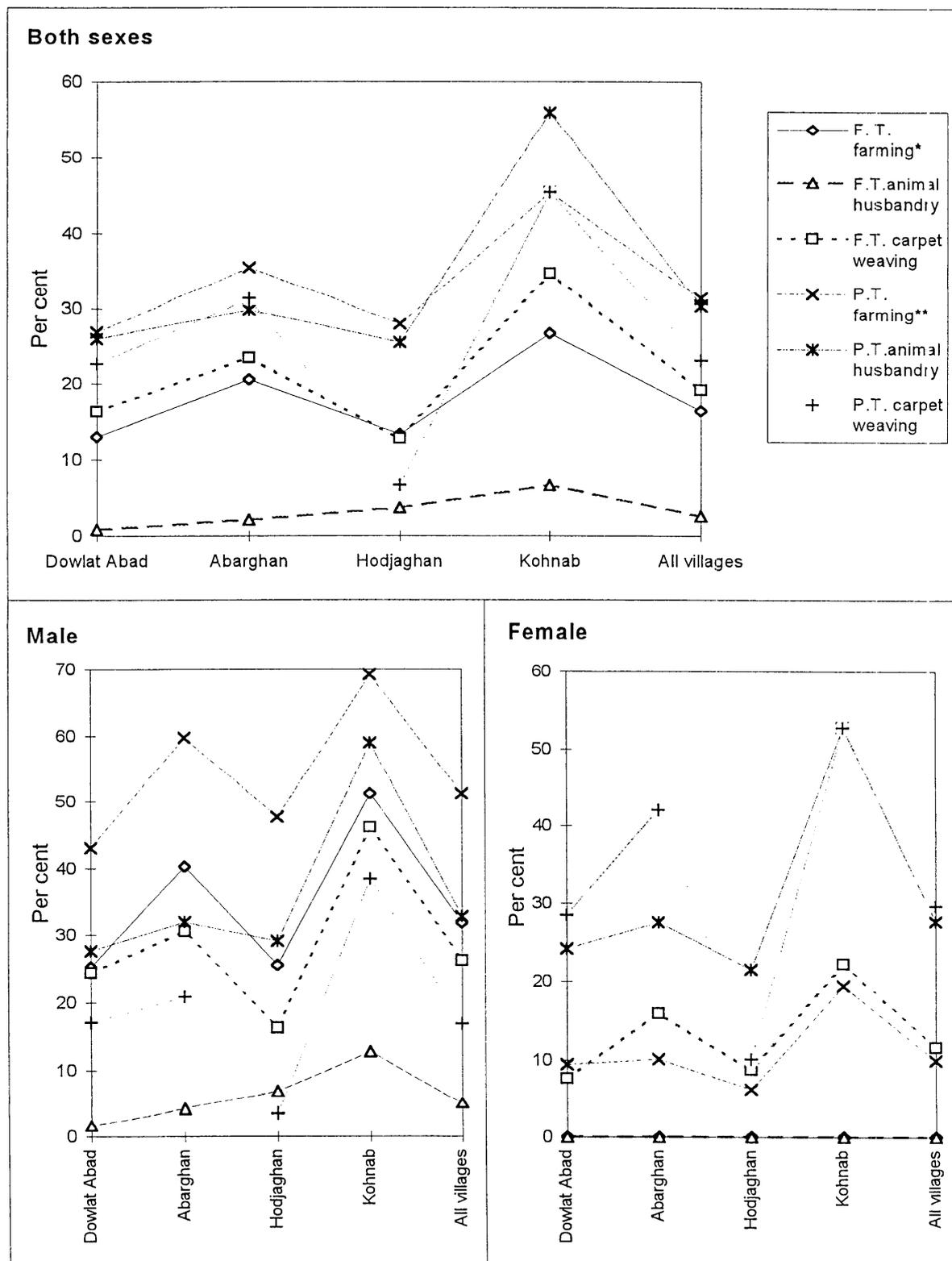
However, as Table 5.3 reveals, the participation of women is lower than the participation of men in economic activities in the sample villages. This can be related to two major factors. First, cultural factors may restrict women's economic activities to certain areas. Bloom and Freeman (1986) stated that the 'labour force participation rates of women, which can be an important component of overall participation rates, are not just economically determined, but also culturally determined, in many developing economies' (pp. 385-6). In general terms, it is a fact that in all countries fewer women than men are reported to be in the labour force (Clark and Anker 1990, p. 257). However, this varies considerably between countries.

Considering the varying rates of women's participation in economic activities in rural areas of the developing world, the 75th Session of the International Labour Conference in 1988 suggested that cultural norms play a significant role in this diversity. It was reported that in sub-Saharan Africa, East and Southeast Asia, where cultural norms do not limit women's participation in field agriculture, their participation rates are high. In other regions such as South Asia and the Middle East where cultural and social practices restrict women's role in field work, the female share in the labour force is considerably lower than in East and Southeast Asia and sub-Saharan Africa (ILO 1988a, pp. 41-2).

Feldman (1994), pointing to cultural factors, notes that in rural Bangladesh, women's labour has been limited to primarily courtyard activities and their participation in agricultural production has been tied specifically to grain processing rather than field production (Feldman 1994, p. 100). Razzaghi (1988) suggested that the low rate of participation of women in Iran, as in many other countries, relates to the fact that many of them are not included in the labour force because they work at home. He further

Figure 5.7

PARTICIPATION OF THE HOUSEHOLD MEMBERS IN HOUSEHOLDS' FARM, ANIMAL HUSBANDRY AND CARPET WEAVING ACTIVITIES



* F.T. = Full-time

** P.T. = Part-time

Source: Field survey, summer of 1994

suggested that childcare and cultural factors also restrict women's participation in the labour force in the country (Razzaghi 1988, p. 104).

Observation from the study area, together with the data obtained through questionnaires, showed that women in the sample villages are mainly participants in activities that are carried out in households' home, farms and properties. Women may also work as wage labourer in other households' farm or other enterprises, but this is again limited to certain activities. The only activity that employs a relatively higher number of women outside their own households — which is carried out within the residential units of the other households — is carpet weaving. Women's work practices as wage labourers in other households' farms is limited to activities such as weed defoliation and the harvesting of crops like sunflower or peas that require relatively light, but time-consuming, work.

Another factor restricting women's participation in economic activities in the sample villages is their home duties that are not considered as 'economic activities'. Women supply almost all the labour required for the maintenance of the households such as cooking, cleaning, and tending the house garden. Moreover childcare in the sample villages is exclusively shouldered by women. Monk and Hodge (1995) see childcare as an important factor restricting married women's participation in the rural labour force (Monk and Hodge 1995, p. 164).

As is apparent from Figure 5.7, the engagement of women in dominant economic activities in the sample villages is mainly on a part-time basis. This is again because their involvement with household maintenance and childcare prevents them from participating on full-time basis in economic activities. Therefore, women in the sample villages participate in activities that either require part-time work, or are flexible and accommodate their household duties. Activities such as milking or feeding animals at home may require only a few hours of daily work. Handicraft or household industries can be practised at home at any time of the day and are activities with time elasticity. The heavy task of in-home animal husbandry in the sample villages, as in other parts of rural Iran (Lahsaeizadeh 1993a, p. 71), is mainly shouldered by the women of the household. In home-based carpet weaving, too, the women comprise a notable

percentage of the workforce. This activity in the sample villages, as will be discussed in Chapter 8, is among the least likely to hire labour and depends mainly on the hidden contribution of women and children.

5.5 Unemployment among the labour force

The discussion presented in previous sections revealed that a higher proportion of the population in the sample villages is under working age and thus, is considered as dependent population. It also revealed that a relatively low proportion of the population participate in economic activities. The present section will use census data to demonstrate the extent to which the participant portion of the population of the sample villages has access to employment.

According to the 1986 and 1991 census data, about one-third of the population aged 10 or more in the sample villages were reported economically active and could be considered in the labour force.⁵ Census data, as is evident from Table 5.4, show a very low rate of unemployment in the sample villages. According to these data, over 95 per cent of the labour force in 1986 and 98.68 per cent in 1991 were reported as employed.⁶ The unemployment rate in Dowlat Abad, the highest among the sample

⁵ In the 1986 census, all household members' aged 6 and over who were reported as employed or unemployed (seeking work) within the 7 days prior to the day of data collection, were considered as economically active (SCI 1993c., p. four). In 1976 and in the 1991 censuses, the definition covered population aged 10 and over (SCI 1979b, p. b and SCI 1994a, p. six). In order to make the census data comparable with each other as well as with the survey data, economically active population aged 6 - 9 have not been included in the calculation of participation rate for the year 1986.

⁶ The following definitions have been employed by the Statistical Centre of Iran for the terms 'employed', 'unemployed', and 'work' in 1986 and 1991 censuses:

Employed: Following persons are considered employed:

- All persons who had a job during the last seven days preceding the enumeration even if they on leave, sick leave, temporary cessation of work and ... but were expecting to resume work after the removal of the cause.
- All persons who had not any permanent job but had worked at least two days during the last seven days preceding the enumeration.
- All persons who had worked as trainee during the last seven days preceding the enumeration.
- All persons who had a job but were not working during the last seven days preceding the census enumeration due to the seasonal nature of their work (seasonally unemployed) provided that they had not been seeking other work.
- All persons who were engaged in military services.

villages, was only 6.82 per cent in 1986 and declined even further down to 2.10 per cent in 1991.

Among the factors contributing to the low rates of unemployment in the sample villages, the growth of non-farm activities seems to be important. As will be discussed in Chapter 8, the non-farm sector has increased employment opportunities in these villages and its share in total employment is higher than that of the farm sector.

Another factor that seems to have played an important role in the low rate of unemployment in the sample villages is the out-migration of the labour force. Monk and Hodge (1995, p. 155) note that those without work in rural areas in the United Kingdom have a higher propensity to migrate away rather than remain unemployed and searching for work within the local area. In developing countries, the search for jobs is considered as one of the main reasons for rural-urban migrations (Kazemi 1980; Gugler 1986; Mohtadi 1986; Hosseinzadeh 1991; Todaro 1994). Mohtadi (1986, pp. 715-8) sees rural unemployment as a significant push factor in rural out-migration in Iran. Data from the field survey supports these findings. As discussed in Chapter 4, seeking work was reported as one of the main reasons for leaving the villages by emigrant members. It appears that this factor is even more relevant to Kohnab's case, where no-one was reported as unemployed in either of the two censuses (Table 5.4).

Meanwhile, the census data on unemployment covers only those who had no work but were seeking work, and are considered as openly unemployed. There is widespread agreement that open unemployment rates in developing countries do not provide a useful indication of the extent to which labour resources are utilised. As stated on 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 on them' (ILO 1988a, p. 28).

- All persons who were attending training courses in faculties and related military and disciplinary academies. (SCI 1990a, p. v)

'Unemployed (seeking work): Those who are not considered employed and were seeking work during the last seven days preceding the census enumeration, are considered unemployed (seeking work).' (SCI 1993f, p. three).

'Work: any legitimate mental or physical activity that results in earning (cash, non-cash) income' (SCI 1993f, p. three).

Table 5.4
EMPLOYMENT AND UNEMPLOYMENT IN THE SAMPLE VILLAGES IN 1986
AND 1991

	Total labour force		Employed (%)		Unemployed (%)	
	1986	1991	1986	1991	1986	1991
<i>Both sexes</i>						
Dowlat Abad	968	953	93.18 (902)**	97.90 (933)	6.82 (66)	2.10 (20)
Abarghan	492	619	96.54 (475)	99.03 (613)	3.46 (17)	0.97 (6)
Hodjaghan	440	493	98.41 (433)	99.39 (490)	1.59 (7)	0.61 (3)
Kohnab	112	135	100.00 (112)	100.00 (135)	0.00 (0)	0.00 (0)
All villages	2012	2200	95.53 (1922)	98.68 (2171)	4.47 (90)	1.32 (29)
<i>Male</i>						
Dowlat Abad	951	944	93.17 (886)	97.88 (924)	6.83 (65)	2.12 (20)
Abarghan	471	601	96.39 (454)	99.17 (596)	3.61 (17)	0.83 (5)
Hodjaghan	435	490	98.39 (428)	99.39 (487)	1.61 (7)	0.61 (3)
Kohnab	112	114	100.00 (112)	100.00 (114)	0.00 (0)	0.00 (0)
All villages	1969	2149	95.48 (1880)	98.70 (2121)	4.52 (89)	1.30 (28)
<i>Female*</i>						
Dowlat Abad	17	9	94.12 (16)	100.00 (9)	5.88 (1)	0.00 (0)
Abarghan	21	18	100.00 (21)	94.44 (17)	0.00 (0)	5.56 (1)
Hodjaghan	5	3	100.00 (5)	100.00 (3)	0.00 (0)	0.00 (0)
Kohnab	-	21	- (-)	100.00 (21)	- (-)	0.00 (0)
All villages	43	51	97.67 (42)	98.04 (50)	2.33 (1)	1.96 (1)

*The very small number of female reported as in the labour force makes the comparison statistically insignificant.

** Figures in bracket indicate the numbers.

Source: SCI unpub.d.

Therefore, census data indicate only partly the real extent of unemployment in rural Iran (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). On a report on the employment opportunities in rural Bangladesh in 1984, the World Bank noted that '... open unemployment in Bangladesh is low because people often engage in part-time or short duration work ..., but underemployment is high' (Koppel and Hawkins 1994, p. 2). For Gregory (1980), unemployment in developing countries is a 'luxury' which can not be afforded by less privileged groups in the society. 'The poor, lacking the resources to maintain themselves during a prolonged period of unemployment, must perforce seek and accept any source of employment, however low the return' (Gregory 1980, p. 678). Regarding the underemployment and disguised unemployment in Iran, Bartsch writes that:

Those who cannot find wage employment ... take up some form of non-wage employment in an activity that promises a modicum of means of subsistence. In the agricultural labour force, the recourse is to unpaid work on family farms regardless of level of marginal productivity, while outside agriculture, such pressure leads to self-employment in the myriad of low-productivity activities of traditional artisanat [sic] manufacturing, trade, and private services (Bartsch 1970, p. 24).

This type of under-utilisation of labour in the sample villages that exists as underemployment or disguised underemployment, will be discussed in Chapters 7 and 8 of the present study.⁷

According to the census data, the unemployment rate is reported to be much lower among the female population of the sample villages. Only one female person in Dowlat Abad in 1986 and one female person in Abarghan in 1991 was reported as unemployed. Taking into account the total number reported as labour force, the unemployment rates among the female population of the sample villages were 2.33 per cent and 1.96 per cent in 1986 and 1991 respectively.

⁷ Underemployment: people working less (daily, weekly or seasonally) than they would like to work. ... Disguised underemployment: people who seem occupied on a full-time basis even though the product or service they render may require much less than full-time (Todaro 1994, pp. 228-9).

However, the lower rate of unemployment among the female labour force, in addition to the above mentioned factors, seems to be more related, as discussed earlier in this chapter, to the underestimation of their participation by census data. Bharadwaj, pointing to the generally lower rate of unemployment among females compared to the males among the Indian population, suggests that this is probably because there is an under-counting of the female workforce and 'many females with marginal work or mainly intermittent work do not get reported in the workforce' (Bharadwaj 1989, p. 73).

The higher portion of the female population classified as 'not reported' by the census data supports this suggestion. The activity status of about 12 per cent of the population aged 10 or more in 1986 census was classified as not reported, of whom almost 59 per cent were female and about 41 per cent were male. It seems that, as will be discussed in more detail in Chapters 7 and 8, many of females whose activity status is listed as 'not reported' in the census data, could probably be classified as either unemployed or underemployed.

One other factor is that, according to the field observation and experience during the conducting the household survey, regardless of the women's involvement in economic activities and their age, the activity status of the wife in most cases is being reported as homemaker. Research on employment problems in Iran in the period prior to 1970 conducted by ILO reported that many homemakers reported as economically inactive were in reality seeking employment, though not actively so (Bartsch 1970, p. 23). According to the survey data, the activity status of only one out of the 135 female population that were reported as the wives of the heads of the surveyed households, was reported as employed and all the others were reported as homemakers. Data from the 1986 census also support this finding. According to these data, the number of females reported as homemakers in the sample villages in that year were more than the total number of males and females reported as employed.

It is also noteworthy that the number of female homemakers in each of the four villages under study is much higher than the number of total households (Table 5.5). In other words, there was on average of more than one female homemaker reported for

each household.⁸ An average of more than one female homemaker for each household can be partly attributed to the existence of extended families among the households in the sample villages. Data from the field survey reveals that in over 11 per cent of the households, the son was living with his parents after his marriage. The corresponding figures for Dowlat Abad, Abarghan, Hodjaghan and Kohnab were 6.67 per cent, 13.89 per cent, 12.20 per cent, and 16.67 per cent respectively.

Table 5.5
NUMBER OF HOUSEHOLDS, WORKFORCE, AND FEMALE HOMEMAKERS
AGED 10 AND MORE IN THE SAMPLE VILLAGES IN 1986

	Number of households	Male and female workforce	Female homemakers
Dowlat Abad	796	902	843
Abarghan	369	475	509
Hodjaghan	436	433	556
Kohnab	89	112	93
All villages	1690	1922	2001

Sources: SCI 1989 and unpub. d.

However, as is evident from Table 5.6, in comparison to rural unemployment at the national, provincial and the county level, the unemployment rate is very low in the sample villages. Note that the underestimation of the workforce or inclusion of all the hidden unemployed and underemployed in the workforce could be similar for all four levels. Meanwhile, the growth of non-farm activities seems to have played an important role in providing employment opportunities which have resulted in the low rate of unemployment in these villages. This will be discussed further in Chapter 8.

⁸ There were also 19 male persons reported as homemakers but have not been included in this calculation.

Table 5.6

RURAL UNEMPLOYMENT IN THE COUNTRY, PROVINCE OF EASTERN AZARBAIJAN, COUNTY OF MARAND AND THE SAMPLE VILLAGES IN 1986 (%)

	Both sexes	Male	Female
Country	12.91	12.08	20.58
Province of Eastern Azarbaijan	11.96	10.94	25.45
County of Marand	7.96	7.76	10.61
Sample villages	4.47	4.52	2.33

Source: SCI 1988a, 1988b, 1990a and unpub.d.

5.6 Conclusion

The two factors of high fertility rate and out-migration of population of working age have resulted a more dependent population in the study area. This problem of more dependent persons among the population is more serious in Kohnab where the rates of both fertility and out-migration have been the highest among the sample villages. Hence, of those of working age, a relatively small portion is participant in economic activities. The lower participation of women in economic activities, which itself is mostly related to social and cultural factors, is a major factor behind the low rate of overall labour force participation.

Meanwhile, the low rate of labour force participation in economic activities suggested by census data is open to question. This is particularly true in the case of the female population in that most of their economic activities and their contribution to households' income are being underestimated in data collections. Similarly, the discussion of unemployment in this chapter suggests that the very low rate of unemployment is in part related to the underestimation of the labour force.

The discussion of unemployment also suggests that the low rate of open unemployment does not necessarily mean a fuller utilisation of labour in the study area since underemployment seems to be high. However, a major factor contributing to the low rate of unemployment in the study area is the employment opportunities available for the labour force outside the farming sector. The distribution of the labour among the economic sectors will be discussed in the following chapter and Chapters 7 and 8 will address the employment opportunities available for the labour in farm and non-farm sectors.

CHAPTER SIX

WORKFORCE CHARACTERISTICS

6.1 Introduction

The discussion presented in Chapter 1 revealed a trend towards diversification in rural economies of developing countries and the last part of Chapter 2 documented the growth of the non-agricultural sector in rural Iran. The main purpose of this chapter is to examine this trend towards diversification in the context of the study area and to document the diverse patterns of changes between the sample villages. Thus, the main focus of this chapter is on the sectoral composition of the workforce and its changes over time. The chapter also discusses the social and economic structure of the workforce by describing its general characteristics in each industry sector as well as in each of the villages. The changes in the sectoral composition of the workforce and its characteristics over time are also described. The detailed study of the employment potential of the agricultural and the non-agricultural sectors will be presented in Chapters 7 and 8.

The analysis in this chapter will mainly rely on the survey data gathered in summer 1994. To examine the trends in workforce characteristics, comparisons will be made between these data and the data available from population and housing censuses carried out by SCI. Data from the 1986 census is the only available data that details the characteristics of the workforce at village level. Detailed occupational data for small settlement areas from the 1991 census were not available since data was collected through sampling (SCI 1994a, p. two) and available occupational census data covering the period prior to 1986 provides only an aggregate number of the employed population in the sample villages. Therefore, the study of changes in the characteristics

of the workforce presented at the end of each section will inevitably be limited to the 1986-1994 period.

Overall, the chapter consists of two main parts. In the first part the sectoral composition of the workforce and its changes over time will be examined. Part two focuses on the three main characteristics of the workforce in each industry sector. The age structure of the surveyed workforce is presented in section 6.3 and the skill and literacy level of the workforce is addressed in section 6.4. Section 6.5 examines the status in employment as an important indicator of the economic and social structure of the workforce and section 6.6 concludes the discussion. In an ideal world, where any information needed was available, a detailed study of the workforce characteristics would also take into account variables such as gender structure, levels of income and labour productivity. However, the appearance of only a small number of women among the surveyed workforce and in the census data, for the reasons discussed in Chapter 5, makes it difficult to address the gender structure of the workforce here. Also secondary data on levels of income and productivity in the workforce of the study area are not available; the survey data on income includes the overall income of the households rather than that of individuals. Thus, this chapter focuses on the general characteristics of the workforce and suggests the need for further detailed study of the workforce characteristics of the study area.

6.2 Sectoral composition of the workforce

This section of Chapter 6 examines the distribution of the workforce among major industry sectors. It also focuses on employment opportunities in the area and on the changes in employment structure over the 1986-1994 period. Emphasis will be on the principal occupations¹ of the workforce since the census data for 1986 report only on the persons' principal occupation.

¹ During the field survey, if a person had more than one occupation, the main occupation referred to the occupation in which the person usually worked most of the times. 'Principal occupation' and 'main occupation' have the same meaning in this study.

However, the workforce in the sample villages may be seen to be active in more than one industry sector and a multiplicity of occupations is a common feature. This means that an accurate assessment of the contribution of the sectors to total employment must take supplementary employment into account. Therefore, this section also examines the secondary occupations of the workforce.

Another important factor to be taken into consideration is that commuting to work in Marand makes a considerable contribution to employment in the area (Sadr Mousavi, Hadili & Zahedi 1992). This will be documented by using the survey data which reports on employment opportunities provided in Marand for the workforce of the sample villages.

The sectoral composition of employment in rural areas can be depicted in a number of ways. The distribution of the workforce into various sectors, according to the principal occupation of either the head of the household or of the entire workforce, is a conventional method. 'The most common dichotomy is the breakdown of the working population into agricultural and non-agricultural labour force' (Muqtada and Alam 1986, pp. 27-28). However, for two main reasons, this discussion will be based on the distribution of the entire workforce among industry sectors. Firstly, this will enable an examination of the employment opportunities in various components of the non-agricultural sector. Secondly, as the survey data demonstrates, the occupations of the heads of the households no longer represent the occupations of the entire workforce.

It is generally believed that non-agricultural activities make a considerable contribution to rural employment in Iran (Khosravi 1978; Najmabadi 1987; Lahsaeizadeh 1993a; Taghavi 1995). Furthermore, as figures in Table 6.1 imply, and contrary to some opinions (Sarshar 1991, p. 267), agriculture is not the only important sector providing employment for rural dwellers. Indeed, in the study area as a whole, the industrial sector accounts for the highest share of total employment and the agricultural sector employs only about one-third of the total workforce. The contribution of the service sector to total employment also seems to be important.

Table 6.1

EMPLOYED POPULATION OF THE SAMPLE VILLAGES BY MAJOR INDUSTRY SECTORS IN 1994*

Major Industry sectors	Dowlat Abad	Abarghan	Hodjaghan	Kohnab	All villages
<i>Both sexes</i>					
Agriculture	22.73 (20)**	46.67 (28)	25.93 (14)	52.63 (20)	34.17 (82)
Industry	47.73 (42)	38.33 (23)	57.41 (31)	39.47 (15)	46.25 (111)
Services	29.55 (26)	15.00 (9)	16.67 (9)	7.89 (3)	19.58 (47)
Total	100.00 (88)	100.00 (60)	100.00 (54)	100.00 (38)	100.00 (240)
<i>Male</i>					
Agriculture	23.46 (19)	50.91 (28)	25.93 (14)	58.06 (18)	35.75 (79)
Industry	48.15 (39)	32.73 (18)	57.41 (31)	32.26 (10)	44.34 (98)
Services	28.40 (23)	16.36 (9)	16.67 (9)	9.68 (3)	19.91 (44)
Total	100.00 (81)	100.00 (55)	100.00 (54)	100.00 (31)	100.00 (221)
<i>Female</i>					
Agriculture	14.29 (1)	0.00 (0)	0.00 (0)	28.58 (2)	15.79 (3)
Industry	42.86 (3)	100.00 (5)	0.00 (0)	71.43 (5)	68.42 (13)
Services	42.86 (3)	0.00 (0)	0.00 (0)	0.00 (0)	15.79 (3)
Total	100.00 (7)	100.00 (5)	0.00 (0)	100.00 (7)	100.00 (19)

* All existing economic activities are classified into three major industry sectors of agriculture, industry and services. The components of each major industry sector are displayed in Table 6.2.

** Figures in the brackets indicate the numbers.

Source: Field survey, summer 1994.

However, there are considerable differences between the villages in this regard. Whereas agriculture plays the dominant role in the two villages of Abarghan and Kohnab, the industrial sector has the highest share of total employment in Dowlat Abad and Hodjaghan. There are also differences between villages in terms of the

contribution of the service sector to total employment, ranging from about 8 per cent in Kohnab to just under 30 per cent in Dowlat Abad.

Table 6.2
SECTORAL COMPOSITION OF THE WORKFORCE IN 1994

Industry sectors	Dowlat Abad	Abarghan	Hodjaghan	Kohnab	All villages
Agriculture					
Agricultural, animal husbandry & ...	22.73 (20)	46.67 (28)	25.93 (14)	52.63 (20)	34.17 (82)
Industry*					
Manufacturing	38.64 (34)	35.00 (21)	53.70 (29)	39.47 (15)	41.25 (99)
Gas, electricity & water**	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
Construction	9.09 (8)	3.33 (2)	3.70 (2)	0.00 (0)	5.00 (12)
Services					
Wholesale & retail trade, restaurants & ...	7.95 (7)	5.00 (3)	1.85 (1)	2.63 (1)	5.00 (12)
Transport, communication & storage	3.41 (3)	1.67 (1)	3.70 (2)	2.63 (1)	2.92 (7)
Financing, insurance, real state, legal & ...	1.14 (1)	0.00 (0)	0.00 (0)	0.00 (0)	0.42 (1)
Community, social & personal services ...	17.05 (15)	8.33 (5)	11.11 (6)	2.63 (1)	11.25 (27)
Grand total	100.00 (88)	100.00 (60)	100.00 (54)	100.00 (38)	100.00 (240)

* *Industry also includes mining but since no-one was reported as employed in this sector either in 1986 nor in 1994, this sector has not been included in the table.*

** *Although no-one was reported as employed in this sector in 1994, it has been included in the table since it had contributed about one per cent to the total employment in 1986.*

Source: Field survey, summer 1994.

Due to the small number of women reported as being in the workforce, it is very difficult to comment on their distribution among the industry sectors. However, the

majority of those females reported as being in the workforce were in the industrial sector. All of the 13 female employees in the industrial sector were engaged in carpet weaving based in their home. This supports the earlier suggestion in this study that women in the sample villages are more likely to participate in activities that are practised in their places of residence.

The existence of occupational multiplicity, in the sense that employees have several sources of income at the same time (Hardjono 1984, p. 307), suggests that many of the occupations yield insufficient income. Studies on rural Iran have shown that, in many rural areas, a substantial portion of persons employed in agriculture engage in other activities as sidelines to supplement family income (Vadiei 1973; Guha 1974; Khosravi 1978; Safinezhad 1987; Lahsaeizadeh 1993b; Taghavi 1995) and, as Najmabadi writes, 'all village reports refer to this phenomenon of combined earning' (Najmabadi 1987, p. 129). This is especially the case in the areas which are agriculturally poor (Safinezhad 1987, pp. 328-330). Pointing to the declining income level from agricultural activities in many parts of rural Asia, Koppel and James stated that 'Diversification of employment and income sources by rural households is being driven, in many cases, by *declining* abilities to maintain standards of living based only on agrarian activities' (Koppel and James 1994, p. 297). Meanwhile, as Zand Razavi (1990, p. 60) has noticed in Southeast Iran, becoming richer may also be a reason for multiplicity of occupation for some wealthy rural dwellers. According to the survey data, occupational multiplicity in the study area is common among the households with larger amounts of agricultural land as well as among the small landowners. In the village of Kohnab, both of the two big landowners that each owned land three times more than the average for the village, were engaged in multiple occupations. Creating a financial surplus seems to be the main reason for being involved in more than one job for such dwellers.

However, observations and data from the field survey suggest that, in addition to the agricultural workforce, employees of the other industry sectors also derive income from various sources. This, as will be discussed in more detail in Chapters 8, suggests that income from some of the non-farm activities is also low.

Table 6.3 indicates the extent to which individuals in the study area were engaged in multiple occupations. Over 45 per cent of the workforce are engaged in second occupations and there are considerable differences between villages in this regard. Whereas over 63 per cent of the workforce in Kohnab is engaged in a second job, only 29.63 per cent of this category can be seen in Hodjaghan.

Table 6.3
CONTRIBUTION OF THE MAJOR INDUSTRY SECTORS TO SECONDARY EMPLOYMENT IN THE SAMPLE VILLAGES

	Workforce with second job	Agriculture as second job	Industry as second job	Services as second job
Dowlat Abad	48.86 (43)	74.42 (32)	18.60 (8)	6.98 (3)
Abarghan	45.00 (27)	33.33 (9)	55.56 (15)	11.11 (3)
Hodjaghan	29.63 (16)	87.50 (14)	12.50 (2)	0.00 (0)
Kohnab	63.16 (24)	33.33 (8)	66.67 (16)	0.00 (0)
All villages	45.83 (110)	57.27 (63)	37.27 (41)	5.45 (6)

Source: Field survey, summer 1994.

Regarding the contribution of the major industry sectors to secondary employment, a few points of interest emerge from the data.² First, in spite of the fact that the service sector provides a considerable share of total employment, this sector provides little secondary employment opportunities. This can be attributed to the fact

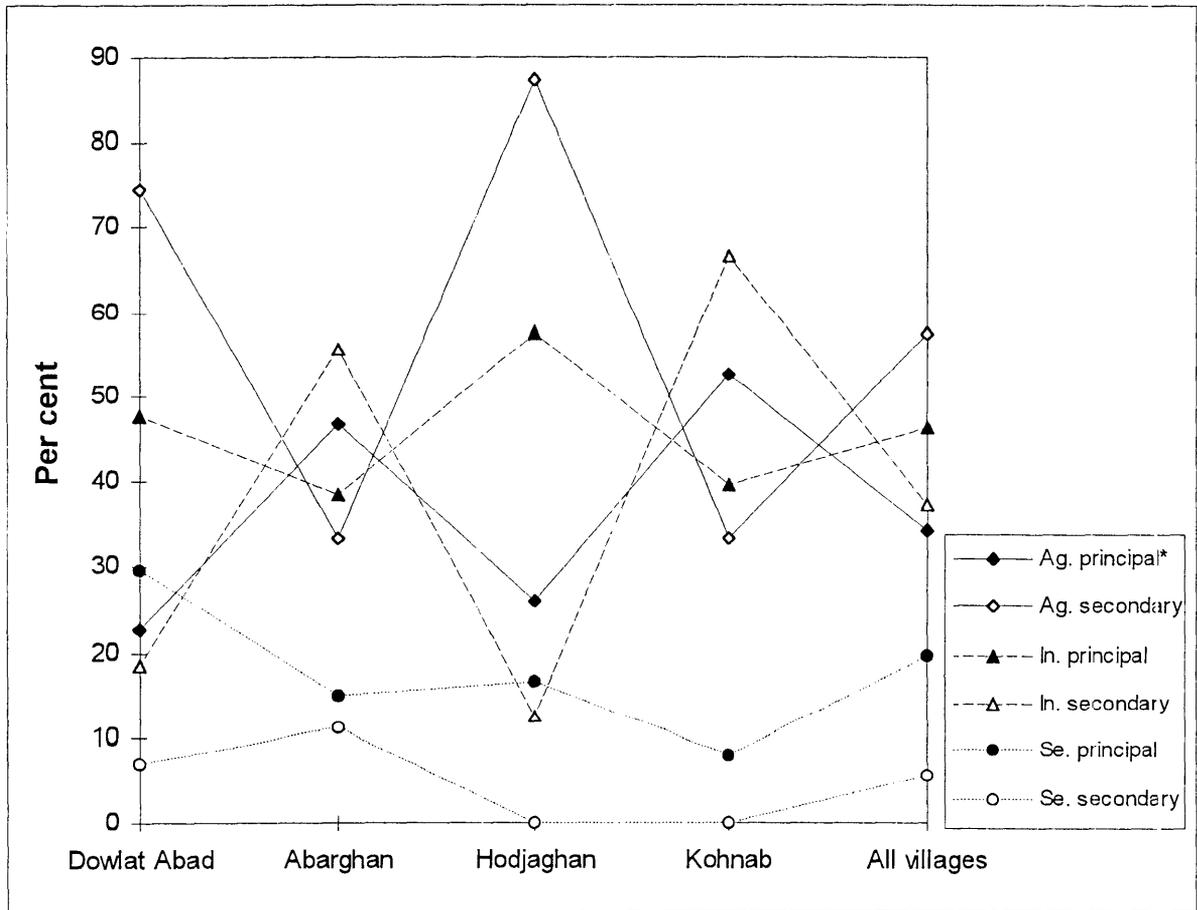
² Some workers might have more than one secondary job but, due to their small number among the surveyed workforce, the third job has not been included in this calculation. Only two persons had more than one secondary job. One was a shop keeper in Dowlat Abad and the other, also a shop keeper, in Abarghan. Both reported running the shop as their principal jobs. The one in Dowlat Abad would also operate the three hectares of land he owned plus carpet weaving on a casual basis. The other in Abarghan did not own any agricultural land but would look after the five sheep he owned. He also was involved in carpet weaving on a casual basis. On the basis of time allocation, farming was assumed to be the second job for the one in Dowlat Abad and carpet weaving for the one in Abarghan.

that over 50 per cent of the employment opportunities provided by the sector are formal and on a full-time basis. Second, secondary employment opportunities in the agricultural sector are higher than in the other two industry sectors. Regarding the relatively lower contribution of the agricultural sector to principal employment, it seems that overall income and employment generation through agricultural activities is limited. This issue will be discussed in more detail in Chapter 7.

Finally, the two villages of Dowlat Abad and Hodjaghan present different pictures to those of Abarghan and Kohnab. Whereas the industry sector accounts for the highest share of secondary employment in the latter two villages, agriculture plays the dominant role in the others. This can be explained mainly by the types of activities that the industrial sector includes in each village and by the returns to the workforce from involvement in individual industry-related activities. The dominant activity in the industrial sector in Abarghan and Kohnab is carpet weaving, which seems to have less attraction for the workforce compared to the relatively diverse patterns of industry-related activities of Dowlat Abad and Hodjaghan. This diversity, as well as the types of the industry-related activities found in the area, will be discussed in more detail in Chapter 8.

The overall contribution of major industry sectors to total principal and secondary employment is displayed in Figure 6.1. As is apparent from this figure, the contribution of the major industry sectors to principal employment in each of the villages is in contrast to their contribution to secondary employment. This again seems to be mainly related to the types of industry-related activities in these villages. In the two villages of Abarghan and Kohnab, where the dominant industry-related activity is traditional carpet weaving, the sector has a more supplementary role as an income source. On the other hand, industry-related activities in Dowlat Abad and Hodjaghan, which include relatively diverse and some non-traditional activities, contribute more to principal employment and seem to be the main source of income.

Figure 6.1
OVERALL CONTRIBUTION OF THE MAJOR INDUSTRY SECTORS TO TOTAL EMPLOYMENT IN THE STUDY AREA IN 1994



* *Ag. principal* = Contribution of the agricultural sector to the principal employment;
Ag. secondary = Contribution of the agricultural sector to the secondary employment;
In. principal = Contribution of the industry sector to the principal employment;
In. secondary = Contribution of the industry sector to the secondary employment;
Se. principal = Contribution of the service sector to the principal employment;
Se. secondary = Contribution of the service sector to the secondary employment.
 Source: Field survey, summer 1994.

Taking both principal and secondary jobs into account, as is apparent from Table 6.4, although more of the workforce are involved in industry in comparison to agriculture, the gap is not as wide as that suggested by the principal occupation data (Table 6.1). Furthermore, well over half of the workforce in all four villages still derive income from the agricultural sector.

Table 6.4
OVERALL INVOLVEMENT OF THE WORKFORCE IN MAJOR INDUSTRY SECTORS

	Total workforce	Agriculture	Industry	Services
Dowlat Abad	88	59.09* (52)	56.82 (50)	32.95 (29)
Abarghan	60	61.67 (37)	63.33 (38)	20.00 (12)
Hodjaghan	54	51.85 (28)	61.11 (33)	16.67 (9)
Kohnab	38	73.68 (28)	81.58 (31)	7.89 (3)
All villages	240	60.42 (145)	63.33 (152)	19.58 (53)

* Row totals are more than 100 per cent since some workers are involved in more than one industry sector.

Source: Field survey, summer 1994

An important factor to be taken into consideration is the fact that some villagers commute to work in Marand and its nearby brick kilns, which makes a considerable contribution to employment, although in varying degrees, in these villages. Figures displayed in Table 6.4 include all workforce regardless of their job location. Table 6.5 displays the number and percentages of the workforce according to the location of their principal job. The impact of a 'spread' effect of Marand over Dowlat Abad is evident from the table, where more of the workforce stated this city as their work place. Meanwhile, considering the shorter distance of Hodjaghan from Marand compared to the distance of Abarghan from Marand, the fact that more of the workforce commute from the latter to Marand, suggests that there are other factors affecting the pattern shown in this table. It seems that employment opportunities provided by sectors in these villages has played an important role in this regard. The dominant non-farm activities in Hodjaghan, as will be discussed in Chapter 8, seem to have more attraction than many of those available in Marand for the workforce from that village.

Table 6.5
PRINCIPAL JOB LOCATION OF THE WORKFORCE

	Total workforce	Job located outside the village of residence	Job located in Marand
Dowlat Abad	88	19.32* (17)**	13.64* (12)
Abarghan	60	11.67 (7)	6.67 (4)
Hodjaghan	54	5.56 (3)	1.85 (1)
Kohnab	38	2.63 (1)	0.00 (0)
All villages	240	11.67 (28)	7.08 (17)

* Percentage of total workforce

** Figures in brackets indicate the numbers.

OCCUPATION OF THE WORKFORCE WORKING IN MARAND*

	Dowlat Abad	Abarghan	Hodjaghan
Construction workers	1	-	-
Bricklayers	1	1	-
Brick-makers	4	-	-
Bakers	-	1	-
Teachers	-	-	1
Clerics	4	-	-
Nurses	1	-	-
Coffee shop workers	-	1	-
Restaurant workers	-	1	-
Hawkers	1	-	-
Total	12	4	1

* This table includes only the persons who reported their job as located in Marand. Of the other 11 workforce who reported their job was located outside the village but not in Marand, 8 were serving the military services, two were teachers and one was a nurse. One of the teachers was resident in Dowlat Abad but his job was located in Abarghan and the other one was from Abarghan with his job located in another village of the district. The nurse was resident in Dowlat Abad and her job was located in Zomuz, a town with about 20 kilometres distance from Marand.

Source: Field survey, summer 1994.

Changes in the sectoral composition of the workforce

Table 6.6 illustrates the changes in distribution of the workforce between the major industry sectors over the period 1986 to 1994.³ Apart from Hodjaghan, which remained relatively stable, changes in the other three villages seem to be considerable. It is noteworthy that changes in the sectoral composition of employment in the area have followed almost the same pattern from 1986 till 1991 as have occurred at the national level. The shift in the pattern of employment in all four villages has mainly been towards expansion of non-agricultural employment. This is not surprising, since it has been the dominant trend in rural Iran as well as in many other Asian countries in recent decades (Hodge and Whitby 1981; Booth and Sundrum 1985; Nattagh 1986; McLachlan 1988, Razzaghi 1988; Amirahmadi 1990; Hakimian 1990; Zanjani 1991; Saith 1992; Koppel and James 1994).

Studying the labour transfer from agriculture to other industry sectors in Iran, Hakimian (1990, p. 124) noted that, with the rise in alternative income opportunities, an increasingly large number of agricultural workers and owner-operator peasant families diverted more of their labour resources into non-farm activities. As a result, the contribution of agriculture to total employment in the country declined from about 34 per cent in 1976 to 29 per cent in 1986 and then to under 25 per cent in 1991. The contribution of the sector to rural employment in the same years declined from 58.92 per cent to 57.02 per cent and 51.89 per cent respectively.

However, as will be discussed in more detail in the next two chapters, it is likely that, in many cases, labour with low levels of assets, particularly land, are pushed as much as they are pulled into non-agricultural employment. In the Indian context, Hasbullah noted that the lower income groups have a higher proportion engaged in non-agricultural activities than the higher income groups. He concluded that lack of land and population pressure have resulted in poor people seeking additional or

³ For data on the contribution of the major industry sectors to total employment in 1986 see Tables 3a, 3b and 3c in Appendix 3.

alternative jobs in rural South Asia (Hasbullah 1989, p. 84). Adams and Jane He (1995, p. 18) found that the real constraint of lack of access to land in rural Pakistan forces the poor to seek the bulk of their livelihood outside of agriculture.

Table 6.6
PERCENTAGE CHANGES IN THE CONTRIBUTION BY INDUSTRY SECTORS
TO TOTAL EMPLOYMENT FROM 1986 TO 1994

Industry sectors*	Dowlat Abad	Abarghan	Hodjaghan	Kohnab	All villages
Agriculture	-3.88	-10.80	-2.94	-12.55	-2.82
Agricultural, animal husbandry & ...	-3.88	-10.80	-2.94	-12.55	-2.82
Industry	-3.27	12.22	3.13	17.15	2.34
Manufacturing	-0.94	14.79	1.28	18.94	4.67
Gas, electricity & water**	-1.22	NA**	-0.23	NA	-0.62
Construction	-1.22	-2.56	2.09	-1.29	-1.76
Services	7.16	-1.42	-0.19	-4.61	0.49
Wholesale & retail trade, restaurants & ...	3.96	1.42	-0.23	2.63	1.77
Transport, communication & storage	0.19	-0.44	1.39	0.85	0.27
Financing, insurance, real state, legal & ...	1.03	NA	NA	NA	0.36
Community, social & personal services ...	1.97	-2.41	-1.36	-8.08	-1.91

* Since no-one was reported as employed in mining, this sector has not been included in the table.

**NA = Not Applicable. Change in percentage contribution by industry sectors is not applicable here because no-one either in 1986 or in 1994 was reported to be employed by this sector.

Sources: Calculated from SCI unpub.e. and Table 6.2. (See Appendix 3 for data on sectoral composition of the workforce in 1986).

For Bruce Koppel and William James (1994, p. 291) the spill-over of rural landless labour into services and the abnormal expansion of marginal employment in this sector in the South and Southeast Asian context, is a manifestation of the poverty

problem, rather than a sign of economic growth and development. Pointing to the departure of about two to three million from the farming community in the period 1966-76 in Iran, McLachlan stated that it was 'a testimony to the truism that poor rewards from agriculture were tolerated only while no alternative existed' (McLachlan 1988, p. 9). For some observers, as Amirahmadi wrote, the 'performance simply indicates that agriculture can not be relied upon as a major source of employment' (Amirahmadi 1990, p. 190). This was reflected in the responses to the question regarding the job the respondents would like to do if they had a choice. Over half of the respondents stated service-related activities as their preferred job and about one-third stated farm-related activities. Only about 6 per cent stated carpet weaving as their preferred job and just about 25 per cent of the carpet weavers said they would choose their own job if they had a choice. It is noteworthy that the latter is the rapidly growing activity in the area.

As is apparent from Table 6.6, changes in the contribution of the service sector to total employment were very little. This may appear a little unusual, since growth of this sector is evident throughout rural Asia and, as Koppel and James note:

The service sector is seen, in many cases, as a tertiary sector that appears *after and under* agriculture and manufacturing — in terms of both sequence and development significance. From this perspective, the growth of a service sector in the context of a predominantly agrarian rural economy appears implausible. ... Nevertheless, ... a complex rural service economy is appearing throughout the region. And in some ways, it is distinct from the employment growth in manufacturing in rural areas that has received more attention in assessments of nonfarm employment (Koppel and James 1994, p. 281).

The same trend was also seen at the national level in Iran in recent decades. Amirahmadi's study (1990, p. 193) shows that out of an average of 224,000 new jobs created in Iran each year over the 1976-1986 period, some 94 per cent were service-related. Indeed, the service sector has notably increased its share in total sectoral employment, from 34.6 per cent in 1976 to 42.33 per cent in 1986 and then, with a

relatively slow rate of increase to 43.62 per cent in 1991 (SCI 1994a). Within the service sector, the retail trade and restaurant industries generated most jobs, followed by transportation and communication.

However, in the study area it was only in Dowlat Abad that the service sector increased its contribution to total employment. The sector experienced a decline in its contribution to total employment in the other three villages. The increased share of the sector in Dowlat Abad can be attributed partly to its recent selection as the administrative centre of the subdistrict, which was immediately followed by the beginning of the implementation of the first stage of the Guidance Plan. Thus, although this new position has added just a few employees to the number involved in public services, it has resulted in an impression among residents that the location of service facilities to provide the subdistrict's needs in the future, will enhance the position of the village as a commercial centre as well. As a result, increasing numbers are employed in retail trade-related activities and the number of shops has increased rapidly.

Among the subsectors, retail trade-related activities experienced an increase, but community and social services showed a sharp decline. Two major factors seem to be responsible for this pattern of change.

First, as Hodge and Whitby noted, 'not all the demands for services of rural populations are met from activities located in rural areas. Urban areas provide services, not only for urban populations but also for populations in a rural hinterland' (Hodge and Whitby 1981, p. 130). The expansion of the service sector in these villages has been strongly affected by the short distance from Marand in two ways: a) expansion in the number of small repair shops such as those servicing vehicles or home appliances has been limited due to the easy access to relatively better services provided in Marand. In Kohnab, where the longer distance from Marand limits the extent of access, the limited demand, due mainly to the small population, is responsible for the non-existence of such services; b) where a certain level of skill is required by services like education or health, discussed later in this chapter, positions are filled by persons from Marand. This suggests that the extent of the non-farm service economy in the study area may

not have been accurately reflected by available census data since some of the employees of the sector are from outside the area and are mainly residents of Marand.

Second, because of the imposed war that lasted for 8 years, the nation had to allocate more of its workforce to defence. As the result, by 1986, defence-related activities contributed more than 8 per cent to total rural employment at the national level (Zanjani 1991, p. 38). According to the 1986 census data, the share of defence-related activities of total employment in the sample villages was over 10 per cent.⁴ Following the cease-fire in 1988, Iran reduced the number of army personnel and it seems that the steady rise in the overall contribution of services to total employment was due to this factor. In the study area, the contribution of defence-related activities to total employment declined from over 10 per cent in 1986 to under 4 per cent in 1994, and it has been reflected in the decline of the share of community and social services (Table 6.6).

Meanwhile, retail trade-related activities showed an increase in the area, but the rate varied among the villages. Whereas the sector experienced an increase of almost 4 per cent in Dowlat Abad, it showed a slight decline in Hodjaghan. The author's observations suggest that, in spite of the fact that residents from all four villages are more attracted by Marand for marketing their farm and non-farm products as well as for buying their needed goods, an increasing number in the area are becoming involved in retail trade.

Unlike the agricultural and the service sectors, the growth of employment within the industrial sector was relatively rapid (Table 6.6). There are again differences between the villages as well as between types of dominant industries. Differences between the patterns of changes in the sample villages show cases of increase and decline. Rapid increases were experienced by the two villages of Abarghan and Kohnab, where the share of total employment held by agriculture showed rapid decline. It seems

⁴ In the 1986 census, persons in barracks, garrisons, police stations, bases, military and disciplinary camps, and also students of military and disciplinary forces, were enumerated as members of their regular household as temporarily absent persons (SCI 1990a, p. III). In order to make the comparison possible, the same method of enumeration was employed in the 1994 survey. Therefore, workforce reported as *in the military service*, were absent from the village.

that the shift of labour in these two villages has been from agriculture to industry. Among industry-related activities, carpet weaving has been the most rapidly growing activity in these two villages. Considering the working conditions in this home-based industry, it appears that the increase in the share of total employment by this industry has resulted because of the push factors from agriculture rather than because of the pull factors in the industrial sector. Employment opportunities in these two sectors will be discussed in Chapters 7 and 8.

On the other hand, the industrial sector showed decline in its share of total employment in Dowlat Abad. It seems that the main reason for this trend lies outside the village. As mentioned earlier in this section, some of the labour force from Dowlat Abad seek employment in Marand. Therefore, changes in the sectoral composition of employment in this village are also closely related to the factors affecting labour market conditions in Marand. Examination of the changes in the components of the major industrial sector shows that decline occurred in the two sectors of construction and manufacturing. It is also noteworthy that the decline in the latter has resulted from the decline in the number of brick-making workers, which is also related to the decline in the construction sector. Whereas brick-makers composed 24.78 per cent of the total workforce of the industrial sector in Dowlat Abad in 1986 (SCI unpub.e.), their share declined to only 9.52 per cent in 1994. All the workforce from Dowlat Abad that are involved in this activity work in Marand but reside in the village.

The city of Marand's brick kilns, which are located mostly within a short distance North of the city, provide bricks not only for whole county, but also for some other areas in the province of Eastern Azarbaijan. These kilns have been an important source of employment for the landless labour force of nearby villages in recent decades. The production processes entail very harsh working conditions and use mainly manual labour rather than machinery. The industry offers employment on a seasonal basis and work usually ceases from November until March (mid autumn until the end of winter). The labour force working in these kilns reside in their villages and commute to work every day. Therefore, they are considered as the workforce of their place of residence.

According to the 1986 census results, almost a quarter of the total workforce classified in the industrial sector in Dowlat Abad (114 out of the total 460), were reported to be brick-makers. It is noteworthy that from the other three villages, only 2 workers from Abarghan (out of total of 124 workers in the industrial sector), were reported to be involved in this activity. The two villages of Kohnab and Abarghan are located further away from these kilns, but Hodjaghan is located almost at the same distance as Dowlat Abad. Considering the harsh working condition in these kilns compared to farm and other non-farm activities available in the area, it seems that 'push' factors are more responsible for the workforce in Dowlat Abad, compared to that of Hodjaghan, seeking work outside the village.

In addition to the decline in the share of brick-making workers in Dowlat Abad, the share of construction workers also declined in this period (from 11.31 per cent to 9.09 per cent). It is noteworthy that local construction works in Dowlat Abad experienced a rapid increase following the implementation of the Guidance Plan that started in 1992. Therefore, the decline in the share of the construction workers of total employment in this village seems to be related more to the reduction in construction works in the city of Marand.

Thus, it appears that the declining share of employment in the industrial sector in Dowlat Abad has been mainly caused by the reduction in construction related activities in the county of Marand. This is not surprising, as construction work at the national and at the provincial levels also experienced decline in recent years. Amirahmadi found that among industries, the share of construction declined the most from 1976 till 1986 (Amirahmadi 1990, p. 192). This has been attributed to several factors, such as a decline in the investment in the housing sector, low levels of support from the banking system, an increase in construction costs, an increase in the price of land and, more importantly, a low effective demand for housing due to the higher cost of living (Plan and Budget Organisation 1993, pp. 186-7).

According to the available data, construction permits issued in urban areas of the country declined from 148,373 units in 1983 to 127,766 units in 1986 and then to 116,984 units in 1991 (SCI 1992). Available data at the provincial and the county level

(which covers only 1990 and 1991) also presents the same pattern of decline in construction work. The reduction in construction permits issued at the provincial and the county level from 1990 till 1991 was from 9,038 units to 7,859 units and from 353 unit to 299 units respectively (Plan and Budget Organisation of Eastern Azarbaijan 1993, p. 498 and 1994a, p. 547).

Thus, in addition to the internal factors affecting changes in the sectoral composition of employment in the study area, the impacts of changes in the labour market conditions of Marand have also been very important.

6.3 Age structure of the workforce

The aim of this section is to examine the age structure of the employed population in the sample villages. The large proportion of young persons overall is reflected in the age structure of the employed population. As is apparent from Table 6.7, the age group of 15 to 24 years old comprises over 30 per cent of the total workforce and some 2.92 per cent of the workforce are less than 15 years old. The appearance of the younger age group of 10 to 14 years old in the workforce suggests that the work age starts early in these villages and that some of the school age population has already joined the labour force. At the village level, the highest share of this age group of the total employed population can be seen in Kohnab and the lowest in Hodjaghan.

The presence of the younger age group among the workforce in the sample villages is partly related to the wealth and income levels of households. Poorer households need a greater contribution from the younger children to their total income than do households with relatively higher incomes. Todaro (1994, pp. 199-200) noted that the financial support expectation from children is one of the main reasons for the higher birth rates in poor societies of the Third World.

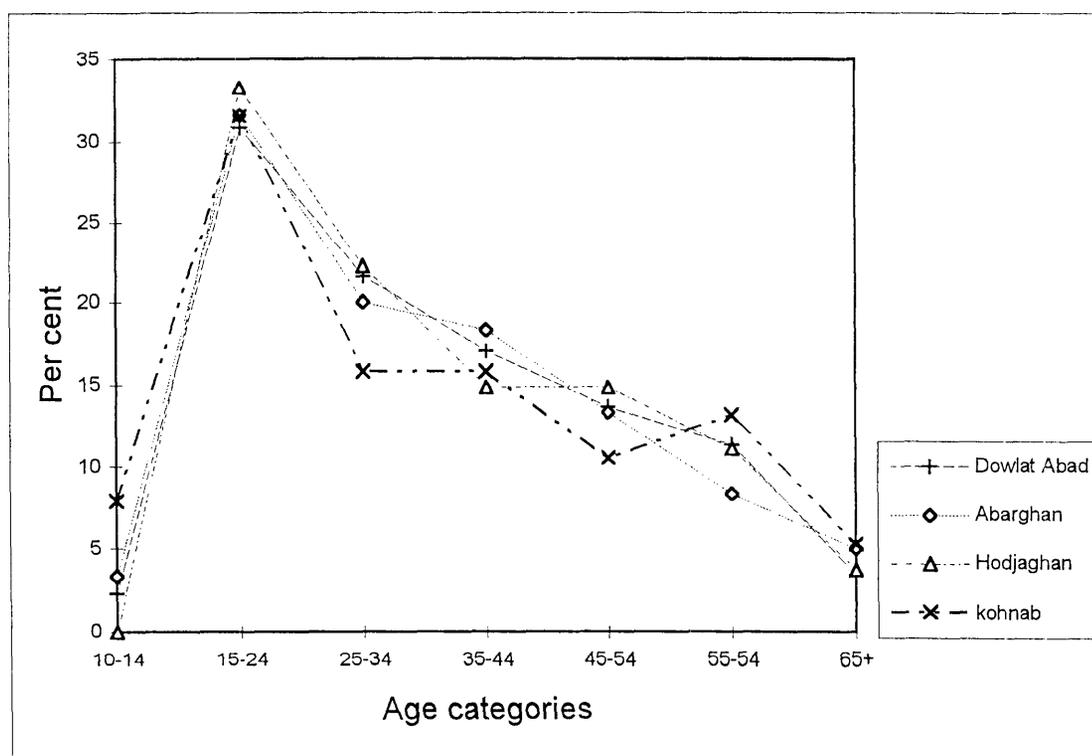
Table 6.7
AGE STRUCTURE OF THE WORKFORCE OF THE SAMPLE VILLAGES

Age groups	Dowlat Abad	Abarghan	Hodjaghan	Kohnab	All villages
10 - 14 Years old	2.27 (2)*	3.33 (2)	0.00 (0)	7.89 (3)	2.92 (7)
15 - 24 years old	30.68 (27)	31.67 (19)	33.33 (18)	31.58 (12)	31.67 (76)
25 - 34 years old	21.59 (19)	20.00 (12)	22.22 (12)	15.79 (6)	20.42 (49)
35 - 44 years old	17.05 (15)	18.33 (11)	14.81 (8)	15.79 (6)	16.67 (40)
45 - 54 years old	13.64 (12)	13.33 (8)	14.81 (8)	10.53 (4)	13.33 (32)
55 - 64 years old	11.36 (10)	8.33 (5)	11.11 (6)	13.16 (5)	10.83 (26)
Aged 65 and over	3.41 (3)	5.00 (3)	3.70 (2)	5.26 (2)	4.17 (10)
Total	100.00 (88)	100.00 (60)	100.00 (54)	100.00 (38)	100.00 (240)

* Figures in bracket indicate the numbers.

Source: Field survey, summer 1994.

Figure 6.2
AGE STRUCTURE OF THE WORKFORCE OF THE SAMPLE VILLAGES



Source: Field survey, summer 1994.

The kind of dominant economic activities in these villages is also an important factor determining the extent of involvement of the younger age group (of 10 to 14 year olds). Data from the field survey reveals that over 85 per cent of the workforce aged 10 to 14 were working on carpet weaving and the remainder was engaged in agricultural activities. No-one from this age group was reported to be working in wick weaving, the second most important non-farm activity in terms of the number of workforce in the study area. As will be discussed in Chapter 8, carpet weaving in the study area is a home-based activity and relies more on the contribution of women and children.

Table 6.8
EMPLOYED POPULATION AGED 10 TO 14 IN THE SAMPLE VILLAGES BY
INDUSTRY SECTORS (1994)

	Total employed	Employed aged 10-14 (%)	Industry sectors (%)	
			Carpet weaving	Farming
Dowlat Abad	88	2.27 (2)*	50.00	50.00
Abarghan	60	3.33 (2)	100.00	0.00
Hodjaghan	54	0.00 (0)	-	-
Kohnab	38	7.89 (3)	100.00	0.00
All villages	240	2.92 (7)	85.71	14.29

* *Figures in brackets indicate the numbers.*

Source: Field survey, summer of 1994.

Another point to be made regarding the age structure of the workforce is the presence of an older population of 65 years old and over. The workforce at this age group contributes 4.17 per cent to the total workforce. This is more than the share held by this age group of total population aged 10 and more and indicates that a specific age limit is not relevant to the workforce of these villages. This supports what Singh Sidhu

suggested following his study of rural labour in Punjab and Haryana that: ‘Unlike urban industrial workers they do not cease to participate in work just because they have attained a specific age’ (Singh Sidhu 1991, p. 120). This seems to be relevant to all of the four villages in the study area. Although there appear to be some differences between the villages in terms of the share of the workforce aged 65 and more of the total workforce, it seems that this is primarily related to the percentage of this age group of the total population aged 10 and more. This is apparent from Table 6.9, where the differences between villages in column 2 of the table have followed almost the same pattern of differences as appear in column 1.

Table 6.9
SHARE OF THE WORKFORCE AND POPULATION AGED 65 AND MORE OF TOTAL

	Share of the population aged 65 and more of the total population aged 10 and more	Share of the workforce aged 65 and more of the total workforce	Share of the workforce aged 65 and more of the total population aged 65 and more
Dowlat Abad	2.92	3.41	42.86
Abarghan	4.25	5.00	50.00
Hodjaghan	3.00	3.70	40.00
Kohnab	5.33	5.26	50.00
All villages	3.55	4.17	45.45

Source: Field survey, summer 1994.

The presence of the older age group among the workforce in the sample villages could partly be related to the wealth and income level of the households. As Clark and Anker suggested, higher wealth reduces lifetime work, whereas poorer persons have a greater need to continue working and earning (Clark and Anker 1990, p. 256). Therefore, it would seem likely that there is negative correlation between income level and the presence of the older people in the workforce. Since detailed data pertaining to the income levels of the households is not available, it is not possible to test this correlation in the context of the sample villages. However, field observations support

this suggestion and, in households with limited access to income resources, all able-bodied members work to meet the basic needs of the households. The majority of the older workforce belong to the agricultural sector and, as will be discussed in more detail in Chapter 7, some 85 per cent of the households who own land in the sample villages, own less than the size that is recognised as a minimum size that on average an Iranian farmer has to have to support his family.

Another factor which may contribute to the presence of the older age group in the workforce of the sample villages is the dominance of self-employment or 'own-account work' (discussed further in this chapter) which does not cease at a specific age. Own-account workers, and in particular those in the agricultural sector, seem to continue their work as long as they feel they have the physical ability to practise work. This is evident from the industry sectors in which the older workforce are involved in the sample villages, displayed in Table 6.10.

Table 6.10
MAIN JOB OF THE WORKFORCE AGED 65 AND MORE

	Total	Farming	Others*
Dowlat Abad	3	66.66 (2)	33.33 (1)
Abarghan	3	100 (3)	0.00 (0)
Hodjaghan	2	50.00 (1)	50.00 (1)
Kohnab	2	50.00 (1)	50.00 (1)
All villages	10	70.00 (7)	30.00 (3)

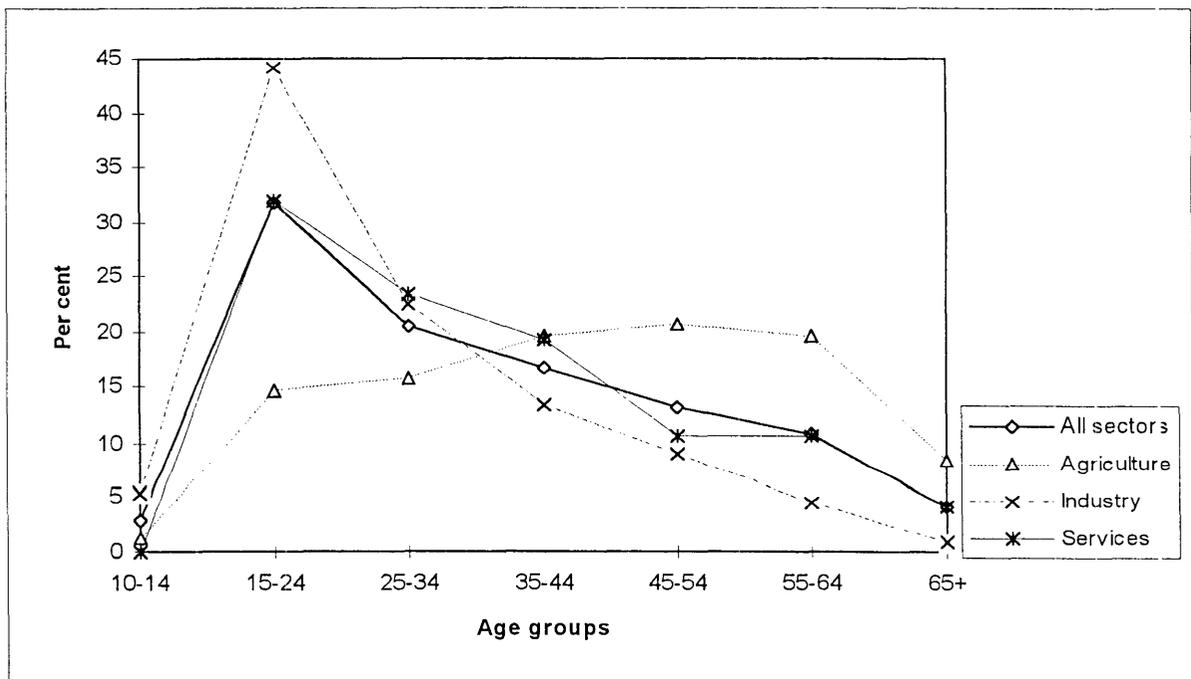
* Of the three persons reported to be in non-farm employment, one in Dowlat Abad and one in Kohnab were in retail trades and the third person was a wick weaver in Hodjaghan.
Source: Field survey, summer 1994.

Carpet weaving, the dominant non-farm activity in the area, requires good eyesight, and it is probably for this reason that no-one of the older age group of 65 and more can be seen among the carpet weavers. Some 70 per cent of the workforce of this age group in the sample villages belong to the agricultural sector. All of the 10

surveyed workforce aged 65 and more were own-account workers. Own-account work, as will be discussed in more detail later in this chapter, is by far the dominant employment status in these activity areas.

Overall, industrial and service-related activities in the area employ more young workers while the agricultural workforce is dominated by relatively higher age groups (see Figure 6.3). Whereas almost half of the labour employed by the industrial sector and just under one-third by the services are under 25 years of age, only about 16 per cent of the workforce in the agricultural sector belongs to this age group. What these figures reveal is that much of the young population joining the labour force in the study area is being absorbed by the industry-related activities. This seems to be related to the limited employment capacity of the agricultural sector due to its limited resources on the one hand, and the attraction of some of the non-agricultural activities for the labour force on the other. These factors will be discussed in Chapters 7 and 8 of this study.

Figure 6.3
AGE STRUCTURE OF THE WORKFORCE BY MAJOR INDUSTRY SECTORS



Source: Field survey, summer 1994.

Changes in the age structure of the workforce

Table 6.11 illustrates the changes in the structure of the workforce from 1986 to 1994. Because a sampling method was used to collect data in 1994, the total number of the workforce in that year is not known. Therefore, it is not possible to discuss the changes in the number of the workforce in each age group during this period. However, comparison of the percentage changes in the workforce of each age group indicates an overall increase in the proportion of youth among the workforce. The highest increase can be seen in the share of the age group 15 to 24 years, which relates closely to the young age structure of the population of the sample villages.

Table 6.11
PERCENTAGE CHANGES IN THE AGE STRUCTURE OF THE WORKFORCE FROM 1986 TO 1994

Age groups		Dowlat Abad	Abarghan	Hodjaghan	Kohnab	All villages
10 - 14 years old	1986	3.33	2.53	0.92	4.46	2.65
	1994	2.27	3.33	0.00	7.89	2.92
	Changes	-1.06	0.8	-0.92	3.43	0.27
15 - 24 years old	1986	29.93	29.89	31.18	31.25	30.28
	1994	30.68	31.67	33.33	31.58	31.67
	Changes	0.75	1.78	2.15	0.33	1.39
25 - 34 years old	1986	20.29	18.74	20.79	14.29	19.67
	1994	21.59	20.00	22.22	15.79	20.42
	Changes	1.3	1.26	1.43	1.5	0.75
35 - 44 years old	1986	18.74	18.53	16.86	15.18	18.05
	1994	17.05	18.33	14.81	15.79	16.67
	Changes	-1.69	-0.2	-2.05	0.61	-1.38
45 - 54 years old	1986	13.53	15.79	14.78	14.29	14.41
	1994	13.64	13.33	14.81	10.53	13.33
	Changes	0.11	-2.46	0.03	-3.76	-1.08
55 - 64 years old	1986	10.20	11.58	11.09	15.18	11.03
	1994	11.36	8.33	11.11	13.16	10.83
	Changes	1.16	-3.25	0.02	-2.02	-0.2
Aged 65 and over	1986	3.99	2.95	4.39	5.36	3.90
	1994	3.41	5.00	3.70	5.26	4.17
	Changes	-0.58	2.05	-0.69	-0.1	0.27

Source: Calculated from Table 6.7 and SCI unpub.b.

In addition, there seem to be some differences between the villages in the extent of changes. The share of those in the 10 to 14 years age group in the workforce declined in the two villages of Dowlat Abad and Hodjaghan, but increased in the two other villages of the sample. All of the sample villages experienced an increase in the share of 15 to 24 years-old in the workforce, but this varied from 2.15 per cent in Hodjaghan to 0.33 per cent in Kohnab. There was an increase of about 2 per cent in the share of the workforce aged 65 and more in Abarghan, while the share of this age group in the workforce declined in other villages of the sample.

Therefore, in addition to the age structure of the overall population, other factors such as migration and the dominant economic activities in the villages also seem to have affected changes in the age structure of the workforce. The lowest increase in the share of 15 to 24 years old in the workforce in Kohnab seems to be related more to the outmigration of the population of working age from this village, while the highest increase in the share of this age group in Hodjaghan seems to be related to the employment opportunities available for young persons joining the labour force. Similarly, the increase in the share of children aged 10 to 14 among the workforce in the two villages of Abarghan and Kohnab and the decline in this share in the other two villages of the sample seem to be related to the growth of different kinds of economic activities on the one hand, and the wealth and income levels of the households in these villages on the other. The diversity in economic activities in the sample villages will be discussed further in Chapters 7 and 8.

6.4 Skill and educational attainment

The overwhelming majority of the workforce in the sample villages are involved in activities that are carried out either in traditional forms or in very small firms. The required skills for such activities are generally learnt on the job, rather than by attending specific training programmes. Nowshirvani (1977, p. 25), through his study

of the agricultural machinery industry in Iran, found that workers in the small firms were informally trained on the job. Data from the enterprise survey suggests that almost all of the workforce employed by enterprises had learnt the necessary occupational skills on the job and no-one had attended special training programmes. This was the case even in the wick weaving sector, which employs relatively advanced mechanised production processes.

Due to the lack of special training programmes, this discussion of workforce skills will focus on general levels of education in the sample villages. This follows Findlay, Watson and Wu's argument that general education is one of the basic indicators reflecting investment in the workforce (Findlay, Watson & X. Wu 1994, p. 130). Data from the 1994 field survey will be employed to examine literacy levels and the educational attainments of the workforce in the sample villages. Differences in literacy levels and educational attainment will be compared by gender, village and industry sector. The final part of this section will document the changes in general education levels of the workforce between 1986 and 1994. For the purpose of the study, the workforce will be classified first into the two categories of literate and illiterate.⁵ The literate workforce will then be reclassified into five categories according to levels of general education.

The literacy levels among the workforce of the study area are generally low, although there are differences between the sample villages. As has been noted in Chapter 4, literacy among the total population is highest in Hodjaghan. The same pattern is also evident among the workforce. Table 6.12 indicates major differences in terms of the literacy level between the workforce of the sample villages. Over 50 per cent of the workforce in the study area were reported as illiterate. The highest share of illiterate workforce can be seen in Kohnab and the lowest in Hodjaghan. The share of the illiterate workforce is higher among females, which seems to reflect patterns of literacy among the total population of these villages.

⁵ Literate, as defined by the Statistical Centre of Iran, include 'all persons who could read and write a simple text in Farsi (Persian) or in any other language, whether or not they had an educational certificate, ...' (SCI 1990a, p. IV).

Table 6.12
LITERACY LEVEL AMONG WORKFORCE OF THE SAMPLE VILLAGES IN 1994

	Total workforce	Literate	Illiterate
<i>Both sexes</i>			
Dowlat Abad	88	48.86 (43)*	51.14 (45)
Abarghan	60	46.67 (28)	53.33 (32)
Hodjaghan	54	57.41 (31)	42.59 (23)
Kohnab	38	42.11 (16)	57.89 (22)
All villages	240	49.17 (118)	50.83 (122)
<i>Male</i>			
Dowlat Abad	81	49.38 (40)	50.62 (41)
Abarghan	55	45.45 (25)	54.55 (30)
Hodjaghan	54	57.41 (31)	42.59 (23)
Kohnab	31	45.16 (14)	54.84 (17)
All villages	221	49.77 (110)	50.23 (111)
<i>Female</i>			
Dowlat Abad	7	42.86 (3)	57.14 (4)
Abarghan	5	60.00 (3)	40.00 (2)
Hodjaghan	-	-	-
Kohnab	7	28.57 (2)	71.43 (5)
All villages	19	42.11 (8)	57.89 (11)

*Figures in brackets indicate the numbers

Source: Field survey, summer of 1994.

There are also great differences among the sample villages in terms of the levels of educational attainment of the workforce. Table 6.13 indicates that over 70 per cent of the literate workforce in the study area have attained only an elementary level of education. If we add the number classified as 'others', which covers mainly workers who have attended Literacy Campaign courses, those with an educational attainment lower than orientation level comprise over four-fifths of the total literate workforce. Table 6.13 also indicates the major differences between the sample villages. Whereas

all of the literate workforce in Kohnab had attended only elementary education, the share of this group in Dowlat Abad was about 60 per cent, followed by Hodjaghan with about 70 per cent.

Table 6.13
EDUCATIONAL ATTAINMENT OF THE LITERATE WORKFORCE OF THE SAMPLE VILLAGES IN 1994

	Elementary	Orientation	Secondary	Higher education	Others
<i>Both sexes</i>					
Dowlat Abad	60.47 (26)*	13.96 (6)	9.30 (4)	4.65 (2)	11.63 (5)
Abarghan	75.00 (21)	10.71 (3)	7.14 (2)	0.00 (0)	7.14 (2)
Hodjaghan	70.79 (22)	6.45 (2)	6.45 (2)	3.23 (1)	12.90 (4)
Kohnab	100.00 (16)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
All villages	72.03 (85)	9.32 (11)	6.78 (8)	2.54 (3)	9.32 (11)
<i>Male</i>					
Dowlat Abad	65.00 (26)	10.00 (4)	10.00 (4)	5.00 (2)	10.00 (4)
Abarghan	72.00 (18)	12.00 (3)	8.00 (2)	0.00 (0)	8.00 (2)
Hodjaghan	70.97 (22)	6.45 (2)	6.45 (2)	1.23 (1)	12.90 (4)
Kohnab	100.00 (14)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
All villages	72.73 (80)	8.18 (9)	7.27 (8)	2.73 (3)	9.09 (10)
<i>Female</i>					
Dowlat Abad	0.00 (0)	66.67 (2)	0.00 (0)	0.00 (0)	33.33 (1)
Abarghan	100.00 (3)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
Hodjaghan	NA**	NA	NA	NA	NA
Kohnab	100.00 (2)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
All villages	62.50 (5)	25.00 (2)	0.00 (0)	0.00 (0)	12.50 (1)

*Figures in brackets indicate the numbers

** NA = Not applicable. No female was reported as in the workforce in this village.

Source: Field survey, summer 1994.

Due to the low levels of educational attainment among the labour force of these villages, most of the employees in occupations requiring higher levels of education are non-native. Primarily employed in education and health care services, these people are mainly settled in Marand and commute to their work place every day.⁶ Thus, this group was not included in the workforce of the sample villages, since both the census and the survey covered only households in the study area. Nor were relatively educated government employees included in the enterprise survey, since that focused only on the private sector. However, data obtained through interviews with officials from schools and Health Houses indicate that the majority of their employees are non-native and non-resident in their work places. According to these data, out of the total of 181 staff members of the schools and the Health Houses, only 27 were natives of their work place.⁷

Table 6.13 indicates that the male workforce is generally better educated than the female workforce. This is in line with Todaro's argument that in almost every developing country, younger females receive considerably less education than younger males (Todaro 1994, p. 370). Educational attainment among the females is much lower and no-one from the female workforce has received education higher than orientation level. The lower level of educational attainment among females in the sample villages mainly reflects, as discussed in Chapter 4, the lower level of education among the total female population and the lower priority given to formal education of girls in rural areas of the country. Boys are considered to be the future breadwinners of the families and it is commonly believed that the higher level of education increases their chances of better jobs and higher incomes (Sadr Mousavi, Hadili & Zahedi 1992, p. 125).

The survey data suggest great differences in literacy among the workforce employed by various sectors of economy (Table 6.14). According to both these data and the 1986 census, the workforce employed by the non-agricultural sector is better

⁶ Only in Kohab, where commuting is associated with difficulties and is even impossible at times in winter, do the four teachers who teach in two primary schools reside there during the academic year. None of these teachers - two male and two female - could be covered by the survey since they had left the village because of summer vacations.

⁷ The origin of the staff members of the schools, which included 171 teachers and other employees of the schools in the sample villages, was discussed in Chapter 5. The number of employees in three units of Health Houses in Dowlat Abad, Abarghan and Hodjaghan totalled 10 employees, of whom only 2 in Dowlat Abad and one in each of the other two villages were natives.

educated than that employed by the agricultural sector. In all four villages, the percentage of literate workforce is lower in the agricultural sector. This is partly due to the younger age structure of the workforce employed by the non-agricultural sector, for, as discussed earlier, the literacy level is higher among younger age groups. This also implies that agriculture is not attracting the literate members of the labour force.

Table 6.14

LITERACY AMONG THE WORKFORCE BY MAJOR INDUSTRY SECTORS IN THE SAMPLE VILLAGES IN 1994 (%)

	Agriculture	Industry	Services	All sectors
Dowlat Abad				
<i>Literate</i>	20.00 (4)*	47.62 (20)	73.08 (19)	48.86 (43)
<i>Illiterate</i>	80.00 (16)	52.38 (22)	26.92 (7)	51.14 (45)
Abarghan				
<i>Literate</i>	25.00 (7)	60.87 (14)	77.78 (7)	46.67 (28)
<i>Illiterate</i>	75.00 (21)	39.13 (9)	22.22 (2)	53.33 (32)
Hodjaghan				
<i>Literate</i>	28.57 (4)	64.52 (20)	77.78 (7)	57.41 (31)
<i>Illiterate</i>	71.43 (10)	35.48 (11)	22.22 (2)	42.59 (23)
Kohnab				
<i>Literate</i>	30.00 (6)	60.00 (9)	33.33 (1)	42.11 (16)
<i>Illiterate</i>	70.00 (14)	40.00 (6)	66.67 (2)	57.89 (22)
All villages*				
<i>Literate</i>	25.61 (21)	56.76 (63)	72.34 (34)	49.17 (118)
<i>Illiterate</i>	74.39 (61)	43.24 (48)	27.66 (13)	50.83 (122)

* Figures in bracket indicate the numbers.

Source: Field survey, summer 1994.

Employees in the service sector are more educated than those employed by the other two sectors. This is mainly due to the relatively higher educational attainment that some of the services such as health care or education require. The only exception

among the sample is Kohnab, where the service sector has made only a minor contribution to total employment and is limited only to activities with relatively low skill requirements.⁸

Changes in literacy levels among the workforce

A comparison of the percentage of the literate workforce employed by sectors in 1994 with percentage for 1986 reveal that there has been an overall increase in the share of literate workforce of the total workforce. This pattern can be seen in all four villages and, with two minor exceptions, in all industry sectors.

The percentage of the literate workforce of the total workforce increased by more than 10 per cent between 1986 and 1994. As Table 6.15 illustrates, the increases have been rapid in villages with very low rates of literacy among their workforce, reflecting a trend identified as occurring among the rural population of the whole country (Taghavi 1995, p. 77). This can also be related to the increase in the share of the younger age group in the total workforce in these two villages, because literacy in the villages is higher among the younger population. In other words, the higher increase in the share of the younger age group in the total workforce, as discussed in previous section (pp. 156-8), has resulted in the rapid increase in the share of the literate workforce.

The highest rate of increase of literate workforce among the villages can be seen in Abarghan, with nearly a 19 per cent increase (from 27.79 per cent to 46.67 per cent), followed by Kohnab with just over a 17 per cent increase (from 25 per cent to 42.11 per cent). The increase in the share of the literate workforce in Dowlat Abad (which was the lowest among the villages), was almost 8 per cent.

Table 6.15 also illustrates the varying degrees of change among the sectors of the economy in the 1986 - 1994 period. The industrial sector experienced the highest

⁸ According to the survey data, the service sector included three persons out of 38 employed persons among the surveyed household members, of whom one was driver of the only transport facility of the village, one was a shopkeeper and the other one was in the military service. Only the last one had attained an elementary level of education.

rate of increase in its literate workforce. It is noteworthy that, as discussed earlier in this chapter, this sector also experienced the highest rate of increase in its contribution to total employment in the sample villages. As discussed earlier in this chapter, the increase in the contribution to total employment by sectors generally has resulted from absorption of the younger age group joining the labour force. It was also discussed that the literacy level was high among this age group. Therefore, one could expect that the higher the increase in the contribution by sectors to total employment, the higher the share of the literate among the total workforce of that sector.

Table 6.15
PERCENTAGE OF LITERATE WORKFORCE BY MAJOR INDUSTRY SECTORS
IN THE SAMPLE VILLAGES IN 1986 AND 1994

		Agriculture	Industry	Services	All sectors
Dowlat Abad*	1986	23.33 (56)**	40.22 (185)	73.76 (149)	43.24 (390)
	1994	20.00 (4)	47.62 (20)	73.08 (19)	48.86 (43)
Abarghan	1986	19.05 (52)	31.45 (39)	52.56 (41)	27.79 (132)
	1994	25.00 (7)	60.87 (14)	77.78 (7)	46.67 (28)
Hodjaghan	1986	21.60 (27)	48.09 (113)	65.75 (48)	43.42 (188)
	1994	28.57 (4)	64.52 (20)	77.78 (7)	57.41 (31)
Kohnab	1986	6.85 (5)	60.00 (15)	57.14 (8)	25.00 (28)
	1994	30.00 (6)	60.00 (9)	33.33 (1)	42.11 (16)
All villages*	1986	19.69 (140)	41.71 (352)	67.03 (246)	38.40 (738)
	1994	25.61 (21)	56.76 (63)	72.34 (34)	49.17 (118)

* One male person employed by industrial sector in Dowlat Abad in 1986 was stated as 'not reported' and has not been included in the calculation.

** Figures in brackets indicate the numbers.

Source: Data for 1986 has been extracted from SCI unpub.c. and survey data of the study has been used for 1994.

However, the increase in the percentage of the literate workforce in each sector does not reflect the pattern of its contribution to total employment in these villages. Therefore, available data do not suggest a strong correlation between these two changes. Whereas the contribution of industry to total employment in Dowlat Abad declined, the percentage of the literate workforce in that sector increased. In Kohnab, while industry showed the highest increase in its contribution to total employment, the percentage of the literate workforce in the sector remained the same. On the other hand, in Abarghan, the sector's contribution to total employment and the percentage of its literate workforce have both shown a rapid increase, but the agricultural sector experienced a sharp decline in its contribution to total employment, while the percentage of the literate workforce of the sector increased.

Moreover, the changes in the percentage of the literate workforce in the sectors do not present a unified pattern in the sample villages. Whereas the percentage of the literate workforce in the agricultural sector declined in Dowlat Abad, it increased in the other three villages. The service sector in Abarghan and Hodjaghan experienced rapid increases in this regard, but there was a sharp decline in Kohnab, and change in Dowlat Abad was almost negligible. None of the villages showed a decline in the percentage share of the literate workforce in the industry sector, but increases varied from none in Kohnab to about 30 per cent in Abarghan.

Among the factors contributing to the varying changes, it seems that the kinds of enterprises in each of the villages is very important. Enterprises in the study area are of diverse types and present different characteristics. These will be discussed in forthcoming chapters.

6.5 Employment status of the workforce

This section describes the socio-economic structure of the workforce by documenting the employment status of workers. It also examines the differences

between villages as well as changes in the employment status of the workforce over the 1986-1994 period.

The employment status in the study area reflects the general pattern of employment status throughout rural Iran. Wage employment is not the dominant type of employment in the rural economy and the majority of the workforce are own-account workers (SCI 1994a, p. 224).⁹ The dominant share of own-account workers among the rural workforce in the country can be attributed mainly to the predominance of small farms (McLachlan 1988, p. 211; Amid 1990, p. 106) and of non-farm enterprises (Lahsaeizadeh 1993a, p. 295). Historically, the contribution of the public sector to total rural employment in the country has been very low and, in spite of a 3.9 times increase from 1976, (Amirahmadi 1990, p. 189), it was only 17.18 per cent in 1986 (SCI 1990a, p. 52).

In the study area, too, as Table 6.16 displays, own-account working is dominant among the workforce. However, the two villages of Dowlat Abad and Hodjaghan present a different pattern when compared with Abarghan and Kohna. Whereas own-account workers have a much higher share of the total workforce in the latter two villages, their shares in the former are relatively low. Here again the small number of females in the survey sample makes it difficult to comment on their

⁹ In order to make the comparison possible, the following definitions of five categories of status in employment which were used by the SCI in the 1986 census and which are in accordance with the International Classification of Status in Employment, have been employed throughout the present study. (For definitions of major groups of status in employment as given in the UN Census Recommendations, see Appendix 4).

Employer: All persons who had at least one employee (wage and salary earner) to help them carry out their activities. Persons who employed only unpaid family workers as well as those who were wage and salary earners themselves even though they employed one or more persons were excluded.

Own-account workers: All persons who worked without having employed a wage and salary earner and did not receive wage and salary themselves were considered own-account workers.

Public sector wage and salary earner: All persons who worked for wage and salary (cash, non-cash) in ministries, government institutions, organizations and government companies as well as Islamic Revolution Institutions and other public agencies like municipalities were included in this category.

Private sector wage and salary earner: All persons in the private sector who worked for a wage or salary (cash, non-cash) were included in this category.

Unpaid family worker: All persons who worked for another member of their household or for a relative and received no wage or salary were considered unpaid family worker (SCI 1990a, p. V).

employment status. Nevertheless, there is slight evidence to suggest, in line with Koppel and James' (1994, p. 284) views based on the Asian context, that most unpaid family workers are women.

Table 6.16
EMPLOYMENT STATUS OF THE WORKFORCE IN THE SAMPLE VILLAGES IN 1994 (%)

	Employers	Own-account workers	Private sector wage and salary earners	Unpaid family workers	Public sector wage and salary earners
<i>Both sexes</i>					
Dowlat Abad	3.41 (3)*	54.55 (48)	22.73 (20)	1.14 (1)	18.18 (16)
Abarghan	1.67 (1)	70.00 (42)	21.67 (13)	0.00 (0)	6.67 (4)
Hodjaghan	5.56 (3)	61.11 (33)	24.07 (13)	0.00 (0)	9.26 (5)
Kohnab	0.00 (0)	86.84 (33)	5.26 (2)	5.26 (2)	2.63 (1)
All villages	2.92 (7)	65.00 (156)	20.00 (48)	1.25 (3)	10.83 (26)
<i>Male</i>					
Dowlat Abad	3.70 (3)	55.56 (45)	24.69 (20)	0.00 (0)	16.05 (13)
Abarghan	1.82 (1)	72.73 (40)	18.18 (10)	0.00 (0)	7.27 (4)
Hodjaghan	5.56 (3)	61.11 (33)	24.07 (13)	0.00 (0)	9.26 (5)
Kohnab	0.00 (0)	93.55 (29)	3.23 (1)	0.00 (0)	3.23 (1)
All villages	3.17 (7)	66.52 (147)	19.91 (44)	0.00 (0)	10.41 (23)
<i>Female</i>					
Dowlat Abad	0.00 (0)	42.86 (3)	0.00 (0)	14.29 (1)	42.86 (3)
Abarghan	0.00 (0)	40.00 (2)	60.00 (3)	0.00 (0)	0.00 (0)
Hodjaghan	NA**	NA	NA	NA	NA
Kohnab	0.00 (0)	57.14 (4)	14.29 (1)	28.57 (2)	0.00 (0)
All villages	0.00 (0)	47.37 (9)	21.05 (4)	15.79 (3)	15.79 (3)

* Figure in brackets indicate the numbers

** NA = Not applicable

Source: Field survey, summer 1994.

The overall proportion of wage earners from both the public and private sectors in the area is only about 30 per cent. In spite of the expansion of public services such as health and education in recent years, the contribution of the public sector to total employment is very low. This supports the previous suggestion that, due to the lack of skills and low levels of education attained by local labour, skilled jobs are generally filled by residents from the nearby urban centres (see p. 167). The slightly higher share of wage and salary earners employed in the private sector in the study area is partly due to the employment opportunities in Marand.

Wage earners from the private sector in Marand contributed 30 per cent (6 out of 20) to the total share of this category in Dowlat Abad and 30.77 per cent (4 out of 13) in Abarghan. But, in Hodjaghan, which has the highest share among the sample villages of private sector wage earners, all were employed in that village. Therefore, it seems that wage labour is more common in Hodjaghan than it is in the other villages in the study area. This is attributable mainly to the growth of a particular type of non-farm activity in this village which will be discussed in chapter 8. The share of private sector wage and salary earners in Kohnab is negligible and is the same as the share of unpaid family workers (2 per cent) of the total workforce.

The share of unpaid family workers of the total reported workforce in all villages is only 1.25 per cent. But, this may be attributed to the understatement of this group of workers during the survey and their share of total employment in real terms is probably much higher. As discussed in Chapter 5, a notable proportion of the household members who contributed to the production of goods, were not reported as being economically active. Members of this group, primarily women and younger members of households, are not usually paid for the work they perform.

Status in employment in major industry sectors

The status in employment of the workforce in the various industry sectors is diverse. While the services are dominated by public sector wage earners, almost 90 per cent of the workforce in agriculture are own-account workers. This pattern mainly

reflects the structure of the country's rural economy, where the majority of the farms are too small to employ wage labour (Lahsaeizadeh 1990b, p. 195) and public services are mainly provided by government agencies (Amirahmadi 1990, p. 193). In comparison to agriculture and the services, the proportion of wage earners employed by the private sector in the industrial sector is relatively high (see Table 6.17).

Even then, as is apparent from Table 6.17, over 60 per cent of the industrial sector's workforce are still own-account workers. Moreover, the presence of about 32 per cent of wage and salary earners from the private sector among industrial workers is related more to employment opportunities in Marand rather than to the local demand for wage labour. It is only in Hodjaghan that the relatively higher share of this category of the total workforce is due to local demand. Therefore, apart from in Hodjaghan, the use of wage labour in industry-related activities in the area is not notable. This seems to be related, as will be discussed in more detail in Chapter 7, to the small sizes of the enterprises on the one hand, and the traditional nature of most of the industries in the area, on the other. These industries, which can be categorised as 'cottage' or 'household' industries and will be discussed in more detail in Chapter 8, generally use family labour.

As mentioned above, the agricultural sector is dominated by own-account workers. This is the result of the land reform which transformed sharecroppers into peasant proprietors (Hooglund 1982, p. 10 and p. 100). Only small plots of land were received by the majority of beneficiaries of the reform (Amid 1990, p. 103; Azkia 1991, p. 123) which resulted in the appearance of a large number of independent peasants in rural Iran (Lahsaeizadeh 1993a, p. 169). All of the four villages under study belonged to large landowners prior to reform and land was distributed among the *nasaq* holder families in the 1960s. As will be discussed in Chapter 7, the overwhelming majority of these farms are now operated by independent peasants who are classified as own-account workers. Other types of farm enterprises, such as *Mosha* co-operatives, agribusinesses, farm corporations and capitalist farming, which have been identified in Iranian agriculture (Lahsaeizadeh 1990b; Azkia 1991), do not exist in the study area.

Table 6.17
 EMPLOYMENT STATUS OF THE WORKFORCE OF THE STUDY AREA BY
 MAJOR INDUSTRY SECTORS IN 1994 (%)

	Agriculture	Industry	Services	All sectors
Employers	2.44 (2)*	3.60 (4)	2.13 (1)	2.92 (7)
Own-account workers	89.02 (73)	61.26 (68)	31.91 (15)	65.00 (156)
Private sector wage and salary earners	7.32 (6)	32.43 (36)	12.77 (6)	20.00 (48)
Unpaid family workers	0.00 (0)	2.70 (3)	0.00 (0)	1.25 (3)
Public sector wage and salary earners	1.22 (1)	0.00 (0)	53.19 (25)	10.83 (26)
Total	100.00 (82)	100.00 (111)	100.00 (47)	100.00 (240)

* Figures in bracket indicate the numbers.

Source: Field survey, summer 1994.

The agricultural workforce is usually classified into the three categories of family labour, exchange labour and hired labour. Hired labour is further divided into permanent labour and casual labour (Hirashima and Muqtada 1986, p. 7). The use of family labour on farms is a common feature of agricultural activities and is common even in developed countries (Hodge and Whitby 1981, p. 45). This is reflected in the dominant share of own-account workers among the total workforce in the agricultural sector (Table 6.17).

Due to the small sizes of the majority of the farms on the one hand, and environmental limitations such as the shortage of water for irrigation and the long cold season that prevent intensive farming on the other, the demand for hired labour in the area by the agricultural sector is limited. In recent years, the use of machinery in farm activities such as ploughing and harvesting has further reduced the demand for hired labour. However, the seasonal nature of agriculture may necessitate outside labour being employed to help the family workforce at peak times, such as at harvest times. As Guest discovered in the Indonesian context, 'hired labour acts as reserve labour,

available to meet shortcomings in the supply of household labour' (Guest 1987, p. 38).

In agriculture in this area, the hire of wage labour is on a casual basis and the permanent employment of labour is rare. Labour is hired for a short period and only when family labour is inadequate for the farm work. According to the survey data, out of 76 households who were reported as using wage labour on their farms, almost 95 per cent hire labour for less than a total of one month for various production processes each year. Only 5.2 per cent (4 persons) of the farmers who hire labour for their farms, hire labour for a total of 30 to 40 days. Of course, this does not mean that the labour is being offered continuous work for even this short period of time.¹⁰ Labour is hired on a daily basis and receives payment in cash. Rates, paid on a daily basis, may vary during different seasons of the year and the contract is made for a short time. Therefore, labour can be hired for only one day when needed and the worker may move to several farms within a single week. Of a total of 82 persons reported as working in the agricultural sector, two of them (2.44 per cent) hire regular labour and could be classified as 'employers'.¹¹ Hire of labour on a regular basis is usually in areas other than crop cultivation such as animal husbandry and poultry farming.

The exchange of labour among households is a well-documented characteristic of traditional rural communities in Iran (Vadiee 1973; Khosravi 1973; Safinezhad 1987; Taghavi 1995). However, observations, as well as discussions with rural dwellers during the field survey, suggest that although some households can be seen still exchanging labour to complete farm work in peak seasons, it is not as widespread a practice as it was in the past.

¹⁰ In agricultural activities, only two persons employed workers on a permanent basis and provided jobs for the whole year. Although classified in the agricultural sector, they didn't employ workers for crop cultivation. One owns a poultry farm which is located within two kilometres distance from the Southwest of Abarghan and employs two workers on a permanent basis. The other employed one worker on a permanent basis in Dowlat Abad for animal husbandry.

¹¹ Farmers who hired labour on a casual basis and only for a short time in seasons, have not been classified as 'employers'. According to ILO documents, these users of casual labour could be classified as own-account workers rather than employers (Hoffmann 1990, p. 257).

Exchange of labour between households is more common in Kohnab than in the other three villages. This is partly reflected in the low share of wage labourers among the total workforce of this village (Table 6.16). This becomes clear if the employment status of the workforce in each village is examined by industry sectors (Table 6.17a). Whereas over 14 per cent of the agricultural workforce in Hodjaghan and 10 per cent in Dowlat Abad are wage and salary earners from the private sector, no-one reported in this category in Kohnab. Given the relatively larger sizes of the farms in Kohnab (discussed in the next chapter), one would expect more demand for wage labour in the agricultural sector in this village. But, several factors limit the demand for wage labour in this village. These include water shortages, the lack of irrigated land, and relatively larger household sizes which mean that more family labour is available for work. However, when outside labour becomes necessary in peak seasons for farm work like harvesting, the demand is met through exchange labour.

Campbell, in his study of the impact of the transfer from traditional to mechanised forms of land cultivation on rural labour in six Asian countries, argued that, in the traditional farming system, a degree of flexibility and mutual labour exchange between neighbours was possible: 'The introduction of multiple cropping and its short "turn around" period takes away this flexibility and mutual labour exchange tends to decline or disappear. Hired labour takes the place of neighbour co-operation' (Campbell 1989, p. 26).

It seems that, in addition to the impact of changes in the crop patterns that are evident in the area and which will be discussed in Chapter 7, impacts of the growth in non-farm activities are also evident. The involvement of farmers in non-farm activities as their secondary job, restricts the possibilities of labour exchange between the households. Over 53 per cent of farmers in the area were involved in a secondary job. Observations in the area suggest that a large majority of them had carpet weaving as their secondary job. When their labour was not needed on the farm, they tended to practise their secondary job rather than work on other farms as exchange labour.

Table 6.17a

EMPLOYMENT STATUS OF THE WORKFORCE OF SAMPLE VILLAGES

	Agriculture	Industry	Services	All sectors
Dowlat Abad				
Employers	5.00 (1)*	2.38 (1)	3.85 (1)	3.41 (3)
Own-account workers	80.00 (16)	57.14 (24)	30.77 (8)	54.55 (48)
Private sector wage and salary earners	10.00 (2)	38.10 (16)	7.69 (2)	22.73 (20)
Unpaid family workers	0.00 (0)	2.38 (1)	0.00 (0)	1.14 (1)
Public sector wage and salary earners	5.00 (1)	0.00 (0)	57.69 (15)	18.18 (16)
Total	100.00 (20)	100.00 (42)	100.00 (26)	100.00 (88)
Abarghan				
Employers	3.57 (1)*	0.00 (0)	0.00 (0)	1.67 (1)
Own-account workers	89.29 (25)	65.22 (15)	22.22 (2)	70.00 (42)
Private sector wage and salary earners	7.14 (2)	34.78 (8)	33.33 (3)	21.67 (13)
Unpaid family workers	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
Public sector wage and salary earners	0.00 (0)	0.00 (0)	44.44 (4)	6.67 (4)
Total	100.00 (28)	100.00 (23)	100.00 (9)	100.00 (60)
Hodjghan				
Employers	0.00 (0)*	9.68 (3)	0.00 (0)	5.56 (3)
Own-account workers	85.71 (12)	58.06 (18)	33.33 (3)	61.11 (33)
Private sector wage and salary earners	14.29 (2)	32.26 (10)	11.11 (1)	24.07 (13)
Unpaid family workers	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
Public sector wage and salary earners	0.00 (0)	0.00 (0)	55.56 (5)	9.26 (5)
Total	100.00 (14)	100.00 (31)	100.00 (9)	100.00 (54)
Kolmah				
Employers	0.00 (0)*	0.00 (0)	0.00 (0)	0.00 (0)
Own-account workers	100.00 (20)	73.33 (11)	66.67 (2)	86.84 (33)
Private sector wage and salary earners	0.00 (0)	13.33 (2)	0.00 (0)	5.26 (2)
Unpaid family workers	0.00 (0)	13.33 (2)	0.00 (0)	5.26 (2)
Public sector wage and salary earners	0.00 (0)	0.00 (0)	33.33 (1)	2.63 (1)
Total	100.00 (20)	100.00 (15)	100.00 (3)	100.00 (38)

* Figures in bracket indicate the numbers.

Source: Field survey, summer 1994.

Changes in employment status

Because sampling methods were used in data gathering in 1994, it is not possible to comment on the changes in the absolute number of the workforce in each employment category. However, considering the percentage contribution of each category to the total workforce in the area as a whole, two major changes can be identified: a) employment opportunities for wage and salary earners from both the private and public sector have declined; correspondingly, b) the share of own-account workers in the total workforce has increased (Table 6.18).

However, there are differences between villages in terms of changes in the employment status of the workforce. Whereas the share of public sector wage and salary earners declined in the three villages of Abarghan, Hodjaghan and Kohnab, it increased in Dowlat Abad. As discussed earlier, the decline in the share of public sector employees was mainly due to a decline in the number in military service, but it seems that the gap has been filled by other public service-related activities in Dowlat Abad. This may be attributed mainly to employment opportunities for the educated labour of this village in Marand. As Amirahmadi notes, most of the new jobs created by the public sector in recent years in the country were service-related and are mainly concentrated in urban centres (Amirahmadi 1990, p. 189). The relatively higher share of public sector employees among the workforce of Dowlat Abad is also related to its new position as the administrative centre of the subdistrict. The establishment of the Health and Medical Centre as well as the expansion of educational facilities in this village are connected with this new position.

The decline in the share of private sector wage and salary earners in this village seems to be related more to changes in the labour market conditions in Marand. As discussed in the previous section, the workforce commuting to work in Marand from this village is mainly employed in construction-related activities. Since this sector largely belongs to the private sector¹², the decline in construction work in Marand (see

¹² Out of 116,984 construction permits issued in urban areas of the country in 1991, 110,277 belonged to the private sector, 4,597 belonged to co-operatives and only 2,110 belonged to the public sector. In terms of

pp. 154-6 of the present chapter) has resulted in a declining number of private sector wage and salary earners in Dowlat Abad.

Table 6.18
PERCENTAGE CHANGES IN THE EMPLOYMENT STATUS OF THE WORKFORCE
FROM 1986 TO 1994*

	Dowlat Abad	Abarghan	Hodjaghan	Kohnab	All villages
Employers	0.86	0.62	3.48	-0.89	0.94
Own-account workers	3.88	3.68	-1.48	-0.66	5.63
Private sectors wage and salary earners	-5.87	-0.86	5.83	3.47	-3.20
Unpaid family workers	-2.08	-1.26	NA**	5.26	-.57
Public sectors wage and salary earners	3.21	-2.17	-7.83	-7.19	-2.8

* This table subtracts percentage share of each category in 1986 from those in 1994.

** NA = Not applicable. No-one in Hodjaghan neither in 1986 nor in 1994 was reported to be in this category.

Sources: Data for 1986 from SCI unpub.d. and data from the field survey for the year 1994.

On the other hand, while the major changes in Abarghan are an increase in the share of own-account workers and a minor decline in the share of wage and salary earners from both the private and the public sector, changes in Hodjaghan appear to be quite different. The proportions of wage earners from public sector and own-account workers declined in this village, while the share of the wage and salary earners increased. The major change in Kohnab seems to be a notable decline in the proportion of public sector wage and salary earners. The share of the two categories of private sector wage earners and unpaid family workers in this village showed a relative increase

the area, out of a total of 27,620,000 square metres, 23,405,000 square metres belonged to the private sector, 2,090,000 square metres belonged to co-operatives and only 2,126,000 square metres belonged to the public sector (SCI 1993b, p. 366).

but, due to the small sample of survey responses, further investigation is required to comment on this trend.

In relation to the changes in employment status of the workforce by industry sectors, it seems that notable changes have occurred in the industrial sector, where the proportion of private sector wage earners declined, while the share of own-account workers increased (Table 6.19). Changes in the agricultural sector were only minor and the changes in the service sector seem to result mainly from the declining number of public sector employees. Since changes in the absolute number of the workforce in each category are unknown, it is difficult to say to what extent the changes in the employment status of the workforce were brought about by the changes in its sectoral composition.

Table 6.19
PERCENTAGE CHANGES IN THE EMPLOYMENT STATUS OF THE WORKFORCE
BY MAJOR INDUSTRY SECTORS FROM 1986 TO 1994*

	Agriculture	Industry	Services	All sectors
Employers	0.75	0.76	1.59	0.94
Own-account workers	-1.56	13.63	6.02	5.63
Private sector wage and salary earners	1.69	-12.71	5.96	-3.2
Unpaid family workers	-1.41	-0.14	-0.27	-0.57
Public sector wage and salary earners	0.52	-1.54	-13.3	-2.8

* This table subtracts percentage share of each category in 1986 from those in 1994.

Source: Calculated from SCI unpub.d. and Table 6.17.

However, as is evident from Table 6.19, the increase in the share of own-account workers in the area has occurred mainly in the industrial sector. As discussed in the previous section, there was an increase in the total contribution of the industrial sector to total employment over the period under study. It was also mentioned that

within the industrial sector, manufacturing showed a rapid increase, while the share of construction declined. Therefore, it seems that at least some of those wage labourers who have lost their job in the construction sector have created, as Todaro noted (1994, p. 253) about new entrants to the urban labour force in developing countries, their own employment in the manufacturing sector. Data from the enterprise survey, as well as observations and interviews during the field survey suggest that, due to the limited demand for labour in other sectors on the one hand, and the ease of beginning small scale family enterprises to produce carpets on the other, carpet weaving acts as a last resort for the labour force in the area.¹³ Thus, it appears that the increase in the share of own-account workers in the industrial sector has mainly resulted from the increasing number becoming involved in carpet weaving in the family enterprises.

In comparison to industry and services, changes in the employment status of the workforce in agriculture have not been notable. However, the changes in the employment status of the workforce in this sector seem to correspond with what the economists may call 'the classic path of development in capitalist agriculture' (Karshenas 1990, p. 159). In contrast to the industry sector, although to a lesser extent, the share of own-account workers in agriculture has declined, while the share of the wage and salary earners has increased. This, plus the decline in the contribution of the sector to total employment, indicates that some of the farmers have either sold their lands or let them to tenants. Since, as observation and field data suggest and will be discussed in more detail later in Chapter 7, the tenant system is not very common in the study area, it seems that some of the farmers, and most probably those with smaller farms, have sold their lands. According to the data from the enterprise survey, 40 per cent of enterprise owners were previously farmers and about 15 per cent of enterprises were established since 1986. Therefore, it seems that at least some of the workforce who had own-account worker status in the agricultural sector, have taken the same status in industry-related activities. In other words, work on a private farm has been substituted with work in a private non-farm enterprise.

¹³ In spite of an increasing number becoming involved in carpet weaving in recent years, it does not seem to be a desired job in the area. According to the survey data, only 6 per cent of the respondents stated this activity as their desired job and no-one wished it for his/her children. It is noteworthy that about 35 per cent of the respondents stated farming as their desired job and 10 per cent wished it for their children.

Regarding the overall changes in the employment status of the workforce, apart from the changes resulting from declining demand by the construction sector in Marand, the changes do not seem to be very marked. However, the increase in the overall share of own-account workers as the result of the growing number of household-based industries, plus the declining share of this category in agriculture while the contribution of this sector to total employment has also declined, seems to suggest that there is a trend away from dependence on employment as own-account workers in the agricultural sector.

6.6 Conclusion

This chapter focused on the distribution of the workforce among industry sectors, its changes over the 1986-1994 period, characteristics of the workforce and differences between the sample villages. The discussion about the sectoral composition of the workforce revealed that the majority of the workforce rely on the non-agricultural sector. Due to the lack of occupational data, it was not possible to examine changes in the contribution of each sector to total employment over a relatively longer period. However, the involvement of the majority of the workforce in the non-agricultural sector, and the increase of its share over the 1986-1994 period, suggest that employment opportunities in the agricultural sector have not kept pace with the growth in the number of the labour force. In the meantime, inadequate income from the land and from many non-farm activities has pushed the workforce to seek income from multiple sources, causing occupational multiplicity among the workforce.

The socio-economic structure of the workforce of the area and differences between villages are related to the structure of the overall population and to the employment opportunities available for the workforce through the expansion of different industries. The younger age structure of the workforce and the low proportion of literacy among them reflects the impact of the former. Additionally, the presence of children under working age among the workforce in the industrial sector relates to the growth of carpet weaving in the area.

The short distance from Marand has affected the structure of the workforce of the area in two ways. First, the skilled workforce providing public services to the residents mainly reside in Marand. Thus, a notable number of persons working in the area are not considered among its workforce, resulting in the appearance of a smaller proportion of skilled and literate among the workforce. Second, it provides access to employment opportunities in the industrial and service sectors in Marand for the labour force from the area, resulting in the appearance of the higher proportion of non-farm sector workers among the workforce. This is particularly the case in Dowlat Abad, in which the structure of the non-farm workforce and changes are strongly related to the labour market of Marand.

The growing non-farm activity in the two villages of Abarghan and Kohnab is home-based carpet weaving, which relies mainly on family labour and on the contribution of women and small children. The workforce in Hodjaghan, in comparison, includes more industrial workers, more literate people and more wage labourers; this is related mainly to the growth of small industries based on machinery use. These issues, including the employment opportunities available for the workforce through the expansion of different industries, will be discussed in Chapter 8, after the employment potential of agriculture in the sample villages is examined in Chapter 7.