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**DEVELOPMENT AND URBANISATION :
THE CASE STUDY OF AMOL AND
MAZANDARAN PROVINCE, IRAN**

By

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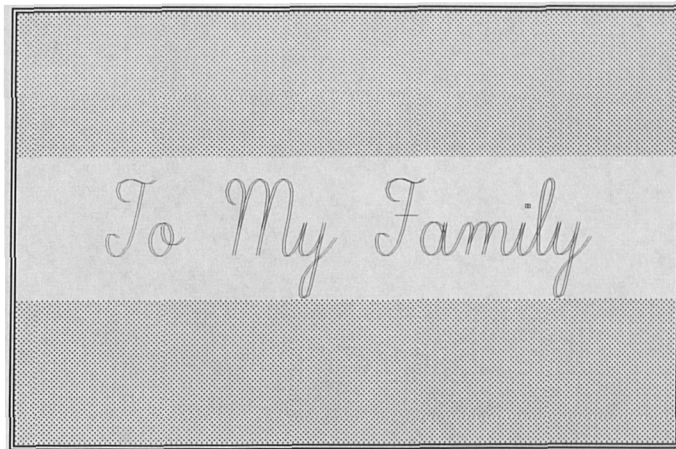
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(In the name of Allah, the beneficent, the merciful)



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ABSTRACT

Many developing countries in the 1950s, and 1960s adopted a growth centred strategy which was a centralised approach to development with the main focus on efficiency. But this strategy failed to improve the socio-economic situation of the majority of their rural population because it ignored the needs of the urban and rural economy i.e. agriculture, especially in commodities-based export countries. From 1970s onwards, the emphasis has shifted towards more a decentralised approach to development with a rural development bias. But the experience of different countries shows that with such a strategy the objective of equity is attained at the cost of efficiency and national growth.

In both the centralised and decentralised approaches, the small towns and intermediate cities remain neglected. The researchers and planners have argued that in countries with an unbalanced settlement hierarchy, especially in the case of urban primacy, equity and efficiency could be achieved by promoting the development of smaller settlements which would integrate the entire urban hierarchy. To get the context for the empirical study, a literature review is undertaken. This examines the theoretical and empirical approaches to the study of development and urbanisation in developing countries. Then, the urbanisation process in Iran is discussed in detail, with particular reference being placed upon the socio-economic transition in the pre and post-Revolutionary era.

The present research investigates the impact of development policies on urbanisation in Iran in general and at the provincial level in particular. The centralised development policy of the pre-Revolutionary period created severe regional disparities despite the availability of great wealth (oil) and undermined the peasant economy of the mass rural population. The most conspicuous consequence of this policy was rural-urban migration and rapid growth of urbanisation. This study investigates the impact and effect of such policy in an area where the dependency on agriculture is very high. The post-Revolutionary development policies tend to be decentralised and shown a greater concern with agriculture. Thus the research aims to evaluate the effect of a new decentralised policy on rural and urban development at the regional level in Mazandaran province. By closer study of Amol city, the research investigates the impact of rural prosperity on an intermediate city and its hinterland. The research has shown that although the new sectoral development (agriculture) decreased the overall economic gap between rural and urban areas, it has failed to prevent migration and the rapid urban expansion of small cities such as Amol.

CHAPTER: 1

INTRODUCTION

1.1. Background of the problem

The urbanisation process has been directly influenced by economic and social development policies in many Developing Countries (DCs). Many attempts to explain rapid urban growth have been based upon the links between the level of Gross National Product (GNP) per capita and the urban proportion of total population. These two phenomena are correlated which is often interpreted as a casual relationship between urbanisation and economic development. In many Asian and Middle Eastern (particularly oil-exporting states) countries, overall economic growth was achieved but the distribution of wealth and opportunities became more unequal. The principal beneficiary of development was the urban sector in general, and the metropolitan pole in particular. In most cases the objectives of rural and regional development have not materialised because the needs, preferences and attitudes of the rural population were not properly incorporated into the programmes.

Many DCs imposed centralised 'top-down' development strategies and then subsequently, decentralised 'bottom-up' strategies. The impact of these policies differed from one country to another depending on the prevailing socio-economic and political situation of that particular country. During the 1950s and 1960s it was widely accepted that the western models of economic development could bring increasing prosperity to the people of the newly developing nations of the world. The adaptation of the growth pole / growth centre strategy, which was essentially efficiency-oriented, expected to trickle down the benefits of development to the lower order of the spatial system. But this expectation never materialised owing to their urban and industrial biased nature. One of most obvious consequences of

centralised economic policy was the massive growth of large urban centres in most DCs. Primate cities and large metropolitan centres in DCs have concentrations of national resources and social overhead capital vastly greater than their share of the national population and this has led to severe regional disparities.

From the political economy of view, however, rapid urban growth is explained through the world economic system, which promoted the diffusion of underdevelopment rather than development in DCs. Thus, developed countries created outposts in the cities of DCs to extract primary products, expand the market for their manufactured goods and finally ensure the continued stability of indigenous political powers that would most willingly support their interests (Friedmann & Wulff, 1976; Frank, 1976; Castells, 1977). This interrelationship existing between developed and DCs was expressed in terms of core-periphery, the metropole and satellite, where the former exploits the latter by means of inter-linked hierarchies of unequal exchange and controls.

Within such a framework, urban systems do not diffuse modernisation but further the process of underdevelopment. However these theories were criticised because they ignored peoples' power to intervene in social and political movement. As Petras (1978, p.33) noted, dependency theory suggests that "people act not for their immediate concrete interest but because the system dictates they act". Thus the equivalent at the national level is an assumption that all Third World states are helpless passive victims of global forces over which they have no control (Drakakis-Smith, 1990).

From late 1960s and 1970s onwards a new paradigm of development emerged which is broadly termed 'development from below'. It is a decentralised approach to development with a bias towards rural development. According to this theory, development policy should be directed towards the problems of poverty in order to help the less advantaged population. Bottom up approaches are basic needs-oriented, labour-intensive, small scale, regional resource-based, often rural-centred and argue for the use of appropriate, rather than the highest technology. Despite the considerable amount of literature on the applicability of this approach in several DCs, the success of bottom-up strategies has also been questioned. It is argued that through this approach equity is achieved at the cost of efficiency and overall growth.

These strategies were displaced during the late 1980s and early 1990s by structural adjustment policies that sought to reorder national economies into market systems, promote private enterprise and encourage international trade and investment. The problem with structural adjustment policies remains how effective they will be in transforming planned economies into market economies (Rondinelli, 1993).

In recent years, governments and planners in many DCs are agreed that the prevailing inequality between the rural and urban, regions and classes cannot be solved without stimulating the rural economy, especially in those countries where a large part of the population are still living in the rural areas. The failure of centralised development strategies, and the conceptual construct of bottom-up policies which rarely occur in a pure form in practice, cleared the way to increasing attention towards the small and medium sized urban centres.

From the early 1980s and 1990s, a growing literature on development planning and urbanisation has emerged on the importance of smaller urban places in different parts of Asia, Africa and Latin America (Baker & Pedersen, 1992; Lindert & Verkoren, 1997; Rondinelli, 1983, Lo & Salih, 1978). However there is no general agreement on the definition of small and medium sized cities which varies according to the size and settlement hierarchy of different countries.

Despite new evidence showing that the growth of medium sized cities has been marked during recent decades (Roberts, 1995), large urban centres are still the main destination of migrants in DCs. The disproportionate share of the metropolitan areas in economic and social opportunities leads to a large movement of population from smaller urban centres and rural areas. In fact a broad section of the problem in big cities of DCs is transferred from other places to these cities. For instance, a glance at the urban plans dealing with the provision of urban infrastructure show that it is primarily limited to the present population of the cities and their natural increase rate, regardless of their rural and regional hinterlands and the potential migrants. It is not surprising that the majority of urban problem solutions tend to be inefficient and only are temporary remedies.

As studies reveal, today the majority of large urban centres experience housing, transportation, pollution, employment and service supply problems (Potter, 1985; Angotti, 1993; Drakakis-Smith, 1987). On the one hand the difficulties faced in managing and maintaining existing sewer, water, and drainage systems, and the costs of meeting social needs exceeded the present potential capacity of DCs' urban authorities. Such situations became one of the major factors which highlighted the function of smaller urban cities in DCs. Similar problems plague the Iranian capital, Tehran; as the Minister of the Housing and

Urban Development pointed out, 'about 9.6 million population live in the city in 1996, this will reach 17 million in the next twenty years and thus we have to provide space for these people with which Tehran cannot cope and so they have to be settled in the newly constructed satellite cities around the capital' (Ettela'at, 1997, No 752).

1.2. The choice of Iran

The history of urbanisation in Iran dates back to a millennium ago. But the contemporary style of urban growth has been directly stimulated by the economic and social transitions during the reign of Pahlavi dynasty. Iran, like other DCs, initiated a series of development plans to attain economic growth, at the time the country was economically dependent on agriculture and over 80 percent of the population lived in the rural areas. Obviously any kind of development programme had to address the needs and priorities of rural masses and agriculture. A short review of Development Plans from 1950 to the eve of the Islamic Revolution shows that this key determinant gained little attention in the First Plan; moreover later development policies undermined the importance of the rural economy.

Subsequently, however, Iran was exposed to the full force of western forms of development owing to the discovery of oil. Indeed, the Iranian economy became dominated by petroleum. Some believe that the most significant feature of the oil sector is its virtual independence from the rest of the economy. The output of crude oil depends on little contribution from the domestic economy and in particular, its share of total labour force is negligible (Katouzian, 1987; Hakimian, 1988).

The state as main receiver and distributor of the oil revenues primarily functioned as an agent for the expenditure of the oil revenues. Although the role of government in the economic growth of the South East Asian countries illustrates a positive picture of state intervention in the economy, existing theories would face serious difficulties in application to the oil exporting countries. As in the case of Iran, the highly centralised state has become the exclusive lever of economic and social power; a power, moreover, which is independent of the productive effort of the community. The traditional sector of society (the rural) lost a large part of its power which determined its social and economic importance. For in this case, the clear line of demarcation between different social groups is not so much their common relations with the means of production, but their common relations with the chief supplier of the means of consumption i.e. the state. Thus the mass rural population (the peasantry) was left out by the process of revenue allocation.

One of the major problems of the two first development plans was the lack of regional planning. Only during the Third Development Plan was a regional planning approach adopted. The establishment of regional planning units in the provinces was recommended, and Third Plan Law provided the legal base for the identification and execution of the projects by the provincial authorities. However, in practice, the authorities were not able to master comprehensive regional projects. During the Fourth and Fifth Development Plans regional development was pursued more seriously, and the study and survey of regions for their economic potential was emphasised. The country was divided in eleven planning regions according to their ethnic compositions, existence of growth points and other factors. This proposal however was rejected by the Cabinet, as result of the provincial governors' influence (under centralised government), for they believed that the regional planners would have wielded more practical power than

themselves and the heads of high sectoral offices (Amirahmadi, 1986). The Fifth Plan considered the efficiency of the regionalisation on the basis of eleven regions. Again the tension between provincial governors, sectoral heads and regional planners led to the isolation of the last. The stated reason at this time was that the division of the country into eleven regions did not correspond to political and administrative divisions. After the rejection of regional planning the Plan and Budget Organisation was given the task of setting up Provincial Planning and Budgeting Bureau in 23 provinces. The Bureau prepared a centrally funded and approved the Social Regional Projects (Amirahmadi, 1986). In reality, the implementation of these projects was hampered both by the low quality of the involved staffs and by other serious problems such as lack of co-ordination, co-operation, and control among the various agencies. This has been the fate of most DCs attempts to materialise development.

The rural sector however remained socially intact under the development plans; it was land reform in the 1960s along with other programs which targeted the social structure of the rural Iran, although some argued that land reform was a political decision (Lambton, 1969; Katouzian, 1978). Whether for political or other reasons, land reform not only failed to promote the situation of the rural masses but destroyed the traditional peasantry system. Then growing consumption market for foodstuffs was increasingly filled by massive imports. This situation has been recognised in the 'resource-based' economy by Auty (1990). Meantime services grew rapidly and Import-Substituting Industry (ISI) expanded, both using capital-intensive techniques without an adequate rate of labour absorption.

Iran, like other DCs, began to follow an ISI strategy for economic growth. But the major characteristic of Iranian industrialisation was its heavy reliance on oil exports. However the strategy adopted prior to 1973, especially during 1960-69, was to a large extent considered to be pure classical ISI, as it was more inward oriented and the new infant industries were protected by heavy tariff and direct import controls. But protection of older established consumer-oriented industries was reduced. Another important aspect of Iranian industrialisation common to other DCs was its heavy reliance on imported inputs and the lack of interdependence in the manufacturing sector. The manufacturing sector remained an enclave of assembling intermediate goods with marginal backward and forward linkages. The ambitious programme of the Shah protected modern industries on the journey to 'the great civilisation', but it neglected traditional sectors and low income groups which might have radically increased inter-sectoral demand and output, thanks to the oil induced income of the 1970s which led the urban middle class to demand higher quality manufactured goods. As far as sectoral shifts are concerned, Iranian import substitution led to the bankruptcy of the agriculture sector and over growth of the service sector. Oil was still the dominant sector being merely a source of revenue without any radical movement in its direct linkages to the industrial sector. Therefore, the industrial sector has not been able to create employment opportunities for rural migrants with low skills and literacy levels. Expansion of public and private buildings, construction in large urban areas and provincial centres provided a temporary solution and became one of major motives for migration from rural areas.

Thus the major outcome of development strategies in Iran was the rapid growth of urbanisation and the increasing income gap between the rural and urban sectors in general, and different regions in particular. It is obvious that regions

with a higher dependency on agriculture were affected more than other places, as the policies were not conducive to the development of agriculture. So the 'backwash effects' of oil exploitation and the state's abandonment of for agriculture became circular and cumulative, while the potential 'spread effects' through market expansion did not materialise because the gates were opened to agricultural imports and urban food subsidies.

The percentage of urban population in a certain geographical space has been used as an index of development in Iran (Amirahmadi & Atash, 1987). Thus the areas with a higher degree of urban residents were considered as more developed. This is relatively true, as statistical data reveal that provinces with high urban populations were more developed. Some parts of the country have received a disproportionate amount of development expenditures, while areas with a higher dependency on agriculture remained undeveloped. Thus a centralised development policy which primarily had its engine fuelled by oil revenues created severe regional inequalities, so that areas with better economic and social opportunities grew richer. Finally, the degree of inequality became an important weapon against these and the concentration of political power and in the end, the system was forced to change by the popular rising of the rural and urban poor. This extreme has been seen in few DCs; Cuba is the best example and like Cuba, Iran paid the price expected by the global capitalist hegemonies powers and thus was forced to be self reliant.

Since the 1979 Revolution, profound changes have taken place in the Iranian economy as a result of a combination of internal and external factors. The revolution itself, the eight years war with Iraq, fluctuations in the output and price of oil, economic sanctions by the western countries and the blocking of Iran's

foreign assets were amongst the main factors which had detrimental effects on the development of the Iranian economy during the post revolutionary period. The Islamic Republic's first Five-Year Development Plan (1983-88) was overtaken by the imposed war from Iraq. To mitigate the impact of economic sanctions and inflation on the standards of living of the large masses of population, the government controlled and directly subsidised a large number of commodities. Overall the Iranian economy in this period can be characterised as a managed war economy. Following the end of the Iran-Iraq War, a draft of the Five-Year Plan (1989-94) was introduced in November 1988 which became the First Development Plan of the Islamic Republic. There was a special emphasis in the Plan on agriculture as the "axis of development" which immediately signalled a new approach to rural/urban relationships.

The projected average annual growth rate of 6.1 percent for the agriculture sector seemed to be very high by historical standards, but the agriculture sector has progressed very well with an average rate of about 6 percent, almost achieving the target rate, and moreover the growth in this sector has been continuous and stable. The main reasons are related to the lower dependency of this sector on foreign resources and also the drastic improvement in agricultural policy during the Plan. While the industry and mining sector grew by an annual rate of only 2.9 percent, the reasons for such low growth were the impact of the revolution itself, economic restrictions by the West and the impact of war.

In general, Islamic government policy tends to be more decentralised, as decision-making at the provincial level is made by the local authorities under the supervision of central government. Division of larger administrative units such as provinces, townships and the addition of 'urban' function to rural settlements aims

to bring administration nearer to the local population. It is often argued that many cities and towns which are presently functioning as major urban centres in different parts of DCs were originally initiated and developed for administrative advantages (Hardoy and Satterthwaite, 1986).

The small and medium towns of Iran like other DCs have traditionally been neglected. The majority of these towns have developed spontaneously without any conscious input from the government and most of the municipal authorities have been suffering from chronic financial shortages. Most of the present small urban centres are rural in character. Many of these centres do not have any urban infrastructure or services. Therefore, a huge amount of money would be required in each centre for the development of necessary infrastructure.

It can also be argued that the present effort of decentralised urbanisation would increase enormously demand for urban facilities, while these settlements were self-reliant in their rural status. The policy considering regional planning is left to be determined by the Comprehensive Provincial Plan. According to this each province has to choose its development aims with respect to social-economic resources and priorities.

Food requirements as a result of improved living standards and increased population forced the government to pay proper attention to the agriculture sector. Self-sufficiency in foodstuffs and escape from oil-dependency became the central philosophy of economic development. Thus the areas with suitable conditions for agriculture development received more government support through the Ministry of Construction (Jihad sazandegae). In some areas agricultural development promote the economic income of the rural households.

This study intends to evaluate the relationship between development and urban growth in the north of Iran with reference to Mazandaran province. Urbanisation processes in the region like other parts of the country experienced the social and economic transition of the 1950s onwards. The region has a moderate climate and abundant water, and is known as one of most productive agricultural areas of Iran. The unique location of the province beside the sea, and with forest, fertile plains and the Albourz mountains provides a rich natural resource for economic development. Considering the pre-Revolutionary development strategies concerning agriculture, it is obvious that the productive role of province was no longer significant in the national economy. The only sector which grew faster was tourism. The Caspian beach and the natural landscape of the area led to an expansion of tourism activities, but only for a few coastal cities. Overall life became harder for the majority of the rural population, as the result of extensive grain imports on the one hand and the rapid increase of population with poverty on the other, encouraged villagers to migrate. Many of migrants moved to the capital city (Tehran) and the remainder sought employment in the cities and towns of the province.

In the post-Revolutionary period, the agriculture sector gained attention, especially in those regions appropriate for agriculture development. Mazandaran has primarily a rice based economy with over 60 percent of country's needs being produced from the region. Also the province has the first rank for citrus fruit production in the country. National events such as the War and the interruption of foodstuffs imported from the Western countries increased the price of domestic products which symbolised and highlighted the importance of agriculture. In the recent decade, the improvement of grain seeds, the utilisation of machinery and the emergence of the new consumer market abroad gave better opportunities to rural

households. Also a decrease of grain imports, especially rice, gave more scope for local products in the internal market, although some believe that agricultural performance has not been quite satisfactory at the national level. The present study will reveal that the overall living standard of the northern farmers confirms that agriculture development brought a prosperity which is a marked success in regional policy. Also such trends had implications for urbanisation in general and intensification of rural-urban interaction in particular.

One of the prime aims of this research is to trace the trend of urban growth in connection with the development of the agriculture. Statistical data show that urban growth has accelerated in the post-revolutionary era. One of the solutions to rural out-migration in DCs is believed to be the reduction of the income gap between rural and urban areas. Evidence shows that income differentiation has decreased quite markedly in the areas where agriculture has improved. Meanwhile the expansion of cities and towns reflects the rapidly growing nature of urbanisation of these areas.

The two post-revolutionary national censuses of 1986 and 1996 revealed that the natural growth rate of the population fell from 3.7 percent in 1986 to 1.6 percent in 1996 in Mazandaran province. Thus, the main factor influencing urban growth is migration. The question will be what is the main motive for migration despite the fact that development strategies seemed to concentrate on the rural areas (bottom-up strategies). The number of urban centres has increased from 37 in 1976 to more than 50 in 1996, and the percent of urban population reached 44.2 percent in 1996 compared to 32.8 in 1976.

As historical experience at the national level has shown, urbanisation grew at the cost of the rural economy and self-sufficiency in foodstuffs. It can be argued that the present pattern and speed of urbanisation in the north of Iran will not be sustainable. If so, the theory of decentralisation through urban growth contradicts the strategy of agricultural improvement as the axis of development which has been strongly emphasised in two National Development Plans (1989-94 and 1994-1999). The main basis of provincial development for Mazandaran is stated to be agriculture (fishing, forestry, animal husbandry) according to the Comprehensive Plan of the province.

It can also be argued that regional urban growth will lead to the decrease of migration toward the capital, Tehran, and the trickle down effects of development can diffuse to the lower tier of administrative centres. As already noted, Iran suffers from urban primacy. Strengthening the role of small and medium sized urban centres leads to a more balanced distribution of resources and population in the country.

Under these circumstances, I intend to examine and investigate the role of Amol city, a third rank city of the province, in rural and regional development. Also the research will take a closer look at the consequences of rural economy growth on the urban expansion of Amol city through extensive socio-economic surveys.

1.3. The objectives of the study

This research intends:

(i) To explore and analyse development policies in relation to urbanisation growth and to investigate the paradox of development and inequality in DCs. Thus the aim is to develop an understanding about urbanisation process in DCs so as to explain the pattern of urban growth in Iran;

(ii) To identify and characterise patterns of urbanisation growth and change in Iran with respect to social, economic and political transitions in pre and post-Revolutionary periods and their impact on urban development;

(iii) To determine the influential factors affecting urbanisation at a regional scale (Mazandaran province) and the role of small and middle sized urban centres in promoting equality, as expressed in the National Development Plans' goals;

(iv) To evaluate the nature of urban expansion and to assess the relationships between urban growth and residential segregation of its indigenous and migrants' areas;

(v) To determine the function of middle sized city, Amol, by analysing its economy as a central place in the region and to assess the nature of rural-urban interaction during the past ten years to evaluate the influence of the rural economy's prosperity on the city.

CHAPTER: 2

DEVELOPMENT AND URBANISATION IN THE LITERATURE

Introduction

The study of the levels and growth of world-wide urbanisation reflects that at beginning of the nineteenth century about 3 percent of the world population lived in urban places. This figure rose to about 15 percent by 1900; presently it stands at about 44 percent and it is expected to reach 50 percent by the end of this century (United Nations, 1995). This rapid increase reflects a period of socio-economic change which formed the environment of current urban societies. One of the major features of settlements in Third World countries is the concentration of urban population in a few very large places. This form of urban primacy would appear to reflect the particular experience of Third World urbanisation and to have implications for development and inequality (Gugler, 1982).

The growth of urban settlement in the developed world was the result of the industrial revolution during the 18th and 19th centuries which transformed western society into the most urbanised of the world. Here cities appeared as the necessary outcome of the concentration of the people required for the operation of industry (Gugler, 1982). These societies developed through internal (class) and external (colonial) appropriation (Hay, and Abu-Lughod, 1977) which with the expansion of capital stock, permitted the productivity of labour to rise dramatically. Hence, urbanisation in the western world is seen in terms of its 'connection with economic growth' and is generally associated with the level of a nation's economic development. The urbanisation process in developed industrial countries was also responsible for radical changes (McGee, 1971).

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Thus, the main theories concerning development such as economic growth, social change and demographic transition are influenced by the industrial revolution in western urbanisation. The current distribution of urban population in the DCs indicates that the gap in the level of urbanisation between them and the developed world has narrowed but this overall growth has not been accompanied by economic development like in western society. So can we transfer the western experience of urbanisation to the Third World? Is the urbanisation process of DCs similar to that of the industrial advanced world? If it is, why are developing nations still not able to escape from poverty and the condition of underdevelopment?

2.1. Forms of urbanisation in developing countries

Historical evidence reveals that urbanisation is indigenous to the Third World and originated there; urbanisation is not therefore coterminous with westernisation. The major expansion in Western urbanisation occurred between the sixteenth and nineteenth centuries with colonial conquests and the Industrial Revolution respectively, while cities which were cradled in the great river valleys of Mesopotamia, Egypt, India, China and the cities of the Maya, Aztecs and Incas were elegant even in the twelfth century.

The developing world is quickly becoming an urban world. Neither civil strife, natural disasters, nor public policies redirecting industry and migrants have been able to stem this process. Growth is occurring in urban places of all sizes from small market towns to mega-cities with more than 8 million residents. In 1950, only 16 percent of the population lived in urban places. By 1990 this reached 37 percent of the total population in these nations, and during the next 35

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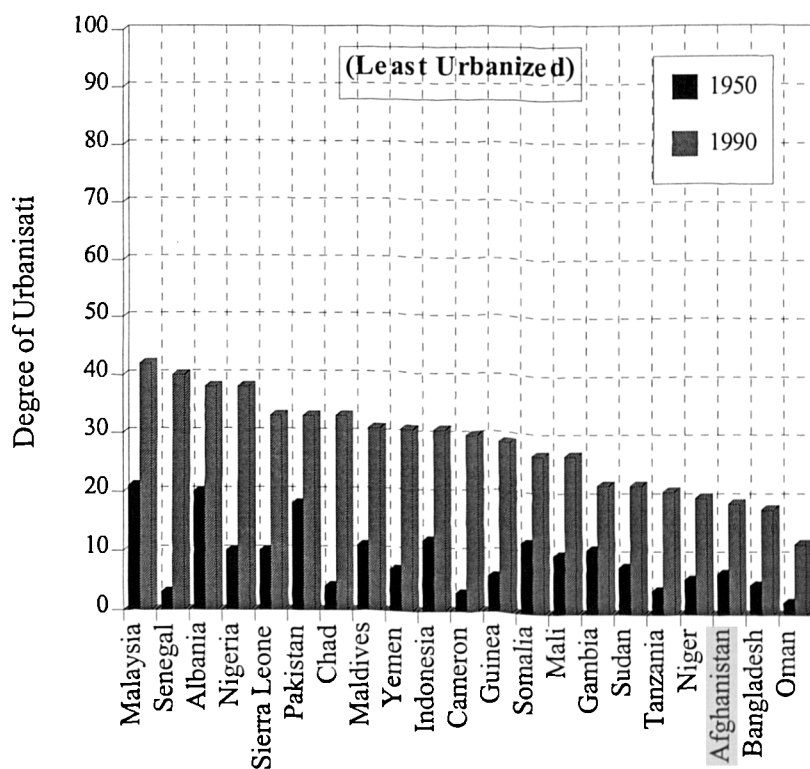
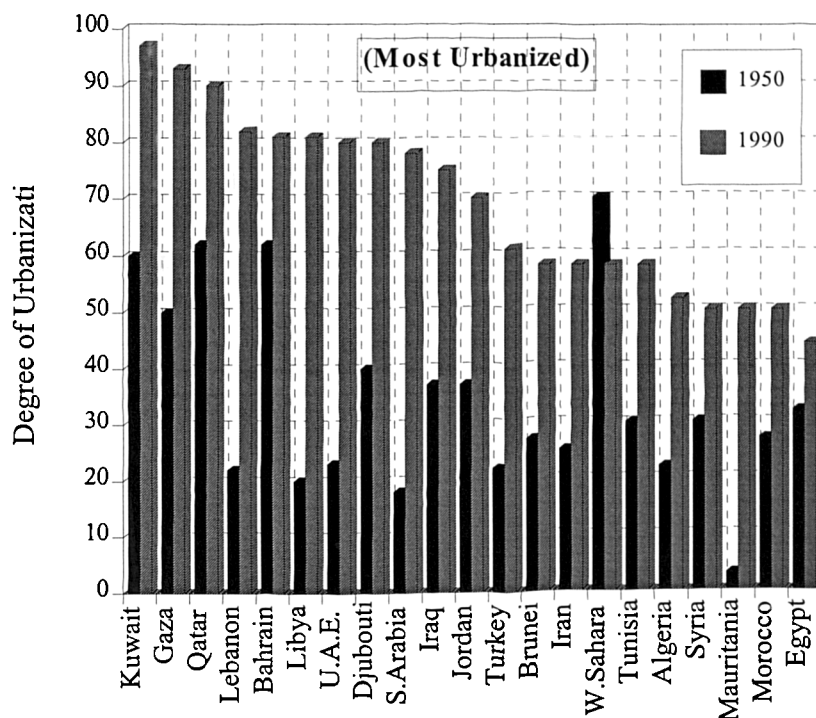
years the urban population of DCs will be about 61 percent. However, there are variations in the level of urbanisation across Third World. For instance, Latin American and the Caribbean countries have nearly two-thirds of their population in urban areas, unlike the Asian countries of China and India with two-thirds of their population in rural places (Gugler, 1996).

A study of Muslim countries revealed that they have experienced significant growth in the level of urbanisation (Fig 2.1). In 1950 only a few countries, and those being extremely small in terms of their total population, had more than half of their population in urban areas. By 1990, another 13 countries with moderately large total populations reached the 50% mark including Turkey, Iran and Iraq (Bilal, 1995).

Today urbanisation in DCs is a manifestation of indigenous traditions and modernisation; 'demographically' they now contain the majority of the world's urban population and are growing the fastest. Economically, they represent comparatively low per capita incomes, a relatively high proportion of employment in the rural sector and low ratios of professionals to population (Lowder, 1986).

Politically, policies are dominated by the capitalist system. Thus, variations in the level and growth of urbanisation and economic development are strongly related to cross-sectional and historical variations in the socio-economic development in the world system (Hoy, and Abu-Lughod, 1977; Potter, 1985).

Figure 2.1: Most and Least Urbanized Muslim Countries



2.2. Political Economy and Development Theories

The emphasis in much of the literature has been placed on the assumption that economic relationships evident in the industrial advanced and predominantly western model countries are the dominant cause of the forms of urbanisation commonly found in DCs. This debate has many facets such as 'modernisation', 'dependency' and 'globalisation'.

2.2.1). Modernisation

One of the post-war development theories was 'modernisation' theory; it proposed that economic growth and development in DCs would eventually be achieved through the transmission of growth impulses from the developed countries by the means of institutions, trade and multinational corporations. Modernisation theory was also based on the assumption of a linear transition from a 'primitive' undifferentiated and pre-rational society to a modern differentiated and bureaucratically rational society (Rimmer & Forbes, 1982). Some believed that the increasing interaction and integration between less and more developed areas will at some stages, lead to the onset of development in the former areas; especially this belief figured in the thought of ecological school who assumed that DCs are very much like the developed societies, only that they are at an earlier stage and will modernise in time (Kasarda & Crenshaw, 1991); among the examples of such diffusionist modernisation thinking can be included the influential core-periphery model of Friedmann (1969) the polarisation and spread effect concepts of Perroux (1950), and the modernisation school led by Soja (1968), Gould (1970), Riddell (1970), and Berry (1972).

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The antecedents of linear development theory were not only economic but also owed much to anthropological and sociological notations on what constituted 'modern' as opposed to 'traditional' attitudes. Particularly close association was made between this dichotomy and the nature of urban and rural communities respectively; this was used to explain how 'progressed' man left the traditional way of life in rural areas and moved to modern life-styles in urban places. Thus in this way migration is seen as the passage of development and modernisation. It was assumed that modern attitudes and trends would begin in the capital city and subsequently diffuse in sequence down the urban hierarchy. A study by Leinbach (1972) in Malaysia showed that the features of modernisation were associated with colonial urban development and the location of contemporary elites. Thus other parts of the country were untouched by the modernisation process.

Some believed that modernisation priorities has had a profound effect on virtually all patterns of spatial development. Perhaps the most outstanding empirical regularity of spatial development is 'the tendency toward geographical concentrations of the attributes of modernisation' (Soja & Tobin, 1977: 158). Thus, it is argued, once initial decisions are made to locate a particular activity or institution at a specific point, a kind of self-generating momentum is established, which continues to attract related enterprises and indeed multiplies the impact of a given social, economic, or political investment. The giant growth of primate cities in Asia, Africa and Latin America is the most evident example of modernisation tendency toward concentration.

Modernisation theory has been criticised because of its Euro-centrism and for its simplistic assumptions "modernisation=westernisation=progress" (Forbes, 1984), but most importantly, it failed to explain urbanisation in practice; it totally

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ignored the causes of the complex pattern of uneven regional economic development and completely misunderstood the dimensions of effective intervention in problems of underdevelopment such as the role of the state, classes, global capital investment and economic changes in the developed world. Close observers of growth patterns in areas such as Latin America (Robert, 1978) or Asia (Berry, 1989) seem to agree with the failure of modernisation theories. Frequently, GNP per capita was rising, the benefits of development (mainly industrial) had been soaked up by a small part of the population and the gap between poor and rich widened. This situation was considered to be unavoidable in the process of linear development, as it visualised the building up of domestic savings for reinvestment by an elite as a prerequisite to the benefits of trickle-down effects.

However, it became apparent that growing unemployment in the DCs was not a temporary phenomenon. Rostow's model of a linear strategy was built on the false foundations of assumed independence of action by individual nations. As Drakakis-Smith (1990: 57) argued, 'it crucially ignored the web of global relationships which conditions the development of individual nations'. He further emphasised that for the metropolitan powers of Europe and the United States, such relationships have in the past been almost entirely favourable, providing cheap supplies of food and raw materials. Over the last three or four decades, these international relationships have been almost entirely unfavourable for most DCs. The multinational corporations, controls on the prices for major agricultural commodities and minerals of DCs limited the benefits of this form of economic growth for them. Indeed, in some countries, the rising inequality between the rural and the urban spawned revolutionary movements.

Therefore, the process of urbanisation in DCs is different from the developed world pattern and involves factors such as elite power, differences in the state policies, the effect of the global economy, and the effect of class structure (Smith & Timberlake, 1993).

2.2.2). Dependency theory

The dependency approach initially emerged in Latin America development studies, especially those by the economists of the Economic Commission for Latin America, who first sought to explain underdevelopment by focusing on the unequal terms of trade between the exporters of raw materials and the exporters of manufactured goods (Valenzuela & Valenzuela, 1993). Dependency approaches provide some insights into the inter-relationships between DCs' urbanisation and the global expansion of the capitalist system. This theory explains that the expansion of the capitalist system on a world scale was only possible through a core-periphery division of labour and unequal exchange which benefit the core areas at the expense of the periphery. Some believe that the patterns and process of urbanisation are best understood as part of the expansion of the capitalist world economy (Nemeth and Smith, 1985).

Dependent urbanisation in developing societies has its roots in the colonial period, and in Latin America's case, the immediate post-colonial era, when countries were incorporated into an international division of labour, through their role as suppliers of primary commodities for production and consumption in the core and as markets for manufactured goods. Cities developed through their pivotal roles in this incorporation and are examples of dependent centres. Uneven development caused dependent urbanisation to vary from core urbanisation. Some

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believe that this kind of urbanisation aggravated urban primacy and caused increased centralisation of activities in the major cities of the national space and also accelerated rural-urban migration, worker exploitation in urban labour markets and the reorientation of urban economies towards capital-intensive industrialisation (Slater, 1978; Walton, 1982). The critical point is that the developed and undeveloped countries did not emerge independently. The development of the one was integrally related to that of the other (Gilbert, 1982). The current social formations and productive systems of most DCs have emerged in response to colonial and capitalist development.

Dependency theory blames outside economic and political influences for Latin American underdevelopment. Dos Santos stated: "By dependence we mean a situation in which the economy of certain countries is conditioned by the development and expansion of another economy to which the former is subjected; the relation of inter-dependence between two or more economies, and between these and world trade, assumes the form of dependence when some countries (the dominant ones) can expand and can be self-sustaining while other countries (the dependent ones) can do this only as a reflection of that expansion, which have can either a positive or a negative effect on their immediate development" (in Chilcote, 1977, pp.128-139).

Dependency theory gave historical validity to the world-systems theory of which Wallerstein (1974) has been the leading advocate. Wallerstein argued that the power of states in different parts of the world is dependent on the regional rates of surplus appropriation in each major zone (core, periphery and semi-periphery). Thus, he believed that the core area ends up with strong states primarily because there are more plentiful surpluses to tax and because the

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dominant capitalist classes want state protection for industry and their control of international trade; on the other hand, the periphery ends up with weak or non-existence states because it reaps less from world trade because its dominant capitalist classes are interested in profiting from direct dealing with merchants from the core areas.

The 'world capitalist system', concept was attacked by Skocpol (1993) who argued that Wallerstein relied only upon arguments about economic conditions and world market interests, largely ignoring other potentially important variables such as historically pre-existing institutional patterns of threats of rebellion from below, and geopolitical pressures and constraints. But a study of urban hierarchies in South Korea and the Philippines has shown that looking at internal politico-economic factors in isolation misses the crucial insight of the dependency-world system approach; class alignments and elite structure in dependent countries can only be understood as part of the expansion of the capitalist world-economy. Moreover, urban configuration rises in response to infrastructural changes that are implemented to fulfil the needs of elite groups whose formation and interests are fully explicable only by understanding the historic relationship of a society to expanding capitalism (Nemeth & Smith, 1985; McGee & Armstrong, 1985). Therefore, a political economy approach to urbanisation in DCs must adopt a "historical-structural" approach sensitive to the changing dynamics of this process in the various phases of capitalist development.

Dependency approach has been criticised because of its under emphasis of internal processes in DCs (Drakakis-Smith, 1990; Petras, 1978). Abu-Lughod (1996), for example argued that two important points are ignored, first, the lack of theoretical framework for seeing the city as the outcome of larger social, economic

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and political process within societies. And secondly, lack of awareness of the extent to which global forces impinge not only on Third World societies in general but, quite specifically, on how Middle Eastern cities have developed and on the problems they face. She posed the question, "can we use the existing theories for the Arab world?" Despite her caution, her answer has been positive and argues that it is particularly useful to apply an analysis that might be termed 'dependency'. The effects of the external system upon internal development can also be explained from the perspective of political economy.

The penetration of the capitalist system varies according to the spatial systems of the DCs and is dependent on the level of capitalist development in the nation and the region. Cities perform a hegemonic role with respect to small towns and rural areas since the capitalist industrial sector has greater urban concentrations. As urban interests are more articulate and powerful, they are able to bias resource allocation, particularly infrastructure investment, in their favour. McGee and Armstrong (1985) propose a hierarchical model which illustrates how decision making, surplus transfers and capital accumulation are centralised at different levels, while ideology and behaviour patterns, together with policy decisions in particular, are diffused to the regional and rural areas and in turn rural and small towns interact with larger urban centres. Under capitalism, the city's morphology and structure reflect the requirements of accumulation and of the class relationships in various cultural and social contexts.

The world urban hierarchy distinguishes the various components of the system in which the accumulation process is undertaken by multi-national companies and local ruling classes. Each segment of the model interacts with and

influences other segments; for example, national cities influence regional centres and then regulate the countryside through a system of intermediary centres.

2.2.3). Globalisation and development

Clark (1996), by analysing the world-wide urbanisation growth, argued that one of the influencing factors on the urban world is that the world itself has become a coherent and integrated whole, through the globalisation of economic and social activity. Markets which were previously separate and localised have become merged and have been superseded by world-wide patterns of production and consumption co-ordinated by global institutions and organisation. Social patterns and relationships which were only local in scale have become global in extent.

It is widely asserted that we live in an era in which the greater part of social life is determined by global processes, in which national cultures, national economies and national borders are dissolving. It is claimed that the emerged global economy makes domestic development strategies less effective (Hirst & Thompson, 1996). The impact of globalisation on DCs has been evaluated by two groups of economic commentators. In recent years many observers in the advanced nations have expressed concern that globalisation may affect the ability of these nations to sustain high living standards. As growth has surged in DCs such as China, led by an expansion of manufacturing exports, which will take place at Western expense. The most extreme expression of it was Ross Perot's warning that the North American Free Trade Agreement would lead to a 'great sucking sound', as US jobs moved to Mexico (mentioned in Krugman & Venables, 1994). It also has been claimed that the rise of Third World manufacturing has already had

serious adverse impacts on the European unemployment rates especially for low-wage workers (Krugman 1994; Wood, 1994).

The second group, criticising pessimistic views on the economic growth of Third World, argue that these analyses suffer from the limitations of econometric statistics, but these are no more disabling than the often journalistic reports that make up a sizeable portion of the literature on DCs (Hirst & Thomson, 1996). A comparison between NICs with Western countries according to their growth rate in the early stage of development reveals that the growth of Asian Tigers was unspectacular. Between 1966-91 Taiwan and South Korea had a growth rate of 1.6 and 1.9 per cent annum respectively while Germany and France had 3.7 and 3.0 percent growth rates between 1950-1973 (Young, 1994). Evidence shows that the problem with unskilled wages is not peculiar to Western countries but also that the relative wages of unskilled workers have fallen world-wide (Lawrence, 1994). Thus an interesting point about the debate over international trade and inequality is expressed by Richardson, (1995: 52) that "few believe that free exchange between rich and poor people makes the rich worse off. If anything, the prejudice is opposite, the rich exploit the poor. So why between societies might some imagine that free exchange impoverishes the rich? ... Within a society, few believe that free exchange impoverishes the upper middle class (the poorer of the rich) in favour of the lower middle class (the richer of the poor). Teachers trade with secretaries; engineers trade with draftsmen".

Although, globalisation as an external factor seemed to play an important role in the development of some DCs, the secret of Asian countries' success is believed to be primarily dependent on the crucial role of their governments as an internal factor. Rodrik (1994) criticised the World Bank analyses of the East Asian

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economic success and emphasised that it was strategic government intervention through investment subsidies, administrative guidance and the use of public enterprise which mobilised resources.

Despite the good performance of NICs, the rest of Asian countries still exhibit low growth and socio-economic inequality. Can it be proposed that the rest of Asia is able to emulate the NICs? Hamilton (1992) after analysing the main factors in the economic growth of NICs and some DCs (Pakistan, Nepal, India, Thailand and Malaysia) in Asia concluded that one of the important problems of the latter was the error of 'policy voluntarism' which can be related to the World Bank's negative attitude towards government role in the economy. Hamilton's study has shown that economic growth is not necessarily inhibited by government involvement and above all, it is not the quantity of government intervention and planning that matters, but its quality.

2.3. Social development theories

The main purpose of a nation's economic development is to permit the achievement of a decent level of living for all the people, whose social values in turn can influence the process of development (Inkeles, 1968). Perhaps one of the earliest contributions about the relationship between social values and development belongs to Wirth (1938). He considered traditionalism as a barrier to economic growth and that a characteristic of many DCs is the relatively high degree of prevalence of a folk-like society, which is usually opposed to rapid change and unable to adapt itself quickly enough to the pressures exerted on it by the increasing integration of DCs into the world system. The reasons for this, as prescribed by Parsons (1956), is that every society possesses a set of 'role

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expectations' which individuals expect one another to perform. The society protects this series of role expectations by its system of rewards and retributions. Together, the 'role expectation' and the system of rewards and retributions constitute a 'social value system' which has a substantial ability to condition the activities of society's individual members.

The role of social institutions and groups, and values in the development process is examined by Germani (1956). He made three observations; first, in pre-industrial societies, most actions are prescriptive. Secondly, change in them tends to be a violation of traditional norms and therefore is abnormal and rare, but in modern societies, change becomes a normal phenomenon. Finally, traditional societies pose an undifferentiated structure with a few institutions performing many functions, while in modern society, each function tends to be performed by a specialised institution which results in a differentiated structure (cited in Gwynne, 1990).

Some believe that economic criteria alone can not push a society toward economic growth but the also cultural and ethical characteristics of a nation are important. An example of the former is McClelland (1993), who expanded the idea of Max Weber on the relationship between Protestantism and the rise of capitalism, and developed a psychological attribute he called the "need for achievement". McClelland examined the fall and rise of Athenian civilisation history and then believed that societies with a higher "need for achievement" were more successful in economic growth. In seeking to determine what produces this psychological characteristic, he stated that it is not hereditary but rather is instilled in people. It is therefore possible (he claimed) to teach people how to increase their need to achieve and by so doing, stimulate economic growth in DCs.

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An example of latter is Khan (1993), who by examining the "Confucian ethic" versus that of "modern societies", argued that Confucian societies uniformly promote sobriety, a high value on education, a desire for accomplishment in various skills, and seriousness about tasks, jobs, family and obligations both in the individual and the family. Then using Nakane's view on Western societies, he explained that in Western societies there is a great tendency for "like to join like" in unions, as students, in work place, and so on. This tends to set one group in society against another: employees against employers, students against teachers. Of course in Confucian society the emphasis is on fairness and equity, but it is fairness and equity in the institutional context, not for the individual as an individual. Therefore this makes the economy and society operate much more smoothly than one whose principles of identification and association tend to lead to egalitarianism, to confrontation, and to excessive compensation or repression.

Khan (1993), termed the successful economies of South-East Asian countries as 'neo-Confucian' societies who displayed an extraordinary talent for economic development and for learning about and using modern technology. It can be argued that there is no clear-cut definition of traditionalism or modernism applicable to all societies. As we saw, while Wirth (1938), recognised folk-like values as an obstacle to development, Khan defended the traditional values of Chinese societies as promoters of economic growth. The controversy over modern man and traditional man has a long debate in sociology. Theorists try to elaborate descriptions of modern man, which tend to contradict one another. While for some, individualism and self-reliance are directly modern traits, for others the ability to subordinate personal goals to the welfare of the collectivity and the ability to work with others toward common pursuits constitute the mark of modernity (Kahl, 1968). Therefore modernism or traditionalism must be

investigated according to the individual society, not as a universal generalisation. For example, religion (secularism) is repeatedly used as a sign of traditionalism (Lerner, 1965; Kahl, 1968, Schnaiberg, 1970), which hinders development and opposes change. But in practice the experience of many Middle Eastern countries (e.g. Iran, Algeria) showed that religion has been a powerful means of opposition to undemocratic rulers, here religion gave a high degree of political maturity, which for Inkeles and Smith (1993: 160) indicated development. However, Escobar (1995), by reviewing the immense economic inequality between the Developed and the Third World, argued that modernity became a magic formula which undermined cultural and social dignity without enhancing development.

Portes (1976) questioned the problematic characteristics of "modern" man (society) which was identified by Inkeles. Especially, Portes' argument relates to two segments of modern attitudes, the 'stress on personal and human dignity' and 'belief in distributive justice'. For Portes it was difficult to understand, however, why 'traditional man' does not stress personal and human dignity nor believe in distributive justice. He further argued that despite the frequent application of tribal imagery to underdeveloped nations, the reality of such societies is not one of an open frontier awaiting conquest by an entrepreneurial elite. Indeed, a complex structure of economic and political interests penetrates every aspect of them. It can be argued that individual motivations for achievement can be absorbed, fulfilled, and utilised without changing a basic situation of economic subordination and social inequality. Thus modern psychology alone cannot make a nation modern, but there also needs to be modern institutions, an effective government, effective production and adequate social services. As studies showed, cultural factors are less important in the underdevelopment of Third World. Whatever their

explanatory power, cultural explanations no longer dominate the field and increasingly thinking about development has become 'globalised' (Seligson, 1993).

2.4). The interrelationship between development and urbanisation

Many of the present day policies regarding spatial planning stem from the locational theories (e.g. Thunen, 1966; Weber, 1929; Losch, 1954; Christaller, 1966). Central place theory provided an account of the size and distribution of settlements within an urban system. It can be argued that central place theory is relevant to urban and regional planning because it assumed that a hierarchical system provides an efficient means of administering and allocating resources to regions. Key central places often grow as a focal point of growth of the region which in turn influences the rate of development over the region as a whole.

2.4.1). Development from above

Since early 1980s the terms 'development from above' and 'development from below' have gained wide acceptance to describe two different sets of development strategies (Stohr & Taylor, 1981). Nevertheless both sets of strategies had been in use in developed nations and DCs since earlier years. Different varieties of 'development from above strategies' dominated spatial planning theory and practice of the DCs for about three decades starting from 1950s. The main theme of the approach was that development would occur in a spontaneous or induced manner in a few dynamic sectors forming geographical clusters from which it would spread over time to rest of the spatial system (Hansen, 1981).

Development from above strategies i.e. the 'centre-down' or 'top-down' development paradigm has its roots in neo-classical economic theory and its spatial manifestation is the growth centre concept. Such strategies tend to be urban and industrial in nature. These are usually capital intensive industrial initiatives which demand the highest technology and depend on economic efficiency through economies of scale (Stohr & Taylor, 1981). After the Second World War, the rulers of DCs readily borrowed Western theories and strategies for the growth and development of their countries. In the view of many authors, there were three major influences towards using these strategies. Dickenson et al (1983) summarised as follows: "1) the Euro-American experience, which had generated an enthusiastic belief in managed capitalist and social development on the basis of Keynesian economic theory. 2) A new spirit of optimism about the future. 3) The growing determination in the colonies to make their own fresh starts."

It was viewed that progress in the West had been achieved by eliminating the rural characteristics of economic and social relations. The DCs were essentially rural and agricultural in character. Since Western development had taken place through the generation of an urban-industrial system increasingly geared to a sophisticated and capital-intensive technology, this model was favoured by the DCs for development (Dickenson et al, 1983).

The spatial manifestation of the centre-down strategy is the growth centre concept. Perroux (1950) introduced the concept of the 'growth pole' into the economics literature. His original work focused on the development of growth poles in economic space. This was a deliberate attempt to break away from the limitations of the central place concept of Christaller and Losch. Perroux's initially defined growth poles only and specifically in relation to abstract economic space

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and not in relation to geographic-economic or geographic space. According to Perroux's original definition: "economic space consists of centres (poles or foci) from which centrifugal forces emanate and to which centripetal forces are attracted. Each centre, being a centre of attraction and repulsion, has its proper field, which is set in the fields of other centres" (Perroux, 1950: 95). Thus his primary concern tended to be interactions among industrial sectors rather than a spatial development process. According to him, poles were likely to be firms or industries or group of industries.

In 1950s, the works of Myrdal (1957) and Hirschman (1958) made a significant contribution to the growth pole concept. Their works displaced the earlier 'balanced growth theory' and firmly established the 'unbalanced growth theory' which ultimately dominated the growth pole/growth centre literature for the next two to three decades. Myrdal maintained that a simple model of 'circular causation' by actual social and economic processes exists rather than the static equilibrium analyses typical of economic theory. Myrdal found that whatever the reason for the initial expansion of growth centre, thereafter cumulatively expanding internal and external economies would fortify its growth at the expense of other areas. These economies include not only a skilled labour force and public overhead capital, but also a positive feeling for growth and a spirit of new enterprise. Myrdal also employed the concepts of 'backwash' and 'spread'. His backwash effects involved the workings of population migration, trade and capital movements. In the first rounds, one-way flows of both capital and skilled labour towards the centre would reinforce the tendency to more inequality. But Myrdal argued that at the later stage, the increased outlets for the hinterland's agricultural products and other raw materials, as well as the diffusion of technical advance from its growth centre, would counter the backwash effects and induce spread.

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Hirschman (1958) in his classic work 'the strategy of economic development' argued that development strategies should concentrate on a relatively few sectors than on widely dispersed projects. He maintained that key sectors would be determined by measuring the effects of backward and forward linkage in term of input maxima. He viewed that growth is communicated from the leading sectors of the economy to the rest, from one firm to another. Hirschman expressed similar views to Myrdal regarding backwash and spread effects by the terms 'polarisation' and 'trickle-down'. Hirschman believed that: "...an economy, to lift itself to higher income levels, must and will first develop within itself one or several regional centres of economic strength. The need for the emergence of 'growing points' or 'growth poles' in the course of the development process means that international and interregional inequality of growth is an inevitable concomitant and condition of growth itself" (Hirschman, 1958:183-4).

Isard (1975) argued that different economies related to the growth centres are the principal reason for the (over) concentration of economic activity in growth pole/growth centres. Agglomeration and deglomeration differentiated into three categories, viz. 'scale economies', 'localisation economies' and 'urbanisation economies'. Growth centres can provide the urbanisation economies which are available to all firms in all industries. Urbanisation economies are: "... associated with the increase in the total size (in terms of population, industrial output, income and wealth) of a location for all activities taken together" (Isard, 1975:116).

Before explaining the growth centre concept with reference to the DCs, it is worthwhile discussing Friedmann's (1966) 'centre-periphery' model. Friedmann viewed the regional policy problem as an issue of applying national policy in a spatial dimension. Friedmann's centre-hinterland model consists of four stages

which trace the transformation of a spatial system from a sparsely populated and newly colonised country to a fully integrated urban and regional system in a developed country (Friedmann, 1966; Gilbert & Gugler, 1982). Friedmann's conceptual model divides the space economy into a dynamic, rapidly growing central region and its periphery. The growth of the centre is viewed as being subsidised in part by the periphery. The model sketches out the evolution of the space economy in DCs and also prescribes the form that future regional policies should take. Friedmann implied that economic development is closely related to the emergence of highly developed and inter related functional hierarchies of cities of the Christaller type. He also implied that growth is in some way proportional to the size of an agglomeration. To encourage development, he advocated a hierarchy of cities as the means of integrating the periphery with the centre or core.

The growth centre approach has so far been widely practised all over the world. Various international agencies, including the World Bank and the United Nations, actively promoted the growth centre concept. This idea spread from Western Europe and the United States to Latin America, first in Chile then Venezuela, Brazil and so on, and finally to Asia, especially Japan, South Korea, India and, to a lesser extent, South-East Asia (Lo & Salih, 1978; Stohr & Taylor, 1981; Kuklinski, 1972, 1978). Let us explain the scope of growth centre planning in DCs with particular reference to Asia.

Wong and Saigol (1984) examined and compared the impact of six growth centres on their surrounding rural hinterlands. The six growth centres were selected from five different countries (Thailand, Indonesia, Pakistan, Philippines and Sri Lanka). The spread and trickle down processes were evaluated in each. The spread effects were measured in terms of the 'income generated in each

growth centre' and the 'income multipliers obtained in the surrounding rural areas'. In their comparative analysis the income generation and multiplier analyses models have identified more unfavourable than favourable income impacts of growth centres on their respective surrounding areas. They also found that the trickle-down process of income generation from the centre and the multiplier impact in the rural areas had not been effective.

The experiences in other Asian countries were essentially unimpressive and the Kuznets law (1955: 62) of early unequal distribution of income leading to equity at a later stage of the development process became a myth. Regional and international disparities increased in many of them (Stohr & Salih, 1981). The overall picture in Asia is one of persistent rural poverty although comparatively high rates of economic growth have been registered in South Eastern countries. In the Middle Eastern countries (especially oil export-based), the GNP had grown rapidly but socio-economic disparities between different regions became one of the main characteristics of these societies. Despite the availability of 'capital' (which is lacking in many Asian countries) for investment and economic growth, development planning has failed to eliminate the gap between different classes, and above all between the rural and urban sectors.

2.4.2). Development from below strategies

The problems of poverty increased interregional and interpersonal disparities between rural and urban areas which resulted in the emergence of a new paradigm in 1960s which is broadly termed 'development from below' or 'bottom-up approach'. The primary objective of this approach is social development with a focus on specific human needs (Seers, 1969; Haq, 1972, quoted in Friedmann &

Douglass, 1978: 163). Since the majority of DCs especially in Asia are essentially rural in character, the main idea behind these strategies is rural and agricultural development.

The earlier agricultural development strategies of the 1960s were capital intensive and were geared to improving the overall condition of rural people through increased output and incomes. The prime economic objective was to increase agricultural output. The 'green revolution' strategies fulfilled the objectives of near self sufficiency in food production in many countries. But the main benefits went to the land owners, the elites and others who were not in real need. Since the majority of the rural population in DCs, especially in Asia and Africa, are marginal and subsistence farmers with a limited access to inputs and credit facilities, the green revolution could not initiate any major change in their quality of life. Misra and Bhooshan (1981: 24-5) expressed this as follows: "The [green revolution] strategy, however, did not improve the living conditions of the rural poor, not so much because it was inherently wrong, but because of the fact that the national Governments did not pursue other rural development strategies with the same vigour and commitment, land reforms, rural industrialisation and other rural institutional reforms lagged behind. This led to very unfavourable implications for landless and small farmers".

It is true that even in countries where land reforms did take place, other supplementary strategies have failed to complete the ongoing process. Consequently development from below policy through land reform accelerated migration towards urban areas and further growth of urbanisation in many DCs. Thus, it can be argued that land distribution or improved seeds cannot alone eliminate poverty, and the persistent income gap between rural and urban sectors.

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The experience of other Asian countries (Taiwan, China, Thailand) reflects the relative success of the agricultural sector when rural development has accompanied rural industrial development. In most successful cases of economic development, such as the widely acknowledged 'Taiwan experience,' agricultural development was the main concern in the early period. The growth of agriculture laid a firm foundation for industrialisation, which in turn led to broader economic development. Here, the land reform programme supplied in dispensable social infrastructure for successful agriculture, and despite the growth of an industrial sector, urbanisation grew slowly, in large part because of the balanced development of agriculture and industry. Good transportation, widely spread industrial sites, and relatively small-scale operations with low capital intensity all helped to keep farm labour employed in rural areas (Mao & Schive, 1995). Moreover, Taiwan's successful economic development over the four past decades began with a strong and growing agricultural sector.

One influential theory of rural development (from below) was 'urban bias' (Lipton, 1977), whose Indian experience led him call urban bias a 'tough beast'. He asserted that "the most important class conflict in the poor countries of the world today is not between labour and capital. Nor is it between foreign and national interest. It is between the rural classes and the urban classes" (Lipton, 1977). Basically Lipton's analysis is that the power of the urban sector is such that it is able to divert an unequal share of resources toward its own interests and away from the rural masses. He also asserted "urban bias keeps poor people poor", owing to the biased nature of development policy. The formation of such policy is through the roles of the rural rich and urban elite which enhances their position and needs in the city and village. Rich farmers produce surpluses of food, savings and human capital for the urban sector and thus "the towns get their cheap

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surpluses, price support and subsidies and the rural poor, though efficient, get mainly pious words though often sincere ones" (Lipton, 1977: 68). Lipton's argument was criticised by some researchers, because urban bias paid no attention to the urban poor and also invalidated the application of the theory to DCs with non-food agricultural exports (Corbridge, 1982; Unwin, 1989; Moore, 1984). It can be argued that urban bias also ignores the existing inequality between larger and smaller urban places. Indeed, there are many underdeveloped regions in DCs with urban places.

Despite these criticisms, the concept has been found to describe development strategies which give disproportionate shares to different places. Sutton (1989) has argued that all countries of the Maghreb suffer from urban bias in their recent socio-economic development which reflects rapid urbanisation and also their relative neglect of rural and peripheral areas. In this zone, Tunisia is the most urbanised country with Tunis taking on the role of a primate city. Casablanca and Algiers also show macrocephalic tendencies. Sutton comes to the conclusion that the Maghreb countries have all displayed increasingly centralised national space economies often with growing regional disequilibria.

Urbanisation was viewed as a parasitic process which led to underdevelopment, and neglect of agriculture. Consequently, an appropriate strategy was devised to counter and reverse the immiseration of the countryside. Integrated Rural Development Programmes (IRDP) and rural industrialisation were introduced as two options for DCs' rural development. The main thrust of IRDPs was on agricultural change, giving little consideration to the vital role of settlements in the rural economy and especially the inter-relationship between rural and urban areas and its importance for development. While some IRDPs had some

success, they generally have depended upon permanent external interventions and thus lack self-sustainability (Baker & Pedersen, 1992).

The promoting of rural industrialisation was of two types. The first involves the promotion of small cottage industries, while the second concerns the decentralisation of industrial development. The latter is nearer to the growth centre approach, which in many DCs ended up in the mere transplantation of capital intensive industries to a rural setting. In many DCs, the reason for rural industrialisation was to attempt to curb the growth of metropolitan centres by reducing rural-urban migration. However none of these strategies worked satisfactory with the possible exception of China and Cuba where there was an agricultural policy (Misra & Bhooshan, 1981). In the case of Cuba, the attempt to diffuse development impulses to rural towns was successful because of the increasing convergence of agricultural and industrial wages and a national development scenario which de-emphasised large metropolises.

Orthodox development planners have long counselled developing nations to maximise GNP growth, but over the last two decades an alternative 'welfare-centric' school of theorists has emerged which urges the pursuit of a much broader range of goals (Griffin, 1981; Streeten et al., 1981; Dreze & Sen, 1989). The theory underlying welfare-centric strategies contends that an emphasis upon rapid growth in GNP encourages distorted patterns of development that tend to diminish the welfare of the poor (Stewart, 1985). From a basic needs perspective, social welfare involves maximising the distribution of such minimal standards of living such as access to food, potable water, medical care, and education. Thus, achieving basic needs successes does not preclude outstanding economic performance defined more conventionally; instead, there exists a complementarity

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in which the achievement of welfare goals helps in the later achievement of growth goals via the mechanism of human capital investment.

However, basic needs approaches may look more attractive to DCs, especially in those societies in which overall GNP growth has led to severe inequality between the poor and rich. As Lee (1981) correctly pointed out, the success of basic needs strategy depends on the successful decentralisation of decision making and greater self-reliance which again hinges on the restructuring of political power. It is important to understand that in the context of the DCs, resistance would come from different interest groups such as the centralised bureaucracy, landlords, industrialists and multi-national companies, which hinder or sometimes make it impossible to implement programmes favouring poor people.

Friedmann and Douglass (1978), like many other authors, observed that the centre-down paradigm of planning has frustratingly failed in DCs. On reviewing the results of the accelerating industrialisation strategies in six Asian countries (India, Indonesia, Malaysia, the Philippines, the Republic of Korea and Thailand), they concluded that the traditional paradigm generated contradictions of crisis proportions in the structure of national development. In their view: "These contradictions of 'dualistic dependency' are intensified by the present transition of the world capitalist economy from an era of high sustained growth to one of structural imbalance and stagnation. A strategy of accelerated rural development is seen as the most appropriate response to the emerging conditions" (Friedmann & Douglass, 1978:164).

In their study, Friedmann and Douglass (1978) advocated the alternative strategy of accelerated rural development and called it 'agropolitan development'.

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They argued that the agropolitan strategy should be oriented to human needs, a more equal distribution of economic benefits and more direct participation by local people in the process of development. In the policy framework for agropolitan development, they argued that an agropolitan district should be developed by embedding some of the key elements of urbanism in dense rural areas of limited size. This policy of spatial development had to be promoted through decentralised planning and decision making. The agropolitan approach advocated the creation of self-reliant communities by selective spatial closure, communisation of productive assets and equalisation of access to bases for the accumulation of social power (Friedmann and Waver, 1979). The success of agropolitan development largely hinges on the simultaneous adaptation of nation-wide land reform and land redistribution policies.

The agropolitan approach has been criticised by some scholars (Gore, 1984; Mathur, 1982; Soja, 1982; Forbes, 1984) because they believe that the approach does not deal with political and economic realities and is therefore utopian; the approach merely substituted spatial structures or territory for class structure. On the contrary, the approach accepted that power structures not only exist between different classes in a society, but also between different units, for example, central government against local administration and production. Furthermore, important power structures exist within the district, clan, extended family and household. The agropolitan strategy, focused explicitly on these local power structures, highlights their importance (Friedmann, 1990, Aeroe, 1992).

Along similar lines to the agropolitan district, Misra and Bhooshan (1981) proposed a new approach which seems to be more pragmatic regarding the Asian context. They suggested that the approach should meet the following four criteria

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to promote rapid socio-economic changes in the rural settings of the DCs: "first it should weaken dichotomous development, second it should be addressed to the problems of the poor; third, it should promote economic growth and finally it should be initiated and managed by the people" (pp 34-35). They further argue that the DCs need both urban development as well as rural development in order to reduce poverty. They propose 'rurban centres' so that there is a continuum integrated in a new settlement system with interdependency between rural and urban settlements.

It seems that 'agropolitan' and 'rurban' theories attempted to elaborate basic needs in a spatial context. In fact to operate such a formula, both approaches need strong local (regional) decision making, which central governments are usually reluctant to produce in many DCs. Thus, the structure and will of political power towards decentralisation and capital endowment for such programmes seems the first step.

2.4.3). The role of intermediate sized settlements in development

We have observed that, either under the influence of external processes (e.g. dependency, globalisation) or as an inevitable result of internal development strategies (centralised, industrial and urban oriented), giant growth of a few major cities, mainly capitals of many DCs, emerged. Therefore, the benefits of development are enjoyed by only a section of the urban population while the condition of the majority in the rural areas remain unchanged. This leads to a national imbalance and disparity in levels of living and development in different parts of the country. It also has been argued that rural development can not be achieved in isolation from urban centres. By the 1980s, the emphasis in the

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development debate shifted towards the interdependence of the 'rural and 'urban', and rural-urban 'interaction'; this has meant the explicit rejection of the earlier compartmentalism of rural and urban into two separate and distinct areas for investigation and intervention.

Some believe that national development goals cannot be achieved without special attention to small and intermediate centres. These places can have an important role in countries where centralised political power has little understanding of sub-national and sub-regional priorities and potential (Hardoy & Satterthwaite, 1986). Small and medium size urban centres can divert migrants from large and capital cities as the employment opportunities are distributed more equally at the regional level.

Attention has long been focused on the growing challenges of urbanisation and on the relationships between rural and urban development. It is often argued that to achieve widespread development and reduce regional and urban-rural disparities, it is essential to develop well integrated intermediate sized centres, small towns and rural centres (Zipf, 1949; Rondinelli, 1983). Any gap in the integrated urban system may retard the spread and diffusion of development and innovation. The ties between urban and rural economies that have been crucial in promoting widespread development in richer countries are likely to become more important as rapid urbanisation continues in the developing world. These linkages are crucial because "the major markets for agricultural surpluses are in urban centres, most agricultural inputs come from organisations in cities; workers seek employment in towns as rising productivity frees rural labour, and other services that satisfy human needs in rural areas are distributed from urban centres" (Rondinelli, 1983:10).

It is difficult to define a small or intermediate urban centre. Most researchers who deal with these problems of delimitation, simply resort to the use of benchmark population thresholds. While a few authors think of places with 1,000-2,500 as urban centres (Morris, 1991 quoted in Czerny et al 1997; Manazal & Vaparsky, 1986), Rondinelli's 'small towns' have less than 100,000 population. Others like Mathur (1982), Kammeier and Swan (1984) and Hardoy and Satterthwaite (1986) place their 'small towns' in the 5,000-20,000 size-bracket, and places with more than 20,000 inhabitants are considered as 'intermediate cities'. As Baker and Pedersen (1992) realised, distinctions between small towns and intermediate cities raise important conceptual and definitional issues, as urban centres of similar sizes may perform different functions in different geographical contexts. Thus universal generalisation and application of a standard set of interventions for towns of the same size may lead to inappropriate or unexpected results. Therefore, some scholars prefer to distinguish urban centres on the basis of their functions, services, and more importantly in the context of their respective national urban and economic systems within different countries (Simon, 1992; Czerny, Lindert & Verkoren, 1997).

One of the problems with urbanisation growth in DCs is believed to be the growth of the capital city at the expense of smaller urban places. The problem of city size and their distribution is one of most widely researched problems in urban and regional analysis. Alonso (1971) formulated 'the economic theory of city size'. Regarding the city as an aggregate production unit, he drew a U-shaped model in which the average productivity has a relation with the average cost. According to this model, with the increase of city size the average productivity tends to increase until the average cost exceeds that of productivity. Richardson (1973: 1) states: "It has commanded equal attention over space as through time, in that it has been

recognised as a problem in all countries regardless of their level of development. This does not mean to say of course that there has been a fixed view about what is a 'desirable' size for a city. Relative size has been far more important than absolute size".

Similar views have also been expressed by other authors and researchers. Tinbergen (1967) argued that both large and small centres have certain advantages as well as disadvantages and this is the reason for the existence of a whole range of sizes within the city system. It is neither possible nor advisable to formulate a unique operational definition of city-size. Urban magnitude depends on various parameters which can vary from one country to another. A city cannot grow or develop independently because it is only a part of the total system of cities and their surrounding hinterland (Alonso, 1971). There are different theories available to explain the concept of city-size. The theory of optimal city size examines how costs and benefits vary with city size and derive an optimal city size where marginal benefits equal marginal costs (Richardson, 1973). But Alonso (1971: 67) enquires: "the question of urban size consists of symmetric parts: how big is too big? and how big is big enough?" These questions are interpreted in terms of economies and diseconomies of scale. The minimum cost approach to city size stressed the presumed diseconomies of urban scale and sought to establish the population size at which cost per capita are the least as the optimal city size. Alonso criticised this approach on the point that minimum cost is insufficient in its own terms. He argued that such an objective is only sensible if output per capita is constant, which in reality is an increasing function of urban size. On the basis of empirical evidence from cities in Japan, Germany and the United States, he argued that the biggest cities are not too big from the viewpoint of economic efficiency.

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Lo and Salih (1978) with regard to Alonso's model argued that 'the critical question is why a city can and does continue to grow beyond both the national and the local optimum'. They discussed that there are three policy dimensions which need to be considered in urban and regional planning. First how to induce the growth of towns below the optimum level to the threshold of spontaneous self-sustained growth to avoid, which they called the agropolitan problem; second how to control the growth of the larger cities beyond the optimum level, that is how to manage the problem of declining efficiency which is the metropolitan problem in DCs and urban primacy problem in developing countries; and third how to programme the development of intermediate-size cities to prevent the growth of primate cities, that is the growth pole problem (Lo & Salih, 1978: 263). Therefore, Lo and Salih's analysis showed that the instability of urban size occurs within the whole range of city sizes and is not particular to the large cities.

It has been understood that local (regional) decision making is a prerequisite for the implementation of development strategies from below and the promotion of smaller towns, which is directly geared to the degree and level of decentralisation. The concept of decentralisation is very broad. The term itself can have many meanings depending on the goals and objectives of the programmes. Cheema and Rondinelli (1983) reviewed decentralisation experiences in DCs and concluded that "decentralisation is the transfer or delegation of planning, decision-making or management authority from the central government and its agencies to field organisations, subordinate units of government, semi-autonomous public corporations, areawide or regional authorities, or non government organisations" (p 11). But, they argued that decentralisation can range from the shifting of routine work to the devolution of powers to perform specified functions. The important point about decentralisation is the decision-making which is different from

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deconcentration, and in many parts of DCs, governments initiated deconcentration without transfer of decision-making power to the regional authorities.

Morris(1992) tried to conceptualise the meaning of decentralisation. In his view, decentralisation is not only a commonly perceived spatial process but also a phenomenon affecting the way functions, economic and social and so on, are organised with a variable spatial effect. Morris distinguishes decentralisation from deconcentration; "decentralisation implies a transfer of powers and decision-making capacities" (Morris, 1992: 3). Although decentralisation however has been impressive in a few countries, the general results of such policies in many DCs have not been very promising. In many cases central government initiated, introduced and heavily publicised decentralisation policies only to see them falter during implementation. The degree of success has been limited due to the uncertainty about the extent and purposes of decentralisation and ambiguities in assigning roles and responsibilities to organisations at various levels of government. Ambiguity in the design of decentralised programmes and weaknesses in the capacity of the central agencies to support and assist decentralised units adversely affects implementation. Resistance by central government bureaucrats towards 'decision making from below' is the major obstacle to decentralisation implementation and in some cases the demand for decentralisation tends to be violated by undemocratic governments.

Development planning policies (above and below) in theory and implementation treated the concept of 'urban' and 'rural' as if they were entirely dichotomous categories. Some researchers argue that in reality they need to be treated as but two sides of the same coin. The differences that characterise rural and urban areas in social, economic, political, demographic and behavioural terms

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are the outcome of a single set of dynamic processes, which are commonly referred to as 'development' or 'change'. Although the rise of structuralism and post-modern approaches to development studies have both witnessed a renewed interest in rural-urban interaction, as yet this is poorly articulated in empirical research literature (Potter & Unwin, 1995). While for some it is the nature of internal development strategies which led to an imbalanced distribution of wealth in rural and urban areas, for Potter and Unwin global changes in 1980s and 1990s were important determinants of rural-urban interaction, especially in regions where the changes took place physically. They further argue that the process of structural adjustment put pressure on the rural poor to secure the financial assistance of international bodies such as the World Bank.

One important approach, which emerged at the end of the 1970s, attempted to investigate and clarify the symbiotic relationships between urban centres and rural areas, and was known as 'Urban Functions in Rural Development' (UFRD). This involved three components. In the first step, it was necessary to identify settlements that could effectively act as service, production and trade centres for their own populations and those of surrounding areas. Second, the strength of the linkages among the settlements themselves, and between them and their rural hinterlands must be determined. Third, areas in which people have little or no access to town-based services and facilities must be delineated (Rondinelli & Evans, 1983). This approach was used in four countries, three in Africa and one in Asia. These projects proved to be a valuable exercise in describing rural-urban dynamics and increased the awareness of local planners of the spatial character of the planning region (Karaska & Belsky, 1987). In 1985 the UFRD methodology was modified to enable the conceptualisation of rural-urban dynamics to be more operative for feasible programmes. Under the revised approach, a sectoral

distinction was made between the smaller towns (market towns) with their emphasis on the marketing of agricultural products, and the larger towns (secondary cities) where the focus is on manufacturing and services. It has been suggested that with this modified approach "the research can appear more meaningful to investment decisions and rural-urban dynamics can be clearly articulated" (Karaska & Belsky, 1987: 44).

2.4.4). Commodity dependency and urbanisation (Middle East)

The end of the Cold War and consequent international realignments had its impact on even the remotest corners of the developing world (Simon, 1992). In such situations many DCs, especially in South East Asia, managed to achieve remarkable economic growth while others such as Middle Eastern countries were struggling to recover from regional conflicts during the 1980s and 1990s. Perhaps none of the regions on the world's map can be found where change and transition came as suddenly as in the Middle East. Here the major stimulus of such transition has been and is oil, the product which more than any other primary material is dependent on the world market. But this is a commodity over which the consumer had more control than the producer; in other words, it was and still is the power and will of industrial countries which determine the quantity and the value of oil. As Philip (1994: 203) expressed it: 'while the impact of oil on consumers in rich countries has been largely positive, it is not easy to draw up a positive balance sheet in respect of the oil-exporters'.

Oil gave the immediate impression everywhere that the oil countries were now on a short-cut to a Golden Era, and it was felt that oil countries faced no serious problems for their social and economic development, except shortages of

skilled labour (Katouzian, 1978). However, the fluctuation of oil prices from 1970s to the present day, especially in 1986, exposed the vulnerability of the Middle Eastern economies. Even in a political sense, some believe that oil revenues entrench despotic governments because they have no links to their society, as result of the elimination or reduction of tax, and thus publics have less representation in social and economic decisions, while non-oil countries' governments need the support of the private sector and other segments of society in order to fulfil their decisions (Huntington, 1991; Crystal, 1990; Lawson, 1991).

The decline in oil demand from consumers (mainly Western European and Japanese) in general placed oil as less important part of the world economy (Auty, 1994). Some governments started to explore alternative ways of development, e.g. by setting up Export-Processing Zones or Free Trade Zones in the Persian Gulf to escape from oil-dependency, but there is still a long way to go. The conditions in many countries reveal that oil cannot be the only lever of the economy, which has been accentuated by the consequences of the regional disturbances of the Gulf and Iran-Iraq wars. The increase of oil prices may have provided revenues for oil-exporters but other non-oil based countries of the Middle East, which Abu-Lughod (1984) termed as 'charity' cases, became dependent on it through migration to the oil economies and aid. Since the 1960s OPEC members have been large donors of direct and indirect aid to other DCs especially in the Middle East (Amuzegar, 1983). Nowadays many immigrants of oil-based states are returning home to Jordan and Egypt as a result of the world recession and decrease of oil prices (Abu-Lughod, 1996). Their governments have to activate other potential alternatives in their socio-economic development, especially in the context of high urban primacy and regional disparities. Today the majority of smaller settlements need to revive their roles in the shadow of giant cities such as Tehran, Baghdad,

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Cairo and Khartoum. These urban centres have grown at the cost of opportunities for employment in small towns and the rural sector.

The commodity income, even in the form of Hirschman's (1981) 'fiscal linkage', can provide a positive stimulus to development only when it is kept in production with the rest of the economy. Thus, if commodity-exporting countries are to achieve successful development, it is likely that they need to rely upon a diversified range of products rather than just a single commodity. Some of the most impressive records of economic progress have been achieved by countries (Mexico and Indonesia) actively engaged in reducing their dependence upon exports of oil in favour of the agriculture (Glassburner, 1988; Knight, 1985).

Another important characteristic of oil-exporting countries is the unequal distribution of income within them. The study of Adelman and Morris (1973) on economic growth and social equity in DCs has revealed that there was a definite correlation between countries with abundant natural resources (especially oil-exporters) and internal inequality. A subsequent study also showed that income distribution in 1980 was worse in oil-exporting DCs than in 1960 (Adelman & Robinson, 1989). In general, this disequilibrium was reflected in the urban and rural areas of the many oil-exporting countries. As was mentioned already, freedom of these economies from non-oil sectors, especially agriculture, broke the bond between mass producers and consumers; governments had the role of distributors, and by their action, created a balance between the different strata of the societies. But the emergence of oil revenues remove the necessity of ruling governments to establish relationships with the producer classes. Therefore social stratification became a function of economic dependency upon the state. In fact the classes with the highest potential independence from the state display the greatest

actual degree of dependency on the latter; Katouzian (1978) termed this category as 'clientele'. The clientele poses the greatest potential threat to the state monopoly of socio-economic rights; it thus takes the highest share of the state's obligations. In economic terms this means large amounts of low interest, high salaries and fees, lucrative positions, etc. which lead to a growing level of consumption and a rapid rate of financial accumulation. In spatial terms, urban areas get the disproportionate share of the oil income as the clienteles live in the cities. The urban sector benefits from the employment and income effect of high public and private expenditure, in addition to public regulations governing such things as tenure and a minimum wage in industry. In sum, oil had a passive impact on the rural economy (agriculture).

Agriculture was the main sector affected by oil revenues and which lost its importance in the national outputs and for the labour force of many Middle Eastern countries. Although the harsh climatic conditions and shortage of water were the main obstacles, historical evidence shows that agriculture had had the main role in economic structures. As reviewed above, different development policies, especially from below, gave importance to agriculture. Thus in areas where natural conditions are suitable for agricultural development, policies need to support and encourage this sector by creating better opportunities through small and intermediate urban centres.

2.5 Demographic contribution to urbanisation

2.5.1 Natural increase

The aim of this section is to review the main result of development policies adapted by DCs on demographic restructuring. The impact of migration in intermediate cities will be discussed. The basic features of urbanisation in the Third World are the growing concentration of population in large cities and the increase in the number of urban places. Urban growth in DCs initially depended on high natural birth-rates and the decline in the death-rate due to medical improvements and better nutrition. Preston in his analysis of 29 DCs concluded that "urban growth through most of the Developing World results primarily from the natural increase of population" (Preston, 1988: 14).

McGee (1977) also found natural increase contributed an important part of urban growth in his study of rural-urban mobility in South and South-East Asia. Davis (1968) described the demographic components of increased population which led to urbanisation in the industrial world in three ways; first, reclassification of rural areas as urban; secondly, through an excess of births over death (natural increase); and finally the movement of people from villages to cities. However he counted the shift of rural population to urban as the principal component of urban growth but in the Third World, natural increase also plays an important role in the growth of cities.

There is agreement that the theory of demographic transition based on Western experience is not adequate for the context of the developing world. Thus Abu-Lughod (1964) in her study in Egypt found that, in contrast to western

societies, where fertility was lower than rural, the urban and rural rates have been substantially the same. Also, data show that urban death rates were higher than rural in the early stages of urbanisation in the West while it is almost the opposite in the Egypt case. By emphasising the differences between rural and urban places, Gugler has analysed the mortality data for many DCs which showed that urban residents had a better chance of survival than rural people. However he believed the data to be problematic, as it is reasonable to assume that they tend to underplay rather than exaggerate the urban-rural differential (Gugler, 1982). Poor countries with an overwhelmingly rural population exhibit a high fertility pattern, that ensures that they are supported by their children in old age (Lipton, 1977). Caldwell (1969) refuted the idea that traditional agrarian societies make irrational decisions about family size. Instead, he suggested that decisions about family size are explained by the nature of the household economy. When wealth flows from the children to the parents through their productive contribution to the household economy, it is rational to sustain a higher level of fertility. Fertility transition occurs when wealth flows from parents to children become of greater importance.

Traditional societies benefited from medical improvements to control fatal diseases; they immunise their children against diseases more seriously than they use birth control techniques. It seems medical centres in DCs have operated more practically to convince families to use medicine, while the application of birth control is less accepted and, indeed, utilisation is in the hands of the people themselves. Social and cultural factors seem to be the key influences on fertility patterns at an international scale (Findlay, 1982).

It has been shown, however, that the improvement of health care is accompanied by great reductions in some kinds of diseases. Omran (1971)

proposed that patterns of disease and death could be more explicitly incorporated into population theory by adopting a framework, which he termed the 'Epidemiological Transition'. As traditional infectious diseases decline as causes of death, degenerative ones like cancer and heart disease take over, and the transition point might be the level of development at which there is equal probability of dying by modern and traditional causes. Smith and Lee's (1993) study of the effect of environmental and technological factors as causes of modern diseases came to this conclusion: the costs and benefits of development and urbanisation are unequally distributed; all groups will not experience a net negative risk in DCs, but the urban poor are more unlucky than others because of limited or no access to housing, water supplies, and sanitation. They are constantly exposed to the ill effects of infectious diseases, and at the same time must also contend with the toxic effluents of affluence associated with industrialisation and urbanisation.

Thus, the most common measure of the rate of urbanisation is the annual change in the proportion of the population living in urban places; a city can grow by natural increase or through rural-urban migration. Natural population growth is a major element in urban growth, but rural-urban migration makes an even larger contribution in many developing countries (Gugler, 1996).

2.5.2). Rural-Urban Migration

Migration is one of the key factors of urban population growth. Nevertheless the causes and patterns of internal migration, especially rural to urban and urban to urban movements, have been and are a crucial component of urbanisation. It is proper here to evaluate popular migration theories to understand their ability to explain patterns for urban growth.

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One of the earliest theories in the migration literature is that of Ravenstein's laws (1885). The laws consist of observations based on the relationship between migration and factors such as distance, stages, economic stimuli, migration currents and rural-urban differences in the United Kingdom. Essentially, he was seeking to understand the causes of migration from empirical evidence. This showed that (1) migrants primarily moved a short distance from their birth place; (2) migration proceeded by stages; people initially moved to the nearest towns and then transferred to the bigger urban places; (3) each main current of migration produced a compensating counter-current; (4) migrants who made the largest distances usually preferred to migrate to one of main centres of commerce and industry; (5) town people were less likely to migrate than rural residents.

Moreover, Ravenstein (1889) predicted that migration would increase over time as a result of development in the means of transport and the growth of industry and commerce. He also explained that other conditions could stimulate migration streams, such as an attractive climate, heavy taxation and compulsion. Therefore, Ravenstein's emphasis was on the economic motives which shifted population from agriculture (rural) to commerce and industry (urban). After Ravenstein, much attention was given to the pattern and forms of internal migration in the countries of the world.

Lee (1970), with his definition of migration as a permanent or semi-permanent change of residence, argued that despite criticisms, the laws of migration have stood the test of time. His own theory of migration, based partly on Ravenstein's laws is underlain by two sorts of forces working in different areas which lead to push movements from rural places and to pull factors to urban areas.

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Movements between two points are affected by a number of intervening obstacles which include the costs and efforts of migration. These variables will impact differently depending on the personal characteristics of the potential migrant; while some of these are constant through the individual's life, others are associated with stages in the life cycle. A person may be affected by personality, intelligence and awareness of conditions in the areas, evaluation of the situations at their point of origin and the likelihood of seeking more knowledge about the situation at the potential destination. Also, this depends upon an individual's personal contact structures (e.g. friends, relatives and other sources of information). Lee (1970: 228-98) maintained that "the decision to migrate... is never completely rational and for some persons the rational component is much less than the irrational".

The push-pull formula suggests that potential migrants will be subjected simultaneously to "centrifugal" forces at their place of origin and "centripetal" forces at the place of destination. This view is favoured by most writers although some researchers have stressed the importance of separating the two effects in order to achieve a better understanding of the decision making process. McGee (1971) in his study of the process of city ward migration has compared European rural-urban migration in the different phases of the Industrial Revolution to South East Asian rural-urban migration with which he found some similarities. But he stated that the push-pull model of Western European rural-urban migration needs to be modified substantially in the Asian situation. The main motives for migration were the pressure of population and lack of jobs in rural areas; thus rural poverty was replaced by urban poverty, while in Western Europe, the transfer of rural population led to industrial development.

Castello (1977) in seeking causes of rural to urban migration in the Middle East believed that the initial migration may be summarised conveniently as pull and push factors, which varied between different regions and individuals. Also, Clarke (1972) argued that in the rural areas, population pressure, modernisation of agricultural methods, commercial extension and a weak economy have been the push factors, while employment opportunities with better working conditions and higher urban wage rates were the major urban pull factors. A study in the Andean region of Ecuador showed that the transformation of the agricultural sector, without providing permanent alternative employment, led to migration toward the large cities of Guayaquil and Quito (Lowder, 1994). Therefore, push-pull theory is based on different conditions in the village and city. The push comes from deteriorating conditions in rural areas forcing emigration, and pull is exerted by the cities as villagers are attracted because of desired and increasing opportunities.

Neo-classical theories of rural-urban migration consider population movement as a rational response to better employment opportunities and higher wages. Todaro (1977) proposed an economic model of migration based on the assumption that migration is primarily the product of rational economic decisions by individual migrants. He claimed that much of the research on migration tended to focus on social, cultural and psychological factors while recognising, but not carefully evaluating, the importance of economic variables. Todaro's theory, influenced by the Lewis-Fei-Ranis model, argued that migration is no longer viewed by economists as an unambiguous beneficial process necessary to solve the problem of a growing urban labour demand. On the contrary migration is now looked on as phenomenon which accelerated urbanisation growth, rising levels of urban unemployment and caused economic and structural imbalances between rural and urban areas.

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Cadwallader (1989) argued that people are sometimes satisfied with less than optimal profit levels, and that decisions are often made in a context of incomplete knowledge and uncertainty. Therefore the concept of 'economic man' misses the other realistic aspects of human life.

Todaro (1977) stated that the decision of the individual to migrate is a function of two variables: (I) the difference in actual income between rural and urban areas; and (II) the probability of employment in the city. His model also emphasised the expected income that migrants hoped to obtain after migration; they may not be able to find it initially but the probability of overcoming the shortage of income will increase over time when urban contacts are developed. Thus it is still rational to migrate, even though expected income is lower than that expected. Todaro's theory is entirely based on economic motives; it ignores other social stimuli of migration, which is its main shortcoming.

Economic variables are not solely responsible for the causes of migration however. For example, Amin criticised Todaro's model because first, the approach is descriptive, not explanatory. Secondly, the approach assumes economic rationality on the part of the migrant. He does not agree with the view that the decision to migrate is made with a full knowledge of the variables of income and potential employment, and questions whether migrants do all come from poorer rural areas and move to richer ones. For example, the marked differences in the income levels of the population of the west coast states of peninsular Malaysia is a consequence of the pattern of colonial development. In this instance, historical patterns of colonialization are more important than current labour market conditions or income patterns to explain the real cause for the pattern of labour migration (in McGee, 1977 p.198).

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Sjaastad (1962) also agreed that there are other variables to be considered in migration than merely economic ones. He placed migration in a framework of the costs and returns from investment in human capital; the expected returns consisted of the greater income which might accrue to the migrant from better opportunities. The cost of migration was broken into monetary and non-monetary costs. The former includes expenditures on food, lodging and transport expenses involved in migration, while the non-monetary costs include forgoing earnings during the period spent in travelling, searching or learning a new job and also the 'psychic' costs of changing one's environment, which cannot be considered as an economic investment because they do not involve any quantifiable resource expenditure. The most important point of the model is that great differences in current earnings between two regions may continue to exist without encouraging migration because the costs of migration may exceed the observed benefits.

Migration costs may not be of as much relevance to the study of migration in DCs as they are in developed countries. In most migration research in DCs, the surveys show that almost always migrants stay with relatives or friends. Thus food and housing costs are a very low investment compared with the expected return from urban employment. For example, a study of migration in Colombia showed that relatives and friends played a particularly significant role at the time of migration, which helped new migrants to settle in the city. Assistance ranged from paying for transportation to assisting in securing employment (Flinn and Converse 1970). Also, Browning and Feindt (1971) have shown that in Monterrey, Mexico, over 80 percent of total migrants were initially housed by friends and relatives.

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Migrants on their first entry to the urban labour market will either become totally unemployed or will seek casual and part-time employment (Todaro, 1977). They commonly find their first job in the so called informal sector, as self-employed persons or working for small family businesses. Typical migrant jobs include street vending, construction, crafts, and for women, domestic services. In most of the jobs, the work is intermittent and varies from one day to the next (Krasse, 1979; Papanek, 1975).

This is a process of urban adjustment; the main factors encouraging or discouraging the migrants to remain in the city are the availability of accommodation and work. Kim and Lee (1979) in their study in the Republic of Korea showed that the occupational skill levels and monthly incomes amongst those who returned to the rural areas were lower than amongst those migrants who remained in the city.

However they were able to make slightly more money than non-migrants in their villages of origin, even though their skill levels were lower than those of non-migrants, their failure to adapt to urban life was owing to the difficulty in finding a job. In Lipton's view (1980) this trend led to many Indian villagers to become dependent on urban money lenders.

Most rural-urban migrants move to the city on an individual basis initially. Many move during the seasons when they are unoccupied in rural areas. Away after some years working in the urban area on a temporary basis, when migrants realise that they could live there on a more permanent footing and had adapted themselves socially, economically and culturally, do they consider bringing their family from the village to join them (Eames, 1967).

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Harvey (1975) considered information prior to migration a significant contributory factor in population relocation. Mabogunje (1972) suggested that the decision to migrate to cities depends on the type of information received from earlier migrants to the city (for example, difficulties in finding jobs or a place to live). The effect of negative feed back will be to slow down further migration from rural areas to that particular city, and inversely, positive feed back will encourage migration. Distance is an important factor, as those living close to a potential urban destination will receive much more information about it.

Adams (1968) showed that in Colombia, the proportion of migrants to the larger cities decreased as travel time increased, in a more remote area, a higher proportion of migrants were moving into nearby villages and towns. Lipton (1977) believed that villages near cities, and rural families with urban members, are the likeliest to seize on any potentially beneficial further downward migration. Indeed, these rural people are often "semi-urban" before moving to the city.

It is important to note that many migrants', moves are involuntary, especially in DCs. Migration is often triggered by other factors like war or internal political conflicts or by macroeconomic changes. These matters may have a much more fundamental influence in changing the pattern of migration than the kinds of behavioural factors studied above.

Drakakis-Smith (1987) pointed out that migration usually occurs initially in response to events (natural, economic, social and political) over which those affected have little control. If this is accepted, then behavioural theories of migration will have only limited explanatory power and an understanding of the timing of migratory flows is more likely to be found in macroeconomic theories

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explaining structural changes in society and in the economy. For instance at the time of industrialisation and westernisation, new employment opportunities are created and at the same time, the intervening obstacles to migration are reduced. As a result, workers are likely to be attracted to some urban areas and not to others. Also situations like war and revolution can increase the diversity of population due to social and economic disorder. Lee (1970) pointed out that in these circumstances, the social status of some groups will become elevated above those of others.

Therefore revolution or other political conflicts might give an opportunity to the lower socio-economic status groups to move to an area with more opportunities, at same time as intervening obstacles are removed as a result at the chaotic situation, which permits migration to urban centres. One such movement happened in South East Asia which resulted in many refugees fleeing across the region (Ng, 1975). As we will see later, the disruptive effect of the Islamic Revolution and war between Iraq-Iran provided a major stimulus to similar types of population redistribution.

The role of remittance money to the place of origin can encourage further migration both directly or indirectly. In a direct way, by sending money to their villages, migrants demonstrate the success of their new urban life style and thus encourage their families and friends to join them. One of the most common uses of migrants' earnings is to help pay for the education of members of the family; the processes by which migrant remittances affect societal and regional income distributions remains poorly understood, but it is quite possible that there may be a connection between remittance networks and the social transition towards family nucleation (Findlay and Findlay, 1987).

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These mechanisms are just some of the ways in which Mabogunje (1972) suggests that the migration process is self-reinforcing and thus results in the future redistribution of population from rural to urban areas. Economic changes may initially stimulate migration but in the long term, population redistribution itself results in regional economic changes. Lipton (1984) defended his position on the empowering nature of DCs' urbanisation, argues that urban-rural remittances, are not peculiar to mostly wealthy families and in a few exceptional villages. The net remittances are very small for the majority of typical villages because of migrant investment for education and other expenses in the urban areas.

Also, sub-systems can exist (Fig: 2.2), one of which acts in the rural area, encompassing local communities; for instance family dependence on land tenure availability influences a migrant's decision to leave; for Mabogunje (1972), this acts as a rural control. It is counterbalanced by another 'urban control' sub-system which operates to encourage or discourage a migrant becoming part of urban environment, via, for example, city administration facilitating cheap housing or providing obstacles to migrant settlements, which makes migration difficult.

The migration process is naturally selective, attracting certain sections of the population more than others. In most of the regions of Asia and Africa research indicates that migrants have been male-dominant between 1965 and 1975. In contrast, in Latin America the average for 23 countries shows that women were predominant in the same years (United Nations, 1980).

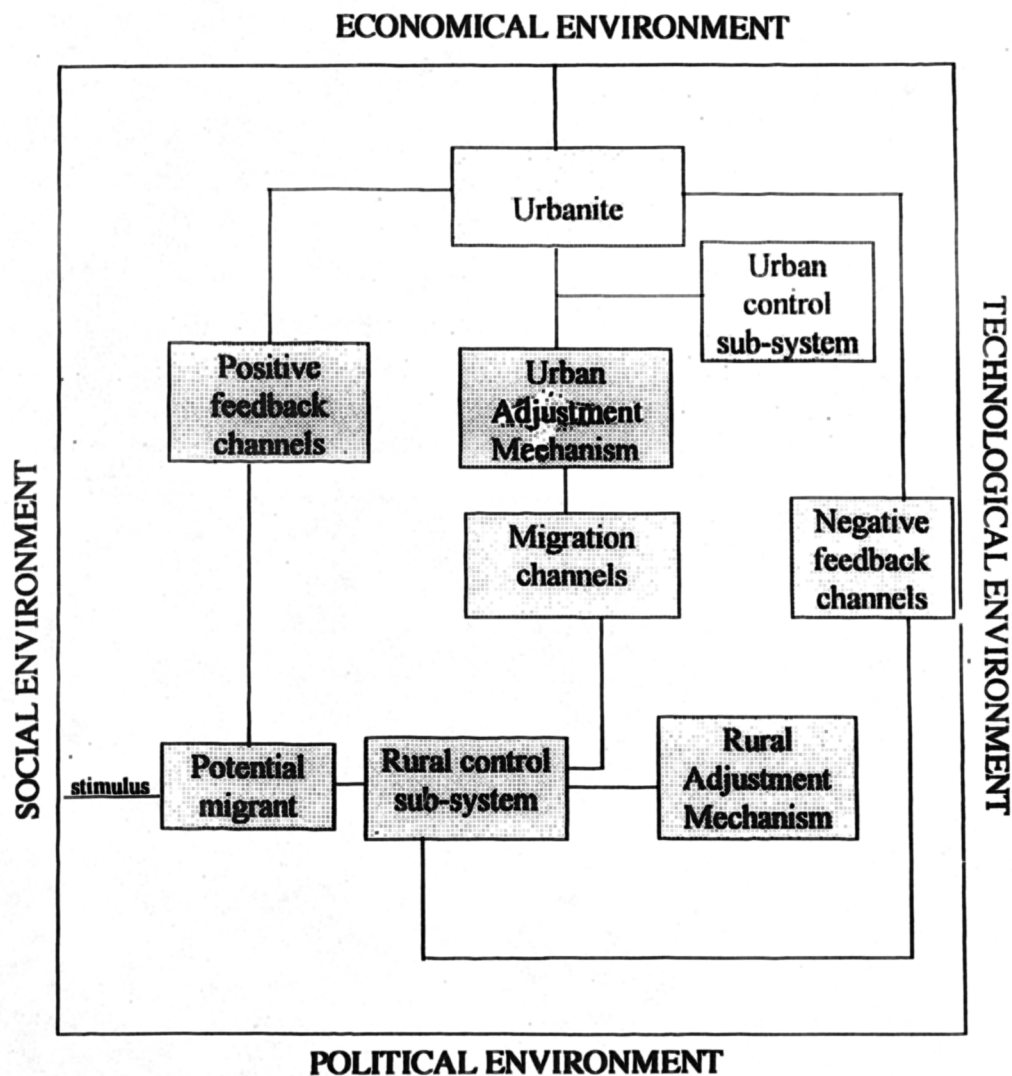
Young adults always predominate where migration in search of employment is concerned. They usually are single and have less at stake in the rural areas than their elders. Demographically, they are the most fertile elements

of the population. These characteristics of migrants have serious impacts on the place of origin and destination. In the place of origin, the most productive element leaves, which, as studies show, causes a reduction in their productive capacity because of insufficient labour at harvest time. Also, Lipton has termed the migration of rural educated people as the "rural drain" as their talents help urban elites (Lipton, 1977). There are major differences among migrants in terms of economic and social background and their urban prospects vary accordingly.

Gugler (1982) explained that the predominance of women in rural-urban migration is related to the pattern of land tenure inherited from the colonial period in Latin America and the Philippines. Indeed, many rural dwellers in these areas own little or no land, while in other parts of the world, women work the farm when men leave the village. Also Gugler believes religious ethos in Latin America exalts the status of the single women whereas elsewhere cultures encourage early marriage. According to Abu-Lughod's (1996) estimates, in the early 1980s it appeared that more than half of the able-bodied men in the Yemen Republic were working abroad, leaving their fields in the hands of women.

The literature concerning the intermediate urban centres showed that they play a conspicuous role in attracting rural migrants. Also these centres are considered instrumental in the stemming of the flow of migrants to larger cities and metropolitan areas (Hardoy & Satterthwaite, 1986; Rondinelli, 1983). Although inadequate empirical evidence from different parts of DCs make it difficult to support the absorptive role of these centres, which itself shows the need for further research on the potential of smaller urban centres.

Figure 2.2: A System Schema for a Theory of Rural-Urban Migration (after Mobogunje, 1972).



The studies in Latin American and African (Beneker et al, 1997; Baker and Pedersen, 1992) smaller cities reveal that migrants were primarily from their own hinterlands and to a large extent were one-step and family-migrants. In fact they have been familiar to the employment opportunities in the city and therefore have been able to establish themselves in the city in a shorter time.

As studies and discussion of the different factors of rural-urban migration and natural growth of population have shown, the urbanisation process is fast and despite some decline in the natural increase in some DCs, urbanisation is not a passing phenomenon, but it is widespread and the future of developing nations will be determined by future urban generations rather than by the rural. The development strategies reviewed in the early section of this chapter revealed that one of main outcomes of national and regional development policies has been rural urban inequality.

However, some theoretical debates give more importance to the external forces in DCs' population distribution. Whether one agree or not, in the contemporary world, the massive improvement of communications through TV screens and information on urban lifestyles encourages the use of manufacturing products by movement to or contact with towns and cities around the Third World.

2.5.3). Urban Residential Mobility

Rapid city growth in DCs, due to migration and natural population increase, has changed the old pattern of population distribution in cities. A variety of theories has been developed to describe the process and factors leading to such a

transition. The four best known theories are the concentric zone, the sector theory, the multiple nuclei theory, and inverse concentric theory. The first three theories were formulated on the experience of developed countries' urban centres, while the majority of cities in DCs follow the inverse concentric theory (Williams et al, 1983).

According to this theory, the elite and upper income classes live in the central part of the city, where they have easy access to their work places and urban amenities, and the lower classes reside in peripheral areas of the city. Many Middle Eastern cities, such as Baghdad and Tehran, present such residential segregation. However the typical order of the inverse concentric model may not be present in all DCs' urban places. Intra-urban mobility may be influenced or initiated by interference by urban authorities, for instance, land and housing policies can affect the spatial distribution of urban residents. Also residential change is strongly dependent on the income of urban households. While low income families move to the areas where the cheaper accommodation is available, the higher income groups flee to the suburbs. Therefore the previous order of the inverse concentric model changes to the concentric.

Turner (1969) hypothesised on the basis of Latin America that migrants moved to the central part of the cities on their arrival and then later moved to other parts for permanent accommodation. Turner's model was criticised by other studies about the pattern of residential mobility. For instance, Vaughan and Feindt (1973) have shown that in Monterey, Mexico migrants were dispersed throughout the city and were not heavily concentrated in any particular area, and unlike Turner's theory most of the migrants moved to an intermediate location. However, some studies report that one of the main reasons for the departure of wealthy families

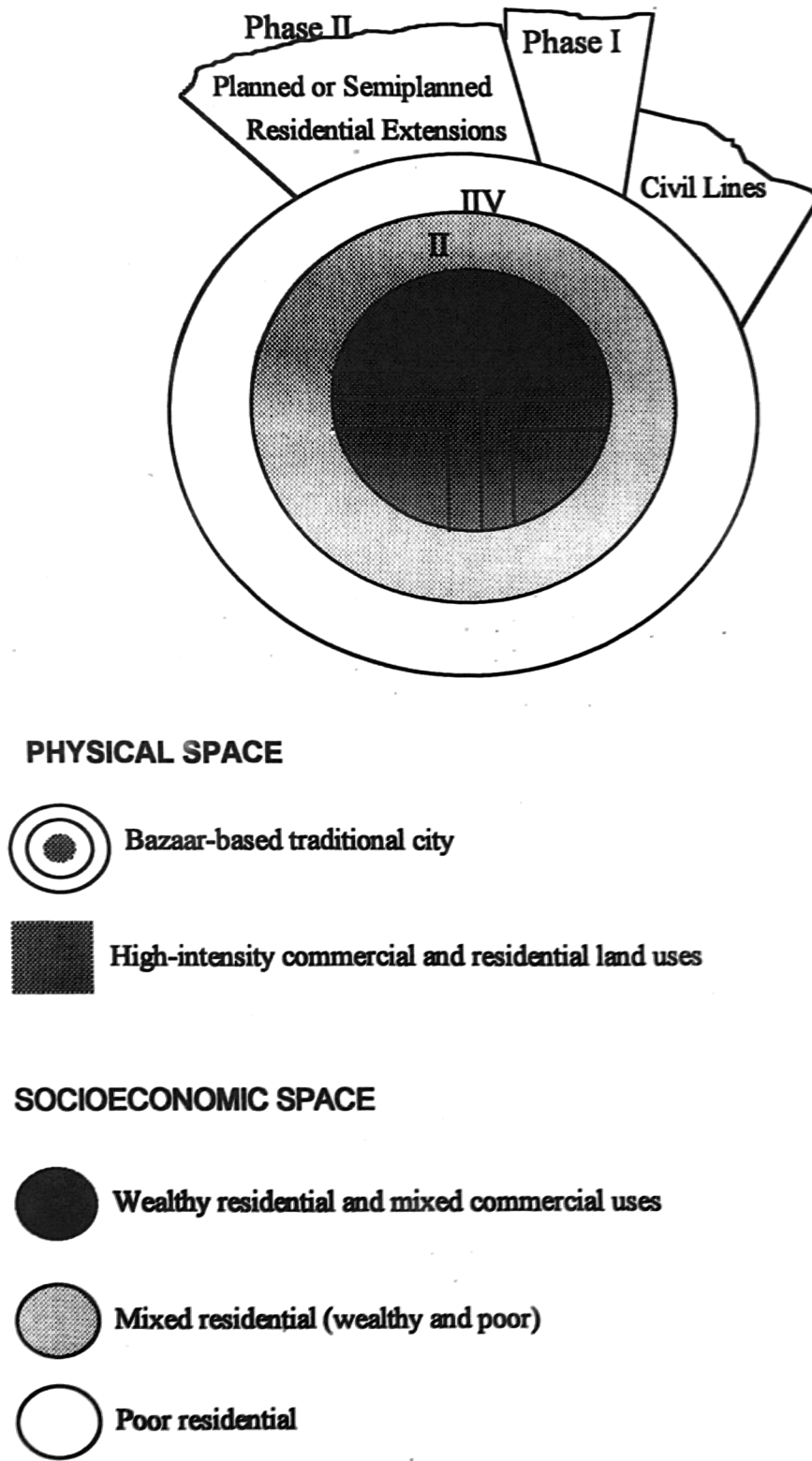
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in the Middle Eastern cities is the results of overcrowding of the bazaar area by the influx of rural migrants (Drakakis-Smith, 1980; Findlay, 1982; Micaud, 1976).

Dutt (1983) constructed a model explaining the structure of the South Asian cities which he termed as 'Bazaar based' city model (Fig 2.3). One of the main motives of urban growth in such cities is the increasing function of trade from agricultural exchange, transport node, and various administrative activities. The socio-economic space of the bazaar-based city represents a classification of different income groups. The higher income groups usually reside in the central part around the bazaar. In the second zone live the poor and wealthy together, and the third zone is occupied by poor families.

It is important to consider that the structure of cities is constantly changing with the improvement of communications and the implementation of urban development plans which accentuate physical expansion. In fact residential patterns are not only the outcome of migrant or even urban residents' choice but more the product of constraints on the availability of land, housing and services in DCs' urban areas.

Figure 2.3: Bazaar based city in South Asia (after Dutt, 1983).



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Summary:

Urbanisation and development have been examined through the three macro approaches of 'modernisation', 'dependency' and the 'world system' theory. From a modernisation perspective, the transition from rural to urban society is conducive to the transformation from 'traditional' to 'modern', in terms of the technology of production and the orientation of individuals and social institutions. Dependency and world system theory have focused discussion on the mechanisms through which DCs are made dependent on developed countries. Within many DCs, the 'top-down' growth centre approach generated economic growth at the cost of increased inter-regional disparities. The 'urban bias' approach was examined especially with respect to the rural-urban divide and rural-urban migration. Proponents of this thesis argue that policy-makers tend to favour urban areas over rural. This has led to the shift of policy towards 'bottom-up' strategies which emphasise rural development. The success of such policies is highly dependent on the decentralisation policies of the central government, which had mostly been limited to the administrative realm. Decentralisation can take various forms. While some analysts, particularly those associated with the IRDP approach, have been primarily concerned with administrative or institutional aspects, others have focused on the political as a means to empower marginal and under-represented groups. It can be argued that the impact of decentralisation is dependent on the type of program and the broader context within which it is implemented. In order to subsidise the growth of large urban centres, small and medium towns were neglected, although intermediate cities could arguably play a key role in accelerating rural development and to curb the excessive growth of the metropolitan areas. Such changes would undoubtedly have an impact on the internal structure of smaller cities. However each DC should develop its own development strategy on the base of its national and regional priorities and resources.

CHAPTER: 3

METHODOLOGY

Introduction

This research study is founded on the fact that development strategies adopted in DCs have created severe regional inequalities. Centralised planning, with an emphasis on industrial development policies which mainly concentrated on a few large urban areas and capital cities associated with primacy, ignored the vital role of smaller settlements, whether rural or urban, and agriculture. It was especially evident in commodity-export based economies where abundant capital was available for intensive-capital industrial activities. These industrial efforts failed to create employment opportunities for the mass of migrants in small and intermediate urban centres. Such a situation led to massive migration toward the capital and big cities of many DCs. The consequent planning legacy in many DCs was an adoption of rural development strategies. But reviewed above, the results of the rural development planning alone, isolated from urban areas, smaller cities and towns, in many DCs, especially in Asia, have not been very impressive, as these programmes primarily benefited rural elites and large land owners. Thus, it is believed that development policies have to concentrate on small and middle sized urban centres, which as points of rural-urban interaction could support and service their rural hinterlands on the one hand and absorb the labour surplus to stop or decrease migration to larger urban centres on the other. Therefore, the growth of smaller cities could lead to balanced urbanisation at the national level.

One important factor in this process is the willingness and support of central government for decentralisation, which seems a prerequisite for the initiation of growth in medium size urban centres. The present research aims to evaluate the role and importance of intermediate urban centres in Iran by particular

reference to Mazandaran province. For a closer look at the results of recent decentralisation policy in the country, Amol city is chosen for detail examination. The author's personal contact and experience of rural and urban life in this area and witness of dramatic changes over the last two decades were the main reasons for the choice of research topic.

3.1. Data Survey

3.1.1. Secondary data

The methodology has been selected in relation to the aim and objectives of the research (chapter 1). In the first stage, a background study was carried out through an evaluation of the development planning (national and regional) and urbanisation process in Iran by obtaining statistical data both from published and unpublished official records, and reviewing academic research (case studies) in different socio-economic aspects of urbanisation and migration, which will be illustrated in the next chapter. The main statistical data source in Iran is the national census which is taken every ten years. Therefore at the time of the fieldwork (1994) the last census had been implemented eight years ago (1986), so could not provide any information about recent changes. One of the major problems with the national census data is that data are reported according to administrative divisions, especially at the township (shahrestan) level which changed, having been redefined at each enumeration; thus they cannot be used for comparative studies. For instance, in defining an urban place, demographic criteria were used in pre-revolutionary censuses, while in recent ones, the presence of a municipality was used to define a city, but there is no clear base or factor which makes a place eligible to be municipality.

The census data are classified according to the township, and generally give information about socio-economic aspects of the urban and rural areas of the township. The information about each urban city is summarised very shortly in the preliminary section of each township's report, and therefore there are no comprehensive data about cities separately. For example if there are three cities in a township, the data concerning them is concealed in that for the 'urban areas' of the township.

Another major shortcoming of the national census is the confusion surrounding migration information. Migrants are people whose birth place is different from their living place (another urban or rural place) at the time of enumeration. It is obvious that many of the rural population may be born in hospitals of the nearby towns or cities and have never lived there, yet they are recorded as urban and as migrants, while in fact this group are rural and non-migrants. Also, migration data do not provide any information about patterns of migration and other socio-economic characteristics of migrants. Likewise, the statistical data considering housing provide limited information about housing facilities for urban and rural areas; again urban areas of a township are reported together and detailed information about the housing characteristics of a particular city cannot be obtained from the national census.

After examining the growth and development of urban centres in Iran it was shown that small and medium towns in the country were not getting proper and adequate attention in development planning, and also the majority of academic research, except some monographs on smaller towns, were generally concentrated on the larger urban centres. It was apparent that these centres have grown and developed spontaneously without much planning. It is argued by that strengthening

the role of medium urban centres can effectively reduce regional disparities. The aim here is to examine the potentials, problems and the future of these centres in producing balanced urbanisation at the provincial level. Thus the five main urban centres (over 100,000 population in 1986) of the Mazandaran province were selected for a comparative study to determine the general growth trends of these cities and set against the overall pattern of the urban growth and change of the province. In this research, urban places with a population of 100-500 thousand are defined as intermediate or medium size cities. It was discussed in chapter two that there is not any standard or universal definition of the city-size and it is more realistic if such definitions relate to the population levels and size of the country (Baker & Pedersen, 1992; Lindert & Verkoren, 1997).

3.1.2. Primary sources

It was considered necessary to interview people who had responsibility and knowledge on urban matters. In this regard, officials in the office of Housing and Urban Ministry in Mazandaran were interviewed. Also the Mayors of the five selected cities were visited to obtain information concerning the present conditions, future plans, and problems that affect the growth of these cities. Although some of the urban authorities were less co-operative, in general, the researcher has been fortunate to obtain considerable information about the perceptions and policies of local governors on urban issues. For instance one of the interesting points in the five cities was the excessive attention paid to physical development in isolation from socio-economic development, and the way in which cities were considered as places separated from their rural hinterlands.

It was considered that by conducting an intensive investigation in one of the medium cities and by examining the relationships with its rural hinterland, the researcher would be able to determine the potential, function and impact of sectoral intervention by the government on agriculture in the rural-urban interface in the post-revolutionary era. The rationale for a field survey was that the information necessary for this research has not been available and the secondary data on related aspects were considered inadequate. Due to the lack of an integrated data base, it is almost impossible to carry out any research in the field of urban and regional planning without a primary survey.

It was, therefore, decided to conduct a field survey in the study area to collect primary and secondary data in a manner which can be used for both quantitative and qualitative analyses. It is important to have a good understanding of the survey area and its people before embarking on any formal questionnaire interviewing method (Moser & Kelton, 1971). Thus, in the summer of 1993 the researcher had the chance to conduct a pilot survey. The main intention behind the pilot survey was to select the survey locations within Amol city and to contact their local authorities to gather an overall impression about the local administrative role, power and support which could be used for personal interviewing.

3.2. Household Surveys in Amol

The questionnaire surveys were the most important part of the fieldwork which was implemented during the summer of 1994. Among the various data collection methods, the 'formal questionnaire interviewing method' was chosen for this research. In this type of interview a set of pre-formulated questions are asked and the answers are recorded in a standard form known as the questionnaire. For

the present study, three types of questionnaires were prepared, and according to the aims of the research, the informants were households, commercial enterprises and commuters respectively.

3.2.1. The Household Survey

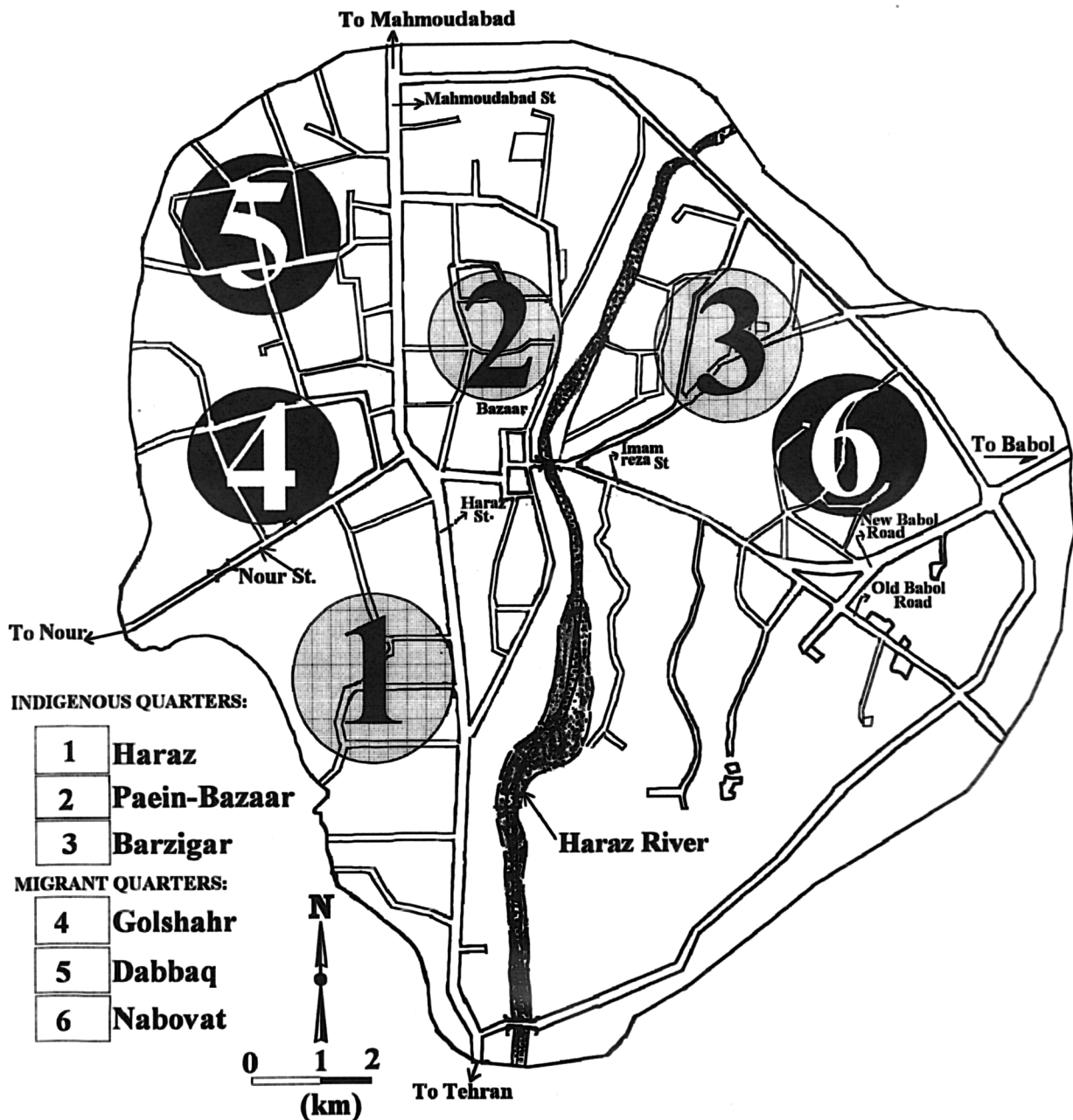
The main reason behind the household survey was to have information about the socio-economic characteristics of the residents in selected residential areas. These data could help the researcher to understand the reasons for the similarities and differences among the Amol's residents' standard of living and lifestyle. This information could be used as a base to be compared with national census data so as to analyse the current changes in the city. Two types of residential quarters were recognised: indigenous and migrants' neighbourhoods (Fig 3.1). The next step was the selection of the survey areas. The information from the pilot study and the assistance of Amol's Municipality staff and planners were a great help in the selection of suitable survey quarters, which distinguished indigenous and migrant quarters and reflected the range in housing quality between them.

3.2.1.1. Indigenous areas

According to common recognition (planners and custom), an indigenous quarter is the neighbourhood in which most of its residents had lived for more than twenty years. For this purpose three quarters in different parts of the city were selected with respect to the income level of the residents (low, middle and high income). This aimed to avoid bias towards a particular income group. Amol city is divided into two sections by the Haraz river, and the majority of the city's

residents live in the western part. For this reason, two of the selected quarters were deliberately chosen from the western part of the city (Fig 3.1).

Figure 3.1: The Location of Selected Residential Quarters



1- Haraz Mahalleh (quarter)

This quarter is located at the southern edge of the city where the highest income groups of Amol live at moderate to low density. As Fig 3.2 shows this area is adjacent to Imam Khomainsi street. Most of the dwellings are large and constructed by modern methods. Until early 1970 the area was occupied by citrus orchards and rice-fields; the increased commercial role in the central part of Amol led to the movement of many wealthy businessmen to this area (inter-urban mobility) and gradually with the concentration of these groups, other higher income classes (the higher educated, such as lawyers, engineers, doctors....) were added to them. This quarter's green spaces and boulevard-like avenues distinguish it from other parts of the city.

2- Paein Bazaar Mahalleh

Paein Bazaar is one of the oldest areas of Amol with the highest population density and is located in the central part close to the Bazaar where the middle and lower middle classes live together. Many of the middle class households have the financial ability to move to the southern part but prefer to stay in this quarter, because of ease of access to their work places, the Bazaar and nearby administrative offices. The buildings here present the traditional architecture of the region. The narrow and stone-paved alleys with dead-ends are a common feature of these areas beside the Bazaar and other historical buildings. Although the residents have easy access to shopping centres and public utilities such as public baths, the Friday mosque, medical centres, banks, educational institutions and so on, it is relatively inaccessible to modern emergency services; it remains a pedestrian neighbourhood (Figure 3.3).

Figure 3.2: The Location of Haraz Mahalleh

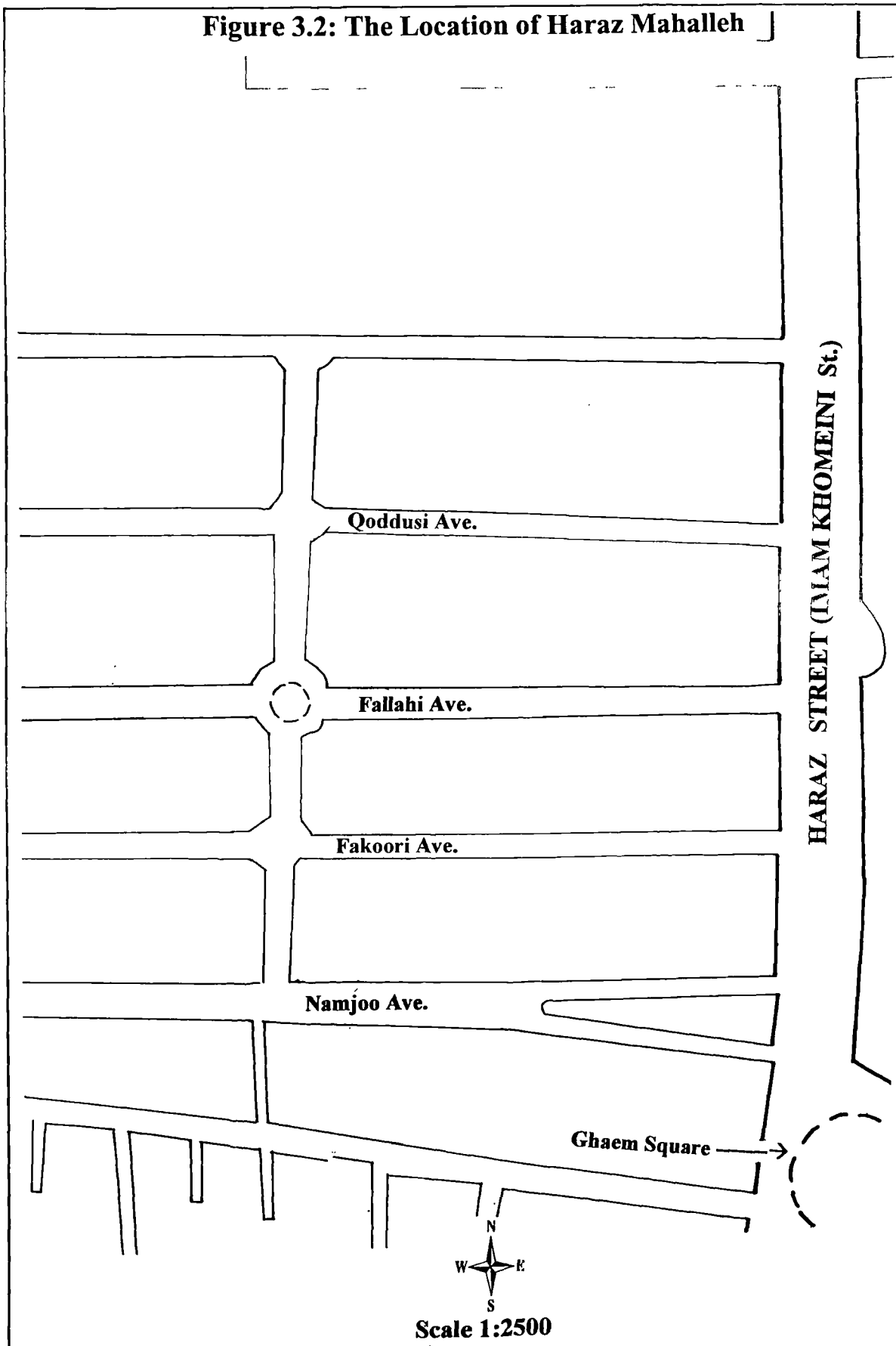
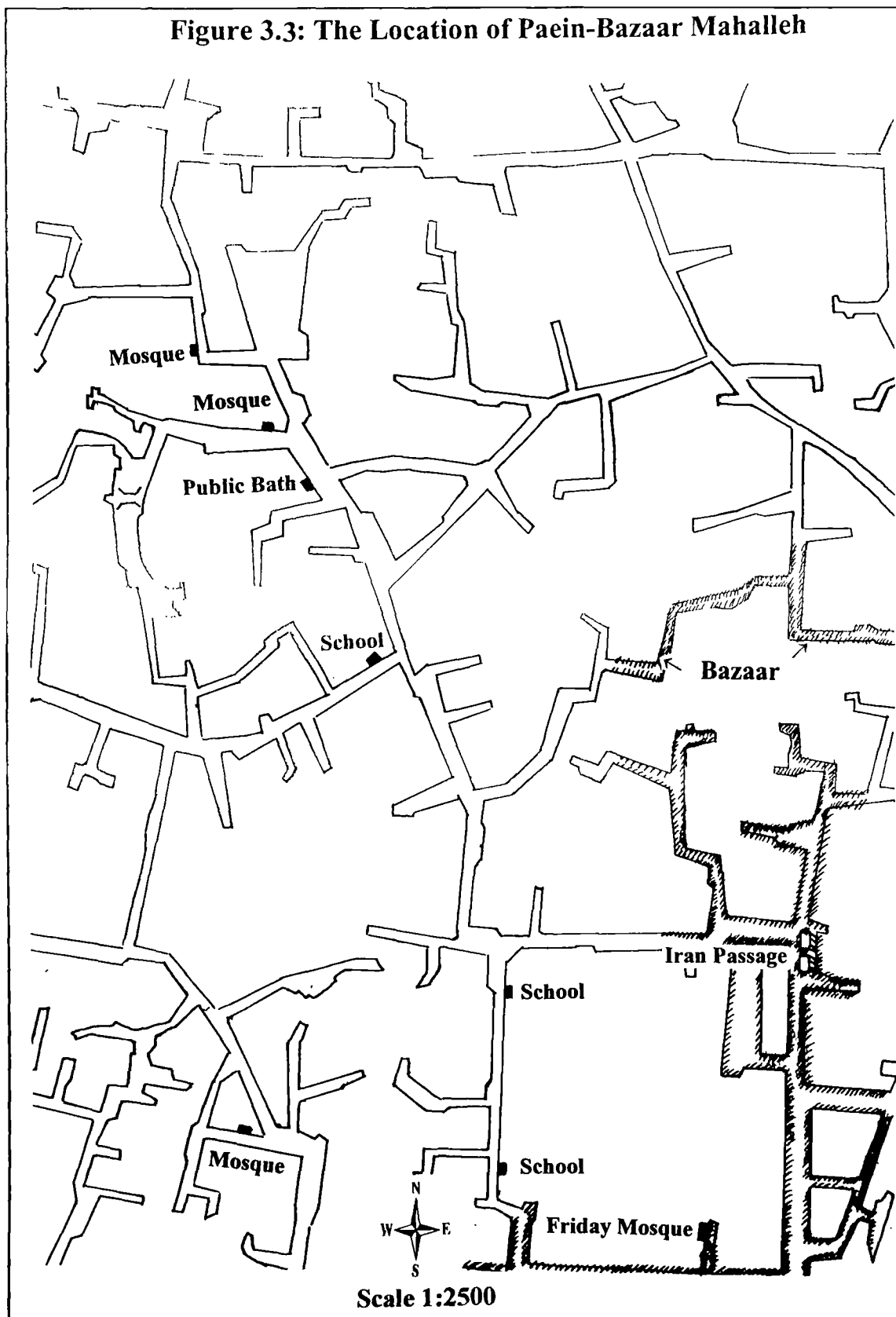


Figure 3.3: The Location of Paein-Bazaar Mahalleh



3- Barzigar Mahalleh

The third quarter was chosen in the eastern part of the city (Fig 3.4). The word 'Barzigar' means 'peasant' in Persian; the residents of this area are the migrants of the mid 1960s who moved from different parts of the township in the pre-revolutionary era. The families of this area are a mixture of low-paid government employees, some middle rank traders and self-employed workers. The residential dwellings are a mix of traditional and new architecture, in fact most buildings have been renewed. The centre of the quarter is relatively inaccessible by modern transport, while towards the edges more space is appropriated for public thorough fares.

3.2.1.2 Migrant quarters

In this study a migrant quarter is a neighbourhood whose residents arrived after the Revolution. Some valuable information from the Municipality helped in the selection of migrant areas and the help of urban planners was especially useful in the investigation of newly developed areas. In this regard three quarters were chosen according to their different income class; two of these neighbourhoods are located in the west part of the city and the last one was allocated to the eastern section.

5- Dabbaq-e-Chal Mahalleh

Dabbaq-e-Chal neighbourhood is located in the north west of the city close to Mahmoudabad street (Fig 3.1; 3.5). This area was under rice cultivation until mid 1975 which was later replaced by citrus orchards; it was outside the city

Figure 3.4: The Location of Barzigar Mahalleh

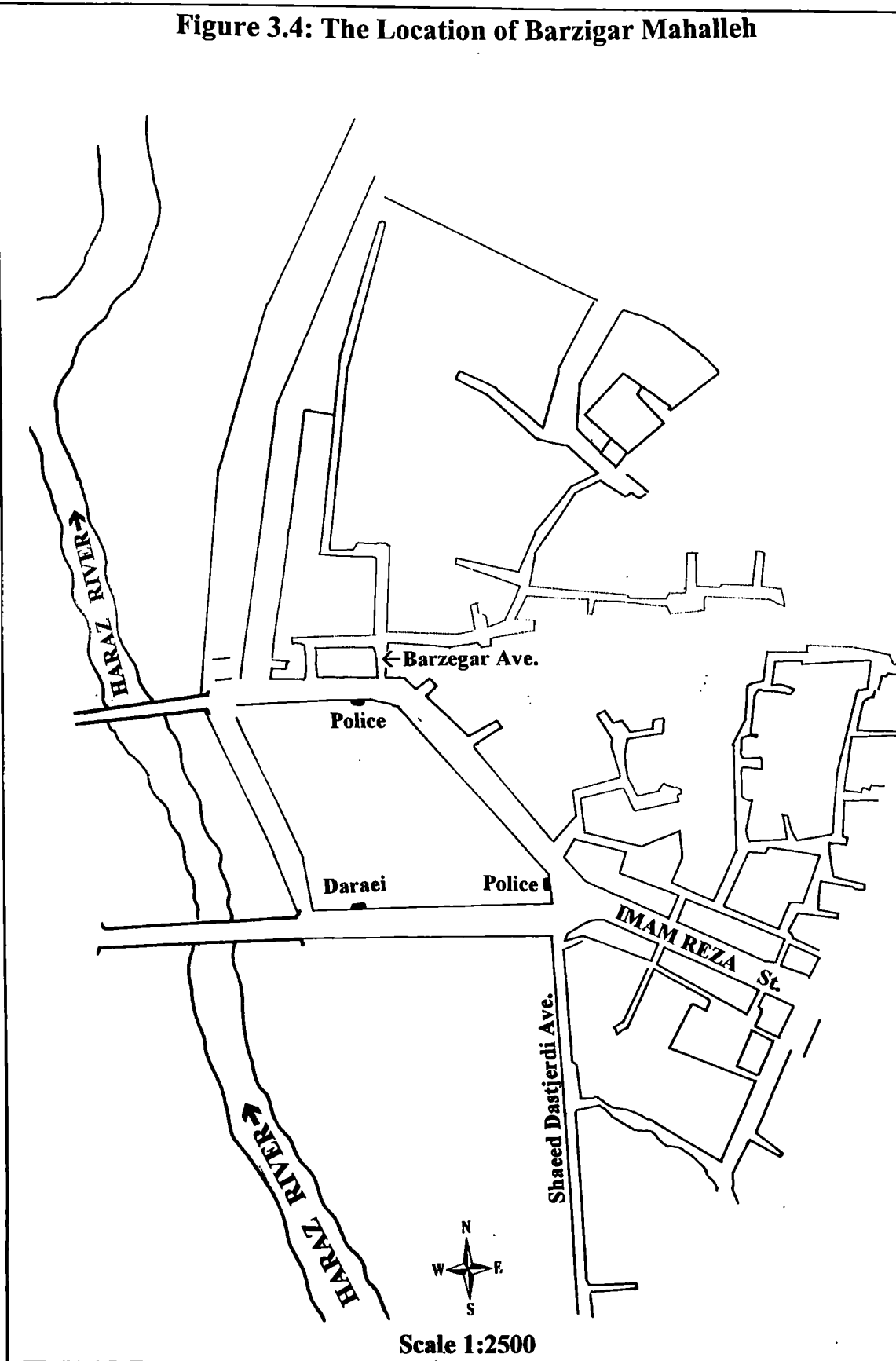
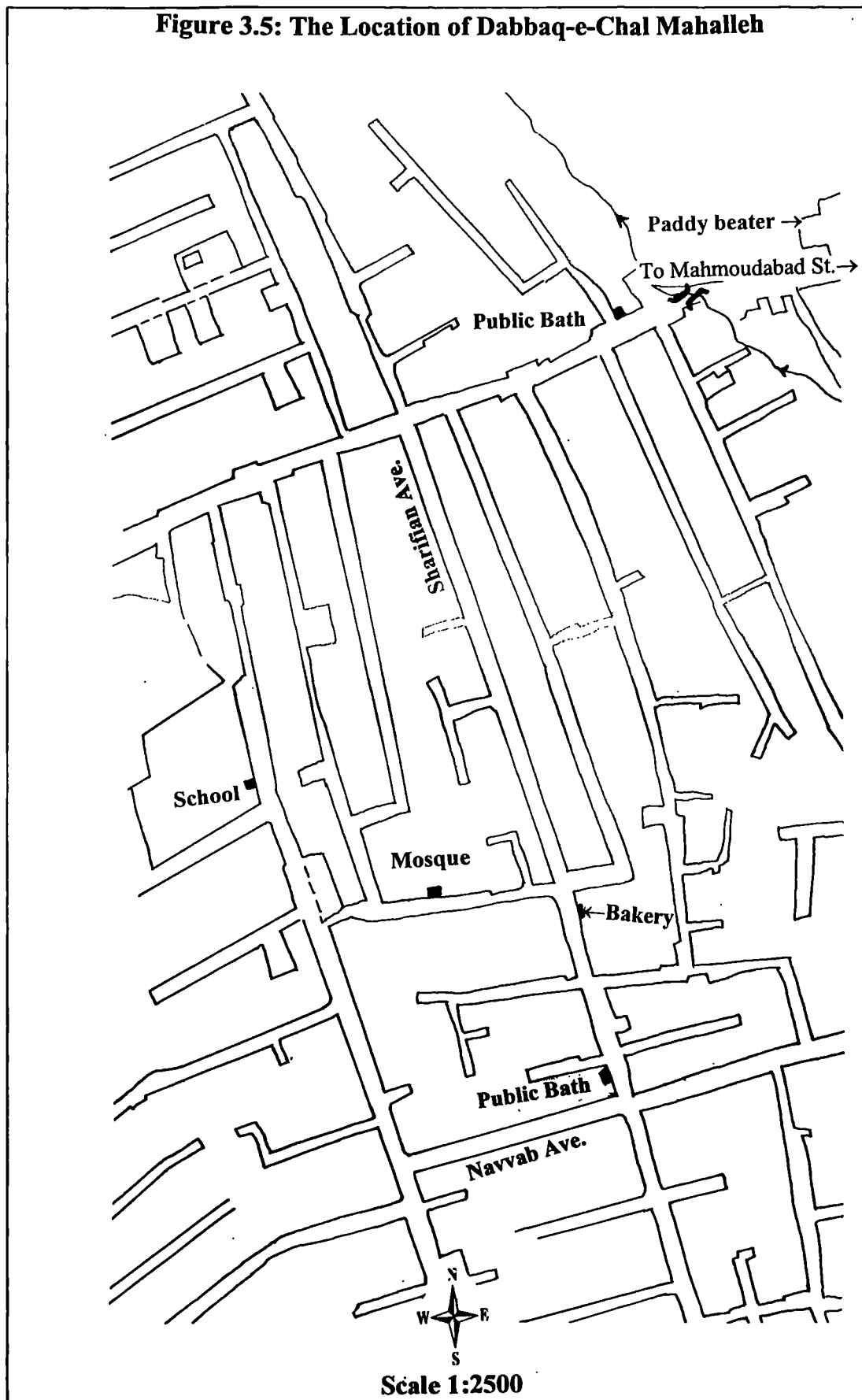


Figure 3.5: The Location of Dabbaq-e-Chal Mahalleh



borders. Until the implementation of Amol Master Plan, this area consisted of small residential buildings constructed by a few wealthy people; these were sold to rural migrants. After the revolution, many land owners realised that large properties would be expropriated by the Urban Land Office, and thus many plots were sold to rural migrants, who constructed shelters with low quality building materials regardless of the urban housing standards. The migrants generally came from plain villages and survived on urban casual work and rural incomes; they have lower incomes compared to the other areas of the city.

4- Golshahr Fifth Avenue

This neighbourhood is located between the Haraz and Dabbaq-e-Chal quarters. The reason for the selection of this area was that most of the migrants came from the mountainous and plain districts of Nour and Amol township. As Fig 3.1 and 3.6 illustrate, the neighbourhood is adjacent to Nour street. The income composition is a mixture of middle and lower middle groups who are employed in small scale commercial work in retail shops. Two main rural bus stations are located in Nour street which provide more active rural and urban exchanges compared to other areas. For this reason this quarter is relatively richer than Dabbaq-e-Chal. The buildings are more standardised than the previous quarter.

6- Nabovat Mahalleh

Nabovat is a new developed area in the north east (Fig 3.1 and 3.7). This area was chosen to represent state interventionism. Most of the buildings were constructed in mid 1986; the area belonged to the Urban Land Office who distributed it among the low and middle paid workers of the private and state-

Figure 3.6: The Location of Golshahr Mahalleh

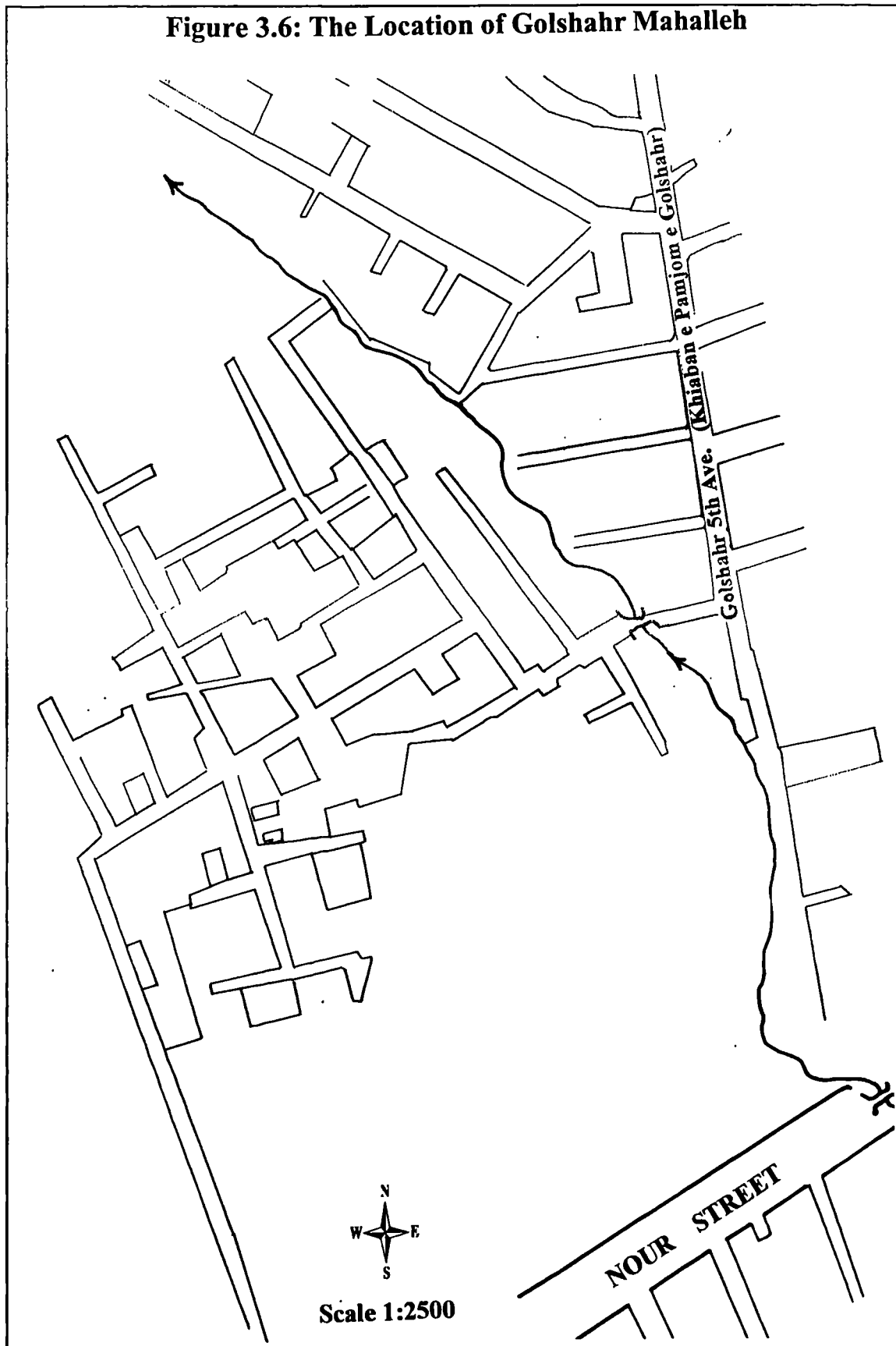
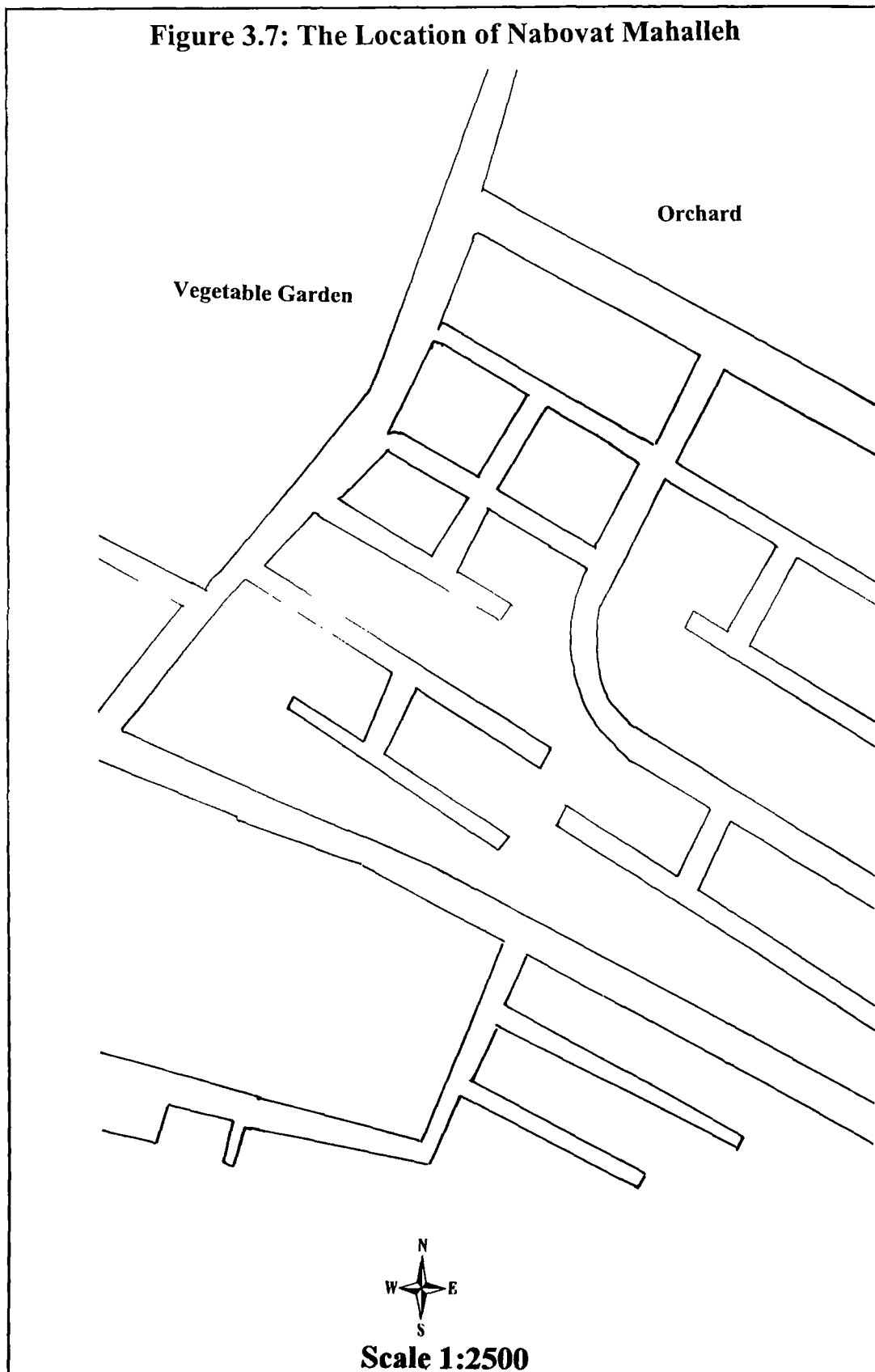


Figure 3.7: The Location of Nabovat Mahalleh



sectors because of the housing shortage. This area has a moderate density and includes orchards and vegetable gardens which employ many of the quarter's residents (Fig 3.7).

The settlement still lacks basic public facilities (surfaced streets, shopping centre etc.) but local planners predicted that the speed of expansion will be high with the development of infrastructure (Author's survey, 1994). Also the fact that the price of land is generally lower in the eastern part is due to remoteness from the city centre, as most of the administrative buildings and Bazaar are located in the western part; this also contributes to its growth.

3.3. Assessing rural-urban interaction

As stated, one of the main interests of this research is to evaluate the influence of an urban place such as Amol on its rural hinterland and in turn, how rural producers and consumers are important for the city. To achieve these purposes two types of questions were conducted in commercial units and the rural Bus Stations respectively.

3.3.1. commercial units

The commercial units of Amol consisted of the Bazaar, retail market and day markets. Three types of questionnaires were conducted in the commercial centres of the city to understand and investigate the function of the city and to what extent these centres interact with the rural hinterland.

A- The Bazaar

The Bazaar is one of the main shopping centres in Middle Eastern cities. Bazaars not only perform an economic function, but also the power of the Bazaar entrepreneurs is significant in the political and social life of these societies. Amol's Bazaar is located in the heart of the city beside the Friday Mosque, and in contrast to those of the central plateau of Iran, consists of uncovered passageways, without domes or vaults because of the moderate climate of the region.

The commercial units are usually one storey except for the new formed Pasaaj (multi-storey department stores) in three avenues; some of the activities are concentrated in a certain place as *Rasteh*, such as Zargari Rasteh (jewellery shops). However with the expansion of shops and stores in the main streets, the commercial units became more diverse.

B- Retail shops

The commercial function of Amol is not limited to the Bazaar; with the growth of the city, many shops and stores emerged along the four main streets, and even in the residential quarters. The function of these units is different to those of the Bazaar. Many of these units sell foodstuffs and include confectioners, butchers, bakers and are associated with services such as photographers, barbers, and chemists, etc. which are rarely found in the Bazaar.

C- Day Markets (Bazaar Rooz)

Day markets are the most common sources for fresh vegetables, fish, poultry and dairy products which are brought to the city on a daily base by rural producers. The number of markets has increased during the last few years due to urban growth and the increase of agricultural products, both in quantity and variety, so suppliers are able to make greater profits. Since these markets are run by villagers and the role of them in the urban economy was of key interest, four markets, of which three were in the western part of the city and one in the east, were selected.

3.3.2. Rural-urban Bus Station Survey

Rural-urban interactions are central to this research, especially to the evaluation of their effect on the urban economy and the influence of such relationships on city development. The only way to approach the rural residents was to interview the passengers at the bus station. The interviews took place at different times of the day so as to avoid being biased to certain groups. Therefore, since Amol has four main stations serving its hinterland, 40 questionnaires were distributed at each station.

3.3.3. Industrial units

Interviews were carried out with the manager and other personnel of industrial firms to ascertain their origin, products, scale and its links in the area. Eight units of fourteen main factories were visited (Appendix 3.6).

3.4. Survey administration

In urban and regional studies, like other areas of investigation, a whole population cannot be investigated. Complete cover can be a waste of time, money and effort because comparable and accurate results can also be obtained using a sample. Sampling theory concerns the development of ways in which practical information may be acquired efficiently and with validity.

3.4.1. Sampling procedure

In this research both systematic and random sampling were used in the household and commercial surveys (Hammond, and McCullagh, 1978). A systematic sample gives a more uniform cover of population. Since the latest map of the city was drawn in 1988, and many changes had taken place in different areas, especially in the migrant quarters by the time of the survey, the author used the number of each dwelling which was coded at the time of survey by the Municipality of Amol.

The reasons and rationale for choosing the different residential quarters have already been explained. After selecting the survey quarters, it was decided to select 7% of all dwellings, which yielded 293 dwellings in the indigenous areas

and 146 units in the three migrants' quarters. There was a 89.4 percent response rate (Table 3.1).

Table 3.1: The distribution of household samples in residential areas of Amol.

Indigenous quarters	No of houses	No of sample	No of interviews	Migrant quarters	No of houses	No of sample	No of interviews
Haraz	1382	97	85	Dabbaq	707	49	41(48*)
Paein-Baz.	1399	98	92	Golshahr	698	49	43(49)
Barzigar	1402	98	95	Nabovat	685	48	41(48)
Total	4183	293	272	Total	2085	146	125

*-No of households

The structure of the questionnaires varied (Appendix: 3.1). The first part of the indigenous household questionnaire dealt with the household's composition by sex and age and ascertained literacy, employment status and the household's head's income. The second part was related to housing characteristics.

The migrant household questionnaire was designed in three parts; the first section was concerned with the household's personal conditions and the second asked questions about their place of origin, its distance from Amol, their jobs, and motives for migration and in the third part, the migrant's housing characteristics were ascertained (Appendix 3.2).

The commercial questionnaires (Bazaar, Retail shops, Day markets) were limited to 10 questions which ascertained their function, tenureship, size of units, customers, and the places of supply (Appendix: 3.3; 3.4). Again the number of

commercial units in the Bazaar and in the four streets was obtained from the Municipality. In the Bazaar it was decided to interview 60 percent of the 500 commercial units systematically, while in each of the three avenues, 100 questionnaires were distributed.

The number of retail units was not available for the four main streets and so the research team counted the shops (Haraz, 98; Mahmoudabad 102; Nour, 111; Imam-Reza, 99) Then it was decided that 40 percent of shops in each street, totalling 160 units, would be interviewed.

Another type of commercial centre was the day market; from seven day markets in the city, four of them were selected for detail study. Since the sellers of these markets did not pay tax to the Municipality and also many of them had no fixed place in the market, there was not any official information about their number and function.

Thus a plan of each market was drawn by the author and the sites of the sellers were marked on it. Then a stratified random sampling was employed. The total sellers were sub-divided into five sections (vegetable, fruit, dairy products, poultry and fish) and in each section four samples were taken, yielding a total number of samples of 20. Also it was important to ask question from the customers, so in each market, 20 customers were interviewed at different hours (Appendix: 3.5). The busiest times in day market was between 7am to 11am and most of the interviews took place between these hours.

Rural-urban interaction and the influence of rural economy on the city was one of main interests of this research. For such purposes the only way to approach the rural population was at the rural Bus Stations in Amol. The Bus Station questionnaires were designed to be short because of the limitations on time of rural passengers at the stations. It was focused on passengers who were living in a village. The busiest time was in the evening when rural people were returning home. In each station 40 questionnaires were completed at two times a day, in the morning between 7-8 a.m. (work officially starts at 8 a.m. and ends at 2 p.m. and in some offices 4 p.m. in Iran) and in the evening between 4-5 p.m.

The role of industrial firms for employment opportunities and their impact on urban growth in the city was another important issue for the study. The industrial units' questionnaire was carried out in 8 factories; 6 managers of 14 factories refused to be interviewed. The main purposes were to obtain information concerning the size of the firm and the number of workers according to their origin (rural-urban) and sex, the problem and future plan regarding the provision of raw materials and marketing.

3.4.2. Survey implementation

The questionnaires were administrated by a research team of six people who were taught by the author and carried out a probationary interview. The interviewers were supervised during the survey and all questionnaires were revised (involving a number of questions being dropped) and edited at the end of each survey. All interviewers were introduced by their name, address and task so as to assure the residents that this survey was not related to any government agency and that the purpose of the survey was strictly academic, thus preventing any

misunderstanding. In contrast to the author's expectation, the middle and poor class quarters co-operated better than high class income neighbourhoods, which sometimes caused a delay in the timetable. Despite the interviewer's introduction about the work, households of the high income group had doubts about the legitimacy of the interview, on a number of occasions fearing that they might lead to robbery after checking the household property. The interviewer had to present a letter (confirmation) from the Local Police Station which was effective.

3.4.3. Data Quality

Since the data collected for this study concerned different subjects, a number of analytic methods was used. The data were entered on a mainframe computer and analysed by using the Excel program. The data were summarised for descriptive statistics, including means, ranges, percentages and others, and presented in qualitative and quantitative formats by means of graphs, charts and frequency tables.

To analyse the socio-economic characteristics of urban households in indigenous and migrant quarters, descriptive statistics are used to gauge similarities, differences and associations in a number of variables in the two types of neighbourhoods and to classify the nature, degree and frequency of rural-urban interactions. The chi-square (χ^2) analysis was applied to test for statistical significance and comparison of results in the commercial units and bus stations survey in four stations. Since a major part of data were nominal and ordinal it was appropriated to use nonparametric methods (Ott et al, 1992).

The results of spatial study of the city and hinterland was analysed and illustrated directly by drawing maps using the Paintbrush programme. The fluctuations of rural-urban interaction during different seasons and the distribution of different income groups in Amol city were also mapped.

CHAPTER: 4

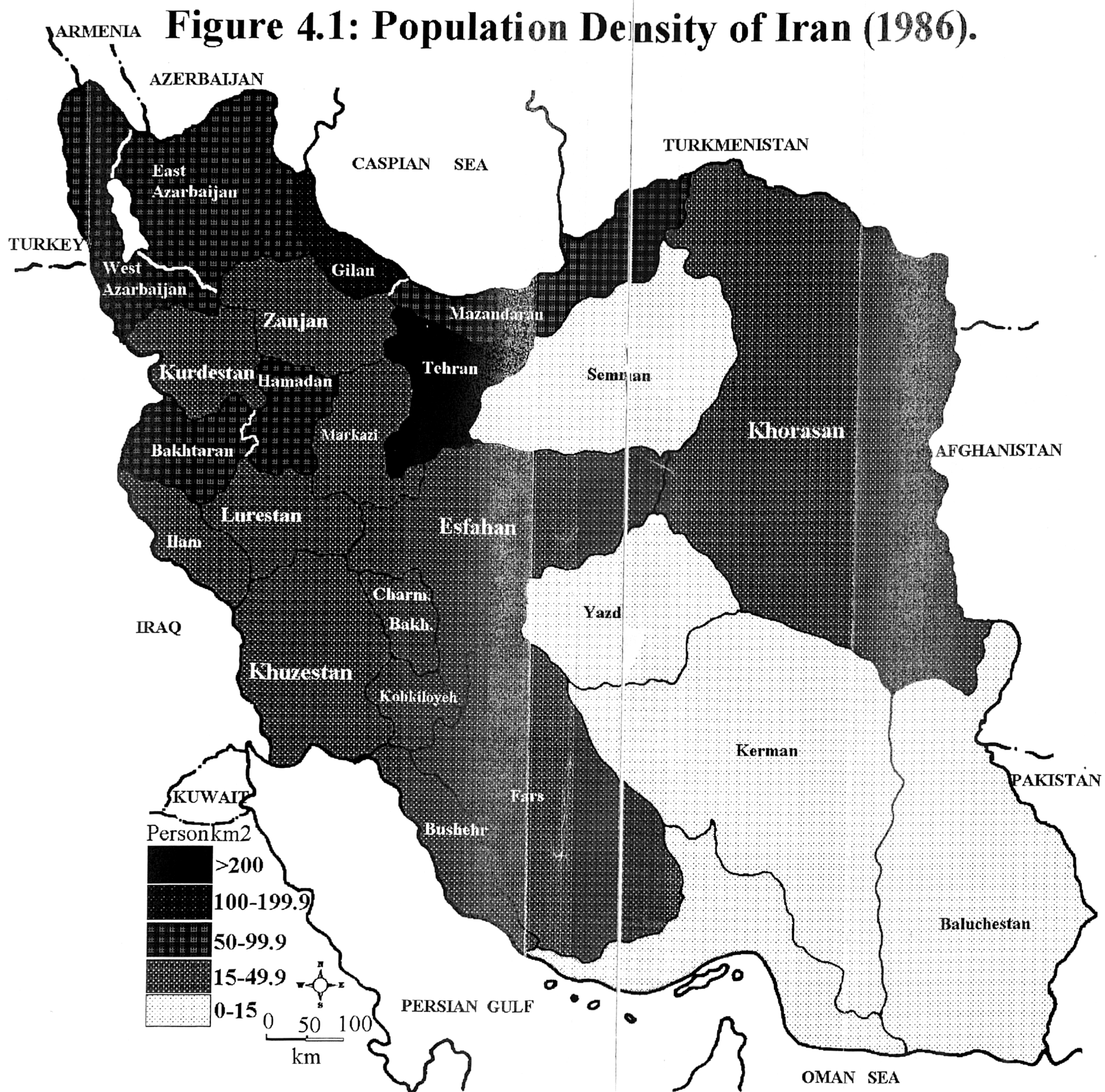
URBANISATION PROCESS IN IRAN

Introduction

Despite some similarities to the European urbanisation process, one cannot assume that it has been the same in Third World countries. The level and degree of urbanisation varies between DCs and to a large extent is dependent on the economic, political and social parameters of a nation. Also, the role of policy-makers, the state and other agencies, has been crucial in shaping the development trajectory which influences the urbanisation trend.

This chapter focuses on the urbanisation process (causes and consequences) in Iran, considering the spatial and administrative structures. Since urban growth has its roots in the historical events of Iran's political system, it is proper to examine the main general geographical characteristics and structure of the political systems (the Monarchy and the Islamic Republic) in the pre and post-Revolutionary periods.

Iran is a country of 1,648,000 square kilometres in the Middle East. Geographically it presents a unique geopolitical location; the map of Iran (Fig 4.1) depicts a square distorted towards the west. Iran shares frontiers with more than ten countries by land and via water. Its northern neighbours are Armenia, Azerbaijan and Turkmenistan; the eastern countries of Afghanistan and Pakistan are other neighbours. Turkey, Iraq and Kuwait share their borders with Iran in the west. Iran's longest border is on the Persian Gulf where it faces Saudi Arabia and the other Gulf states. At least 50 percent of the total land of Iran is desert, with much of it being in the centre of the country (Statistical Centre of Iran [SCI],



1991). The central massif of the country is isolated by massive mountain ranges on all sides.

In terms of physical structure and climatic conditions, there are four different large regions: the shoreline of the Persian Gulf in the south; the Albourz (with EW direction in the north) and Zagros (with NW-SW in the west) mountain chains, the central high plateau; and finally, the shores of the Caspian Sea in the north.

The population lives on about 15 percent of the total area and is concentrated mainly around the west, south and northern parts of the country where the climate is mostly humid or semi-arid compared to the desert in the south east and central parts of the country.

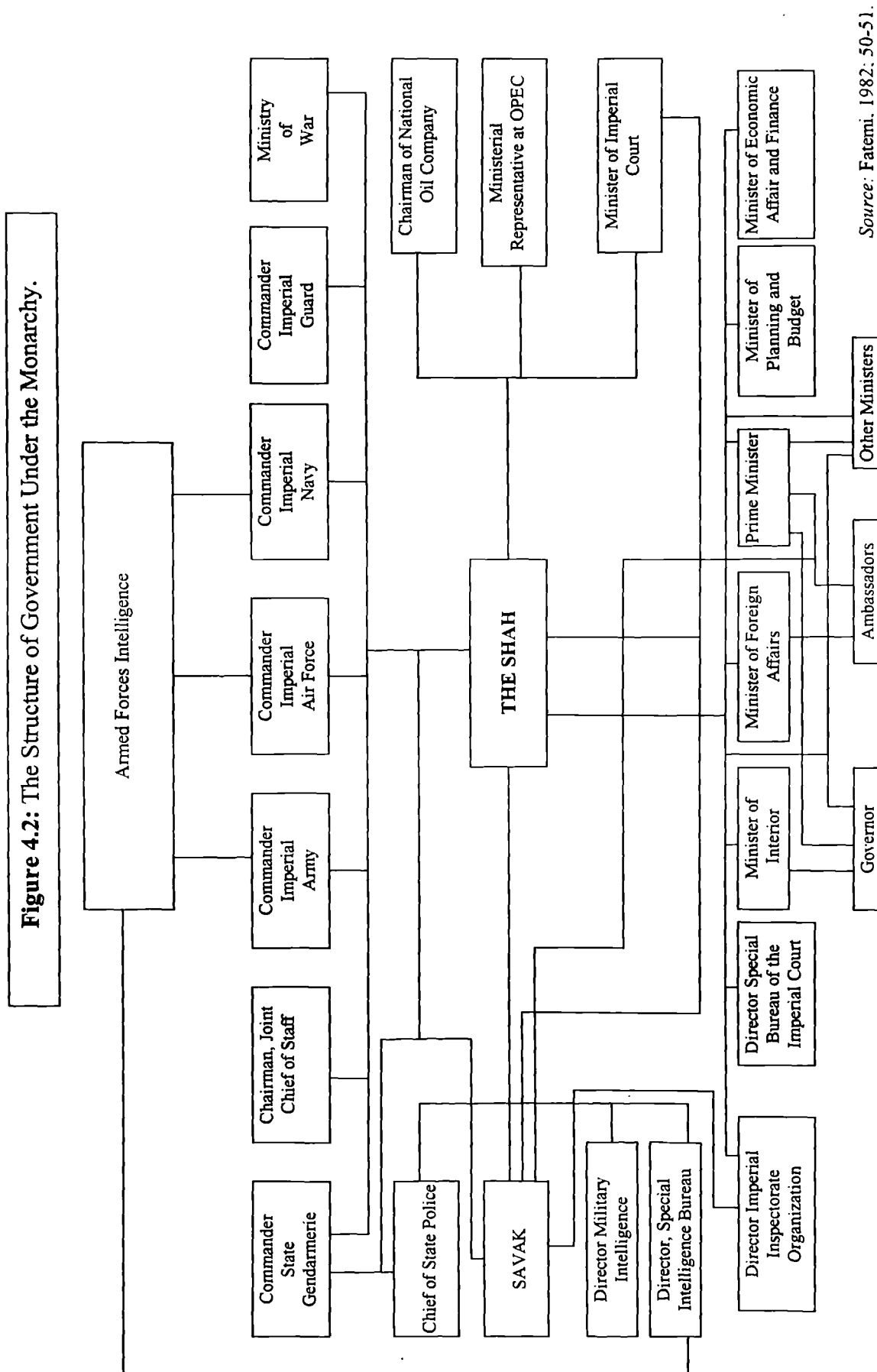
The degree and level of urbanisation has been directly stimulated by the different governments of the pre and post-revolutionary periods. State service delivery under the Monarchy operated according to a centralised administrative system in which all parts of the country did not receive an equal share of the development process. While the Islamic Government's different ideological belief gave priority primarily to the deprived classes and areas, in practice the aftermath of eight years of war and economic difficulties associated with the revolution retarded the development process in which agriculture grew more than other sectors. Therefore, it is proper to consider the government structure in the two periods to show how the state applied its power to maintain economic growth.

4.1. Iran's Political System (government structure)

4.1.1. The pre-Revolutionary monarchy

Iran had been a kingdom for 2500 years; the last chief of state, the Shah succeeded his father in 1941. But in February 1979 the fifty years old Pahlavi regime collapsed after a popular uprising. Here, we review the main characteristics of the government structure of the monarchy system. The government was divided into three separate units: the executive, legislative and judicial. Fig 4.2 shows the structure of this monarchy government. The Parliament (Majlis) was the independent legislative unit to which 268 members were selected every four years. There were 21 ministries; within each a deputy minister directed the civil service staff, and the departments were administrated by a director-general (Fatemi, 1982; Abbott, 1977).

Iran was divided into Ostans (provinces) for administrative purposes. Every Ostan council was under the control of a Governor-General (Ostandar), who was appointed by the Shah on the recommendation of the Minister of the Interior, and was composed of two representatives appointed by each township (shahrestan) council. Members of township councils were elected by the people of the districts, and had 15-20 members depending on their size. The council was headed by a township-governor (Farmandar) who was appointed by the Governor-general (Ostandar). City (Shahr) councils were also elected by the people and consisted of up to 30 councillors depending on their size. The city mayor (Shahrdar) was controlled by the council, the Governor-General and by the Ministry of the Interior.



Therefore, administration in Iran was highly centralised and policies were initiated or inspired, directly or indirectly by the Shah (King), who was advised by the Supreme Economic Council of Cabinet Ministers. The Ostandar's responsibility was nominally to execute actions of the state within his province. Basically, a hierarchical order was the main characteristic of government structure. The Constitution was an artificial element and served as a point of reference when convenient (Graham, 1978). In practice there was no difference between the executive authority of the Shah and the independent legislators. In fact the Shah was the head of all three units of government and was also the commander of the Armed forces. This organisational structure was sustained mainly to protect the Shah and his throne from any threats, such as military action and strong political rivals within his own organisation (Fatemi, 1982).

The government controlled the mass media and there was only one official political party, which was subservient to the monarch (Bakhash, 1985). The main concern of the Shah was with the military and the oil industry; the Shah's dream was to transform Iran into one of the world's five major conventional military powers. The 1973 explosion in oil prices enabled the regime to establish an armed force with modern weapons, but over-spending of the Petro-dollars on military equipment created problems in logistical maintenance and training which were beyond the country's capacity.

Iran was a relatively decentralised state in which several groups had had considerable power and autonomy prior to the late regime. Oil income, its growth and relations with the oil consuming West reinforced the trend towards centralisation which will be discussed later. The Shah's approach to economic modernisation favoured the rich over the poor, the big over the small enterprises in

both industry and agriculture, and the urban over the rural population. The Reform Programmes of 1962 was deemed the only way to tackle the problems of rural poverty, which will be discussed later. Therefore the way in which oil incomes were handled in Iran intensified the economic and cultural split between two cultures: the rich who had been influenced by western experts and cultures, and the poor, the traditional (religious), and the bazaar classes (merchants, money lenders and artisans) (Holliday, 1979; Bakhash, 1985; Bill, 1982).

The collapse of the monarchical system has been attributed to a number of factors. First, the rapid modernisation policies alienated large parts of traditional Iranian society, such as the clergy and bazaar merchants, because modernisation plans (through National Development Plans and Reform Programmes) were mainly concerned with industrial development and sought to westernise traditional society. Secondly, strategic and military considerations made Iran highly dependent on the United States, which in Iranian religious ideology was perceived as an invasion and enslavement of Islam and Iran; the presence of western culture was never welcomed, being described by the revolution's leader (Imam Khomeini) as a "document of enslavement for Islam and the holy Quran and hence is illegal". He continued that "the world must know that all the difficulties faced by the Iranian nation and Muslim people are because of aliens, because of America ..." (IPO, 1991: 104). Therefore, American influence in Iran (politically and economically) increased the political opposition and was at the roots of the Revolution. Some believe that it was the Shah's organisation of his system that stimulated the Iranian Revolution in 1979 (Fatemi, 1982).

4.1.2 Islamic Republic (post-Revolutionary)

The Islamic Republic is also based on a parliamentary system and follows the same principle of separating executive, judicial, and legislative powers for the administration of the country. But this system operates within an Islamic legal framework. The Islamic Republic was established by a referendum in which 98.2 percent of the votes were in favour (Bakhash, 1985). The constitution was approved firstly by the Majlis Khobregan (Assembly of Experts) and then was ratified in a referendum which won the 99.5 percent of the votes (Ramazani, 1980). This constitution, directly influenced by Islamic laws, has been in force in Iran from the establishment of the Republican Government, although there have been some amendments.

Iran is run under the leadership of religious jurists; principle two of the Constitution says the Islamic Republic is "a system based on the belief in religious leadership and continuous guidance, and its fundamental role in the permanency of Islam's Revolution". The fifth Principle states that during "the absence of the Glorious Lord of the Age (the missing 12th Imam of the Shi'ite sect) the government and leadership of the nation devolve upon the just and pious Valie Faquih who is acquainted with the circumstances of his age; courageous, resourceful and accepted as leader by the majority of the people" (IPO, 1994).

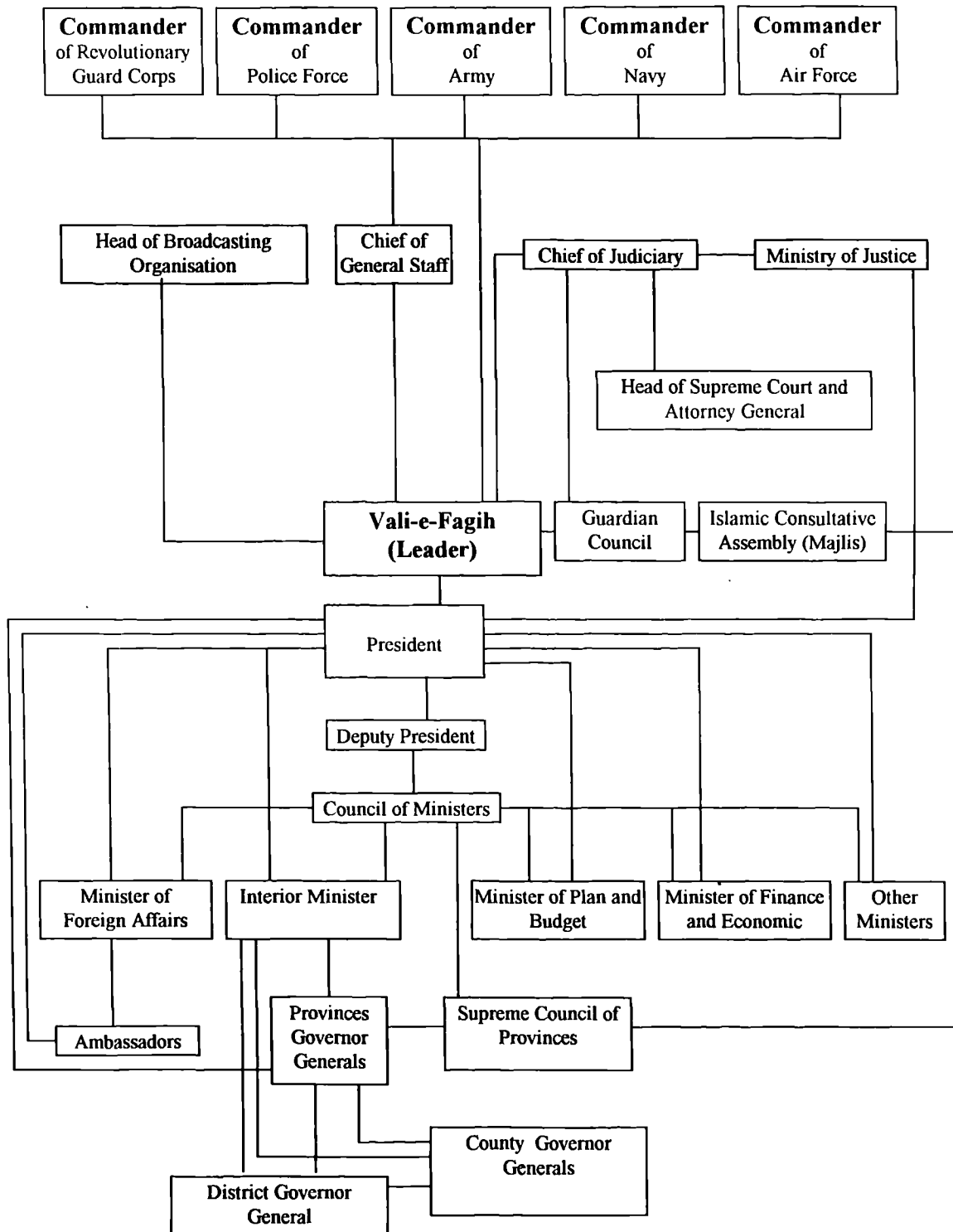
The duties of the Leader are described by Principle 110 of the constitution. He is the commander-in-chief of the armed forces, and has authority to appoint or dismiss the chief of the General Staff and the Commanders of the Military's three branches as well as the Islamic Revolutionary Guards Corps, and to declare war or peace. He has the authority to approve the president on his election, or dismiss

him if the Supreme Court has found him politically incompetent or in violation of his legal duties towards the Islamic Consultative Assembly (Majlis). He has also the right to appoint the Chief Judiciary power and the Islamic Jurists on the Council of Guardians. Therefore, the Leader is placed between the Chief Justice and the Head of State.

After the office of Leadership, the President is the highest official in the country (Fig 4.3). He is responsible for the implementation of the Constitution, co-ordinating the three State powers, and acting as the Head of the Executive, except in matters directly concerned with the Leadership. The President is elected for a four-year term by the direct vote of the people and may be re-elected for only one successive term. He has a First Deputy and several other deputies. The President is responsible to the Majlis for the action of the Council of Ministers. Each Minister is responsible to the Majlis and president for his own special duties (article; 113-120). Figure 4.4 demonstrates the administrative structure of the Islamic Republic.

The first Islamic Consultative Assembly (Majlis Shora-e-Islami) was elected in 1980. The Majlis is the main Legislative power of the country, with 270 members which may be increased every ten years, in time with the increase in the country's population at the rate of one per 150,000 additional persons. All minority groups elect their representative to the Majlis (article, 62-64). The fifth election of Majlis took place in spring 1996, and the number of professional and educated deputies increased in comparison with the last election. The main characteristic of the post-revolutionary Majlis is the presence of many clergy.

Figure 4.3: The Government Structure of the Islamic Republic of Iran.



Source: The Constitution of Islamic Republic of Iran, 1991.

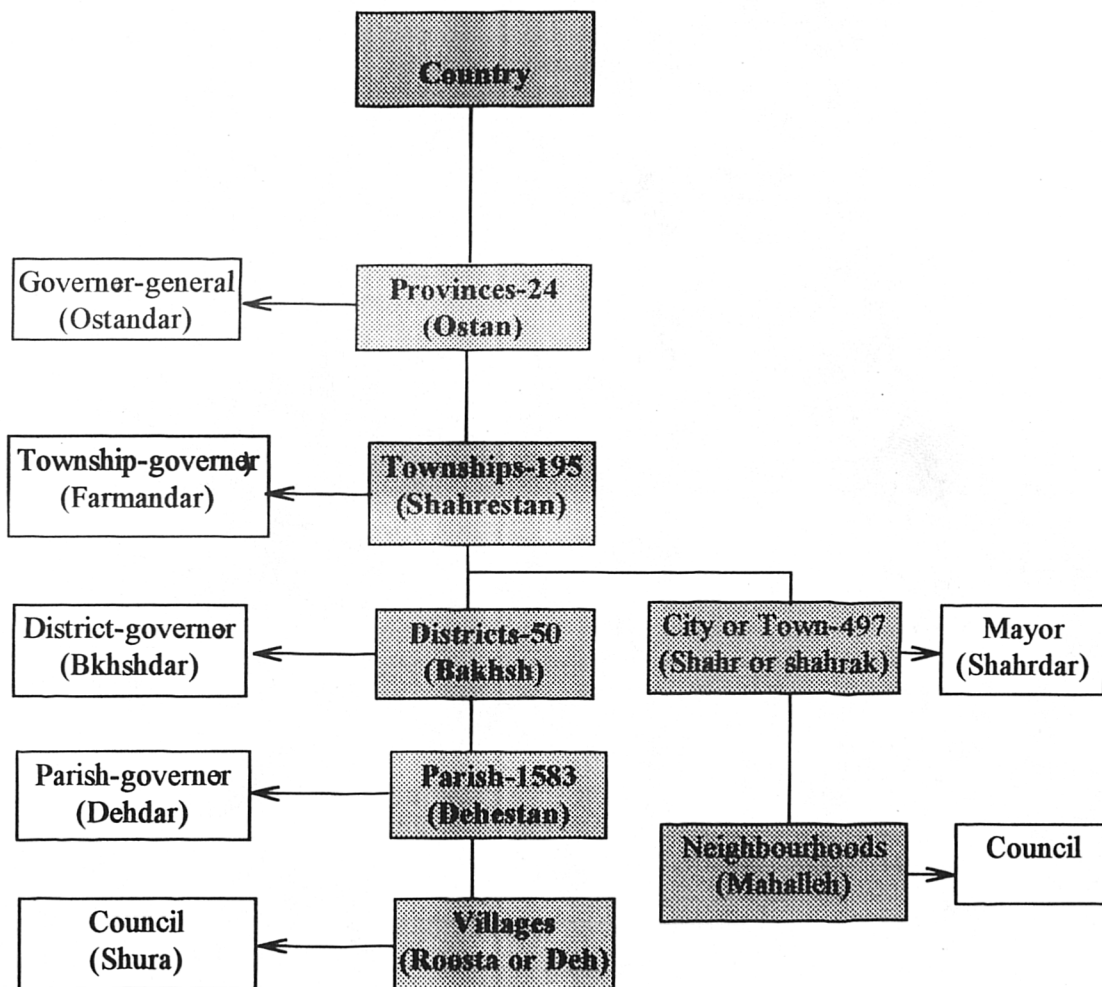
In order to expedite social, economic, development, public health, cultural, and educational programmes and facilitate other affairs relating to public welfare with the co-operation of the people according to local needs, the administration of each village, division, city, municipality, and province is supervised by a council. Members of each council are elected by the people of the locality in question. The Supreme Council of Provinces has the jurisdiction to draft bills and to submit them to the Majlis, either directly or through the government. These bills are then studied by the assembly (article, 100-106).

The administrative system is based on Ostans (provinces) and is hierarchical (Fig 4.4). The General-governors (Ostandar), township governors (Farmandar), district chiefs (Bakhshdar), and other authorities that are appointed by the government are obliged to obey the Council's decisions as long as they fall within the limits of the council's power. Although the government system is relatively centralised, the people are given more rights to involve themselves in decision making, by electing council members (e.g. from a small village to the large city). The nature of decision making in the post-revolutionary period is strongly dependent on the religious laws (sharih) which oblige Muslims to obey the government (Velayat Faqih). Religion is not a separate facet of their life, in fact the Islamic Revolution's main target was to practise the laws of Islam. Thus religious commitment is the main difference from the previous monarchy regime, rather than changes in the structure of government and centralisation.

4.2 Urbanisation in Iran

Urbanisation in Iran is one of the most conspicuous phenomena seen in the last three decades. During these periods the 'city' has changed on a basis of socio-

Figure 4.4: Administrative System of Iran, 1986.



economic transitions and what is termed as the urban problem is the main product of such trends.

Urbanisation in Iran is not a recent phase of life, and historically, there have been many famous cities before Islamic influence. The cities of Naishabour, Kerman, and Esfahan had relatively large populations and pre-Islamic elements (Soltanzadeh, 1983). These cities were built by different dynasties. Despite the destruction of these cities by the Moguls, other tribes or by natural disasters, today they are still large cities. Islam added some new elements to the Iranian cities, such as mosques and shrines, which in some cases have been the main stimulus for urban growth, like in Mashhad and Qom.

Contemporary urbanisation commenced in the 1920s, when the Pahlavi dynasty took power, which coincided with the introduction of the capitalist system and the integration of DCs into the world capitalist system. Since then the mechanisms of urban change and growth have differed in the pre and post-revolution, thus the urbanisation process will be discussed in two parts: first the period of 1920-1976 (the last national census of the monarchy took place in 1976) and the second the period of 1976-1996 of the Islamic government.

4.2.1. Urbanisation Trends 1920-1976

a). The emergence of capitalism and modernisation (1921-1961)

The economic and social structure was pre-capitalist, and the feudal system was the only form of land ownership in the early 1920s, while several groups had

autonomy at provincial level. After conferment of power on Reza Shah (king), his first task was to restore the authority of the central Government throughout the country, and then integrate Iran into the world economy by 'modernisation' programmes, in which the traditional mode of production had to be transformed to the capitalist.

The population of Iran was estimated at about 9.5 million in 1921 of whom only 20 percent lived in urban areas, and the annual natural growth fluctuated between 0.2-0.3 percent (Zanjani, 1986). The main economic surplus was provided by the agriculture sector.

Reza Shah started a series of modernisation programmes which imitated those of western societies. Modernisation in Iran, like in other DCs, was undertaken by the government because the private sector was not able to fund large industrial enterprises and there was substantial tariff protection against competition from overseas manufacturers. Modernisation was conceived as a change from a 'primitive' undifferentiated and pre-capitalist society to a modern differentiated and bureaucratically-rational social entity (Rimmer and Forbes, 1982). In fact, modernisation in Iran involved a handful of industrial activities (consumer industries such as textiles, food, construction) and the improvement of physical communication networks which were necessary for the connection of the internal market to the outside world. Some new administrative offices (Army, Ministries etc.) were added to the government structure. The government's total investments doubled in the modernisation programmes of 1938 compared to that of 1926, for instance; the length of the country's roads increased tenfold between 1926-1941 and the number of cars increased twenty six fold by 1945. The national railway was constructed. The industrial sector was reinforced by the establishment of 200

factories employing a total of 60 thousand workers in 1941, and the share of industry in GNP nearly doubled from 9.8 percent in 1920 to 18.4 percent in 1940 (Tabari, 1984). In agriculture, the traditional grain crops, (wheat, oats) were replaced by cash-crops (cotton, sugar cane) which changed the non-monetary structure of the peasant economy. These transitions underlay the beginning of urban growth.

The process of modernisation was interrupted by the outbreak of the Second World War in 1940 and the dismissal of Reza Shah in 1941. Government budgets declined by about 40 percent by 1940 and the import of industrial commodities decreased by 80 percent in 1941. Meanwhile the export of agricultural products like cotton fell from about 20000 tonnes in 1940 to only 1000 tonnes in 1946 (Sodagar, 1984).

The new government (Mohammad Reza Shah) continued the modernisation programme with the initiation of the First Development Plan (1949-1955). The projected revenues for the Plan had to be provided by oil exports and the World Bank which contributed about 37 and 32 percent of the total revenue respectively. Oil had been exploited since 1901, the British Government controlled the main interests by a concession; after long disputes between the two countries, an agreement was signed in 1954 and the Anglo-Iranian Oil Company was transferred to the National Iranian Oil Company (Fisher, 1996). Private investors, sale of government property, loans from the Bank Melli Iran were other sources of Plan revenues (Farhang, 1975). However, following the nationalisation of the oil industries in 1951, the flow of exports of oil and consequently of oil revenue was cut by the West. Foreign financial arrangements, given the embargo situation, could not be concluded either. Since about 70 percent of the Plan revenue was to

be obtained from oil revenues and foreign loans, the sudden vanishing of these two sources of funds made the main targets of the Plan impossible. Therefore, the remaining funds and priorities were given to the growing urban areas.

At this time, about 70 percent of the country's population lived in the rural areas; the growth of urban population from 1920 to 1940 was quite low and the real increase of the urban rate began after 1940. As a consequence of modernisation programmes, urban centres underwent drastic physical changes; for example, new buildings replaced the old to accommodate government or administrative functions such as police headquarters, banks or railway stations (Gita-shenasi, 1985). During the First Development Plan (1948-1955) feasibility studies were carried out with regard to urban development and attention was given to the provision of urban facilities such as water supplies, electricity production and street surfacing. The growing attraction of urban places led to an increase of urban population from 21.9 percent in 1940 to 27.8 percent in 1950 (Table 4.1). According to the first National Census (1956) the population of Iran was about 19 million, 31.4 percent lived in urban places, the annual growth rate has been 2.5 percent, a considerable increase compared to 1941 (0.6 percent) (Table 4.1).

Table 4.1: Distribution of rural and urban population (1920-1956)

Year	Urban %	Rural %	Average growth rate of pop
1920*	21.0	79.0	0.2-0.3
1930*	20.0	79.1	-
1940	21.9	78.1	0.6
1950*	27.8	72.0	-
1956	31.4	68.6	2.5

Sources: Baharier, 1971; Zanjani and Rahmani, 1989 *= Estimated

Although, the agriculture sector received 40.4 percent of total government expenditures in the First Development Plan because of the large rural population, this ratio dropped in later development plans (Table 4.2) which was clearly due to increased attention to urban modernisation. Also, the Plan did not pay any direct attention to the regional development aspect, but the creation of the Moghan Plains Development institution in 1953, which aimed at utilising the water resources of the area for agricultural activities and for the region's nomads, can be considered as a precursor to regional development (Baher, 1981). The main achievements of the Plan were limited to the establishment of six new industrial factories, some road and rail construction, and a few minor developments in irrigation and mechanisation of the agricultural sector.

The Second Development Plan (1955-1962) was introduced after the nationalisation of the oil sector and the revenue was important for development budgets, as were foreign loans. The main objectives of the Second Plan (1955-1962) were to increase the productivity of agriculture; industry; the provision of public needs; the improvement of health care and education, and to strengthen communication services. Transport and communication absorbed 44.8 percent of total expenditure, while agriculture dropped to 28.5 percent (Table 4.2).

Table 4.2: Expenditure under the 1st and 2nd Development Plans

Sector	First %	Second %
Agriculture/irrigation	40.4	28.5
Industry/mines	29.1	11.5
Transport/communication	24.8	44.8
Social services	5.70	15.2

(Source: CBI, 1976)

The Second Plan, like its predecessor was primarily a series of government projects subdivided into four main categories (Table 4.2). Large scale projects in most sectors soaked up much of the funds while there was shortfall for other activities. In agriculture, for instance, substantial overspending occurred on large dam projects at the expense of crop improvements and animal husbandry. In the communications and telecommunications sector heavy overspending on railways and roads between Tehran and the principal ports was achieved at the expense of other facilities. As Baharier (1971: 92) put it "similarly a small number of textile factories soaked up most of the funds for a wide range of industries, while there was considerable shortfall in expenditure on public health rural development activities".

Implementation of unfinished projects of the First Plan continued in the Second Plan (1955-1962) with efforts to improve the municipalities' administrative organisation. Of 516 projects involving the construction of urban facilities, 329 were completed in the Second Plan and the remainder was transferred to the next plan (PBO, 1961). Again, because of the decisive role of oil (75 %) in the Plan's revenues, the only owner and investor in industrial activities in the modernisation programme was the state (Baharier, 1971: 93). There were some attempts to encourage domestic investors to participate, but the lack of an entrepreneurial class in Iran, except for a few cases, limited industrial expansion. The expansion of transport and communication systems continued strongly; for example, the number of vehicles increased more than twofold in 1961 compared to 1951, the volume of import credits increased by 85 percent in 1960 (Sodagar, 1984). Also, a number of banks were established to operate in the new economic system. In aggregate, all these transitions were pre-requisites for the capitalist mode of production.

The process of integrating Iranian society into the world economy required the entire transformation of the rural economy. As mentioned earlier, Iran had been a relatively decentralised state in which each region had relative autonomy. Some believe that the end of World War II and the positioning of the powers into Cold War confrontation patterns eventually made way for a more sinister phenomenon, neoclonialisms in DCs. In order to fulfil the ambitions of domestic rulers, like the Pahlavi regime in Iran, different reforms were introduced (Musavian, 1990).

b) -Land Reform and its impact on migration (1960-1976)

Beside the implementation of the National Development Plans, the Shah introduced a six-point reform-programme in 1962 to improve standards of education, health and social welfare amongst the poorer classes which were:

- 1) Elimination of the feudal system through land reform.
- 2) Nationalisation of forests and pasture lands.
- 3) Transformation of state enterprises into companies to support the land reform.
- 4) Workers to share in companies' profits.
- 5) The right of women to vote.
- 6) Creation of a Literacy Corps for compulsory public education.

Although these reforms looked essential for a Rostowian social and economic take off, these were boycotted by different opposition groups, especially the religious clergy (Musavian, 1990). They believed that the main target of the Shah's reforms was to open the way for a cultural invasion by the West under the

guise of the Literacy Corps and others. Land Reform is the most discussed and analysed programme because of its impact on migration and urban growth. Here we discuss briefly the mechanism of the land distribution among the rural population and its impact on urbanisation. Land Reform commenced in 1962 and ended after three stages in 1972. However, some believe that Iranian land reform, like many other bourgeois-capitalist reforms, was a political response to the mounting internal and external pressures. As the Third Development Plan prepared for the period 1962-67, it made no assumptions and allowed no provisions at all for an imminent land reform (Pesaran, 1985; Katouzian, 1978). Absentee landlordism was the dominant form of land ownership where more than 55 percent of the cultivated land was owned by one percent of the population residing in the cities (Ajami, 1973). The Land Reform programme covered all estates in excess of one village or parts of different villages that could be regarded as equivalent to one whole village; orchards and mechanised farms using modern agricultural machinery were exempted.

The government's policy of creating farm corporations in order to facilitate the mechanisation of farming and to increase agricultural productivity, forced peasants to transfer the use of their land permanently to the farm corporations in exchange for shares equivalent to the value of their land and other farm assets. Thus the peasants reverted again to their previous social status of being mere agricultural labourers (Lambton, 1969).

At the end of the reform about 1.6 million rural households received land, about half of Iranian village households (Eatamad, 1984). Land reform in Iran was heavily criticised as a socio-economic failure (Hooglund, 1982; Keddie, 1981; MacLachlan, 1988; Eatamad, 1984) because it did not give land to landless

workers who neither rented nor owned land. Moreover, the subsequent phases moderated and reversed the initial radical phase. Consequently many peasants were excluded and the vast majority of the remainder were given less than 7 ha of land, the minimum amount of land assumed necessary for peasant subsistence and survival. Also, the limited land that was given, was in scattered plots, while irrigation ownership was unchanged. Matters were made worse by the neglect of the agricultural sector, the cheap food policy and the dualistic development strategy. Thus land reform and subsequent policies resulted in rural destitution and mass migration which made the country dependent on food imports. Therefore, instead of bolstering the power of the Shah as had been hoped, land reform was indeed one of the main factors which contributed to his overthrow (Beamont et al, 1988).

The impact of land reform on migration can be traced through the national censuses. The percent of those recorded in their birth place decreased markedly as a direct result of land reform between 1966-76 (Table 4.3). However the great problem for a migration study is the lack of direct information about this vital aspect of population movement. The national censuses only record the place of birth of the population by province, while many of the migrants moved a short distance (intra-provincial movements). The migration rate was estimated at 0.6 percent between 1921-1941 (Eatamad, 1984). During the 1956-66 period the annual urban growth rate was 5 percent and for 1966-76, 4.7 percent, which, as the annual natural growth rate for the two decades was 3.1 and 2.7 percent respectively, shows that the role of migration in urban growth was marked (Table 4.4). In fact about 41 percent of urban growth was due to migration in the first decade, which increased to 44 percent in the second decade. The data considering employed population in agriculture show that there was a declining trend of

employment in agriculture after the implementation of land reform. The share of agriculture in employment was 47.5 percent in 1966 which had decreased to 34 percent by 1976. The government's policies encouraged urban-based economic activities at the expense of rural activities, which has resulted in rural degradation. The slow growth of agricultural production as result of traditional methods and food demand has frequently been stated as evidence of the dualistic nature of the Iranian economy (Amuzegar and Fekrat, 1971).

Table 4.3 The % of migration from birth place at the time of enumeration

Year	Born in same place	Born in another place, same province a	Born in another place and another province b	percentage of migrants a+b
1956	89.02	3.90	7.08	10.98
1966	87.50	4.80	7.70	12.50
1976	76.80*	13.03	9.63	22.66
1986	77.80**	12.10	8.50	20.60

* 0.54 percent born in other countries are not included.

** 1.6 percent born in other countries are not included.

Source: SCI, selected years 1956-86

Table 4.4 Urban growth due to migration 1956-76

Years	Annual urban increase %	Annual natural increase %	Urban increase due to migration %
1956-66	5.0	3.1	41
1966-76	4.7	2.7	43

(Source: Eatemad, 1984)

Subsequent reform programmes, in the Third Plan (1962-68) were supervised by a European and North American team of planners and economic advisors. It was Iran's first scientific comprehensive development plan. Broadening scope for the eradication of economic dualism came about as a result

of the main findings of the Second Plan's evaluation which were the lack of co-ordination between the activities of the various sectors of the economy, and the lack of a comprehensive view regarding the availability and use of resources in the whole economy (PBO, 1961).

The private sector was given various financial, commercial and institutional incentives to invest in light industries which were fed by public investment in infrastructure and heavy industries. The reliance on the private sector to sustain industrialisation was reflected in relatively low allocation of funds to public industrial enterprises. The Third Plan budget allocation was revised twice in 1964 and 1965, following the increase of oil revenue in these years. Overall price levels kept relatively stable during the Third Plan period. However the early 1960s recessionary conditions which had created a favourable balance of trade did not last long, in spite of import restrictions placed on the private sector.

It was also during this period that a more comprehensive approach to regional planning was adopted. A special regional development chapter which aimed at institutionalising the regional system was introduced to the Plan. The establishment of regional planning units in provinces was recommended, and the Third Plan law provided the legal base for the identification and execution of projects by the provincial authorities (Namazi, 1976). The technical offices in provincial capitals had to identify regional needs, plan projects and report them to the Plan Organisation for approval /disapproval. In practice, because these offices did not have any decision making powers due to centralised government, they created more problems for regional development than solutions. Therefore, in 1963 only a year after their creation, these offices were transferred to the new

Ministry of Development and Housing as provincial branches (Amirahmadi, 1986).

The Fourth Plan (1968-73) similar to the First and Third Plans, began with a choice of three programmes with a target annual growth of GNP of 9 percent. To attain this growth rate, a huge amount of capital was needed. Thus 55 percent of this had to be financed by the public sector and the remainder from the private sector. Oil revenues, as before, were to provide the main source of funds for development. In reality 80 percent of the funds were to come from oil revenues (Amuzegar, 1977:164). Agriculture received less attention during the Fourth plan, and increased emphasis was placed on industry, power and fuel (Table 4.5).

The industrial policy in this period played a double-edged role. On the one hand, it managed to achieve a high rate of growth in import substitution industries. At the same time, the policy makers were less concerned with the problem of income inequality and geographical disparity. On the other hand, commitment to dualistic development policies resulted in increased economic dependency; in Iran, foreign investment in the oil industry resulted in enclave development as elsewhere and the traditional sector, agriculture, did not experience many growth-inducing linkages nor any marked benefits from Development Plans (Afshar, 1985).

The Fifth Development Plan covered the years between 1973-77. Investment allocation in the plan indicates that agriculture received even less than in the Fourth Plan, only 6.2 percent, while industry and oil production absorbed the bulk of investment (33.8 percent); only 6.6 percent of the total funds were allocated to education, health and social welfare (Table 4.5).

Table 4.5 Sector allocation 3rd, 4th and 5th Plans

Sector	Third Plan % 1962-68	Fourth Plan % 1968-73	Fifth Plan % 1973-77
Agriculture	21.3	13.5	6.20
Water	-	-	4.60
Mines/industry	12.4	26.1	22.4
Power and fuel	15.8	18.0	23.5
Transport/communication	25.9	20.9	10.0
Education	9.30	7.30	5.20
Health	5.90	2.90	1.20
Urban development	3.30	1.60	2.50
Rural development	-	-	1.60
Housing	5.40	5.0	16.4
Others	0.7	4.5	5.77

(Source: CBI, 1976)

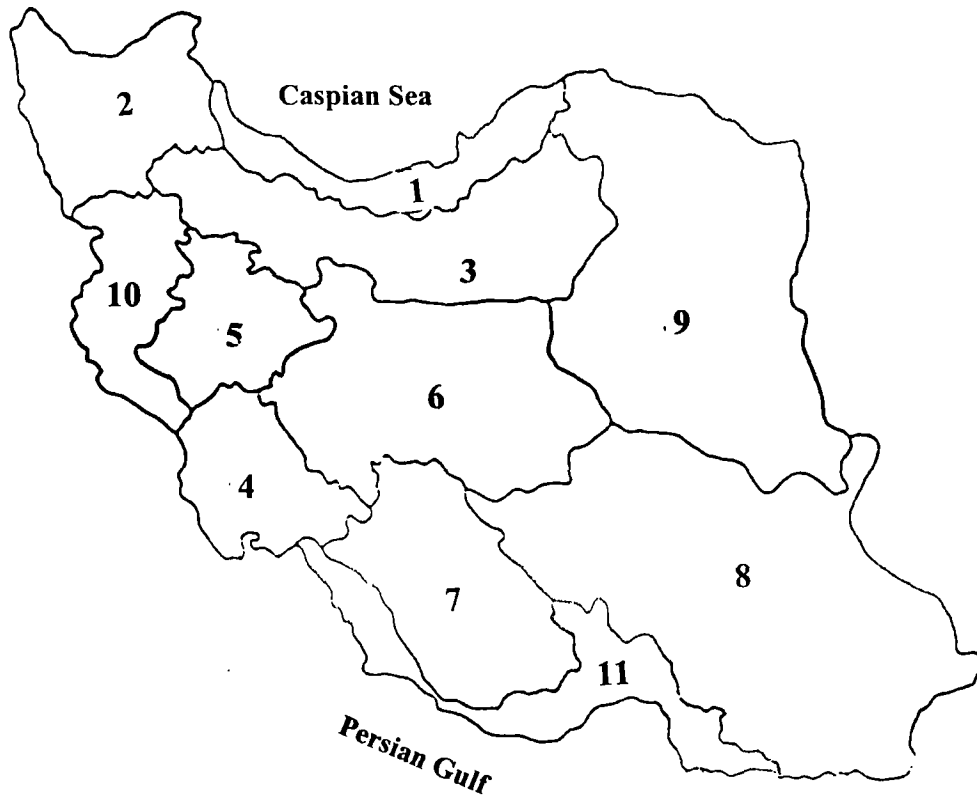
The increase of oil revenues in 1973 (from \$6.5 billion in 1973 to \$20 billion 1974) led to the revision of the Fifth Plan to increase investments. Housing was the largest single non-military expense at about 16 percent; it had accounted for only 5 percent in the previous plan. Another characteristic of the Fifth Plan was the participation of the private sector which contributed about 37 percent of total investment, mainly in industry and housing. It is interesting that for the first time there was a small amount of investment for rural development, even though in 1976 the rural population made up 52.9 percent of the country's population. Of course one of the problems in analysing the plan's sectoral expenditures is the uncertainty surrounding the location (rural or urban) of expenditure. Although, the Fifth Plan allocated only 2.5 percent of investment for urban development, clearly most of the other sectors like industry and housing have been urban-biased. The main objective of the plan considering urban affairs was the improvement of the quality of urban life which the increasing urban problems necessitated; social and

economic criteria had to be taken into account rather than concentrating only on physical planning in development plans (Clark, 1980).

Initially the plan was regionalised on the basis of eleven planning regions (Fig 4.5). Each region had its own investment programmes. However as the Fifth Plan was launched, the contradictions between the regional plans and the centralised system began to show (PBO, 1973). In practice, the \$2 billion study by the consulting firm was not reconciled with the sectoral plans, and the two evolved in isolation. The sectoral programs were adopted and the regional studies and projects were put aside. The division of the country into regions was also rejected because they did not coincide with the political and administrative divisions. In practice the government favoured sectoral decisions in the provinces and the leading role of the governors (Amirahmadi, 1986). After the rejection of planning regions, the Regionalisation Division of the Plan and Budget Organisation was commissioned to organise a Provincial Planning and Budgeting Bureau in each of the 23 provinces. Thus Social Regional Projects (SRPs) were prepared and funded centrally. The provincial authorities and local councils were given the authority to decide on the location of the SRPs. However the execution of SRPs was hampered both by the low quality of the involved staff and other serious problems such as lack of co-ordination, co-operation and control among the various agencies (Amirahmadi, 1986).

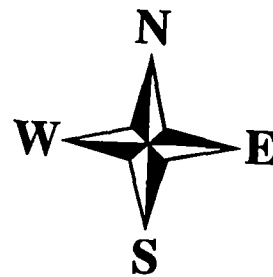
It is evident that the economy grew at a much faster rate (17.2 %) during the Fifth than during the Fourth Plan (11.6 %). The rapid acceleration of economic development after 1973 soon led to an unprecedented rate of inflation, and material shortages slowed down the implementation of many of the development projects.

Figure 4.5: Eleven Planning Region of Iran.



LEGEND:

- 1. Gilan, Mazandaran, Gorgan
- 2. Azarbaijan
- 3. Tehran, Semnan, Zanzan
- 4. Khuzestan, Kohkiluueh
- 5. Hamadan, Lorestan
- 6. Esfahan, Yazd
- 7. Fars
- 8. Kerman, Sistan and Baluchestan
- 9. Khorasan
- 10. Ilam, Kordestan, Kermanshahan
- 11. Bushehr, Bandar Abbas



(Source: Plan and Budget Organisation, 1973).

Most of the economic and social development policies in the pre-revolutionary periods, whether Reform Programmes or Development Plans made with oil revenues ignored the mass of the rural population and agriculture. As has been discussed in Chapter Two, oil revenues proved to be more than a costless windfall gain for greater prosperity and economic progress in oil-exporting countries. In the case of Iran, oil revenues helped the state to extend its control over the agricultural sector, and accompanied by the implementation of 'modernisation' programmes, encouraged the de-population of the rural sector. Using the Myrdalian terms of the 'backwash effects' of oil and the state for agriculture became circular and cumulative, while the potential 'spread effects' through market expansion did not materialise because of the extensive agricultural imports and urban food subsidies. On the contrary, agriculture, which had been the major sector of the economy, was relegated to a secondary position; as the result of the flow of resources from the rural to the urban areas and misconceived national planning, Iran lost its earlier self-sufficiency in food. The impact of oil on rural out-migration has been described: "At the gates of the city, dispossessed of his land, deprived of his cultural identity and social framework, subjected to uncertainty looking for streets paved with oil. And he was turned into a disguised beggar. This sums up the contribution of oil revenues to rural society in Iran" (Katouzian, 1978: 367).

Although import substitution contributed to the engagement of more population in large scale projects in the industrial sector, due to the rapid increase in the share of capital intensive projects, the growth of employment was lower than investment and output growth. The industrialisation strategy in the 1970s shows that capital abundance created in Iran and other oil producing countries reinforced industrialisation, by introducing the parallel development of non-traditional manufactured export industries to substitute oil revenues with new

sources of income i.e. a strategy of import substituting industrialisation. The post-oil boom industrialisation strategy adopted by Iran led some to believe that it could become the world's fifth industrial power by the end of the century (Nikki, 1981). In reality, the industrial strategy based on a 'big push' faced major infrastructural bottlenecks, lack of skilled workers, transportation, power, water supply and a supporting agriculture. Construction provided a temporary solution to unemployment in cities and towns which became an additional excuse for migration. Thus, this use (misuse) of oil revenues destroyed the only sector (agriculture) which could be used for economic diversification.

The degree of urban growth at the regional level was influenced by the degree of reform and the plans' effects. The areas in which the economy was entirely dependent on the land were influenced the most (Clark, 1972). Mechanisation of agriculture and the high annual natural population increase (3.1 and 2.7 percent in the two decades of 1956-66, 1966-76) were the other effective push factors in migration. The increasing opportunities in cities for employment, health and educational facilities accelerated the trends of urbanisation to reach 47% in 1976 (Table 4.6).

Table 4.6 The population changes in Iran (1956-86)

Years	Total	Urban pop	% urban	Rural pop	% rural
1956	18,954,704	5,953,563	31.40	1,3001,141	68.60
1966	25,788,722	9,794,246	37.97	15,994,476	62.03
1976	33,708,744	15,854,680	47.04	17,854,064	52.96
1986	49,445,010	26,844,561	54.29	22,349,351	45.21

Source: SCI, selected years Iran

The basic spatial dimension of these transitions was the rapid growth of cities, particularly Tehran and other major urban centres (Table 4.7). Although the

growth of Tehran in absolute numbers was remarkable, the share of this city in the total urban population declined between 1966-1976 (from 30.4 to 25.9) while the share of small and intermediate cities increased steadily. Clearly, rapid urban growth has not been peculiar to large cities since it has been significant for smaller cities.

Table 4.7 Distribution of urban population between 1956-76 (in 000s)

Years	Urban pop	Tehran	%	cities > 100		cities < 100	
1956	5,953	1,561	26.	1,538	25.	2,864	48.
1966	9,794	2,980	30.	2,714	27.	4,100	41.
1976	17,337	4,496	25.	5,304	30.	7,537	43.

Source: SCI, selected years Iran

4.2.2 Development and urbanisation patterns in Iran (1976-1996)

Since the 1979 revolution, profound changes have taken place in the Iranian economy as a result of external and internal factors. The revolution itself, the eight years war, fluctuations in the output and price of oil, the economic boycott of the Western sanctions and the blocking of Iran's foreign assets, were amongst the main factors which had detrimental effects on the development of the Iranian economy during the post revolutionary era. In such situations, the main effort of the new government was to alleviate the disruptive effects of severe shortages of major commodities by introducing an intricate system of rationing and to allocate subsidies for a large number of commodities throughout the war period. Thus, there was no scope for serious attention to social and population planning.

After the cessation of hostilities with Iraq in August 1988, the government announced that the economy was badly in need of reconstruction. Thus the First Five Year Plan was formally approved by the Majlis (parliament) in January 1990.

It was the first official document that clearly and comprehensively outlined the government's medium and long-term socio-economic objectives and policies. The Plan covered the period of 1989-1994 and anticipated an average annual growth of GPD of 8.1 percent. The general objectives of the plan were classified under ten headings (see appendix: 4.1). Economic affairs received 44.8 percent of the funds. (Table 4.8).

Table 4.8:Development expenditures for the First Plan (1989-1994) (in billion rials)

Objectives	Expenditure	Percent
General affairs	519.6	6.8
Economic affairs	3401.4	44.8
Social affairs	2466.4	32.5
Other development expenses	850.2	11.2
Reconstruction of War damaged areas	350.0	4.6
Total	7587.6	100

Source: PBO (Plan and Budget Organisation of Iran) 1989.

There was a special emphasis in the Plan on agriculture as the 'axis of development'. The projected average annual growth rate of 6.1 percent for the agriculture sector seemed to be very high, but this sector has progressed very well with an average rate of about 6 percent, which was almost the same as the target rate, and moreover the growth in agriculture has been continuous and stable. Within 'economic affairs' agriculture was the second largest receiver of the Plan's funds after roads and transportation (Appendix:4.1). The better performance of agriculture was also related to the lower dependency on foreign resources and the drastic improvement in agricultural policies, while economic restrictions by the West, the destructive war and the impact of the revolution itself led to the low growth of industry and the mining sector. As Table 4.8 reveals, the war not only retarded the economic development of Iran during that period but also absorbed a

significant part of the country's financial resource (350.0 billion rials) for reconstruction in the post war era.

Social affairs received more than 30 percent of the Plan's expenditures. The rapid population increase (3.9 percent per annual in the post-revolutionary era) intensified the shortage of education centres; consequently, general education received 32.4 percent of the funds in the social affairs sector (or 10.5 percent of the total plan's funds). One of the main problems in analysing the Plan's expenditure again is the uncertainty surrounding the location of the investment i.e. rural or urban. However rural and urban development appropriated two segments of the 'social affairs' budget receiving 2.4 and 4 percent of the expenditure respectively (or 0.8 and 1.3 percent of total plan's funds). Obviously agriculture, education, housing and transportation covers both rural and urban areas. Another aspect of the general objective of the Plan was to balance the distribution of population geographically to avoid socio-economic concentration, especially in the more developed regions, through more investment in deprived areas. At the regional level, each province was left free to determine its main axis of development which generally related to the natural resources and locations. For instance provinces which are located in water frontiers (Persian Gulf or Caspian Sea) gave priority to sea-related activities such as trade (Free Trade Zones) and fisheries.

The data released by the Central Bank of Iran which covered the three years of the Plan indicated that the difficulties facing the economy in achieving the projected targets. The persistent world oil glut and the drastic decline of oil prices, particularly since 1991, clearly showed how wrong and optimistic the planners were in basing finances on the oil revenues and oil export. The decline in oil

prices during the final year of the Plan caused the halting of economic growth and problems of debt service; it proved that it is very important for a country like Iran, where oil was expected to provide around 60 percent of government revenue for the plan period, that the decision makers should be aware of their vulnerability to the state of external markets.

Another feature of the post-revolutionary era was the rapid growth of urbanisation which put more pressure on government budgets. The rate of population growth in this era remained very high. Political change and the disturbances of the early years of the revolution led to the displacement of a relatively large, especially rural population to the cities where most of the practical manifestations of the revolution took place (demonstrations, confiscation of the previous regime's properties, etc.) especially in Tehran. The urban annual growth between 1966-76 was 4.9 percent; after the 1979 Islamic Revolution, the annual urban growth reached 5.5 percent. According to the 1986 census, 26.84 million people lived in urban areas which represented 54.3 percent of total population.

There are several factors explaining the rapid percentage increase in the urban population in Iran during the decade between the two national censuses of 1976 and 1986. Firstly, high natural increase in the population due to improved medical care and insufficient attention to family planning in the early years after the revolution especially led to a rapid increase in population (Zanjani, 1991); the annual national increase rose from 2.7 percent (1966-76) to reach 3.9 percent in 1986. However there was also other causes such as the change in the definition of a 'city' from population criteria to the existence of a municipality which led to an increase in urban places as their population became urban. Also the physical growth of cities and the 'eat-up' (Lipton, 1977) of nearby villages resulted in

'urban' population growth. Moreover the children of rural areas who were born in the hospitals of nearby cities have been counted as urban (birth place), although they probably lived in the village even at the time of enumeration. According to the SCI in 1976 there were 373 cities; these increased to 497 in 1986.

The pattern of migration according to the 1976 and 1986 censuses shows that there has been relatively little migration to the rural areas compared to urban places (Table 4.9); this is true of both the 1976 and 1986 censuses. Although, there is a reduction in the percentage of migration in and to urban areas in 1986, this was not very significant considering the proportion of migrants in the total population in 1986 in relation to 1976; this reduction can be explained by the fact that the war against the cities had started with bombing going on and some people moved to rural areas for safety (Zanjani, 1991). According to Table 4.9, from the total rural population in 1976, 94.5 percent had been born in the same place. By 1986 census this proportion had decreased to 89.5 percent; this suggests that migration to rural areas had increased with moves being mainly from other provinces. These movements rose significantly from 2.7 percent of the total in 1976 to 8.9 percent in 1986. Also it should be noted that the share of men and women in Iran's migration is almost the same in both censuses of 1976 and 1986 (Nazari, 1989). Migration accounted for 44 percent of urban growth in the period 1966-76 but decreased between 1976-86 to 37.9 percent for the reasons mentioned earlier.

Between 1976-82 net migration to the urban areas of the country involved more than 3.2 million people. Of these, 54 percent were migrants from the war zone and the remaining were from rural areas (Alizadeh and Kazerooni, 1984). Also the data from the SCI reveal that, of the total population who had not been

born in the same place as that of enumeration, 7.8 percent had migrated from rural to urban places, 17.7 percent were urban-urban migrants, 3.2 percent rural-rural moves and 1.5 percent urban to rural migrants. These figures show the high percentage of urban-urban migration, which is clearly a result of the Iran-Iraq war and movement away from the war zones.

Table 4.9: The pattern of migration according to the birth place (1976, 1986)

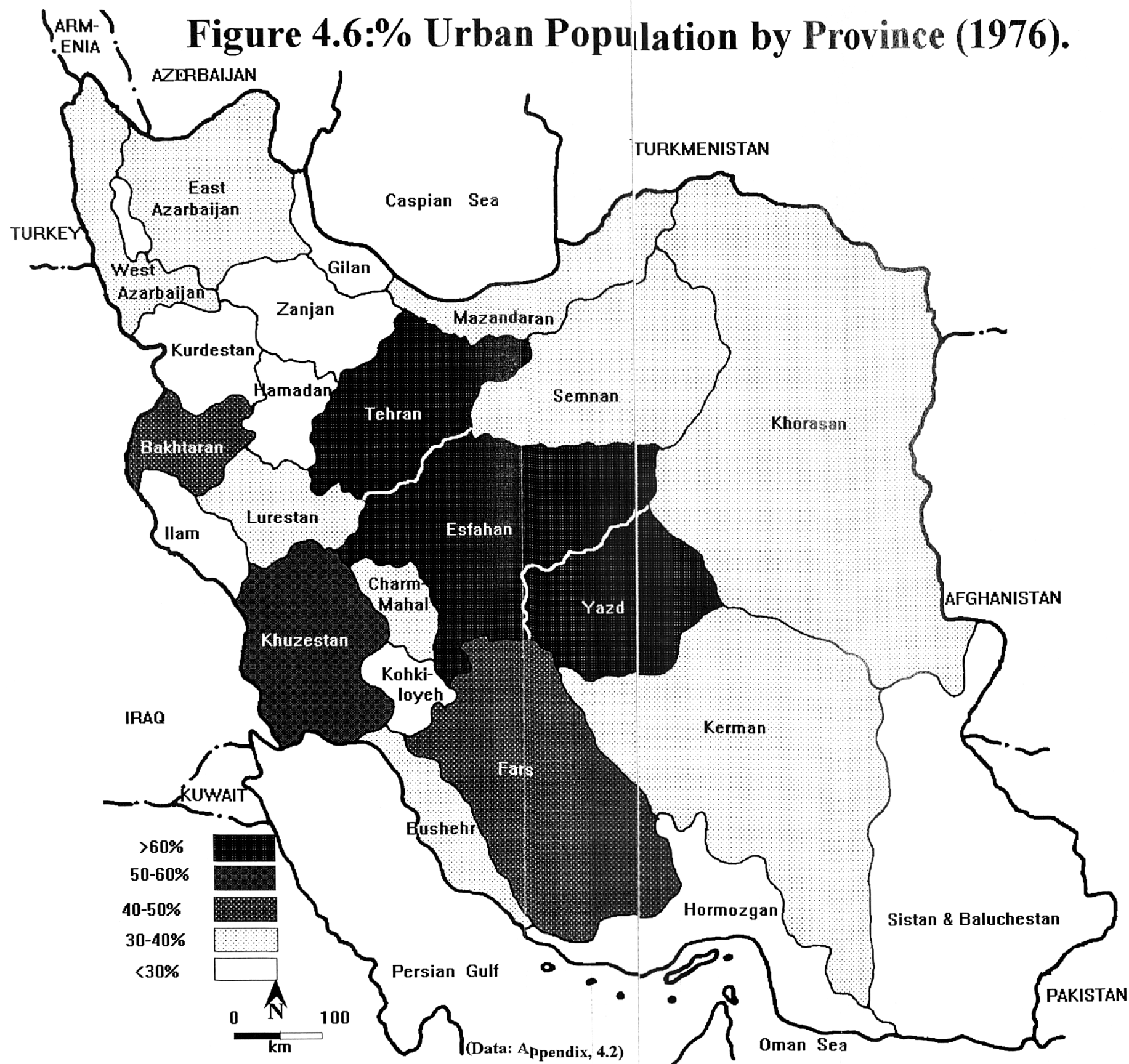
Place of birth	% of rural		% of urban	
	1976	1986	1976	1986
Born in same place of enumeration	94.5	89.5	56.6	69.7
Born in another place in same province enumeration	2.60	2.50	24.7	20.1
Born in another place and another province of enumeration	2.70	8.90	17.4	8.30
Born outside the country	0.2	1.30	1.0	1.90

Source: SCI, selected years Iran; Zanjani, 1989

The degree of urbanisation varied within the country (see appendix:4.2). The agricultural areas were less urbanised in the north west and western part of the country (figure 4.6) while central and some provinces in the oil field of the south had a high percent of urban population. Provincial disparities in 1976 are reflections of the national development plan and regional policies of the government. Central (which included Tehran), Esfahan and Yazd provinces had higher urban rates than other provinces.

The rate of urbanisation was one criterion for the measurement of development in Iran; in general there has been a positive correlation between the degree of urbanisation and development, as more developed areas had higher rates of urban population (Amirahmadi & Atash, 1987). However, Bakhtaran province,

Figure 4.6:% Urban Population by Province (1976).



with a moderate rate of urbanity, was one of the least developed areas in 1976. The most urbanised provinces during the National Development Plans received a disproportionate share of funds, which were largely invested in infrastructure and import-substitution industries primarily located in large urban centres; agricultural areas, except large mechanised farms, were ignored in planning policies. The trend of provincial urbanisation in 1986 follows previous characteristics but there are some variations among the regions as figure 4.7 reveals. The least growth provinces in 1986 were the most urbanised provinces of 1976 (Table 4.10). Since Tehran and Markazi (central) provinces were as one province, they are excluded from the table 4.8 (see appendix: 4.2). Khuzestan province was the only place with a negative urban growth rate because of the war; the majority of relatively highly urbanised (11-15%) provinces also were the least or moderate urbanised provinces in 1976.

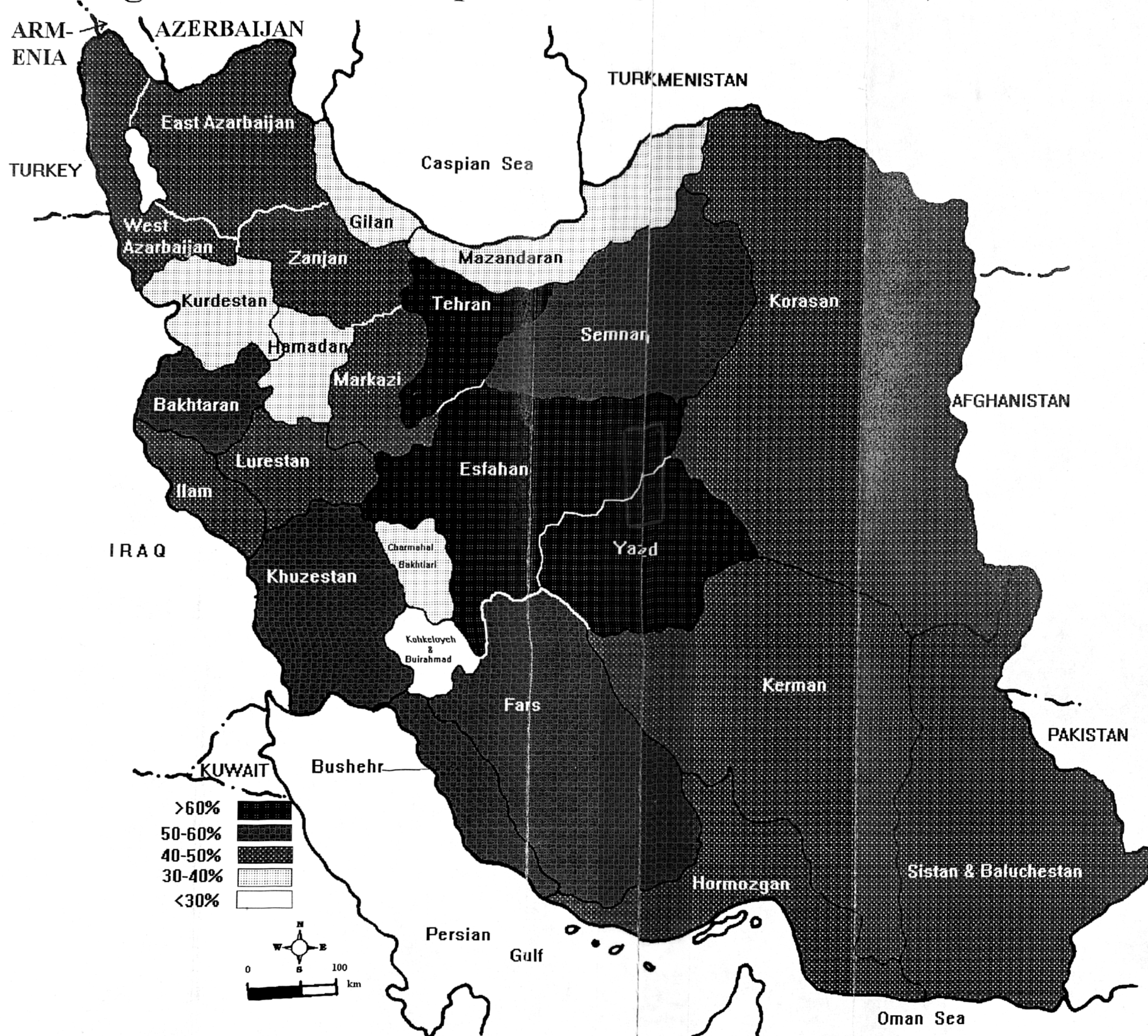
Table 4.10: The variation of urban growth rate among provinces (1976-86)

Growth rate %	Province
0 -5	Yazd, Charmahal-bakhtiary., Esfahan, Khuzestan
6-10	Mazandaran, Fars, Hamadan, Gilan
11-15	Kurdistan, Sistan/Balucestan, Khorasan, Bakhtaran, Luristan, Kerman, Kahkiluyeh/Buierahmad, East Azarbaijan, West Azarbaijan,
16-20	Semnan, Zanzan, Bushehr, Ilam

(Source: appendix: 4.2)

Studies reveal that the level of provincial disparity had decreased in the post-revolutionary era, which was due to the relatively decentralised policies of the Islamic government (Amirahmadi and Atash, 1987; Amirahmadi, 1989). The

Fig. 4.7: % Urban Population by Province (1986).



economic and social projects were aimed at the poorer regions of the country, and local governors were given more authority to participate in decision-making; the governors of some border provinces were even allowed to trade with neighbouring countries. For instance, since the collapse of the Soviet Union, Mazandaran province exports textiles and foodstuff to the newly independent republics of Central Asia (Ettela'at, 1996, No 572).

Although the trend of urbanisation in Iran shows that the large urban centres have been growing more than small and middle sized cities, the growth rate of larger centres decreased in 1986 (Table 4.11). According to Zanjani's (1986) study of several provinces (among them Mazandaran) the growth of middle sized urban centres has been greater than the larger in 1986. In general, most of the Iranian urban population still live in cities of less than 1 million people (64.2 percent). The share of Tehran city, which had 25.9 percent of the country's urban population in 1976 decreased to 22.5 percent in 1986.

Sixteen new urban centres were constructed as one of the practical policies in recent years to reduce population pressure on the large cities. According to the Ministry of Housing and Urban Development, 12 cities with a total of 80 thousand housing units have been constructed and occupation started; these places tend to be industrial cities and four are located in Tehran province (Ettela'at, 1996 No 536). Also, one hundred villages will be reclassified as cities by the end of Second Development Plan in 1999 and the total number of urban centres will reach 620 instead of the 496 in 1986 (Jomhori'eh Islami, 1996, No 4947). Therefore, urbanisation, whether spontaneously or intentionally, needs a huge investment in the provision of urban utilities which constrained Islamic Government funding and will continue to do so.

Table 4.11: The % of urban population growth of cities (1956-86)

Cities	1956-66	1966-76	1976-86
25-50000	3.69	5.39	7.20
50-100000	4.32	4.53	7.10
100-250000	3.83	3.29	6.62
250-500000	3.56	5.09	6.77
500-1000000	4.40	4.63	5.79
+ 1000000	5.70	5.20	3.74

(Source: SCI, selected years Iran)

After the 1986 National Census, the Statistical Centre of Iran (SCI) took four inter-census enumerations (1991, 92, 93, 94) which provide some general information. According to these, the rate of urban population reached 57.4 percent in 1991 and 58.1 percent in 1994 (Fisher, 1996). There is no sign of a decline in the urbanisation rate after 15 years (between 1976-86 and 1986-94) of the Islamic government policies, despite a drop in the natural growth rate in the 1990s.

In mid 1992, the SCI reported that the annual rate of population growth over the previous five years was 3.28 percent, lower than the record level of 3.9 percent estimated for the first half of the 1980s. In September 1993 the Minister of Health stated that the annual rate of population had fallen from 3.2 percent in 1992 to 2.7 percent in 1993. Finally, a UN press release quoted the Iranian Health Minister's statement that Iran's population growth rate had declined to 1.56 percent in 1996 (Ettela'at, 1996, No 576). The success of the Islamic Republic's population control resulting from the new policies which were taken from 1990, when free birth control facilities became available to all women and in 1992, government announcing policy by that new measures would disqualify families with more than three children from receiving free social facilities.

4.3 Social change and urbanisation

The above discussion of the post-revolutionary migration trend has shown that despite the increased attention to agriculture and rural development, urban areas expanded further. However there are no hard data nor comprehensive study on the motivation of migration in this period. Despite the wide destructive effects of the War and the huge budget deficit in the war period, the data released by the National Census in 1986 show that social conditions changed in both rural and urban areas. Here the main emphasis would be on literacy, employment and housing, which could lay a base for further understanding of social changes in rural/urban areas and the extent of social disparities. Indicators for education show how the increased tendency towards education was effective (a decline in the proportion of employed people as result of the longer duration of education) on the percent of employed population. It is proper here first to have an evaluation of the literacy change in 1976 and 1986.

According to the 1976 census only 47.5 percent were literate of the total population (over 6 years old). There was a sharp difference between the rural and urban populations with 65.4 percent of the urban and only 30.5 percent in rural areas. Further variation was evident between women and men, as only 35.5 percent of the literate population were women and in rural areas this figure decreased to 17.3 percent of rural females.

It is obvious that despite the Shah's reform program through the Literacy Corps, the overall education opportunities did not improve in line with economic growth. However, cultural factors played an important role in impeding access of women to education, which some considered as an influence of religion i.e. Islam;

in fact here it was not that Islam opposes women's education, rather the clash of Western culture with Islamic values which the regime exaggerated by encouraging and in some cases insisting that young females attend school unveiled. The statistics for 1986 reveal an increase of 14.3 percent in the proportion of literacy, 8.3 percent in urban areas and 17.9 percent in rural areas. The literacy change is more evident among women especially in rural areas.

However the proportion of illiterates among women is still high (Table 4.12); increased emphasis has been placed in both rural and urban areas to eradicate adult illiteracy by the creation of the Nahzat-e Savad Amuzi (literacy movement), similar to the previous Literacy Corps, but this time based on Islamic social values. Increasingly the social climate of the educational centres encourages families to send their children, especially girls, to train in various subjects. Data on higher education revealed that participation by female students has increased rapidly (MHE, 1994).

Table 4.12: Literate population (over 6 years old) of Iran in 1976 and 1986

Region	Both sexes %		Male %		Female %	
	1976	1986	1976	1986	1976	1986
Country	47.5	61.8	58.9	71.0	35.5	52.1
Urban	65.5	73.1	74.4	80.4	55.6	65.4
Rural	30.5	48.4	43.6	60.0	17.3	36.3

(Source: SCI, selected years Iran)

Another aspect of the post revolutionary era has been the change in employment opportunities. Despite the improvements in literacy and the rapid increase of the population, employment opportunities did not grow in parallel. The data on employed population shows that in 1986, 22.3 percent of the total population of Iran was employed, compared to 26.1 percent in 1976. Several

factors explain the low growth of employment especially in the industrial sector. The disturbance of the Revolution was accompanied by the flight of many industrialists abroad and sanctions by the West faced the remaining active units with shortages of spares and other inputs.

The prolonged war destroyed many of the industrial units in the western provinces and so those employed in industry fell from 3.0 million in 1976 to 2.8 million in 1986. The sectoral division of employment shows that the service sector grew more than other sectors (Table 4.13). Moreover the tendency of the young population to attend higher education is reflected in a further drop in employment in the post-Revolution era. However it has been claimed that the average rate of unemployment declined from 13 percent to 9 percent during the First Development Plan (1989-94) (Ettela'at, 1997 No 815). Employment creation is one of the serious issues in the socio-economic development of the new government elected in the summer of 1997. The high natural growth rate of the 1980s and the limitation of labour absorption in the agriculture sector because of climatic and natural conditions, forced the government to take drastic measures and planning for employment creation in other sectors of the economy.

Table 4.13: The No and % of employed population of Iran by different sector

Year	1976		1986	
Sector	Number	Percent	Number	Percent
Total	8,799,420	26.1	11,001,535	22.3
Agriculture	2,991,869	34.0	3,190,761	29.0
Industry	3,012,300	34.2	2,781,008	25.3
Services	2,720,562	30.9	4,670,045	42.4
Unclassified	74,689	0.8	359,721	3.3

(Source: SCI, selected years Iran)

The data revealed that the performance of the housing sector has been better than others, during the periods of 1966-76 and 1976-86. In pre-revolutionary times housing policy in Iran was implemented through the preparation of Master Plans. The housing sector received 5.4 and 5 percent of the total budget of the Third and Fourth Development Plans respectively. The rapid rise in oil prices led to a revision of the Fifth Plan (1973-1977) and the increase in the housing sector's allocation to 16.4 percent. The participation of the private sector in housing construction was marked. By the end of 1977 the private sector had constructed nearly 90,000 housing units in the urban areas in the country (CBI, 1979). Government participation was concentrated on the construction of housing for the military forces and on public infrastructure. Also, the Ministry of Housing and Urban Development established a new department of Land Organisation to acquire non-utilised lands for the provision of low-cost housing for low-income families and civil servants; this was strongly opposed by land owners and consequently was disbanded.

After the revolution of 1979, many revolutionary institutions such as the Housing Foundation and the Oppressed Foundation began to confiscate and distribute urban land. Many large land owners were frightened and rushed to sell their land at cheap prices which led to a marked decrease of urban land prices and the expansion of the urban boundaries.

According to article 31 of the Constitution, all the Iranian people, as individuals or as families have the right to own a house, giving priority to the poor (peasants and workers). Therefore to implement the mentioned article, the Parliament approved the Urban Land Law in 1982. According to this, the applicant qualifies only if they have lived more than five years in the city

continuously, which excludes new migrants; the applicant and his family should have no urban land or a house in the country and also must be able to buy the land and build a dwelling.

Despite the rapid increase of population and tendency towards nuclear families, housing production has grown relatively better especially in urban areas. The growth of urban housing was 5.17 percent in 1966-76 decade while rural housing had a growth of 1.92 percent over the same period. This proportion was 6.6 percent for urban areas in 1976-86 and only 1.57 percent in rural places. The sharp difference between rural and urban areas reflects the deteriorating living conditions in rural areas and the preference of rural households to own urban property. But the disturbances during the early years of the revolution led to a fast expansion of housing units in the majority of urban places when there was not any control from government bodies. Furthermore, allocation of urban land to government employees and low income groups led to an increase in the number of dwellings.

It must be considered that the larger growth of housing over population does not mean that every Iranian household owns a house. In fact, for many of the middle and higher income groups housing is an important source of income, either through renting or selling. However there is no reliable information about such activities.

The number of rooms in the dwelling relates to the size and the income ability of the household. It must be remembered that the kitchen was counted as a room in both the censuses of 1976 and 1986. Dwellings with one room constituted 13.8 percent of the total units in 1976 but only 7.7 percent in 1986. Since

households of one person represent only 4.5 percent of the total households in Iran, it seems the condition of the dwelling improved according to the number of rooms. Those with three or more rooms increased from 56.3 percent to 74.9 percent in the post-revolutionary era. But this increase was higher in the rural areas than in the urban, which could be related to the size of households and the greater availability of space for housing than in urban areas. Despite the increase in rooms, the growth of housing infrastructure has not been equal, with the shortages being more evident in rural areas than urban.

A closer look at Table 4.14 shows the extent of the social gap between the rural and urban areas of Iran, especially in 1976 when the country was experiencing a high economic growth as result of the oil boom. However, the post-revolutionary picture may not seem very impressive for rural areas but is a considerable improvement especially for a country involved in war and the upheaval following the revolution itself.

Table 4.14: Housing facilities in Iran (1976 and 1986)

Year	1976			1986		
Facility	Total	Urban	Rural	Total	Urban	Rural
Electricity	48.3	90.2	14.2	83.7	97.4	65.1
Piped water	40.9	79.1	10.0	73.3	90.3	51.5
Telephone	5.2	13.6	0.2	10.9	18.5	0.6
Private bath	-	-	-	43.6	63.2	17.2
Piped gas	-	-	-	5.6	9.3	0.7

(Source: SCI, selected years Iran)

To sum up, the living conditions of Iranian households has improved during 1976-1986, although there are no data on household income by zone which makes it very difficult to analysis changes in living standards.

Evaluation

The general pattern of urbanisation in Iran has followed the economic and social transitions which were the results of different policies in the pre and post-revolutionary periods. The great stimulus of urbanisation in Iran is the direct result of high annual natural growth which for 1976-86 reached 3.9 %. The socio-economic transitions due to modernisation and development policies, which were fuelled by the rapid increase of oil prices and the marginalisation of agriculture in the national economy, ended in favouring urban centres, weakening the rural economy and causing migration. Such characteristics can be explained by the "urban bias" model of Lipton. Whether through investment of oil revenues in cities or the integration of the Iranian economy into the world capitalist system, the allocation of Development Plans' expenditures was unequal between the rural and urban sectors.

The political change of 1979 encouraged the influx of rural masses to urban centres, while the outbreak of war intensified the movement of people from the western borders to other provinces. There were marked variations in urban growth between the different regions of Iran; the urban growth trend at the provincial level shows that the highly urbanised provinces of 1976 had relatively lower rates of growth in 1986. Demographically, Tehran's primacy had declined by about 3 percent by 1986. Although there was a greater level of absolute population growth in the large cities, the increase of secondary cities has been remarkable over the 1976-86 period. The redefinition of urban places, the physical expansion of cities, and the use of 'birth place' in the estimation of migration are other reasons for the apparent growth in urbanisation.

Overall, despite the considerable growth of economic and social facilities in the post-revolutionary era, still the existing gaps between the rural and urban sectors is the main motive for migration, which need to be treated more realistically. These trends are also evident at a regional scale. The next chapter relates specially to the demographic and socio-economic changes in the northern province of Mazandaran.

CHAPTER: 5

URBANISATION IN MAZANDARAN

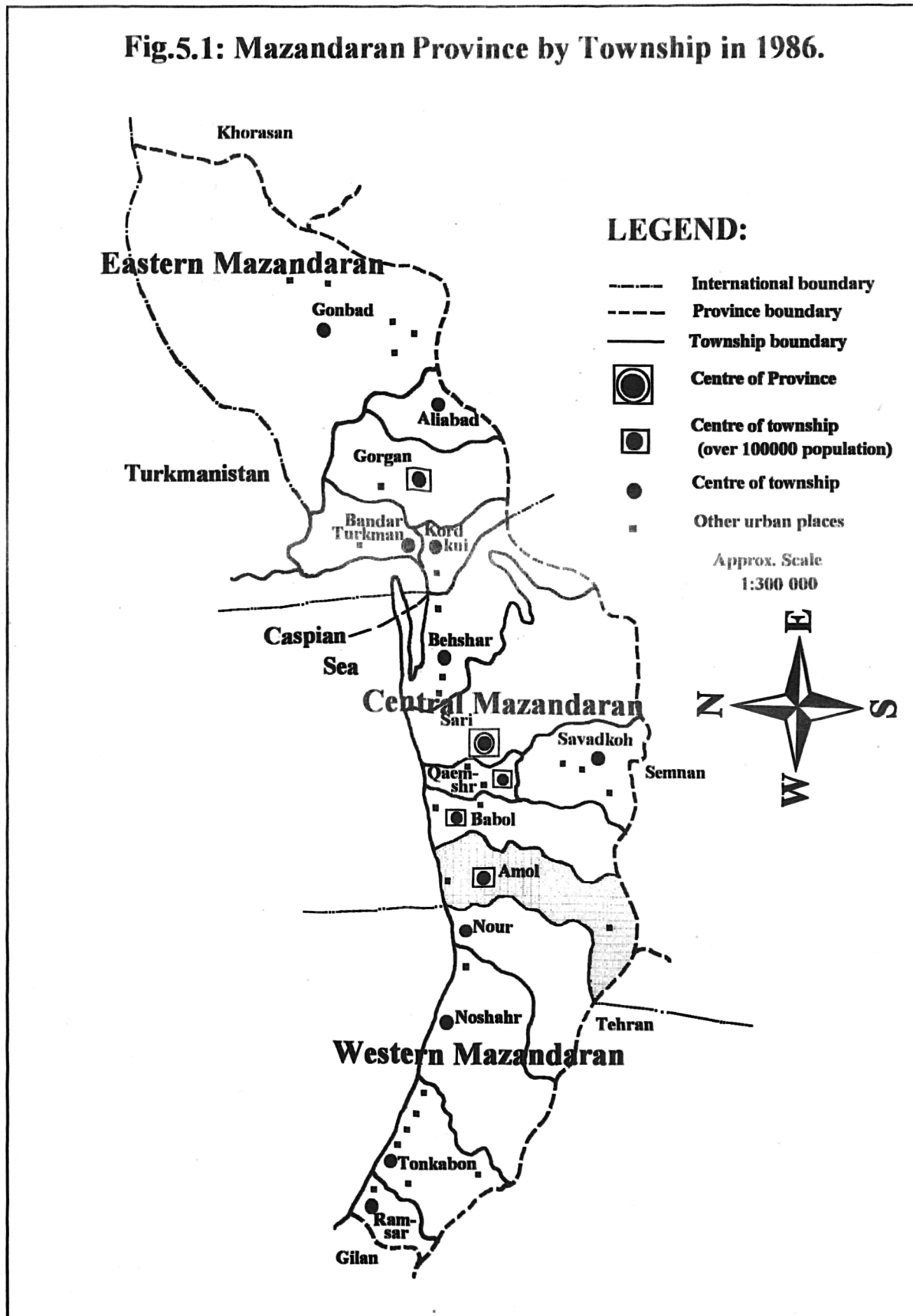
Introduction

Mazandaran is one of the two northern provinces of Iran with an area of about 46,460 km², or about 3 percent of the country. The Caspian sea and Turkmenistan are the northern neighbours of the province, Khorasan in the east and Gilan province in the west are other neighbours. Finally Tehran and Semnan provinces share their borders with Mazandaran in the south (Fig 5.1). From the physical point of view the province can be divided into two sections; the plain and mountainous areas. The coastal plains are formed by alluvial deposits from the mountains and by a gradual retreat of the sea, although recently some coastal cities were threatened the fluctuations in the level of the Caspian Sea.

The province's economy is dominated by primary activities; agriculture is the most important on the plain where most of the population are settled and the main urban centres are located. About a third of the province is covered by forest; Mazandaran is the major supplier of forest products to the country's large and modern wood works in Neka city and the biggest saw and paper mill in Sari (Wood and Paper of Mazandaran went on stream in 1997) along with other smaller wood products' factories in the province.

Many urban settlements have emerged and developed beside the Caspian Sea. Fishing, trade and tourism are the major economic activities which produce income for urban residents. This area is now the contact point with the newly independent countries of Central Asia by land and sea.

Fig.5.1: Mazandaran Province by Township in 1986.



Mazandaran province has experienced considerable population change over the last four decades. As Table 5.1 reveals, the volume of population increase was very high in 1976-86; this was due to high annual natural increase (3.7%) and migration. According to the national census of 1996, the annual growth rate of Mazandaran population decreased quite markedly to 1.6 percent during the last decade (Ettela'at, 1997, No 781). The increase of public information about living standards, health and family planning were the main factors for this trend. The density of population increased from 28 persons in sq. km. in 1956 to 74 persons in 1986, and reaches 221 persons per sq. km² in the central part. Rural populations had higher fertility rates than the urban and therefore provinces with a high percent of rural inhabitants had greater population growth (Djavan, 1988; Aghajanian, 1988).

Table 5.1 Distribution of Mazandaran population in 1956-86

Years	Total	Urban pop	% of urban	Rural pop	% of rural
1956	1,300,019	226,361	17.4	1,073,658	82.6
1966	1,845,270	441,020	23.9	1,404,250	76.1
1976	2,387,171	775,831	32.5	1,611,340	67.5
1986	3,449,359	1,315,206	38.4	2,111,676	61.6
1996*	4,280,000	1,891,760	44.2	2,388,240	55.5

(Source: SCI, Mazandaran province selected years).

(1996* = Ettela'at, 1997, No 781).

Mazandaran's rice based agricultural economy has been able to support a high rural population; moreover access to water and a moderate climate played a vital role in the distribution of the rural population throughout this area unlike other parts of the country where lack of water dispersed rural settlements. Studies have shown that Mazandaran province has been attractive to migrants; it was

ranked fourth in attracting migrants in 1976 (Djavan, 1988; Nazari, 1989; Lahasaizadeh, 1977). Subsequently the province supplied many migrants to Tehran but also became a host for war and Afghani refugees who came from the neighbouring province of Khorasan; however the lack of detailed data makes analysis impossible at the provincial level.

The increase of population in Mazandaran has differed between rural and urban areas (Table 5.1); in 1956 only 17.3 percent of the people lived in urban areas. By 1966 it had reached 23.9 percent and ten years later in 1976 it doubled to 32.5 percent, reaching 38.4 in 1986. The preliminary results of the 1996 national census revealed that the proportion of the urban population reached 44.2 percent.

5.1 Economic transformation and urbanisation

Urbanisation here has been influenced by the social and economic transitions in pre- and post-Revolutionary times. Although, Mazandaran has a long urban history (Gorgan, Gonbad and Amol are a thousand years old), the real urban expansion began with the economic development policies of the Pahlavi regime, whose home region it was. In contrast to the other parts of the country, here urban settlements are more evenly distributed, which may be related to the lack of a large urban centre in the north of Iran. Historically, northern cities have never been political centres or had a religious function; moreover the region had easy access to the metropole's facilities. Most of the province's population still live in the rural areas from which they may migrate. Between 1956-66 about 6 percent were added to the urban population; this figure increased to 10 percent for the 1966-76 period. As we observed previously, the highest national increase in the urban population

rate was in 1966-76. The determinants of this increase have been explained by the pull-push model, reflecting the uneven development policies, the failure of land reform and the effects of war.

The effect of land reform in the north of Iran were slightly different to those in other parts of the country. Firstly the *Umdeh-maliki* system was not common in all parts of the province; in this system villages belonged to urban based landlords, many of them large landed proprietors (umdeh malik), who had their land worked on a share-cropping basis by peasants, *ra'iyat*, or tenants. In contrast, *Khordeh malik* who worked on their land themselves were more prevalent. The structure of rural land use in Mazandaran pre-land reform shows that 28 percent of the total land use was worked by share-croppers, 27 percent by proprietors and 45 percent by tenants (Ehlers, 1985). In general, the free peasant system was found mainly in peripheral and agriculturally marginal areas, while the landlord system prevailed in a quasi-continuous zone from eastern Azerbaijan, through Qazvin towards the dry central region to Khorasan (Safi-nejad, 1978).

The land reform program was generally implemented in central Mazandaran. Another main principle of the Shah's Reform Programmes was the nationalisation of forests and pasture; this left many of the husbandmen without grazing land for their animals, causing them to sell them and migrate to the cities and towns of the province. Another important factor for migration here was the utilisation of agriculture machinery to a far greater extent than in other parts of the country. As mechanised farms were exempted from the land reform programme, large farmers tended to introduce machines to avoid being reformed. Their extensive application of modern farming methods, especially as agro-machinery works better on flat rice fields than on mountainous lands, left rural youth

unemployed which directed them to the towns of the province.

The province is one most productive regions in Iran; agriculture is the main economic activity and occupies 9,500,000 hectares of the arable lands. More than 60 percent of rice and citrus fruits in the country are provided by Mazandaran province: for instance, the area under rice cultivation was 280 thousand hectares in 1996 and in the same year 1,250,000 tons of citrus fruits were produced, which gave it the first place in the country (Jomhori-e-Islami, 1996, No 5037). In the eastern part, cotton, wheat, oil seeds (sunflower, corn, Soya [60 % of the country's needs]), beetroot and grains are grown. Also the economic potential of the province is not limited to agriculture. Trade, fishing and tourism are other important sources of employment for the coastal settlements. However these opportunities are not fully employed and moreover the emergence of newly independent countries intensified the exploitation of sea products, especially caviar; the small cities of Bandar Turkman, Gaz and some rural places nearby are highly dependent on it. The environmental issues also attracted the attention of the local authorities, as the extensive exploitation of oil and gas resources by the other littoral states threatens the aquatic life of the Caspian Sea. Following this recent concern, the first Environmental Research Station was inaugurated in Amol (Ettela'at, 1997, No 848).

Cities act as agro-processing and supply centres for their regions and provide services for rural populations; most paddy beaters, cotton-gins, and vegetable oil-processing factories are located in the cities. Here rural farmers participate in commercial activities through day markets which produce an important source of income and reflect the mutual influence of urban and rural economy. The sub-tropical region of the Caspian littoral presents a distribution of

periodic markets across the northern provinces of Gilan and Mazandaran. These markets are entirely dependent on regional products; for instance in Agh-ghaleh (eastern Mazandaran) local hand made carpets by Turkman villagers and tribes are one of major goods. While studies in other DCs have shown that day markets tend to convert into permanent shops, (Sada et al, 1978; Misra et al, 1974) here the number of day markets increased with the increase of urban population. This will be examined in the context of Amol and the role of such market places in rural-urban interaction.

Moreover, these cities have sufficiently large populations to offer economies of scale for a wide variety of health, education, and welfare services. Thus the main cities of the province display a combination of urban and rural socio-economic characteristics and generally perform functions found in both urban areas and the countryside. They act as regional marketing centres offering a wide variety of distribution, transfer, storage, credit and financial services through retail shops and bazaars.

The increase of agriculture products' prices in the post-revolutionary era gave better income opportunities to the rural farmers. The reasons for these increases were diverse; the war imposed numerous constraints on agricultural lands on the western borders (Lawless, 1996), while the sector which suffered the most after oil was agriculture (Amirahmadi, 1988). Economic sanctions by the western countries in the aftermath of the revolution increased the need for self-reliance and led to higher prices of domestic agricultural products. Food requirements had increased as the result of improved living standards and increased population. All this made the government support agricultural projects by the means of increasing support prices for grains and other crops, tax

exemptions for farmers, subsidising fertilisers and pesticides, establishing seed selection stations (especially for rice) to obtain higher output, all of which increased the incomes of rural inhabitants in the north of Iran. Although the rate of inflation was high in the country, especially in foodstuffs, rural populations were in a better position than urban, since they received government support and were the producers of their food necessities and so they were less dependent on the provision of food from markets with high prices. The result of such policies was the intensification of rural-urban interaction and paradoxically, the migration of farmers to the cities, as will be seen later.

5.2. Variations in urbanisation

The increase of urban population was reflected in the increase in the number of urban centres. According to the 1956 census, there were 15 urban centres; by 1966 they had increased to 23 and to 37 in 1976. There were 47 urban centres in 1986 (Fig 5.2). The redefinition of cities according to the presence of a municipality was the main reason for the increase in their number in 1986. Sari, Gorgan, Amol, Babol and Qaemshahr were the largest cities of the province with more than 100,000 population in 1986 (figure 5.3).

The distribution of urban population varies in the different parts of the province. Over half (54.2%) of the urban residents lived in the central part according to the intra-census of 1991 and about 32.5 percent resided in the eastern cities. Only 13.3 percent of the province's urban population lived in the western section in the same year (SCI, Mazandaran, 1991). Therefore the central part is the most populated area of Mazandaran where the four large cities are located at a short distance from each other.

Figure 5.2: Administrative Changes and Distribution of Urban Centres in Mazandaran (1956-1986).

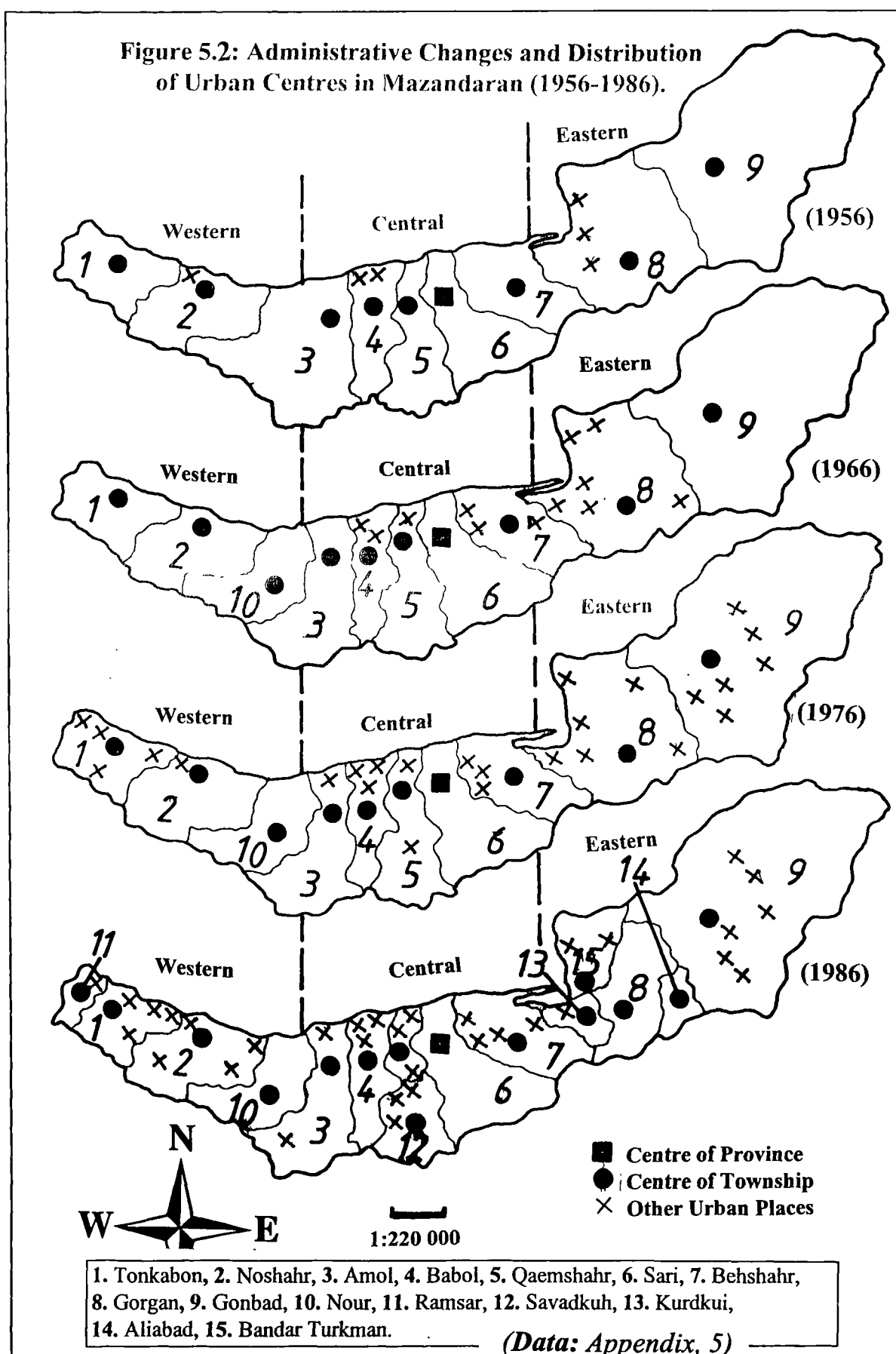
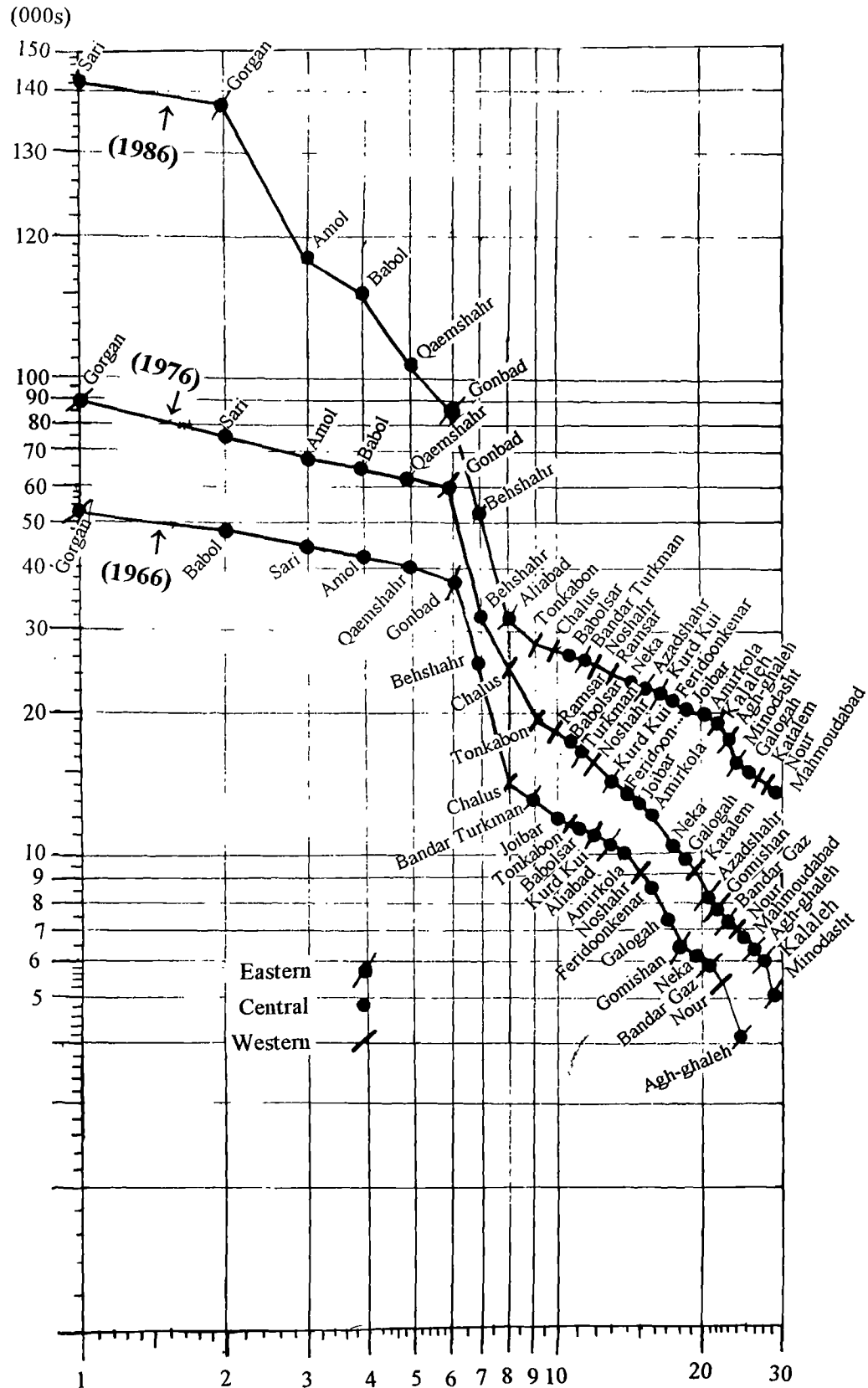


Figure 5.3: Rank-size distribution of urban centres in Mazandaran



The average annual growth rate of Mazandaran's urban population shows that generally the urban centres experienced very high growth between 1956-66 which was triggered by the implementation of land reform and mechanisation of large agricultural lands resulting in migration. In the next decade (1966-76), the urban growth rate of Mazandaran cities declined markedly, as result of out-provincial migration towards the capital and also the emergence of smaller cities which decreased the share of larger urban centres. Furthermore, the introduction of family planning led to a decline of in the natural growth rate of population. Finally, in the third decade of 1976-86, the rapid decline of the urban growth rate in the western cities of the province was reflected in the overall annual growth rate for Mazandaran. Since the trends of urban growth are different in the three parts of Mazandaran, they will be discussed separately (Table 5. 2).

Table 5.2: The average urban growth rate in Mazandaran (%)

Region	% of a nnu al gro wth rate		
	56-66	66-76	76-86
Eastern	9.2	5.4	5.6
Central	7.0	3.7	4.1
Western	4.1	7.7	4.1
Total	6.8	5.6	4.6

(Source: SCI, Mazandaran, selected years)

5.2.1. Eastern Mazandaran

The only city with more than one hundred thousand population in this part is Gorgan. Gorgan's fertile agricultural land attracted many wealthy people from Tehran (mainly retired army-personnel and the Shah's relatives) who wanted to invest in agriculture. Historically investment in agriculture has been a common

phenomenon among the wealthier people in a country and in the region agriculture could produce a more reliable income than industrial projects. The Crown lands were distributed in 1951 among the peasants and vast uncultivated lands such as marsh and pasture lands, were also disposed of to those wishing to develop them, which encouraged the usage of mechanisation. At first wheat was the only product, but it was soon realised that the natural conditions of Gorgan were more suitable for the cultivation of cotton. The development of mechanised farm operations led to significant economic changes in this area (Okazaki, 1985). With the intensification of cotton cultivation, farms began to need more labourers which the region could not provide. However replacement of ploughing animals by tractors led to a decrease of employment in the cultivation stage but not in other stages such as weeding and picking which still were unmechanised and highly dependent on human labour. Therefore the underdeveloped regions of Khorasan and Sistan supplied the labourers who migrated 1100 miles to Mazandaran province seasonally or temporarily (Djavan, 1988). The trade in agricultural products like cotton and wheat, which were exported to Russia, and also the great demand for cotton by the internal market as the result of the development of the textile industry, enhanced Gorgan's city role as the main distributor of agro-machinery, fertiliser and marketing; these commercial activities also led to the economic growth of the city, especially as it was also the main accommodator of migrants who primarily settled in Gorgan as the farms were located in the suburbs of the city.

Some nomadic groups living in the east of the province, who had been forcibly settled by the last regime, or through other economic problems of nomadic life, migrated to Gorgan and Gonbad cities during 1956-66. Gonbad with 8.2 percent and Gorgan with 6.1 percent annual growth were the fastest growing cities

of the region in that decade. The average annual growth rate of eastern cities was 9.2 percent which compared to central and western parts is very high.

The trend of urban growth rate decreased in the decade of 1966-76 which was also common for the central cities as well. The reasons for this were that firstly the intra-provincial migratory trend had almost come to an end, as the result of labour saturation, and secondly the effect of family planning which was taken much more seriously in this decade. The declining trend of urbanisation is more evident in the growth rate of Gorgan and Gonbad cities as two main urban centres of eastern part. The increase of urban places in 1976 and 1986 (Table 5.3) meant that the post-revolutionary era's urbanisation trend remained almost the same as 1966-76. Although eastern Mazandaran experienced growth, Gorgan and Gonbad rates decreased even further in the post-revolutionary period (1976-86).

Table 5.3 The No of cities by township in eastern Mazandaran 1956-86

Township	Number of cities			
	1956	1966	1976	1986
Gorgan	4	6	8	2
Gonbad	1	1	7	7
Bandar Turkman	-	-	-	2
Aliabad	-		-	1
Kurd-Kui	-	-	-	2
total	5	7	14	14

(Source: Appendix: 5.1)

The main reason behind the decrease of urban annual growth was the decentralisation policy at the local level. The distribution of urban facilities to other newly formed towns alleviated the demographic pressure on Gorgan and Gonbad cities and allowed the rural population access to the urban facilities in the

smaller towns; Gorgan township was divided into three new townships, Bandar Turkman, Aliabad and Kurd Kui. However, Gorgan was and still is the biggest city of eastern Mazandaran, although it lost its supremacy to Sari as the capital of the province in 1986. There has also been some demand for the division of Mazandaran province into two smaller ones as Gorgan and Mazandaran provinces. The cultural differences (most of the population in the eastern part are Sunni Muslim) between the two parts and the relative distance to the centre and the provincial capital at Sari, in addition to the claim that most of the funds are spent on the central and western parts, created a climate for such separation (Deputy General-Governor of Mazandaran Province, 1994). But a closer look at the economic and social indicators of the eastern cities of the Mazandaran show that it has benefited more than the central part, as the rate of unemployment was lower (5 %) in comparison to the central and western parts (6.8 %).

Following the post-revolutionary decentralisation policy through administrative division, the bill proposing Gorgan's division was given to the Majlis for ratification in October of 1997, although Mazandaran province is much smaller than the large provinces of Khorasan, Kerman, Fars etc. (see Iran's map [fig 4.1]). This new policy for the further breaking down of the provinces aims to give more opportunities to the people to participate in decision-making. However there are some small provinces in the western areas of Iran which have not been very successful in their economic and social performance (Amirahmadi & Atash, 1987). It can be argued that the existence of an administrative centre implies a policy of deconcentration, not decentralisation, and results in the mushroom growth of unnecessary administrative services, which in fact is one of the marked problems in the governing system of the country. Whether in response to cultural difference or economic disparities, administrative division should give more

decision-making power to the local people but this must be balanced by the efficiency criterion.

Eastern cities had a similar rate of employment in agriculture to the central and western parts (13.6%) which ranged from 19 percent in Bandar Turkman township to 8.8 percent in Gonbad township. It is worth mentioning that agricultural activity includes fishing, hunting and forestry, and the coastal cities of Turkman and Gaz have most of their employed people in the caviar-processing firms. The industrial sector absorbed about 14 percent (on average) of the employed population which was higher in comparison to the other parts of the province. The main industrial firms are agro-related such as textiles, cotton-gins, fish canning, vegetable oil-processing etc. Also about 11.6 percent of population were employed in the construction sector. In general the eastern cities, like other parts, are service-oriented (61%) which also include port-activities as result of the recent expansion of the Caspian ports beside the South-North railway. It hoped that the new track (185-mile) between Khorasan and Tejen in Turkmenistan will recreate the lost glory of the '*silk road*' and provide more employment opportunities in eastern Mazandaran though the intensification of trade through the Caspian ports. However the Central Asian market is unlikely to expand for many years to come, as the average monthly wages are very low in these countries. Iran's recent exports to these nations were mainly basic goods, especially agro-products.

5.2.2 Central Mazandaran

The most populated part of the province is the central section. Sari, Qaemshahr, Babol and Amol are the important urban centres (Fig 5.1). More than

half (54.4%) of the total urban population of the province live in six townships. The main agricultural activities are based on rice which differs from the eastern part. The social structure of the population is more homogenous here as most of the migrants originated from the province itself, unlike in eastern part where intra-provincial migrants from Tehran, Khorasan, Sistan-Baluchestan and Afghan refugees mixed with the local residents during the last thirty years. The density of rural places is very high in the central part as climate conditions are more moderate compared to the east.

The average urban growth rate in this area was about 7 percent in 1956-66. The impact of land reform in the central part was more evident as the extent of the mechanised farms was less than in the eastern part. It seems that the main migration influx from rural to urban took place in the early years (1962-65) of land reform implementation; migration slowed down in the post-reform period. However in other parts of the country, migration accelerated in the late and post reform era (Eatamad, 1984; Hesamian, 1984; Nazari, 1989). Also the increase in the number of cities from 7 in 1956 to 12 in 1966 because of reclassification led to the sudden increase of urban population (Table 5.4). Meanwhile, the eradication of malaria decreased the death rate. In the next decade, the central cities experienced the lowest urban growth in the province (3.7%). Although the decline of the natural growth rate had its effect on the whole population, the decade of 1966-76 was a turning point in the Iranian economy which during agriculture lost its importance. As the area was highly dependent on agriculture and in contrast to the eastern part, the coastal cities here had no noticeable role in trade to create an income, the main priority in this period was given to tourism which was concentrated in the western part of the province. Despite the existence of industrial cities such as Behshahr and Qaemshahr, the average employed population in the

industrial sector was lower (13%) than eastern Mazandaran.

Table 5.4 Change in the number of cities in the central part of Mazandaran

Township	No of cities			
	1956	1966	1976	1986
Behshahr	1	4	4	4
Sari	1	1	1	1
Qaemshahr	1	2	3	3
Savadkoh	-	-	-	4
Babol	3	4	4	4
Amol	1	1	2	3
Total	7	12	14	18

(Source: Appendix: 5.1)

The urban growth rate accelerated in the period 1976-86. The main determinants in the population growth of the central cities were high natural increase, which was also high in the province as whole (3.7%), and migration. The average urban growth rate increased from 3.7 percent in 1976 to 4.1 percent in 1986. The four main cities of the central part had annual growth rates of more than 5 percent. The dominant role of the central cities tended to be more service-related. While this sector covered 61 percent of the eastern employed population, it was about 67 percent in this area. The fastest growing cities were Neka and Sari. Neka's rapid growth rate was owed to the construction of a large wood factory and the power station (electricity) of the province which account for most of the 18 percent of the population active in the industrial sector. Sari, as capital of the province, expanded in response to the establishment of various administrative and educational centres.

5.2.3 The coastal cities of the western part

The urban centres of the western part are small and generally located on the shoreline of the Caspian Sea (Fig 5.1); only 13.8 percent of the urban population live in this part. The annual average urban growth rate of the western cities was about 4.1 percent which was lower than elsewhere in 1956-66. As was discussed in Chapter Four, one of the reform programmes of the Shah was nationalisation of the forest. The area includes the forest slopes of the Albourz mountains. Rural settlements were entirely dependent on the forest for animal husbandry and the excavation of coal in the traditional way. The natural balance of animal husbandry between large and small herdsmen disintegrated owing to the shortage of pasture. The larger animal owners were able to convert their property into other forms and generally migrated to Tehran, while poor herdsmen had to work on a casual base in the agricultural fields or in towns. The second form of dependency on the forest was coal production which had been transported to Tehran, as oil-consumption for heating and cooking was still uncommon. Owing to the relative improvement of the transport system in the early 1960s, the exploitation of the forest accelerated, as animals were replaced by cars. The extensive exploitation of the forest by rural populations and large forest pasture owners drew the attention of the government; from the mid 1960s, exploitation was limited, as each villager had to pay tax and was restricted to not more than four coal-kilns. Later there was a total ban on forest exploitation without replacement of new income sources or support for the rural population which triggered migration toward the towns of the area.

The average urban growth rate of western cities increased sharply to 7.7 percent in 1976. The main sector of growth was tourism which was important for the coastal towns of Noshahr, Chalous and Ramsar. The rate of urban growth

decreased in the decade of 1976-86, as tourism attracted less attention. The rate of unemployment was higher (7.2%) compared to the other parts of the province. The distribution of employment reflected a different pattern of economic activities in western Mazandaran. The share of industrial activity in employment was only 9 percent, compared to the 14 and 13 percent of the eastern and central parts respectively. The majority of the smaller towns of the area were dependent on agriculture, especially citrus fruit. Towards western Mazandaran the agricultural land is limited by the Albourz mountains and the forest advances to lower altitudes. The share of agriculture in employment was only 13.1 percent in 1986, while this proportion was 19.4 percent for the central cities of the province. There is a recent concern about the change from less profitable agricultural products to more market-oriented products, such as kiwi fruit; a considerable amount of these products were exported to Russia, Turkey and the Persian Gulf countries (Ettela'at, 1996, No 642).

Expansion of the Caspian ports has been one of the Islamic government's priorities to facilitate commerce and trade outside the province in recent years. The investment in the port of Noshahr (and others in the central region) is designed to connect northern cities to Europe through the Volga river (Ettela'at, 1997, 652). Noshahr's port installations have an important role in trade and commercial activities in the province and the country. Fishing is another important source of employment with three stations. Despite the recent attention toward this sector, the economy is still unable to exploit the full potential of the marine products. Caviar is one of main sea products for export which is threatened by over-fishing by the new countries and needs closer co-operation between the Caspian states. Thus exploitation of other sources of income such as trade and tourism seems vital for tackling the unemployment problem in this area.

5.3 The five largest urban centres

The large urban centres with more than 100,000 population were Sari, Gorgan, Amol, Babol and Qaemshahr, of which four were located in the central part. Sari as capital had the highest rate of urban growth in 1976-86 and population (Table 5.5). Its increase in rank in population terms after 1966 indicates the multiplier effects stemming from administrative and educational roles, each with various new institutions, which led to rapid growth and made it the first ranked city in 1986.

Table 5.5 Urban population and urban annual growth rate of major cities

City	populati on				annual growth rate %				
	1956	1966	1976	1986	1996*	56-66	66-76	76-86	86-96
Sari	26,287	44,547	70,753	141,020	196,000	5.4	4.7	7.1	5.6
Gorgan	28,380	51,181	88,033	139,430	189,000	6.1	5.6	4.7	4.5
Amol	22,251	40,076	68,963	118,242	160,000	6.1	5.6	5.5	5.6
Babol	36,251	49,973	68,059	115,320	158,000	3.3	3.1	5.4	4.8
Qaemshahr	23,055	38,998	63,377	109,288	143,000	5.1	5.0	5.6	4.1

(Source: SCI, detailed results of shahrestan 1956-1986; Zanjani, 1989)

(* Ettela'at, 1997, No 819)

Studies of migrants' origins and destinations have shown that the majority of rural migrants primarily move to the centre of their township (Zanjani, 1986; SCI, Iran. 1986). Sari is the only city of its township which absorbs rural migrants from its immediate hinterland; about one third of its population were recorded as migrants in 1986. Although Sari has long been the capital of the province, owing to the decline of urban growth (Table 5.2) in the province in general and the central region in particular in 1966-76, the city did not experience much growth. In general most of the provincial investment was biased toward the eastern part.

The urban population growth of Sari declined in the second period of post-revolution era (1986-96). This clearly reflects the effect of the decrease in the natural growth rate which was evident also for the other four major cities (Table 5.6).

Table 5.6: The percent of migrants in major cities of Mazandaran 1986 (%)

City	Non-migrant	Migrant population				Total %
		Urban origin	Rural origin	Abroad	Unknown	
Sari	66.1	13.4	19.7	0.3	0.5	100
Gorgan	72.7	12.2	12.7	2.3	0.1	100
Amol	74.9	4.1	20.6	0.3	0.1	100
Babol	87.8	4.9	6.1	0.1	1.1	100
Qaemshahr	78.6	12.0	8.8	0.3	0.5	100

(Source: SCI, detailed results of Sari, Gorgan, Amol, Babol, and Qaemshahr Shahrestans, 1987a, b, c, d, e).

Of the total population of Sari, 46,960 (33.3 %) were recorded as migrant of whom 40.2 percent came from urban areas and 58.9 percent from rural places. Sari's high urban origin migration shows that the administrative function of the city attracted more educated and white collar employees from other urban places. Sari reported a lower proportion (19.2 percent) of households living in rented houses than in Gorgan city as the latter had a noticeable proportion (2.3%) of Afghan refugees (Table 5.5).

The concentration of provincial administration offices in Sari city led to a high proportion of employees in the service sector (74.8%) in 1986, and a lower share of industry and construction (Table 5.7).

Table 5.7: Major occupation group in the major cities of Mazandaran 1986

City	Services*	Construction	Industry	Agriculture
Sari	74.8	11.6	10.5	3.1
Gorgan	70.1	11.4	13.1	5.4
Amol	65.3	15.4	13.5	5.8
Babol	74.1	9.1	11.2	5.6
Qaemshahr	66.1	5.1	26.5	2.3

(Source: SCI, 1987a, b, c, d, e)

* (commercial activities, communication, education, health care, etc.)

The only city with more than 100,000 population in the eastern part was Gorgan, a city which expanded as result of agricultural development and which was initiated by intra-provincial migrants. The city's high population growth declined from the 1960s onwards as many smaller cities emerged. In 1986 Gorgan was the second ranked city in terms of population. About 8.6 percent of Gorgan's migrants came from abroad. Also the share of urban and rural migrants were the same in 1986. The social structure of Gorgan's population is relatively unhomogenous with each of the cultural groups residing in their particular area of the city. Gorgan's physical growth in recent years led to insufficient urban facilities. Although it was hoped that after the separation of Gorgan from Mazandaran, the city would be the centre of the new province and therefore attract more government funds and investment; however, Gonbad city's authorities believed that it was more appropriate to be the capital.

Amol was the third rank city of the province in 1986. Its township with three urban centres is one of the most densely populated areas of the province. Like the others, the city operates as a centre of rural-urban exchange. A quarter of its population were migrants in 1986, the vast majority being of rural origin (Table 5.5). This city not only attracted migrants from its township but also from the

neighbouring township of Nour. The composition of employment shows that its construction sector was the largest in comparison to other cities (15.4) which probably attracted many rural migrants with low skills. The service sector (65.3 percent) was the dominant activity of the city. The relatively large population and its function as a regional market and as an agro-processing, service and distribution centre, allowed it to stimulate agricultural production in its hinterland. The farmers not only benefited from an increase of the rice price but they realised that a change from subsistence to cash-crop production could produce more income. Despite the decline of natural growth rate in the province, Amol was the only city in 1996 which experienced the same growth rate as in 1986 and this resulted from rural-urban migration. The next chapter will examine more closely the growth of Amol city and the implications of the city's economic and social life with respect to the increase of agricultural output.

Babol, the third city in the central part with more than one hundred thousand population, is located between Qaemshahr and Amol. The city had the lowest percent (11 percent) of migrants among the major cities of the province; rural migrants slightly exceeded the urban. The comparatively low annual growth rate of Babol city during three decades shows that despite being the biggest demographically in 1956, it is now in fourth place. Its township contains three other cities; Babolsar, Feriaddonkenar, Amirkola (Fig 5.2). Although the growth rate of these towns in the first and second decades was high, lately Babol city grew more rapidly. The economy of the city is dependent on small-scale commerce and personal services; the establishment of several educational institutions in recent years (colleges and university) added employment opportunities. The service sector dominates, with 74.1 percent of employment, which serves the mass of rural residents in the township.

Qaemshahr city, within 15 km of the province's capital, was classified as an industrial centre with 27 percent of the population employed in manufacturing activities (Table 5.6). Following the rapid increase of oil prices in the 1970s, there was some considerable effort to industrialise. Qaemshahr was chosen for the establishment of three textile factories as the city had access to the capital Tehran (market) through the Firoozkoh Road and Tehran-North railway. The annual urban growth rate of Qaemshahr remained almost the same for the first two decades and increased to 5.6 percent in 1986 (Table 5.2). The city's three main textile factories however attracted many migrants from the north western province of Azerbaijan but the majority of them originated from the Qaemshahr township; migrants made up a fifth of Qaemshahr's population in 1986, with over half of them being recorded as urban. It seems that because of the industrial functions of the city, rural migrants with less education had a lower chance of employment; their dependency on the land led to seasonal migration while manufacturing needed full-time workers for the whole year. Qaemshahr township includes 3 smaller towns which are economically dependent on agriculture.

Conclusion:

The conclusions drawn here are directly related to the current decentralisation policies of the government regarding decentralised administration and the promotion of the larger rural places to urban functions (by creating a municipality), and also the division of large townships to smaller ones in Mazandaran province. The growth trend of the five major cities shows that, however, they have been historically the largest cities of the province and have accumulated greater social overhead investment over time than smaller cities, but the impact of recent decentralisation policy varied in each of them. This is the case of Gorgan, Babol and Qaemshahr

which grew less than Amol and Sari. The division policy of the townships (Fig 5.3) led to a decrease of population pressure in the first three owing to the increased administrative role of the new townships. The other two's boundaries remained unchanged after 1986; thus they continued to be the urban centre of their township and created multiplier effects in their local environs. The main function of urban centres here is the provision of services for their rural hinterlands, which meets Rondinelli's secondary cities' characteristics. The impact of agriculture on the urban employment structure was less evident, but the increased commercialisation of rural output stimulated rural-urban links in all aspects of economic and social life of the province.

CHAPTER: 6

ECONOMIC RESTRUCTURING, AND ITS IMPACT ON A CENTRAL PLACE (AMOL)

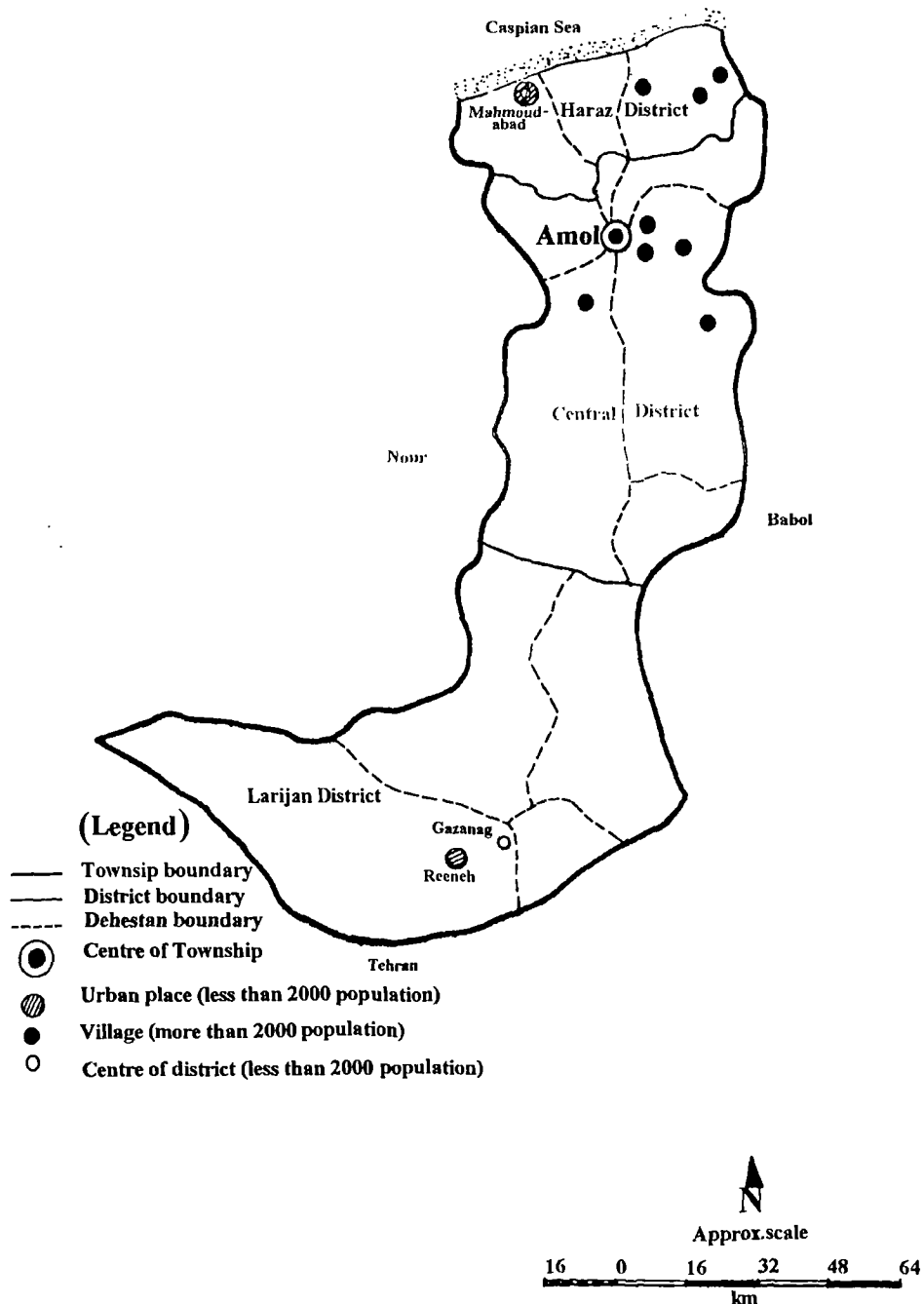
Introduction

Amol township is one of the 15 townships in Mazandaran province located in the central part. Administratively, the township (with 2,790.7 km²) consists of three districts; Larijan, Markazi and Haraz and there are two other towns, one in each district, Mahmoudabad and Reeneh (Fig 6.1). The township is further divided into 13 parishes (dehestan) with 413 rural places. From the physical point of view, the township lies in three different morphological regions; the mountainous part in the south is Larijan district, the densely populated forest and plain area in the Markazi (central) district which includes Amol city and finally the coastal section in the north is the Haraz district. Most rural settlements are situated in the central and coastal part of the township where the predominant activity is rice cultivation. According to the 1986 census 44.2 percent of the population were employed in agriculture including animal husbandry, fishing and forestry.

6.1 Economic structure of Amol Township

The 1960s reform programmes had significant effects on rural communities where the dependency on land was very high. According to the First National Census in 1956, in 85 percent of the Amol township's villages, part or all of the agricultural lands were owned by absentee or present land owners (*Malik=Arbab*) who did not work on their lands; only 15 percent belonged to peasants who worked their lands (SCI, 1959). Unfortunately, there are no data about distributed land after the implementation of the reform which obscures a major restructuring process. However the changes in crops in the Amol city suburban areas by the wealthy land owners in the attempt to exempt their lands from reform in the mid

Figure 6.1: Amol Township by District (1986).



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1960s is an indicator of their effect. Utilisation of agricultural machinery in the township, especially in the paddy-fields, where ploughing was very laborious in comparison with the work done in grain fields, led to an increase of rural labours; this was another way of gaining exemption from reform. For instance the import of tillers from Japan increased from one in 1957 to 4,369 in 1964 (two years after the land reform) and to 10,050 in 1972 at its end (Okazaki, 1985). Unfortunately, the mechanisation of agriculture, whether to increase output or escape reform, left many rural workers unemployed who made their way to urban centres, the capital and Amol. Also, the land owners who received compensation from government, or peasants for their properties, invested it in commercial activities in the city; however they were semi-urban before moving to the city. Moreover, nationalisation of forest land left the pastoralists without grazing land which was the basis of employment for most of the forest villages of Amol and Nour townships.

The economic boom of the 1970s following the explosive increase of oil prices created macro economic changes which undermined the agricultural sector. The extensive importation of foodstuffs, especially American rice, at low prices in comparison to domestic produce, struck the economy of rural farmers in the township which had been growing as a result of the application of machinery and fertilisers. Therefore a second stage of migration was encouraged through the exodus of rural males. The excess of middle aged men over women shows the selective nature of migration to Amol city in 1976. The families stayed in the villages while men moved to the city for a job; this is possible because even the farthest village is less than two hours travel from Amol city. The improvement of the transport system and educational institutions encouraged the movement of educated people toward the cities where they had more chance to use their

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knowledge, instigating a rural brain drain (Lipton, 1977).

The population of the township has experienced change over three decades. The absolute increase of total population was slow in the first period (1956-66) which was due to a relatively high death rate owing to malaria and emigration toward the capital. In the following decade (1966-76), the population grew faster owing to the eradication of malaria and improvements in nutrition. Finally the highest increase (two-fold) was in the post-revolutionary era (1976-86). The rate of natural increase for the township was 2.1 percent in 1986, which was lower than Mazandaran province's rate (2.9%), despite the domination of the rural population. The assumption of high rural fertility seems to be incorrect in the case of Amol township. Therefore, migration was important for its population growth.

The percent of urban population increased from 14.6 percent in 1956 to 39.5 percent in 1986, partly owing to the reclassification of the coastal city of Mahmoudabad which was a rural place until 1976. Amol city, as the biggest urban centre of the township, contributed most to the urban population changes (Table 6.1).

Table 6.1: Population change in Amol township 1956-86

Year	Total pop	Urban	Rural	Urban %	Rural %
1956	152,211	22,251	129,960	14.6	85.6
1966	171,524	40,076	131,448	23.4	76.6
1976	232,475	76,066	156,409	32.7	67.3
1986	332,678	131,323	201,355	39.5	60.5

(Source : SCI, Amol shahrestan [detailed results] 1956-86)

6.2. Rural-urban interaction

Many development strategies considered agriculture as a key acting in small and middle sized urban centres. The 'agropolitan districts' of Friedmann and the 'secondary cities' of Rondinelli both paid attention to the agriculture sector in regional planning. Both deemed linkages between urban and rural areas essential to the process of development. While for these scholars, local and regional resources were the determining factors shaping rural-urban interactions, others believe that the role of the global recession of the late 1980s and early 1990s with the collapse of socialism in Eastern Europe and former USSR, should not be ignored in the study of urban-rural interaction in developing countries (Potter & Unwin, 1995). Here, taking account of the above global change and national constraints toward agriculture in Iran, an attempt has been made to evaluate the nature, change and development of rural-urban interaction in the region of Amol.

The rural population of Amol and Nour townships commute to the city on a daily basis which fluctuates through the different seasons. One of the main reasons for the intensification of rural-urban interaction was the improvement of the rural transport system, as many remote mountainous villages are now connected to the city. The only way to approach the rural population was to carry out interviews with rural passengers at Amol's four main bus stations. The stations of Larijan and Nour serviced the mountainous and forest villages, while the plain villagers travelled to the city through Mahmoudabad and Babol stations.

The survey was biased towards men (65 percent) because many females travelling with their male relatives preferred not to take part; 42 percent of men were accompanied by one or more of their family. Women who were alone agreed

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to answer the questions. Of the total sampled, three out of four people were aged 16-65 years. Distance was an important factor for under fifteen year olds as the passengers from plain areas (nearer) were younger than from the mountainous areas. The survey took place during the main rush hours, to avoid being biased against a particular professional group, as, for instance, official workers had to be in their work places at 8 a.m. The questionnaires which were completed in the morning generally covered the passengers who had to stay in the city for a night, the interview had to be done with passengers waiting at stations to leave because arriving rural people were in a hurry. Evening passengers consisted mainly of officials who were returning to their villages.

The survey asked respondents 'What was your main reason for travelling to the city?'. The responses from all four bus stations are aggregated and shown in Table 6. 2 below.

Table 6.2: The main purpose of travelling to the city (%)

Station	Agro-related	Work related	Medical purposes	Shopping food/ cloth	Visiting relatives	Entertainment
Larijan	27.5	12.5	15.0	37.5	7.5	0.0
Nour	25.0	20.0	7.5	20.0	17.5	10.0
Mahmoud.	25.0	7.5	17.5	40.0	5.0	5.0
Babol	15.0	15.0	12.5	42.5	5.0	10.0
Average	23.1	13.7	13.1	35.0	8.8	2.5

(Source: Author survey, 1994)

The high density of rural population in the township provides a large consuming market for urban made commodities. As the Table shows over a third of rural people's prime purpose was shopping, which ranged from food to cloth and housewear. The second important aim was agro-related (23.1 percent), that is

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the purchase or sale of outputs or inputs (fertiliser, repairing machinery, to hire labour). The main rural products (rice and fruits) are usually supplied to the markets by van and lorry and are excluded here; only vegetables on a small scale were delivered to the city by the farmers.

The survey took place in the high agricultural season especially for rice; much of the extra rural labour force came to the city to be picked up by farmers of particular village for work in the rice-fields, as wages increase rapidly at harvest time. Therefore Amol not only distributes the urban made commodities but also articulates the rural labour market, thus highlighting the role of the city in all stages of production, distribution and consumption of rural out-put. Other reasons such as medical and official (as work place or to visit the headquarters office) were in third place. The improvement of rural medical clinics over the last decade decreased markedly the volume of movement for medical reasons. As an unpublished document in the Health Centre of Amol revealed, between 1988 to 1993, 12 rural clinics were founded in different districts of the township.

The survey could not obtain any direct information about pupils who commute to the city for educational purposes (schools were closed for the summer holidays). Thus the Education Office of the Township was approached so as to estimate how many pupils of the city's high schools (15 high schools plus 4 technical teaching schools) were of rural origin during the last year (1993-94). On average, about 15 percent of the pupils were coming from rural areas of the township, although a number of schools took more than 30 percent of their students from rural areas, especially for the new system in high school (nezaam jadid, this system opened in 1990 which takes intelligent students and the subjects are taught at a highest level) which was only available in the city. Thus the city

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plays an important role as an educational centre and will attract more rural young through the opening of the newly established Open University in 1995.

The majority of the commuters came from plain areas less than 20 km from the city. As Table 6.3 indicates, about 60 percent of passengers were commuting less than 20 km to the city. Only 26.3 percent of them were coming from villages, more than 50 km away. The frequency of travel declines with increase of distance significantly ($X^2 = 30$, critical value 13.28 at $p = 0.01$ level, $df = 4$). Generally, 55 percent of the sample population commute to the city more than twice a month and while people from the remoter villages travelled only one or two times.

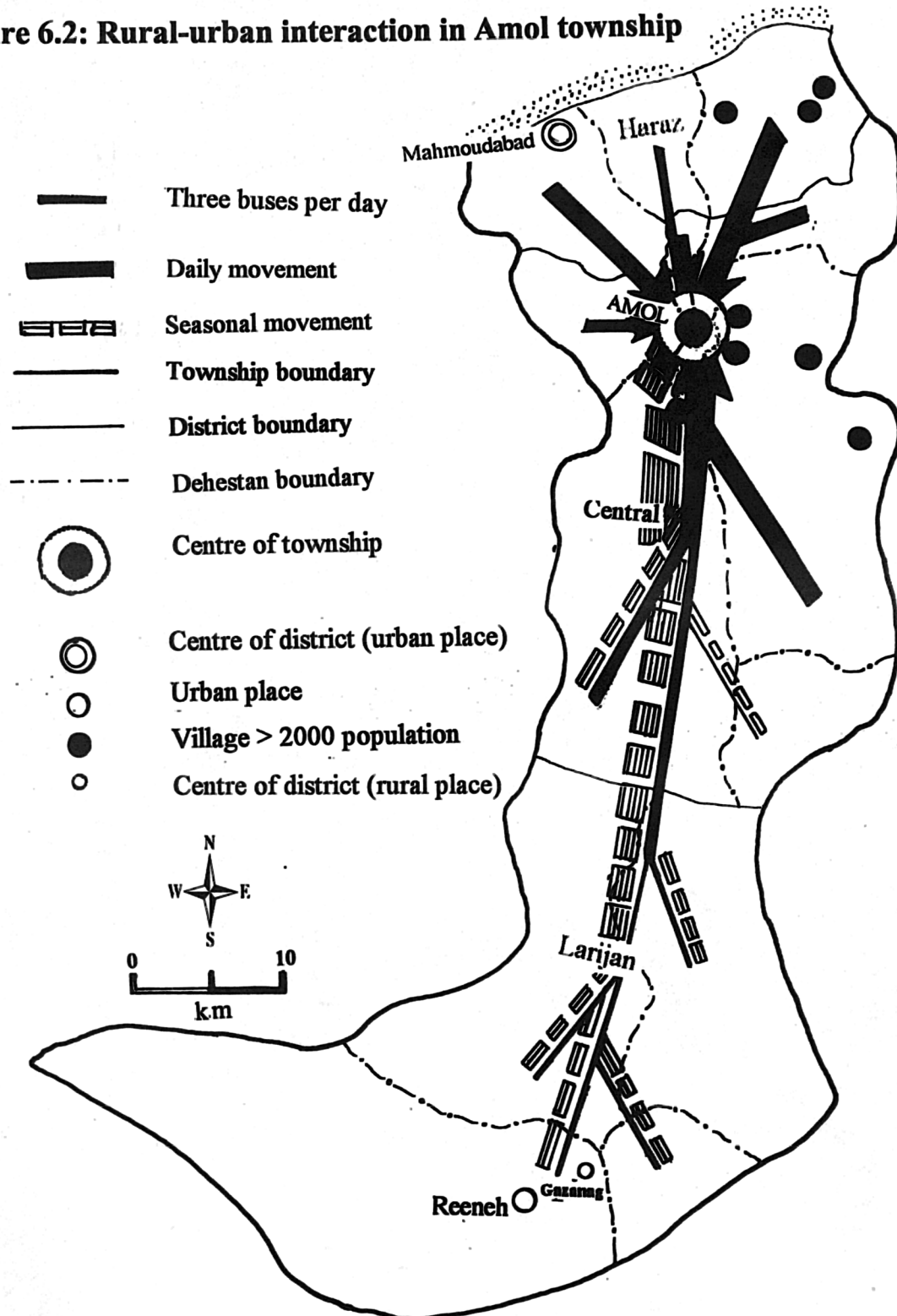
Table 6.3: The distance (km) and the frequency of travel to the city (monthly)

Frequency Distance km	1	2	3	4	5	+5	Total
<5	0	1	2	3	3	4	13
6-10	1	3	4	8	9	8	33
11-15	2	4	6	5	8	3	28
16-20	3	4	5	2	3	3	20
21-50	9	7	3	2	2	1	24
> 50	21	17	3	1	0	0	42
Total	36	36	23	21	25	19	160

(Source: Author survey, 1994)

It is clear that the profession, aim and season determined the frequency of travel to the city. Figure 6.2 illustrates the sequence and volume of daily and seasonal movement of population in different parts of the township (Fig 6.2 is based on the volume of people only for Amol township and thus Nour township is excluded in this Figure). Larijan and the upper part of the central districts have less daily contact to Amol compared to their seasonal movement. Seasonal movement between the city and mountainous hinterland (Larijan and some part of

Figure 6.2: Rural-urban interaction in Amol township



Source: Bus Station Office of Amol and author survey 1994.

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Nour township) reaches its highest level in summer and autumn. The first groups of passengers are the rural and urban population who move to the highland for a two or three month period to enjoy the cooler climate; records for the Larijan district show that the population of the district increases from 10,000 to more than 30,000 in summer (Bakhash-dari, 1994). The second group are the rural population from the plain and mountainous areas who commute to the city to sell or store (refrigerate, especially apples) their agricultural products. In general the population from the plain areas travel to the city more frequently than from the mountainous.

In order to appreciate the trends over time in frequency of travel to the city, the active aged group were asked 'do you travel to the city more recently compared to five years ago?' Seventy two percent of total responses were affirmative. They believed that the recent increase in living standards and agro-activity enabled them to have more contact with the city. Therefore, the fluctuation of agriculture as the mainstay and dynamo of the regional economy was an important factor in the intensification of the commercial function of Amol. As Manzanal and Vapnarsky (1986) argued, the extent to which agriculture stimulates or supports local urban development depends critically on the value of crops; high value crops provide good incomes for farmers and agriculture workers which can support rapid growth of local urban centres to the point where agriculture supports a relatively urbanised population. It can also attract new enterprises from outside the region. A study of agricultural development in the Punjab of India showed that the rapid increase of agro-product prices widened the market for consumption goods and services which intensified rural-urban interactions (Bhalla, 1995).

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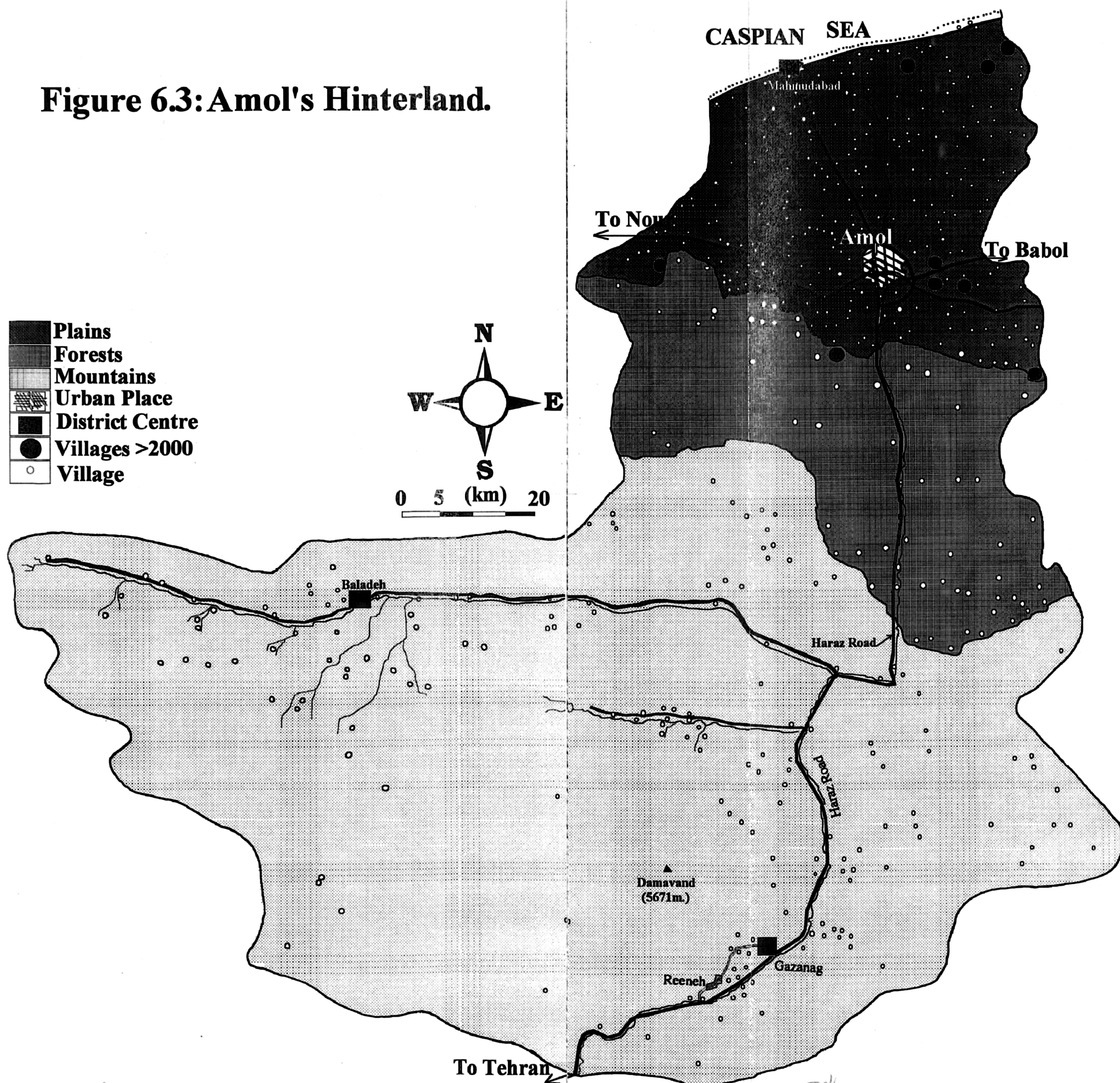
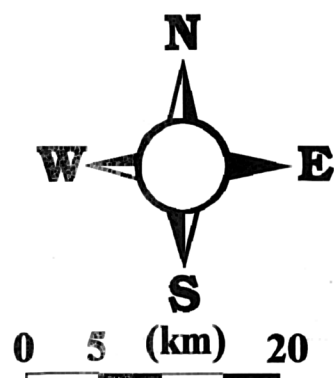
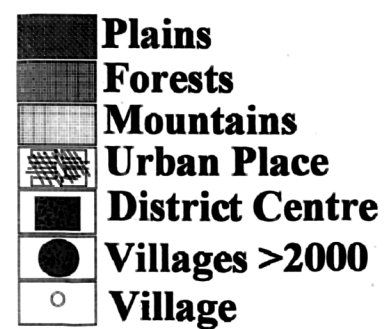
It seems that the relationship of the city with its hinterlands was previously based on low rural outputs due to a stagnant economy; rural dwellers had less relations in an almost closed environment and were only consumers of urban markets but now the growing value of rural products gave them something worth supplying and earned more income. However, a number of studies claimed that the growth of Iranian agriculture has not been marked at the national level, although most of this research was carried out before end of the war and relied on the data published between 1980-86 (Mojtahed & Esfahani, 1989). The present empirical study of Amol and its hinterland illustrates that agricultural improvement at a regional level has been the main stimulation of urban expansion. As Findlay (1994) pointed out, 'agricultural development in particular countries needs to be judged relative to resource availability and development goals, rather than against idealistic western models'. Thus, Haswell's insistence that cities are the main generator of debt and modernisation without development is somehow misleading in this case (in Morgan, 1978).

6.3. The role of Amol city in the township

The city is sited at the junction of mountainous and plain areas and is surrounded by more than 500 villages in Nour and Amol townships (Fig 6.3). Most of the populated villages are situated at a short distance from Amol in the Markazi and Haraz districts in the plain section. The improvement of transport systems accelerated interactions between city and rural places in the post-revolutionary period.

Although the main head-quarter offices of the city oversee the smaller offices in the districts and in turn in the villages which creates continuous relations

Figure 6.3: Amol's Hinterland.



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among these places, Amol's main importance is a regional market. A complicated web of transactions exists between Amol and its hinterlands which are articulated primarily by the merchants of the Bazaar, although the role of day markets is significant and new forms of commerce have displaced traditional craft based activities.

6.3.1. The role of the Bazaar

The Bazaari class in Iran were great supporters of the clergy and at different stages of the revolution, had a vital role in the unification of the opposition groups (Bakhash, 1985). The vote and financial support of Bazaar merchants is very important for local government candidates and they therefore influence local and sometimes regional decision making; for instance for the selection of the Majlis Representative who is chosen by the direct vote of the township population. Usually the candidate who had more support of the Bazaar demonstrated by extensive propaganda wins the most votes. They may affect decision making in the City Council or in the Municipality in favour of some quarter or neighbourhood of the city. The Bazaar operates on a regular basis and consists of numerous small-scale merchants who usually employ family members and occasionally, one or two assistants; it fosters regular relationships with suppliers and customers. The Bazaar acts as a channel of distribution for farm products (mainly rice) from rural areas and for manufactured goods from Tehran and other large urban centres. However, although the monopoly role of the Bazaar is threatened by the expansion of retail shops along the main streets and quarters, villagers were entirely dependent on the Bazaar traditionally; most of them still sell their products to certain vendors and become regular customers so as to obtain credit.

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According to 75 percent of the Bazaar merchants, the rural consumers were more important than the city residents. The rural areas of Nour township, despite the closeness to Nour city, have regular contact with Amol's Bazaar. The increasing influence of Amol in the rural hinterland resulted strongly from agricultural profitability arising from new markets abroad, especially the Central Asian countries, as a considerable volume of citrus fruits and cereals were exported in recent years. Therefore, here cities (especially through the Bazaar's merchants and other commercial sector) can play a crucial role to connect the region with the outside world. However the existing agricultural policies do not capitalise on the potential production which the province in general and the region in particular with highly fertile lands could attain beside being an important geopolitical region. The Caspian Sea provides a reasonable and economical means of transport to the new markets. Recent documents about the main orientation of the Second Development Plan (1994-1999) reveal that the promised priority for agriculture is overshadowed by industrial biased projects and despite the early emphasis on the rural sector, urban areas (especially Tehran) receive more attention from President Rafsanjani's government cabinet (Nasiri, 1997, p 83).

The Bazaar's function was analysed by the scale and type of business and the sources of supply and demand. They were small-scale retail outlets (Plates 6.1 and 6.2) and only 13.6 percent were wholesale, although some of them operated at both scales. The goods sold in the Bazaar were generally supplied from Tehran; more than 70 percent of traders bought their stock directly from the capital. This dependency on Tehran arises from the lack of a large city in the region and also its close proximity to the capital (250 km). Tehran is also the major market for agricultural produce such as rice and fruit which local merchants supply for foreign markets (export). Some goods, likes textiles and furniture, are provided

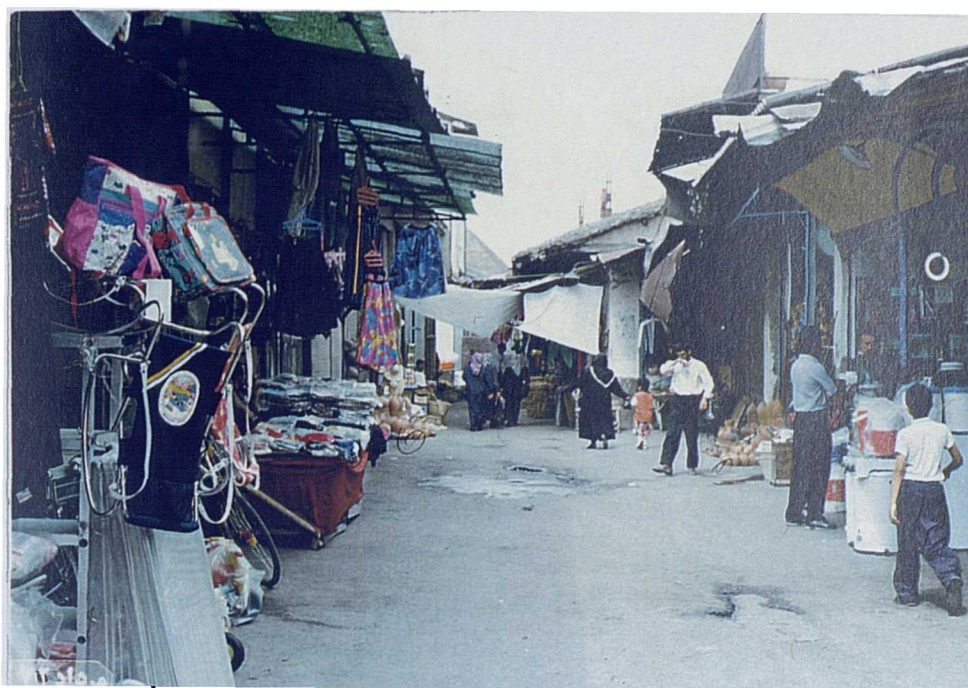


Plate 6.1: Bazaar.



Plate 6.2: Bazaar Cloth Rasteh.

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from inside the province, for instance Mazandaran Textiles are famous in the country and are produced in Qaemshahr and Behshahr cities, as the province is relatively rich in cotton production. Moreover a number of cloth shops are supplied by the two main cloth-making factories (Jean-Mode and Dokht-e-Khazar) in Amol. The various commodities supplied by the Bazaar, cloth and household goods with textiles made up more than 54 percent of the commercial goods (Table 6.4), while only 6.4 percent of the units provided services.

Table 6.4 Distribution of commercial units of Amol by their function

Function	Bazaar		Retail Shops	
	No	%	No	%
Food/rice	33	11.8	62	38.7
Clothing	65	23.2	7	4.5
Textiles	42	15.0	4	2.3
Carpets	11	3.9	2	1.3
Jewellery	19	6.8	2	1.3
Shoes & leather	31	11.1	6	3.8
Household goods	41	14.6	11	6.9
Furniture	10	3.6	3	2.1
Handicrafts	4	1.4	7	4.1
Industrial spares	6	2.1	3	2.0
Services	18	6.4	53	33.0
Total	280	100	160	100

(Source: Author survey, 1994)

Such functions are concentrated in the main streets close to residential areas. Food shops such as grocers, butchers, bakers and others only made up 6 percent, also the same percent of shops were selling rice. Rice is relatively monopolised by the Bazaar merchants, who buy and store it until a suitable market arises (many of these merchants own some agricultural land in the villages). Many rice dealers also own another shop with a different function; they usually purchase

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from the same farmers and villages so there is a form of chain relations between farmers and dealers of rice. Sales fluctuates in the Bazaar; more than 90 percent of shop-keepers believed that sales reaches the highest level at end of the summer. Thus the dependency of the Bazaar on its rural hinterland is revealed through the impact of the fluctuations in agricultural production.

Amol Bazaar lost its productive role in the last decade and became a commercial distributor of manufactured commodities. The majority of blacksmiths and felt carpet weavers have been replaced by multi-storey department stores selling a wide range of house-wear, cloth, textiles etc. The Bazaar traditionally also had a few tea-houses which served simple food to the rural customers; these have been weakened by the emergence of many take-away shops in the main streets and at the entrance of the Bazaar. Moreover new electric household goods represented 14.6 percent the Bazaar's shops.

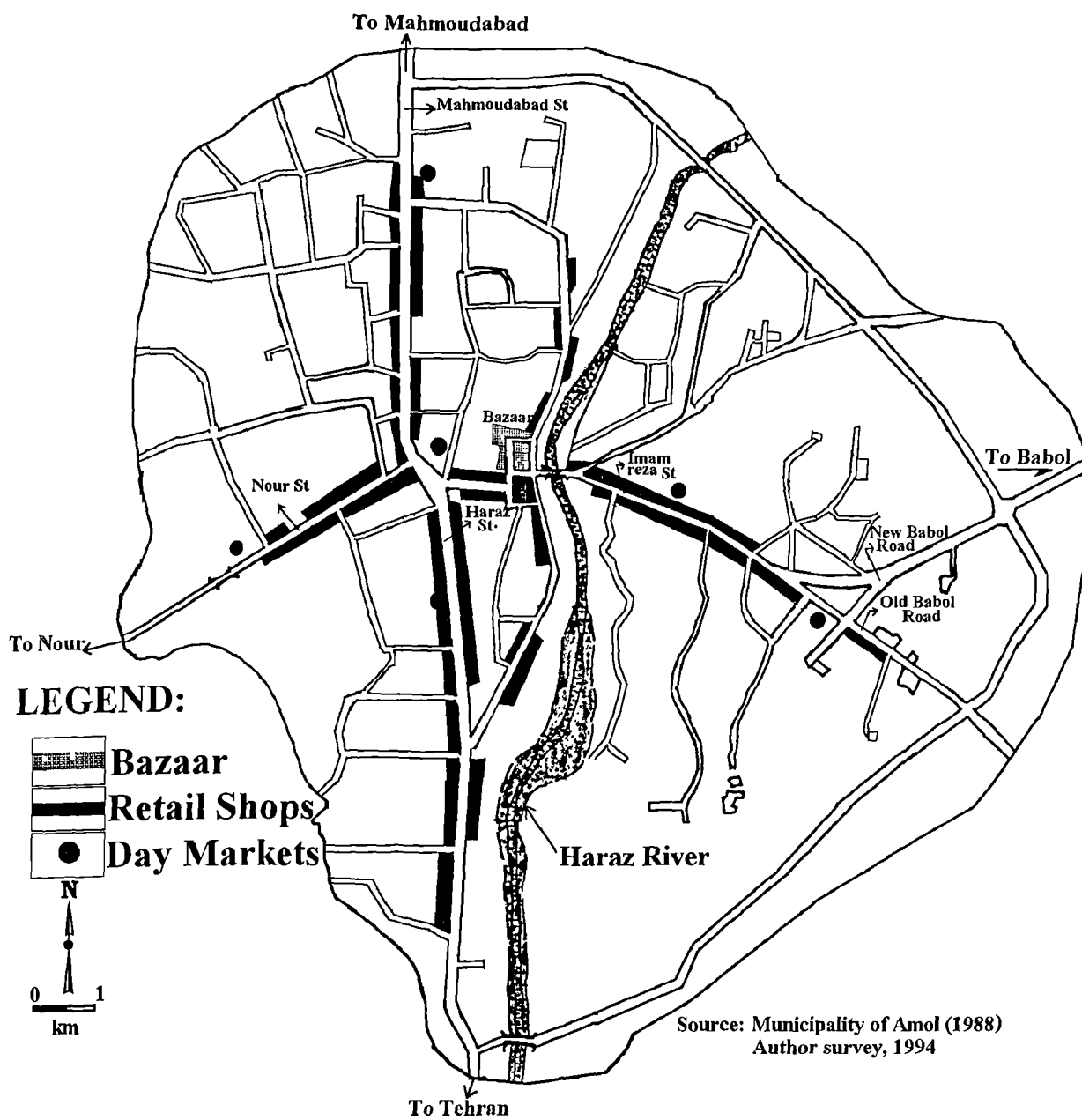
The type of ownership in the Bazaar shows that more than half (59 percent) of the outlets were owned by individuals and 29 percent were jointly owned by two or three persons; most of these were wholesale or mixed with retail. The rented shops represented only a fifth of all units. This simply indicates that the rental of an outlet inside the Bazaar is very high due to intensive competition between the traders. The size of the units with respect to their function (wholesale or retail) and the size of goods differed. More than half of the units were less than 20m², which reflects the relatively high value of land compared to the retail shops outside the Bazaar.

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The function of the commercial activity changes toward the outside and even at the entrance of the Bazaar. The main administrative offices, medical centres, banks, real estate agencies and services are concentrated around the Bazaar. In contrast to the Bazaar, only 1.2 percent of the shops sold wholesale; the majority of retail shops were serving the daily needs of the residential areas and providing personal services (Table 6.4). There was a significant difference in function between Bazaar and retail shops (calculated $X^2 = 128.29$, critical value 16.81 at the 0.01 level, $df = 6$). Over a third (35.7 percent) of the units were rented compared to 12 percent in the Bazaar. The average area occupied by retail markets was also larger than the Bazaar despite the paucity of wholesale units. The suppliers of the retail shops were primarily merchants of the Bazaar, but 42.6 percent were supplied directly from Tehran. Thus the power of the Bazaar merchant can be traced in the smaller shops outside its commercial boundary.

The rapid increase of population and expansion of the city toward fringe areas have encouraged the advance of commercial establishments along the four main streets (Fig 6.4). Some differences are evident between them according to the type of goods and services. Both Nour and Imam-Reza shops are a mixture of non-service and service functions as they are located away from the Bazaar. Even in Imam-Reza a number of multi-storey department stores (pasaaj) have been founded in recent decades (Plate 6.3). Amol's cross-road position connecting central Iran to the Caspian beaches through Haraz road is also an important reason for the development of commercial units, as the majority of the local handicraft shops are located at the entrance of Haraz and Mahmoudabad streets where tourists pass on their way to the beach.

Fig. 6.4: Distribution of Commercial Centres in Amol (1994).



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6.3.2. The role of day markets

The commercial function of Amol city in the region is also exposed by its Day Markets which are a particular feature of rural-urban exchanges in the north of Iran, being less known in other parts of the country (1978). These markets are entirely dependent on regional products and predominantly run by women who come from the villages on certain days of the week. Unlike the Bazaar where many goods are supplied from the capital (except rice), day markets are entirely dependent on rural produce (Plate 6.4). In the early 1980s the city had three main day markets, which had increased to seven by 1994. The increase has been accompanied by a greater number of sellers in three of the four markets sampled in this study, Andevary, Imam-Reza, Falakeh and Nour (Fig 6.4).

Nour and Andevary day markets were founded in the post-revolutionary period. The sellers were almost equally split between urban and rural (54.7% rural) origins. Women outnumbered men by 8 percent (plate 6.5) which illustrates the active role of women in rural households. The dominant goods for sale were fresh vegetables in three of the markets, while dairy and poultry products ranged from 35-60 percent of the market' stocks (Table 6.5).

Table 6.5 The diversity of rural products in day markets (%)

Goods	Falakeh	Imam-Reza	Andevary	Nour	Total
Vegetables	30	40	40	20	32.5
Fruits	15	20	25	20	20.0
Dairy products	5	30	15	30	20.0
Poultry	30	10	20	30	22.5
Fish	20	-	-	-	5.00

(Source: Author survey, 1994)



Plate 6.3: Passaj in Imam-Reza Street.



Plate 6.4: Day Market (Falakeh).

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Falakeh, the oldest market, had more diverse goods for sale than others, for instance fish sellers were only present in this market. The diversity is related to its location beside the main square where the rural sellers of different parts of the hinterland meet each other; moreover its relative vicinity to the Bazaar provides more customers than to the other markets. The other three markets were predominantly run by rural sellers.

One of the major characteristics of day markets is the length of activity; most of the stock are sold in the morning. The early hours are the busiest. The survey showed that the availability of market goods determined the hours of sale in the market not the number of customers, as the majority of sellers believed that if they had more products they could run the market for the whole day. In addition, customers were rushing to the markets to buy better quality products, as they believed market stocks usually ran out by midday. The increase of agro-products' prices in recent decades encouraged many rural households to participate directly in day markets instead of selling to intermediaries. The improvement of the transport system in rural areas also provided better access to the urban market. The majority (72.6 percent) of sellers were satisfied working in the markets despite the increased competition due to expansion. A number of sellers stated that vegetable growing is more profitable than rice, as they owned a small plot of land, usually under one hectare. According to the survey of customers, the high inflation rate of food prices, especially meat, led to a shift to vegetables, as 52.4 percent of customers responded that the price of vegetables is much lower. Day markets compete easily with the permanent fruit shops by offering lower prices and better quality, as the vegetables and fruit are delivered daily. Also, customers can find bargains in day markets, while in permanent fruit shops the prices are fixed.

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One of major reasons impeding participants of day markets to set up a permanent base is the level of tax. Many of them (57.6 percent) without a fixed place in the market never paid tax to the Municipality and the rest paid a small amount compared to the retail shops. The urban authorities explained such different treatment by the government as a measure to support agriculture and the rural economy, especially small landholder farmers (Mojtahed & Esfahani, 1989, p 841) on the one hand and to keep the price of vegetables down for the urban consumers on the other; this led to an increase of day markets rather than fixed outlets. Thus the proposition that an increase in urban population leads to the phasing out of day markets for more permanent shops is not valid in Amol city. In contrast, the number of markets and sellers has increased with the expansion of the city.

It is important to understand that in the pre-revolutionary period extensive imports of cereals, especially rice from Thailand and the United States, undermined the value of domestic products, which led to a stagnant agriculture in the region; many large land owners shifted partially from cereals to cash-crops (fruit, vegetables such as cucumbers, tomatoes etc.). This put pressure on smaller land holders. During the past two decades, increasing attention has been directed to the productivity of agriculture so as to obtain self-sufficiency with respect to the region's potential; the biggest problem in Iran is the paucity of water. The increase of agricultural products, especially rice, accompanied by a decline in imports in recent decades and the emergence of new markets in the Central Asia, led to the shift of large land owners from small cash-crops back to cereals, which reopened the market for smaller farmers to supply their various but small-scale products to the local urban day markets.

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The number of day markets and the number of days they operate is growing with the increase of the urban population. In a study of day markets in northern Nigeria, Hill and Smith (1972) advanced the hypothesis that in an essentially Muslim area, Friday should be the most popular day for market meetings. The survey in Amol showed that the busiest market day was Saturday, the first day of the week, as children and other members of the family were employed by the farmer (seller) on Friday (as schools and offices are closed) to pick and pack the vegetables for the next day. In fact two markets of the sample were closed on Friday and in two of them, few sellers were present. Most of these markets are located in or near rural-urban bus stations rather than inside the residential areas. Thus they also act as linkages between rural places and Amol.

There is also a different type of day market formed when the Municipality attempted to gather all informal street sellers in a place near the Bazaar; their goods were not agricultural but clothes, handicrafts, drinks and so on which soon attracted many customers (Plates 6.5 and 6.6). Later it was opposed by the Bazaar and under its pressure, it was moved to a newly made public park beside the river Haraz.

6.3.3. The role of industry

The increase of agro-products in the 1980 encouraged a number of private investors to put their capital into industrial units in the region, especially agro-related industries, like textiles which has a long history in the province. These are necessary for employment opportunities. Amol's major industrial units are located outside of the city boundary mainly on the Amol-Babol Road. A survey of eight industrial firms (four of them were active in textile and cloth making) was carried

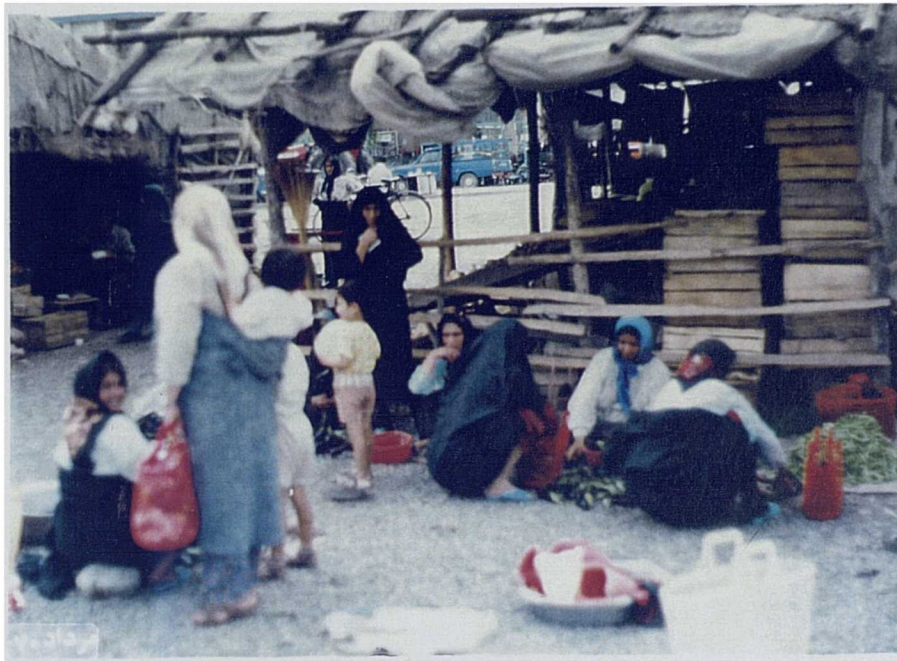


Plate 6.5: Day Market in Nour Street.



Plate 6.6: Thursday Market.

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out to obtain information about their activities and their impact on Amol city. All of the non-textile units of Amol were founded in 1970s when the main priority of development plans was given to the growth of the manufacturing sector. These firms, except in the case of Iran Electric, were based on local materials and work force (Appendix: 6). Three of four textile-related firms were established in the early years after the revolution (Appendix: 6). The largest of them all was Babakan Textiles which produces different types of thread and fabric. The factory had over 1000 personnel in 1994, about 40 percent of workers were women and the majority of workers came from Amol. The primary material was generally provided inside the province and also according to the manager's statements, the increase in cotton prices in recent years led to the importation of some materials from abroad. Other textile factories had similar conditions with Babakan.

One of the main problems for almost all units was competition with foreign products which are imported mainly from South East Asian countries. For instance in both cases of Jean-Mode and Dokht-e-Khazar, the firms increasingly relied on imported primary material which is better quality and cheaper than the domestic. The main market for these firms was primarily the province. Only Sherkat-e-Amolo (mineral water) exported its products abroad, mainly to Eastern Europe and the Persian Gulf countries. Since this firm was based on domestic primary materials, the general situation was satisfactory, and especially it had plans to increase its production by 20 percent over the next two years.

The evaluation of firm managers' statements revealed that the ambivalent national industrial policy led to the unsatisfactory growth of these units. On the one hand the government encourages the private sector to participate in industrial development by giving credit, while on the other, extensive imports of industrial

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products tightens the market for domestic ones. Thus, agro-related industry might have increased by the number of firms in the post-revolutionary era but their ability to absorb the labour surplus from other sectors (especially commerce) seems less promising.

Conclusion:

It is possible to make three general conclusions concerning the changes that have taken place in terms of rural-urban relations associated with agriculture in the township over the three decades. The first is that the 1960s land reforms of macro-economic restructuring dislocated many rural households in the hinterland of the city, as the program failed to implement the complementary stages. Secondly, the injection of oil revenues into the national economy permitted the marginalisation of the productive role of agriculture through the extensive import of grain. Thus, rural-urban migration, which started in the previous decade, accelerated in the 1970s. Thirdly, the resurgence of agriculture in the 1980s in response to internal and external factors boosted the income levels of rural families, especially in the plain areas where rice is the dominant crop. This income increase created a higher demand for urban made goods for which the Bazaar is the main distributor. Therefore Amol expanded further as a result of rural prosperity.

CHAPTER 7: THE PHYSICAL GROWTH OF AMOL

Introduction

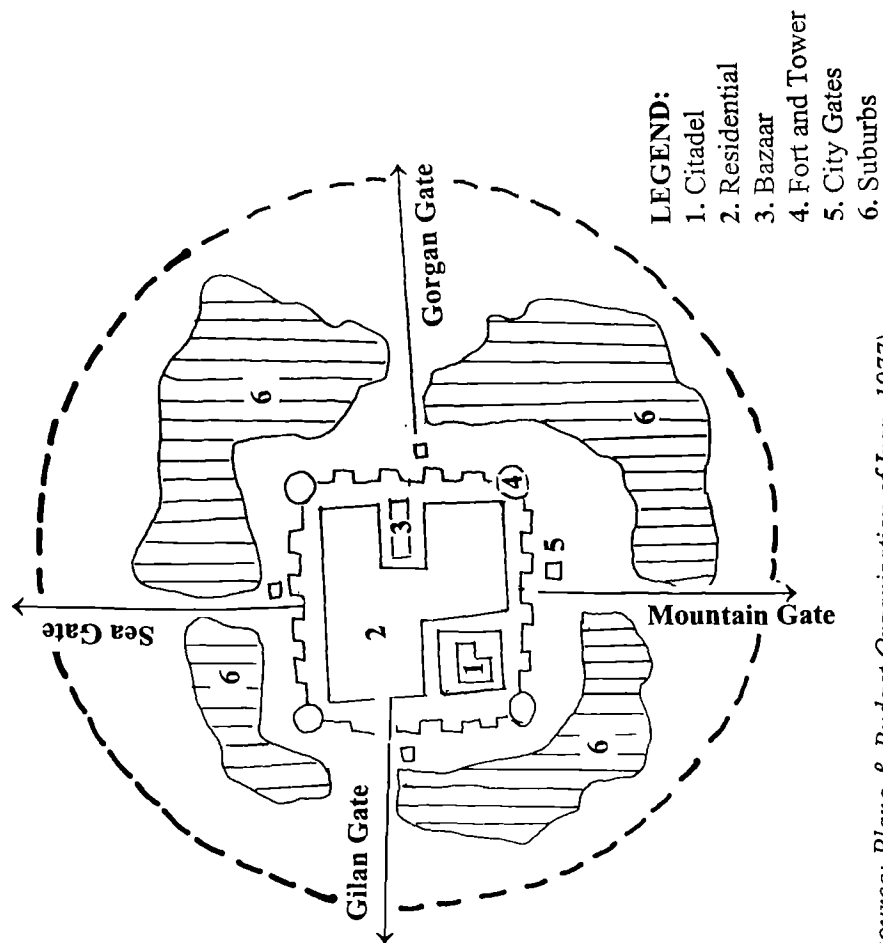
This chapter aims to evaluate the socio-economic changes and the physical expansion of Amol city as whole first, and then, with pre-knowledge of the city, the demographic and residential characteristics of the selected quarters of the indigenous population and migrants will be investigated.

Amol city is more than one thousand years old (Rabino, 1913; Fig 7.1). Its first nucleus was on the west bank of the Haraz river; some Islamic elements such as mosques and shrines were added to the old urban buildings like the Bazaar, public baths and Zoroastrian Fire-Temples after the conquest of the city by Muslim forces in 716 A. D. Population growth remained quite low because of natural disasters, for instance, a flood led to much loss of life in 1540, but they were replaced by Georgian migrants who were forcibly moved to the city. There is still a neighbourhood called the Gorgi-malleh today (Hakimian, 1968).

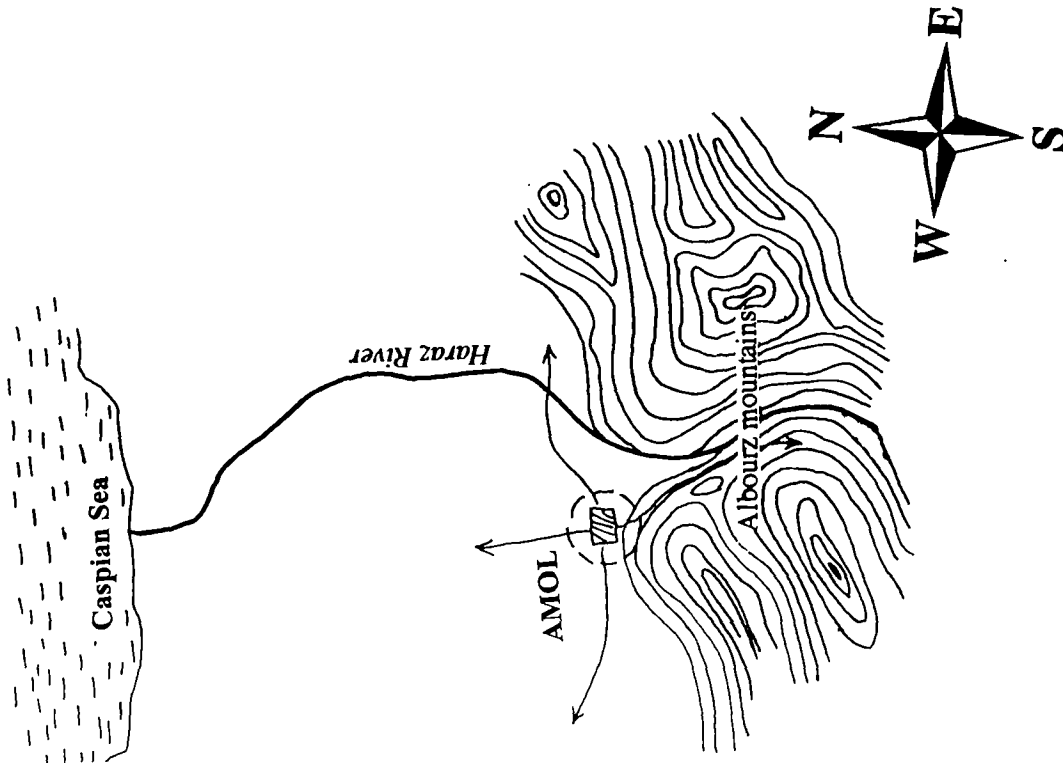
7.1. Population changes in Amol

At the time of the First National Census in 1956 Amol had 3,483 households with a total population of 22,251, and an average size of household of 6.4 persons. In ten years the population nearly doubled, owing to an annual growth rate of 6.1 percent, the highest recorded rate (Table 7.1). The number of households nearly doubled due to the break-down of the traditional extended family into nuclear families. The average size of these households also decreased by one person as a result of family planning. The population of Amol reached 68,068 in 1976, a lower increase in absolute terms compared to 1966, as the size of households (5.3 persons) and annual growth rate (5.6%) both decreased.

Figure 7.1: Site and Structure of Amol in Sassanid Dynasty Period (550, A.D.).



(source: Plane & Budget Organisation of Iran, 1977).



(source: Topographic map at 1:50 000; G.O.I., 1965)

The gender coefficient of 106 in 1976 could be explained by the movement of male migrants without their families; other members joined their relatives in the city later, as indicated by the lower coefficient of 102 in the next census. However an inter-census survey showed that the gender coefficient of the urban population of the township had increased to 108.4 in Amol township in 1991 (SCI, 1991). The previous trends continued over 1976-86 with a further decline in the annual growth rate (5.5 percent) and the size of household (4.6 persons) (Table 7.1). The average natural increase rate in Amol city was 2.3 percent in 1986, therefore the remaining 3.2 percent was due to migration. Amol city's share in the township population has increased from 14.6 in 1956 to 35.5 percent in 1986.

Table 7.1: Demographic changes of Amol city population 1956-86

Year	Total pop	G. R %	% of total pop			Size of H.H	No of H.H	Gender coefficient
			> 15	15-65	< 65			
1956	22,251	-	43.6	53.6	2.8	6.4	3,483	102.6
1966	40,076	6.1	47.0	50.0	3.0	5.5	7,318	104.6
1976	68,963	5.6	43.9	53.3	2.8	5.3	13,086	106.1
1986	118,242	5.5	41.8	55.5	2.7	4.6	23,485	102.4

(Source: SCI, Amol selected years)

The age structure of the city's population has also changed over the three decades. The percent of under 15 years group decreased from 47.0 percent to 41.8 percent by 1986. An increase between 1956 to 1966 was the result of greater survival rates following malaria eradication, and in next decade (1966-76) birth control was treated more seriously which led to a decline of those under 15 years old. The increase of the middle aged, except in 1966, was the result of immigration of young rural people to Amol city, the percent of elderly (over 65 years) has decreased steadily over the 30 years; the greater access to medical

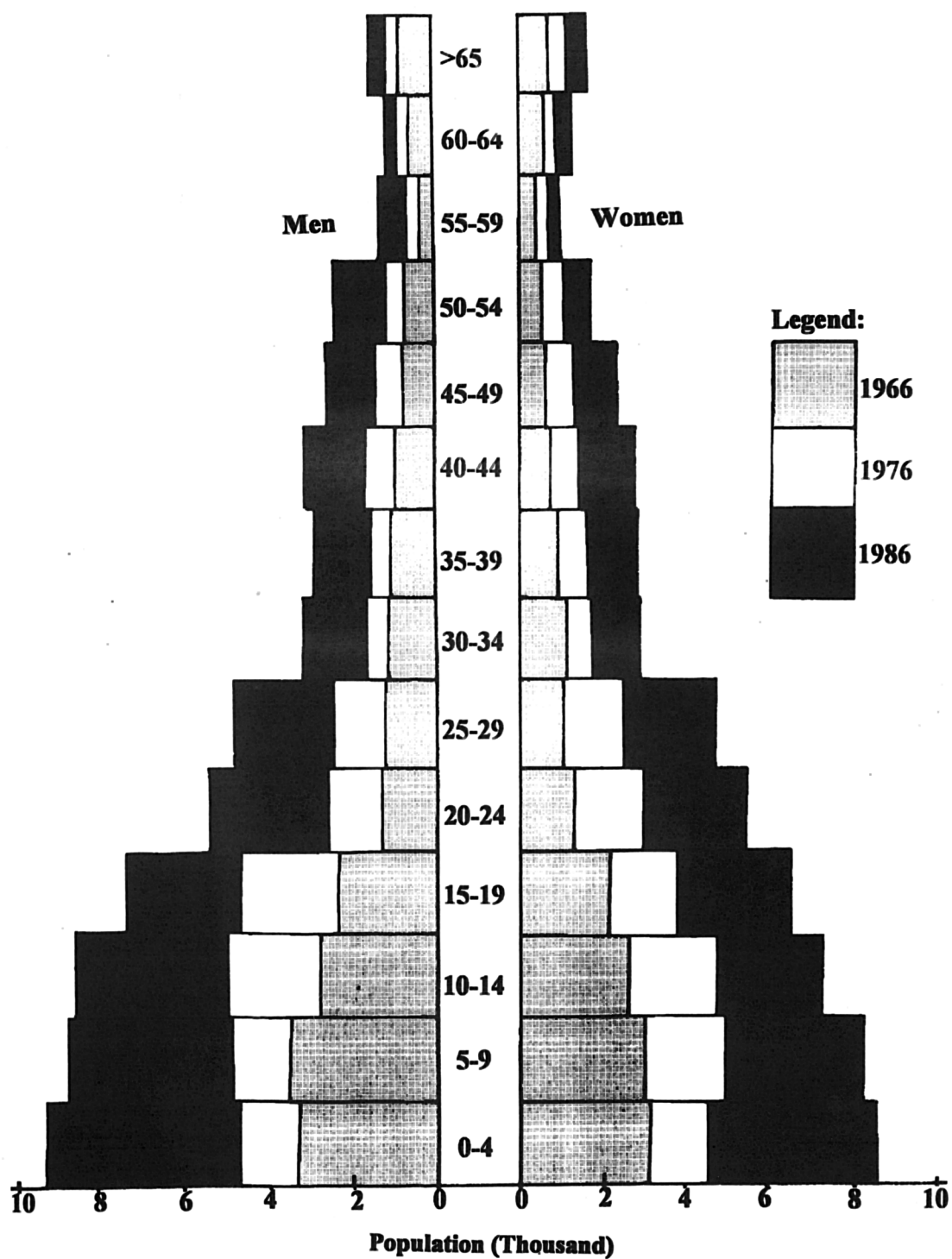
facilities could relate to the return of elderly population to their place of origin in rural areas.

The broad base of Amol's age-sex pyramid associated with extreme youthfulness indicates the high proportion of the population under age 15 who enter the child-rearing age cohorts (Fig 7.2). Despite the application of birth control, the average size of household still stands at 4.6 persons. However it has been claimed that there are signs of a slowing trend in Iran's population growth recently but the reality of this will only be revealed by the detailed results of the National Census taken in November 1996. Natural population growth and rural-urban migration led to a housing shortage in the city; however the extent of the housing problem is relatively less in small and intermediate cities compared to the large urban centres.

7.2. The physical expansion of Amol

The city witnessed much of its physical growth in the Pahlavi reign when the monarchy's policies focused on urban modernisation. The construction of the municipality building, the establishment of a high school, the construction of the suspension bridge, a few new shops and a large rice silo were the main additional elements up to the dismissal of the first Shah. The major physical changes took place in second era of the Pahlavi dynasty; the old square was renovated, the city walls were demolished and new buildings were constructed to accommodate local authorities for administrative functions which were sited mainly around the Bazaar and in the central part.

Figure 7.2: Age Distribution of Amol's Population.

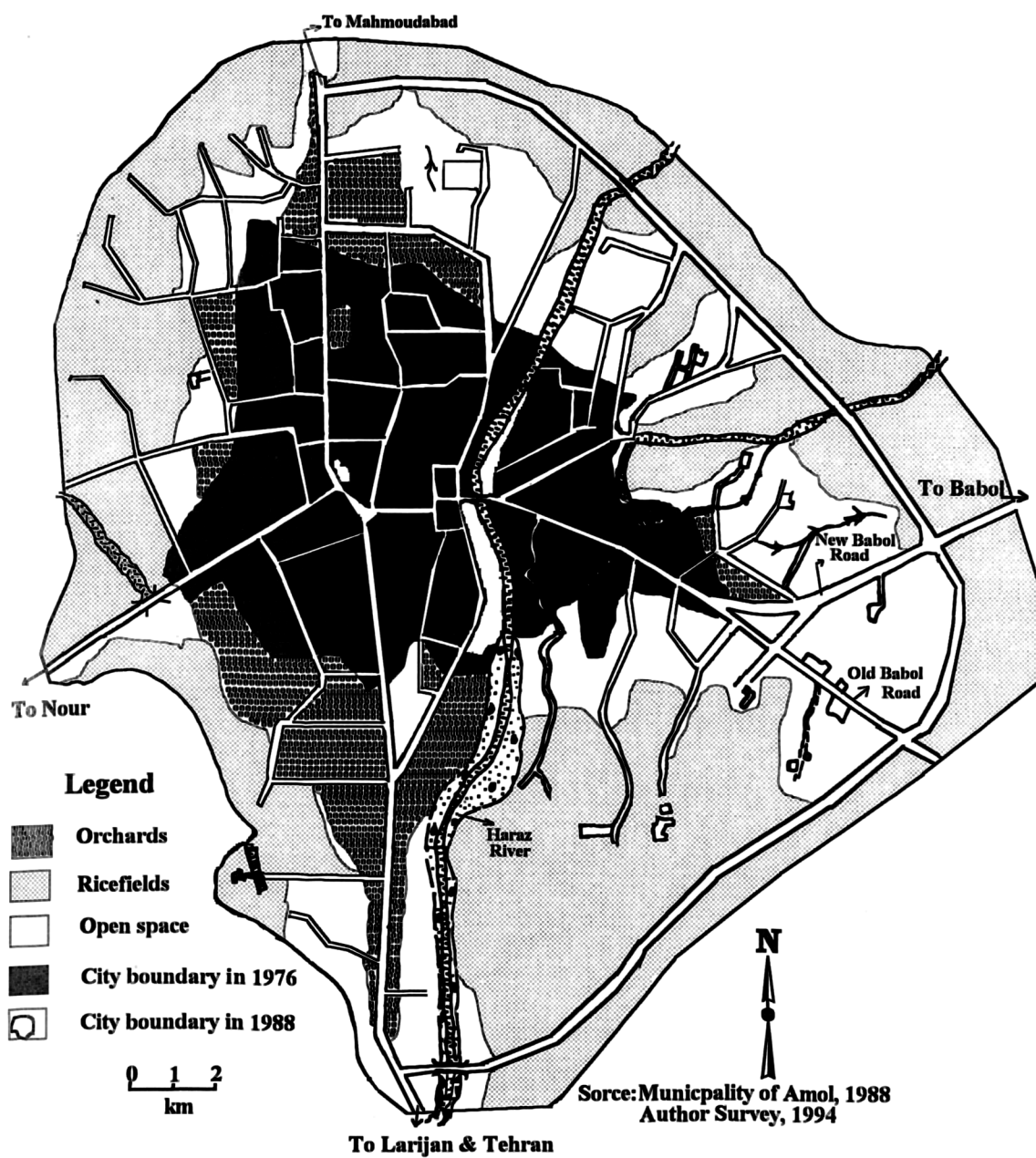


As mentioned previously, there are no data about the spatial allocation of National Plan expenditures but cities with high populations received most investment; only during the Fourth and Fifth Plans were the technical bureau of municipalities at the provincial level authorised to prepare guide maps for small urban centres such as Amol (PBO, 1968). The Master Plan proposed in 1970 gave priority to the provision of water, electricity, and street surfacing. The haphazard appearance of the city was changed by a relatively regular urban network with the construction of streets and boulevards, and the improvement of old alleys and avenues.

The physical expansion of the city from 1966 onward showed a new trend, as the implementation of land reform programmes and the lack of consideration of agriculture by the National Development Plans motivated the growth of the city. As a township centre with a commercial and increasing manufacturing role in an agricultural environment Amol could provide employment for a growing population. The main directions of its physical expansion were along the four major highways, especially the southern part where citrus orchards were mainly located (Fig 7.3). The area illustrates the increasing land transactions.

On the implementation of land reform in the township, many land-owners invested in commercial activities; these groups traditionally had stores and properties in the city. On redistribution of their lands in the villages, most of them transferred their assets to lands around the city where instead of cultivating rice, these planted citrus trees; the importation of foodstuffs undermined rice production and the citrus fruit seemed more profitable. Latterly these orchards were sold in plots in sizes suitable for residential purposes in response to population growth. The remainder of the rice lands belonged to households who worked them for

Figure 7.3: Urban Expansion of Amol (1976-88).



subsistence which prevented their sale while orchards were owned by comparatively rich people.

In the post revolutionary era Amol expanded in all directions. The intense growth in this period was due to the chaotic situation during the revolution. The urban planning policies were mostly concerned with decentralisation and gave more responsibility to the local level and a greater public involvement in decision making and the preparation of plans. The main objectives of the Amol Master Plan involved physical planning; it was revised in 1983 as the 'Detailed Plan'. This had to take into account social and economic factors in its implementation rather than concentrating only on physical factors. It had to determine land-uses in the city and to mark their boundaries. The plan was jointly implemented by the Municipality, local supervisors, contractors, the city council and the public, all of whom worked under the Housing and Urban Development Bureau of the province and the provincial Planning Council. The main shortcomings of this plan were its ignorance of rural population mobility. Thus urban infrastructural needs were based on the resident population, although used by that living in smaller cities and towns. In other word, cities were looked at in isolation from their hinterlands. Therefore it is not surprising that despite the implementation of plan goals, urban amenities are not able to cover the whole population.

The new government supplied cheap land, building materials and long term loans to state employees in smaller cities to overcome the shortage of housing, while in the capital and large urban centres, housing creation was the main policy. The growth of commercial activities in the central part led to the richer people shifting to the southern periphery of the city causing physical expansion in this area.

7.3. The residential structure of Amol city

Rural-urban migration and land speculation resulted in further physical development of the city but little attention was paid to urban planning criteria such as minimal space requirements, ventilation and access to public sanitation. Planning regulations are less observed in small and intermediate cities, especially in migrant quarters where the housing standards reflect the economy of the household and urban authorities are reluctant to intervene in the construction process (Shieh, 1990). The rising commerce and congestion in the central part, particularly around the Bazaar, encouraged many wealthy people to move out, especially to the south (Haraz street).

Despite the emergence of new quarters in the fringe areas, the central part still has the highest level of density (Fig 7.4). Residential density declines from the centre to the peripheral areas. There has been a trend towards segregation by income groups. A mixture of upper and upper middle classes occupy the south and Southwest of the city; the buildings are large and the style of architecture is similar to the villas of the Caspian beach with open space (Plates 7.1 and 7.2). The residents are a mixture of highly educated professionals and wealthy businessmen who have properties in the bazaar. This class resides between Haraz and Nour streets. The second spatial and residential area of Amol consists of middle class families of self employed businessmen and government employees. They occupy predominantly the area north of the bazaar at a higher density. Here, the residents are the oldest citizens of the city; the buildings are combined with new and old (indigenous) architecture (Plates 7.3 and 7.4). Further north of this area is occupied by lower middle classes who migrated from the rural areas of plain and forest villages in the early era of the revolution.

Figure 7.4: Population Density of Amol (1988)

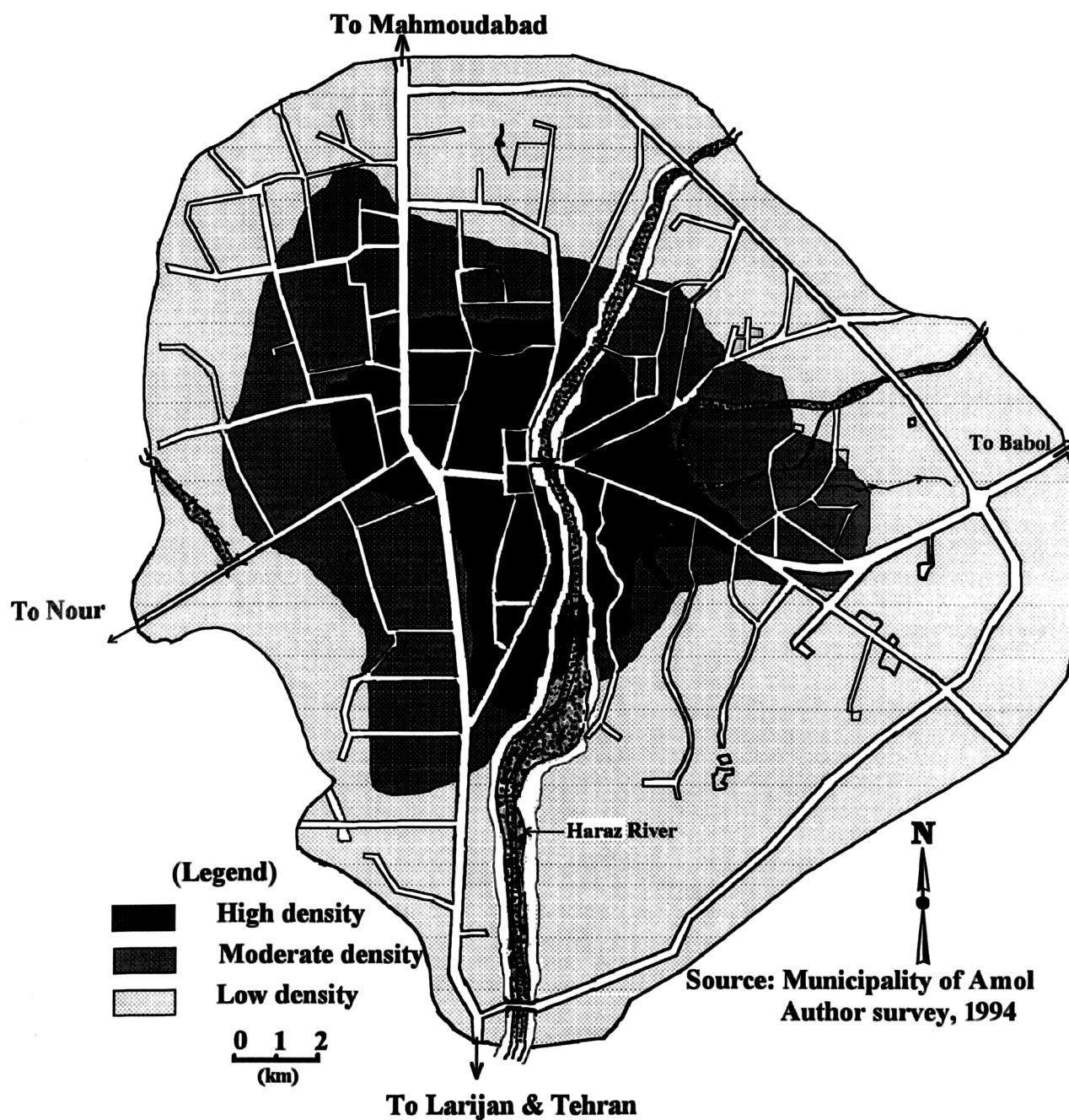




Plate 7.1: Haraz Indigenous (upper income class).



Plate 7.2: Dabbaq-e-Chal (migrant and poor area).

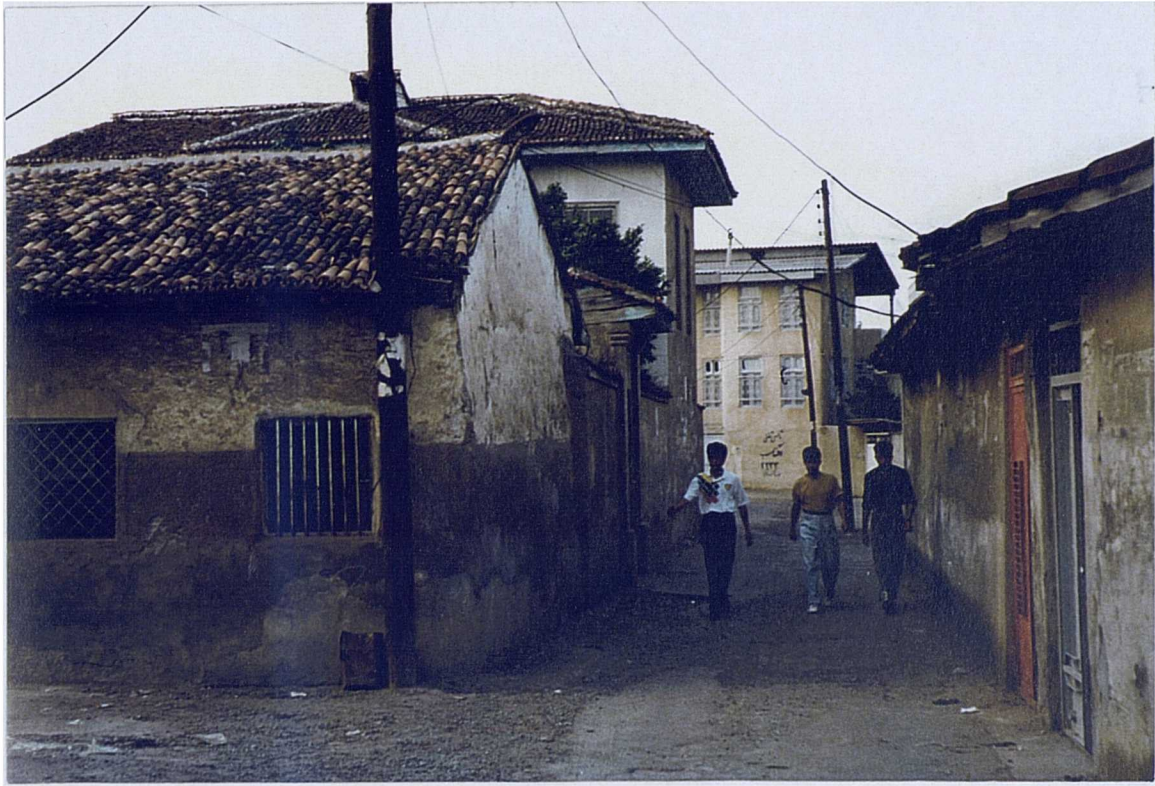


Plate 7.3: Paein-Bazaar (old and new architecture).

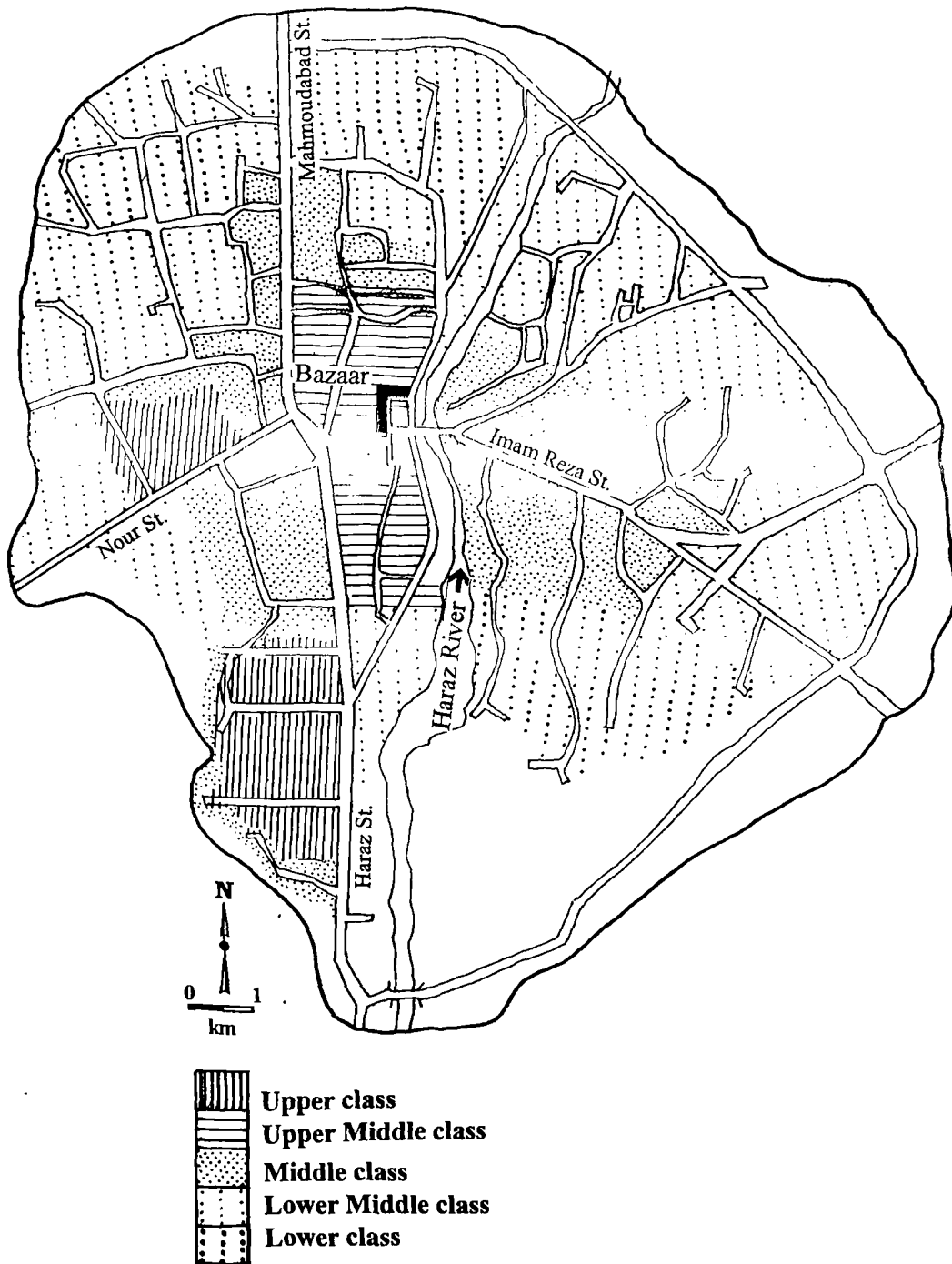


Plate 7.4: Paein-Bazaar (mixed architecture of the old and new building).

The third category is the quarters between Mahmoudabad and Nour street (Fig 7.5). Here the families can be divided into two classes; first, the old residents who are middle class and work in the retail markets. When the house is close to the main street, the lower storey is appropriated for the shop and the upper storey has a residential function. The second class of this area is the lower middle class who migrated generally from villages of the plain (Haraz and Markazi districts) and Nour township. Houses are small and often not more than two rooms; in many cases two or more households live together (Plate 7.2). The main occupation is construction or casual jobs; also many households receive an income from agriculture in the village of origin.

The fourth income group is spread over the eastern part of city, both to the south and north of Imam Reza street (Fig 7.5). The areas close to the main street in the old part house a middle class whose employment is dependent on service and commercial activities. The north part of this area is a moderate density quarter which developed in mid 1985 as result of urban land distribution. Most of the residents are government employees and rural migrants who form a lower-middle class; the fringe areas of southern Imam Reza street are occupied by lower income groups. Therefore, the larger part of Amol's residential areas housed a mix of middle and lower middle income classes, the gaps between Amol's social groups as a secondary city being relatively less than in large cities. Amol migrants lived at a short distance from the city and had knowledge of opportunities in the city; the nature and motives of migration varied in the pre and post-revolutionary periods of the national economy changes in the regional space. According to the 1986 census, about 82 percent of Amol's migrants were from the rural areas of its township, thus they shared the same socio-economic and cultural backgrounds.

Figure 7.5: Distribution of Different Income Groups in Amol (1994)



(Source: Municipality of Amol and Author's Survey, 1994).

The physical expansion of Amol city was accompanied by an increase in housing units over the three decades. There were 3,383 housing units in 1956 in the city which housed the same number of households; obviously the 'household' was counted as a housing unit or vice versa. The housing units increased to 4,769 units in 1966, and the number of households doubled to 7,318 in the same year. Clearly this was the result of reform and natural increase of population which led to a rapid growth of household numbers, and greater demand for housing. The number of houses increased to 9,613 units in 1976 and 20,294 in 1986. A comparison between the increase of housing and households shows that the percent of rented houses decreased over the three periods (Table 7.2), and therefore despite the growth of the urban population, housing supply seems relatively better in the 1976-86 decade than in previous ones.

Table 7.2: Housing and household change in Amol city

Year	No of H.H**	No of H*	No of rented H	(%)	No of rent free H	(%)
1956	3,483	3,483	1,242	35.7	360	10.3
1966	7,318	4,769	2,407	32.9	612	8.4
1976	13,086	9,613	3,479	26.6	771	5.9
1986	23,485	20,294	3,546	15.1	1,221	5.2

(Source :SCI, 1956-86 detail results Amol sharestan)

(*H = Houses ** H.H = Households)

Following the emphasis of the Fifth Development Plan on the participation of the private sector in housing, some local investors (e.g. the Azizi brothers) embarked on housing projects in 1975; it became an important source of income which in ten years (1966-76) doubled the number of housing units; construction continued into the 1976-86 decade. This did not mean necessarily that houses were in excess or without residents; in fact some of these buildings are owned by people

who consider themselves as rural-based. The increase of agro-products' prices in the region encouraged many people to transfer their capital to more valuable commodities, such as land or a house in the city.

The distribution of the urban lands among the people in Amol was undertaken by the Urban Land Office. Somehow government employees met the required criteria (Chapter Four) for land allocation by the government, as they benefited disproportionately; however some of them evaded these criteria through favouritism.

Table 7.3: Urban land distributed by ULO in Amol, 1983-94

Year	Plots	Total (m ²)	Average size	Year	Plots	Total (m ²)	Average size
1983	40	4,500	112.5	1989	66	15,816	239.6
1984	80	23,100	288.8	1990	296	40,604	137.2
1985	47	13,082	278.3	1991	295	42,390	143.7
1986	393	87,880	223.6	1992	151	24,855	164.6
1987	282	61,711	218.8	1993	624	69,934	112.1
1988	126	29,378	233.2	1994	105	22,244	211.8

(Source : Unpublished data, ULO of Amol, 1994)

A total of 2,505 plots of land were distributed between 1983 and 1994. Most of the distributed lands were located inside the city boundary, and were at the fringe of the built-up areas. All of the allocated lands were for residential purposes. About 72.7 percent of land was located in the eastern part along Imam-Reza street (*Yoor*) and consisted of expropriated privately-owned citrus orchards. Thus, government policies encouraged rural-urban migration and urbanisation. The average size of plot was relatively large (160-200 m²). The increase of average area for residential plots from 139 m² in 1975 to 186 m² in 1989 was one of the

reasons for urban expansion. Although the average size of allocated plots shows a declining trend in Amol, this was a response to the increasing applications for urban land and the limitation of land inside the city boundary in the 1990s (Table 7.3). However the relatively large size of plots reflects not just the average size of Iranian households but their increased standard of living and the cultural values in Islamic society which prizes privacy between households. While the lower income group still has difficulties in finding shelter, or not being able to acquire lands, it seems the area per house needs to be limited, so that a larger part of the population can obtain land for residential purposes while the rapid expansion of urban areas can be slowed down. The ability to build up a house on the required land was one of the criteria to avoid non-residential purposes. The plots usually are walled immediately after distribution by the beneficiaries, then one or two rooms are constructed to show that the plot has a residential land use.

Following the rapid growth of the urban population and dwelling units, the major utilities have increased markedly. For instance, in 1986 about 97.9 and 92.7 percent of total residential units of the city had their own electricity and piped water respectively, while the respective figures were 84.2 and 83.2 percent in 1976. However there were many problems considering the efficiency of the utilities. The disconnection of electricity for a few hours each day was a common norm, as the station has not been able to supply the increased consumption. Also there was a concern about shortage of water following the rapid increase of population and especially the extensive use of drinking water to irrigate gardens and green spaces, which has led to a marked decrease of the water table level in the public wells over the last ten years. The over-exploitation of well water in recent years has led to infiltration on the salty water of the Caspian Sea into the agricultural lands in the coastal areas. Thus the Water Station authorities tried to

encourage citizens to economise on consumption, which in practice was not drastic, but finally decided to increase water prices and also disconnect the supply for some hours during the warm season through a rationing mechanism. However the water shortage of the city is still not very serious; it will be intensified with the increase of urban population and also by the extensive use by industrial firms. It may look an unimportant issue in an area where the climate is moderate and there is a large river with a high discharge, but it must be remembered that the Haraz river is used to irrigate the rice fields of the township and now is even threatened by the diversion of the water resources of the Lar Dam in Larijan, the only water source of that river to Tehran if the Second Development Plan is implemented.

The rapid urban expansion has also influenced the structure of employment in Amol, which has experienced a number of changes with the increase of the population. The percent of the employed population declined from 40.6 percent in 1956 to 34.9 in 1986 (Table 7.4) due to an increase in those over ten years old now participating in education. Despite the out-break of the war, which obliged many government and non-government employees to leave their jobs and join the defence forces (six months service in the front line was compulsory for all governmental employees), the number of employed people increased by 3 percent in the post-revolutionary decade, as a result of rural migrants who employed themselves in the service sector.

Table 7.4: The change of employed population by sex (1956-86)

Year	over 10 yrs pop	Total employed	% T	Male	% M	Female	%F
1956	15,200	6,171	40.6	5,591	90.6	580	9.4
1966	26,913	10,009	37.2	9,059	90.5	950	9.5
1976	48,628	15,443	31.8	13,982	90.5	1,461	9.5
1986	82,424	28,765	34.9	26,296	91.4	2,469	8.6

(Source: SCI, Amol selected years)

The number of both male and female employed population doubled in 1976-86 compared to the last decade (66-76) clearly indicating the presence of rural migrants. Although the share of women in employment shows a decrease in 1986, this could be due to the fact that more women attend colleges and universities for higher education than in the pre-Revolutionary era and then they start work later.

Being a market centre, most people have always been employed in the service sector. As Table 7.5 reveals, the second major occupation was in industry up to 1986, when construction took the second rank. Agriculture, although the main activity for the township, is disappearing amongst the Amol population. One of the important points which is usually ignored by Iranian researchers in analysing the role of agriculture in urban employment is the indirect influence of this sector in employment owing to related activities being classified by the censuses either as an industry or as services. Many of these agro-related activities are directly dependent on the overall growth of agriculture. For instance, the trade of agro-products in the north of Iran is one of the major sectors for employment opportunities. Therefore it would be wrong to assume that agriculture is disappearing from these cities which is implied by the figures for the major occupation groups, namely industry, services and agriculture. In reality, the role of agriculture is still very high in urban employment. Although the data of the four last census indicate that the sector had a smaller share in employment, the number of people employed in this sector rose from 911 to 1,668 in Amol.

The industry and construction sectors have grown more than the service and agriculture sectors in the 1966-76 decade. From 1970 onwards many industrial units were founded and sited in the fringe areas along the Amol-Babol road. The

main industry is textiles which made up 6 of the 14 units in the city. The biggest of them, the Babakan Textile Factory, employed more than one thousand workers in 1994. Other industrial activities concerned electrical spares, glass, bricks and mineral water; most of them had more than 50 employees.

The service sector was the fastest growing sector during 1976-86 due to the decrease of occupation in industry as the sector suffered serious difficulties such as shortage of spare parts, raw materials and others in the 1980s (Lawless, 1996). Moreover the migrants of this period were more educated than before and therefore they had more chance to be employed in official works. Although construction decreased by four percent, it absorbed 15.4 percent of the employed population in 1986, which meant an increase in the number of employed people from 2,950 in 1976 to 4,430 in 1986.

Table 7.5: Distribution of major occupation of Amol city.

Year	Total employed	Ser vices		Indu stry		Construction		Agric ulture	
		No	%	No	%	No	%	No	%
1956	6,171	3,636	59.9	950	15.4	716	11.6	870	14.1
1966	10,009	6,025	60.2	1,692	16.9	1,581	14.8	810	8.1
1976	15,443	8,200	53.1	3,382	21.9	2,950	19.1	911	5.9

(Source :SCI, Amol, selected years).

Conclusion:

The impact of the reform program of the 1960s had two major consequences for the physical expansion of the city. Firstly, it caused the influx of rural migrants from the plain and mountainous areas, as the nationalisation of forests and pasture left many husbandmen of Markazi and Larijan districts without grazing land for

their animals. Thus this group migrated to the city in search of employment and generally resided inside the built up areas of the city. Secondly, the large land owners converted their rural property into 'urban' land so as to avoid being reformed. The new urban property (citrus orchards) were generally located at the edges of the western parts along Haraz and Mahmoudabad streets; these were plotted later and sold at a profitable price. The major outward expansion of the city occurred in the 1970s when urban development was associated with physical planning through comprehensive plans and modernisation.

The post-Revolutionary trend of urban growth accelerated due to three major processes, the dominant of which was the new urban land policy approved in 1982, which allocated a large amount of land to government and non-government employees in the eastern suburbs areas of the city. The migrants of the 1980s generally were able to buy, or build, a house on their arrival, which was less evident in the case of previous migrants. Finally, the rapid increase of urban population, either through rural migration or high natural increase, led to the high density in the central part of the city. In addition, the degree of commercial competition in the Bazaar areas prompted many wealthy businessmen to move towards the southern part. This process led to the emergence of a new high income class with a distinctive socio-economic background in the suburbs.

CHAPTER-8:

THE INDIGENOUS AND MIGRANT POPULATIONS

Introduction

This chapter aims to analyse the recent socio-economic characteristics of Amol's population by choosing two different neighbourhoods namely indigenous and migrant households after the national census of 1986. The distribution of the different social and economic classes in the city illustrated a marked division. Thus, with respect to such variations the household survey was carried out among the three different indigenous and three migrant quarters. The assistance and valuable help of urban planners and technicians in the Municipality of Amol was vital to the selection of the different quarters according to their social and economic backgrounds.

The indigenous quarters are defined as the areas in which more than 60 percent of the household heads have lived for over twenty years (since the majority of the population in small and middle sized cities are from its rural catchments) at the time of survey. According to this definition, Haraz, Paein-Bazaar and Barzigar are indigenous quarters, with the first having the highest percent of 'indigenous population' (82 percent), and Barzigar with 66 percent the least. The Migrants' neighbourhoods are defined as the areas in which more than 60 percent of their heads of households have come to Amol after the Revolution (Table 7.1). Thus, except Nabovat, over 60 percent of Golshahr and Dabbaq households moved to the city after the Revolution. The Nabovat quarter was deliberately chosen to evaluate the recent urban land policy of the government in 1983 onwards. Therefore from the length of residency point of view, Nabovat households were the oldest migrants of Amol who have resided in different parts of the city and moved to the Nabovat quarter in mid 1986. Golshahr and Dabbaq housed the most recent migrants of Amol.

Table 8.1: The No and % of heads of household by the length of residency

Length of residency	Indigenous		Migr ants	
	H. H* No	%	H. H No	%
+20 yrs	202	66.3	11	7.7
-20 yrs	64	33.7	132	92.3
Total	272	100	143	100

(Source: Author survey 1994. * Household).

8.1. Household structure and gender

The average size of household differed between neighbourhoods as those of the indigenous areas were slightly smaller (4.5 persons) compared to the migrants' households (5 persons). The average size of household for Amol as a whole was 4.6 persons in 1986. This shows that even after eight years, the size of household is still high despite the pronounced decline of the national natural growth rate of population in the 1990s. With a gender coefficient of 102.2 the indigenous areas were less male dominated, as this figure rose to 104 percent in migrant quarters. Also, there was a marked difference between the three migrant neighbourhoods, as in Dabbaq (most recent migrants) the gender coefficient was 108. This indicates the male-biased nature of migration, as in the early stage men move to the city and women are left behind to take care of agricultural lands, unlike their counter-parts in Latin America and the Philippines (Gugler, 1982). Also, even when migrants had moved with their family, the male members outnumbered the females. This could be explained by the fact that traditionally rural girls get married at a younger age and stay in the village while males wait until they have obtained education and a job. In addition, bearing in mind that the places of origin do not generally lie more than 20 km away, migrants can easily contact their villages to manage their agricultural lands, while gaining a better position of work in the city.

The age structure of the sampled areas revealed that the indigenous quarters had a higher percent of adults (over 15 years old) in the population than migrant areas (Table 8.2), although there were great differences within the three migrant and indigenous areas.

Table 8.2: Age distribution of sampled population

Quarters	-15 Years	15-65 Years	+65 Years
Indigenous	40.4	56.0	3.4
Migrant	48.0	50.0	1.9

Source: Author survey 1994

The under 15 years old population was about 8 percent higher in the migrant quarters, which reflects the higher fertility rate and larger size of households in them. It has been stated that the majority of migrants were drawn from middle age groups. But in the case of Amol, the middle aged population were less represented than the younger age group, especially in quarters (Dabbaq) where migrants moved to the city in recent years; the higher levels of under 15 year olds shows that migrants move with their family. A small percent of migrants were over 65 years old; generally they had moved with their married children.

8.2. Education and employment

According to the 1986 census, about 73 percent of Amol's residents (6 years old and over) were literate. This shows that literacy increased by about 15 percent in the indigenous quarters by 1994 (on average 85.3%); as expected this ratio was smaller in the migrant's quarters (70%). There was some differences among the three migrants quarters considering gender. While there was no

significance difference between genders in the indigenous population, only 38.3 percent of migrant women were literate. This figure shows how rural perceptions of the utility for education to women and men differs. However, despite the paucity of literate females, the migrant population as a whole were more educated than in the rural areas of Amol, which is one of the positive results of migration.

Table 8.3: The level of education by the heads of household

Level of education	Indigenous quarters	Migrant quarters
Illiterate	14.8	23.7
Primary	34.4	31.3
Secondary*	17.8	16.8
Diploma	18.3	22.4
+Diploma	14.8	5.80

(Source: Author survey, 1994).

(*secondary and high school without a degree).

The level of education was important in the respective types of employment and the levels of income. The proportion of higher educated (over diploma) was only 5.8 percent for migrants while this rose nearly threefold for the indigenous population, although in both quarters the primary educated heads dominated (Table 8.3). One of the interesting points were the heads in migrants' quarters who had diplomas, which shows this group were government related employees or came to the city for employment in the public or private sector as wage and salary workers. Thus there was a significant difference among the three indigenous quarters ($X^2=66.17$, df 8, p 0.05), owing to their varied locations.

There was a correlation between the level of education and the level of income in Haraz, where the highest income groups live, and here education seemed to play an important role in income level; in Paein the level of education was lower but income was high. Such a negative relation results from the location of the quarter beside the Bazaar where many heads of households were traders and owned an outlet; formal education is less important for the Bazaar merchants than capital. However it is necessary to remember that a number of better educated professionals left this quarter for Haraz.

The employment status shows that the proportion of employed population were about 6 percent higher in the indigenous areas. Amol as whole had 35 percent of its over ten years old population employed in 1986, also 4.9 percent were unemployed in the same year. The average employed population in the indigenous areas was 30 percent for all age groups and only 1.2 percent of them were unemployed at the time of survey. This ratio was 5 percent less than Amol in 1986 which resulted from counting the 'under ten years' population. There was no significant difference between the three indigenous quarters but there was a 6 percent gender difference in employment, as in Haraz and Paein 19 percent of females worked, but only 13 percent in Barzigar. Compared to Amol's 7 percent in 1986, the proportion of women employees has increased markedly. It seems that job provision for women improved greatly during the second decade of the post-revolutionary era through female participation in higher education, as female students increased by 25 percent in urban areas of Amol township between 1976-86 (SCI, 1987d). These students entered the job market in the second decade. Moreover the increase in living standards and inflation encouraged women to work and help their family financially. Although the indigenous women have improved their employment opportunities, migrant women had less chance of employment.

On average only 3 percent of them were employed compared to the 17 percent of the indigenous areas. The most common sector for female employment in Iran is services in health and education in which women with more education have more chance. In other DCs, especially in the Latin America, domestic jobs attract more less educated females (Lowder, 1997); this is less acceptable to by the cultural values of Iranian society and therefore is uncommon.

The type of employment showed that more than half of the heads of household were self-employed (mainly trade and services) in the indigenous quarters. This ratio was slightly less in the migrant quarters (Table 8.4). The heads of households who were still dependent on agriculture were classified as self-employed, and they represented 23.8 percent of the three migrant quarters. As Gilbert (1982) pointed out, the size of city (large) is important in the creating of waged jobs in the public and private sectors. Amol, as a middle rank city, tends to have more self employed in commerce and services used by a wide rural hinterland. Casual jobs were the second most important source of income in the migrant quarters, which shows that migrants had less opportunities for permanent jobs in other sectors.

Table 8.4: The type of employment by the head of household (%)

Type of employment	Indigenous quarters	Migrant quarters
Wage/salary private sector	14.5	12.1
Wage/salary public sector	18.2	14.3
self-employed	52.0	48.6
Casual jobs and others*	15.1	25.0

(* under the financial support of children).

Before turning to the level of income, it is necessary to look at the type of previous job which migrants had in the rural areas. According to the 1986 census, about 68 percent of Amol's rural population were employed in the agriculture sector (including animal husbandry, fishing, hunting and forestry). It should be remembered that the environments of the plain and the mountainous areas in the township resulted in different kinds of crops being cultivated which impacted on migration in different ways. For instance in the highlands of Larijan and Nour fruit growing (apple, cherry) is the dominant agricultural activity. The increase of agro-products was more evident for cereals (strategic product) than fruit as imports of cereals decreased markedly in the post-Revolutionary era, while fruit has been mainly produced in the country and was less affected by the price fluctuations. For instance the price of rice increased by 120 percent from the 1980s to the 1990s, and fruit such as apples and cherries increased only 30 and 40 percent respectively in the same years (in 1994 prices).

Thus the recent prosperity of the rural income increase was in the plain areas where rice is the dominant crop. The classification of employment before migration is based on the rural activities. About 55 percent of heads of households had worked in the agricultural sector and nearly a quarter of household heads still do so which was very high compared to Amol as whole (6 percent). Thus despite the movement, this sector remains the main source of income for these families.

The second most important category of rural employment was officials and public employees (teachers, officers) who transferred for multiple reasons. For instance, a teacher can apply to transfer to a city after five years teaching in a village. The third group were students (10.8%) who usually arrived as single persons and never returned to the rural areas. Only 6.3 percent of heads of

households were unemployed before migration.

There were some differences between the three migrant quarters. Nabovat had the highest number of service workers, as its migrants had a longer history of living in the city. Also since many of the heads of households were employed in governmental jobs, they received land from the Urban Land Office. While in Dabbaq with a shorter time of residency in the city, agriculture was the most important sector.

Although more than half of the migrants had shifted from the agricultural sector to other urban employment, the role of rural income was important. This inter-dependency of the city and village fluctuates with the performance of the agricultural sector; for instance, the increase of agro-products' prices encouraged these groups of migrants to strengthen their links with the villages by regular contacts because agro output was economically profitable.

There was a marked difference between the groups in terms of their monthly income. In general, indigenous areas had higher incomes than the migrant areas (Table 8.5). However data considering income may be influenced by the conservative behaviour of the respondents or by magnifying incomes by poorer households. But such risks were kept low by not asking the names of the interviewees (overall there was a reasonable relationship between the types of employment and the level of incomes noted in each questionnaire).

Table 8.5: Income level by the heads of households per month

Income 000s	Indigenous %	Migrants %
-20 Rials	0.7	4.2
21-49 Rials	6.1	18.8
50-99 Rials	18.6	25.0
100-149 Rials	21.3	31.5
150-199 Rials	24.1	14.5
+200 Rials	29.5	6.5

(Source: Author survey, 1994).

The average income in the indigenous areas was about 110,000 Rials (£1=5500 Rials in 1994) per month while this figure was 75,000 Rials in the migrants' quarters. There was a significant difference between the indigenous quarters ($X^2 = 35.91$, $df=4$, critical value=9.49 at 0.05 level of significance). The average income for the urban areas of Iran was recorded as 86,180 Rials per month in 1986. The sampled areas of Amol had slightly higher incomes (92,500); however as the survey data were taken eight years later and considering the inflation rate, they not show that Amol's residents had a higher income level than other urban areas of the country. However, unlike the prediction by the literature, the level of income in the three migrants' neighbourhoods revealed that the recent migrants in Dabbaq had higher incomes than those in Nabovat and Golshar who had moved before them. This can be explained by the fact that the new migrants are still dependent on the farm in the village while gaining some income in the city; older migrants have lost or have not been able to maintain a rural income and therefore their only source of income has been an urban job. In other words, the older migrants of Amol primarily moved to Amol as result of agricultural

depression and sold or converted their rural property to urban, while the recent migrants moved to the city for its welfare and social amenities, not because of absolute poverty.

It would seem that the migration theories which solely rely on economic forces have less explanatory power in the case of Amol as the rural economy has a great impact on urban employment. This situation mirrors the importance of rural-urban interaction, as not only do the flow of goods and information determine the extent of the rural-urban relationship but also during the last decades, the most important motor of regional growth has been the rapid modernisation of regional agriculture by an increase of productivity through new and improved methods, such as seed selection and government support with the orientation of agricultural production to national and international markets (regional countries in the Middle East and the Central Asia). The agricultural based incorporation into the national economy caused an accelerated urbanisation, attributing new economic and social functions to the regional towns like Amol.

8.3. Dwelling characteristics

About 79 percent of Amol's residential units were owned in 1986 which was ten percent higher than the urban areas of Iran as a whole in the same year. The survey data on the migrant and indigenous neighbourhoods revealed that they differed markedly from each other and also there were differences among the six quarters (Table 8.6).

Table 8.6: Tenure-ship of residential houses

Tenure	Indigenous	Migrants	Total
Owned	82.1	70.1	77.1
Rented	14.5	16.1	15.3
Rent free*	3.3	13.4	8.4

(*Relative and governmental houses)

The highest rate of owned houses (87 %) was recorded in Haraz quarter where the high income groups of Amol live, while nearly a fifth of Barzigar's households lived in rented houses. One of the distinct differences between indigenous and migrant quarters was the proportion of households who lived in rent free accommodation. This percent was 13.4 for the migrants while it was only 3.3 percent of the indigenous households. It shows that multiple households living together in a single unit is peculiar to migrant areas, being rare in other parts of the city. The migrants in small and intermediate cities tend to have a fuller knowledge about the city environment than in larger cities as they normally do not face cultural or language differentiation. But from a financial point of view, free accommodation in the early years of migration is a great help.

The number of households per unit in both migrant and indigenous areas showed that while almost all residential units were occupied by one household in the indigenous areas, 12 percent of the houses in migrants' quarters had two or more households. This tendency was especially marked in Dabbaq where the migrants lived a shorter time in the city. One of the distinctive characteristics of rented houses in the migrants' areas was sharing the unit between tenant and owner which occurred only in two cases in the the indigenous areas. This suggests two interesting socio-economic characteristics of migrant households. First the need of

the house owner to rent his unit to another household (preferably a family with less children) because of economic constraints. Second, the inability of the tenant to rent a separate unit which is much more expensive than a shared house. The rent per month in the migrant, quarter was markedly lower than in indigenous areas. All of the tenants in migrants' areas paid less than 50 thousand Rials per month while the level of rent was much higher in the indigenous areas. The main reason of this difference was the remoteness of the migrant areas to urban infrastructure and access to the main streets.

Residential mobility (intra-urban) was one of the important factors in the physical expansion of Amol. The details for the Haraz quarter revealed that more than 30 percent of the households had moved from the central part of the city. This was in agreement with previous research which showed that better off families prefer to move towards the suburbs (Turner, 1968; Findlay, 1982; Drakakis-Smith, 1980). The main reason was the desire to live in a larger and more modern house, while in other quarters access to the work place and cheaper housing were the factors for their residency. These spatial and social changes of the city resemble the 'concentric zone' model as the higher income group of Haraz areas once lived in the central parts. Such segregation is only evident in the case of Haraz in the southern part of the city and in other parts of the suburbs middle and poor live together. It is difficult however to determine whether the processes which brought about such segregation are likely to increase through time or whether the inequalities will disappear. Charkravorty (1990) found that there was a relationship between the change in the spatial distribution of the population and income distribution in his study of ten Asian and Latin American countries; he concluded that rising concentration increases inequality when other variables are unchanged. The existing inequality between sample quarters is the result of both

the increase of population density and increase of the value of space for commercial purposes, which promoted many wealthy households to shift. Overall, Amol as a regional market with a Bazaar in the centre of city and its cross-road position reflects the Bazaar-based model of Dutt (1983).

The different architecture of high income groups is noticeable to any visitor who crosses the city from southern areas to the central part and the east bank of the Haraz river. The native architecture, which was appropriate for the humid climate of the region, is changing, especially in the areas which have been recently developed. The traditional residential buildings are located mainly in Paein and Barzigar areas. Here, the main building materials are brick and wood. Previously usage of wood in Mazandaran was very common because of accessibility to the forest; now iron beams are replacing the wood. In 1986 about 49 percent of buildings in the urban areas of the township were constructed of brick and wood with another 25 percent of brick and iron beam. The data on the indigenous areas show that the time of construction and income level were important indicators of the type of materials used for buildings. In Haraz 40 percent of the units were constructed with iron beams and bricks while it was 25 and 20 percent in Paein and Barzigar quarters. In the migrant quarters, the main materials were cement blocks (Plate 8.1 the left side) which became common in recent years and are generally used in the rural buildings of the plain areas of Amol. On average about 60 percent of houses were constructed of cement blocks in the three migrants' areas. Although the material proved more damp-absorbent, especially in the humid climate of the region, it is increasingly used because of its cheaper price.

The general improvement of housing was gauged by the number of rooms per unit in Iran (Zanjani, 1989). It was argued that with increase of living



Plate 8.1: Dabbaq Mahalleh (new expanded).

standards, despite the growth of nuclear families, the number of rooms per unit had increased between 1976 and 1986. Thus the number of rooms was higher in migrant than indigenous units and reflects their larger size of household. The most obvious differences between the two was the availability of household goods and domestic facilities. The usage of telephones, private baths and the sewerage system was quite low in migrant areas (Table 8.7) and dependent on the length of residency in the dwelling. The major utilities such as piped water and electricity were quite ubiquitous everywhere.

Table 8.7: The proportion of dwelling utilities (%)

Utilities	Indigenous	Migrant	Amol*
Telephone	64.9	24.4	15.7
Private bath	62.2	28.0	34.2
Sewerage**	81.5	79.6	-

(*Urban areas of Amol township in 1986 **Deep well).

In Haraz over 80 percent of units have private baths while it was only 47 and 52 percent in Barzigar and Paein quarters. In Paein, despite the relative ability of residents to build private baths, many families prefer to use the public baths. Despite the recent improvement in dwelling facilities public baths remain a social institution in most Middle Eastern countries (Baker, 1986). Moreover they believe that the expense of a private bath is greater than using the public baths because of the high price of the fuel (oil), especially in the cold season and even many households with a private bath regularly used the public baths. In migrants' areas only a quarter of units had private baths. Also dwellings with a telephone were predominantly in the indigenous areas. However from 1990 there was an improvement and increase in the number of telephone lines at the national level,

and the sampled areas of Amol confirm such improvement.

Amol like other urban areas of Iran is still lacking an efficient sewerage system; deep wells are the common way of sewage disposal and are possessed by almost all of the units. But the majority of them used the open public drain channels (joubs) for slops regularly as long as not reprimanded by the municipality. Although there was some effort to prevent such actions, as discussed before, the urban authorities of small and intermediate cities usually are reluctant to intervene in such cases, as migrants' areas have expanded recently and the unsurfaced (dirt) streets and avenues are covered by mud after each rain.

The different life styles of the migrant and indigenous areas were reflected in their household possessions. The indigenous families had many more durable household goods (Table 8.8). For instance, a video is almost a new visual means luxury which is generally within reach of the high income groups but rarely elsewhere.

Table 8.8: Household possessions

Facilities	Indigenous	Migrants
Washing machine	62.4	32.8
Vacuum cleaner	56.5	14.8
Freezer	43.2	7.0
Video	15.9	2.1
Car	22.1	16.6

(Source: Author survey, 1994).

Other domestic equipment like vacuum cleaners and washing machines was given a higher priority by the families of the middle and lower income groups, especially in the migrant areas. Cars however represented not just the income level

of the household; the differences between migrant and indigenous areas were not too wide as it was in the case of other possessions. While cars were used for commuting to the work place in Haraz, it was the means of work and used to earn a living in migrant and other areas indigenous areas.

Having examined the socio-demographic characteristics of the indigenous and migrant areas, it now became appropriate to look at the patterns and motives of migration in the three sampled areas of Amol.

8.4. Patterns of migration

Amol city as central place for a wide rural hinterland is the major destination for migrants, who according to their social class, tend to reside in a certain area of the city. The time of migration and the place of origin are two fundamental factors in determining the volume and direction of the migration. The earlier migrants came from the mountainous and forest districts of Larijan and Baladeh (Nour township) in which agricultural activities are based on fruit growing and animal husbandry. The mountains' migrants usually settled in the south west of the city, while the forest village migrants moved to the north east areas of the city. Another main source of migrants is the plain districts of Haraz and Chamestan (Nour township) who moved to the city more recently and generally settled in the fringe areas of the west and north west. The three sample quarters reflect the different origins of the migrants.

As the plain area of the township has a high rural population density, the flow of migrants is much greater than from the highlands. Nabovat quarter in the north east part became predominantly the home of forest and mountainous villagers

of Nour; the majority obtained land from the Urban Land Office, as a large number of heads of households were employed by the government. Golshahr quarter residents are a mixture of plain and forest villagers who lived in the city for a shorter time although longer in their present dwelling than those in Nabovat and Dabbaq. Finally the migrants of Dabbaq moved from the plain areas where the income level was higher than the others, and the distance travelled was generally less than fifteen km. Thus, Ravenstein's two laws are applicable to the pattern of migration to Amol as "most migrants only move a short distance, or in other words the rate of migration between two points is related to the distance between these points" and "migration streams will increase over time as a result of development in the means of transport and the growth of industry and commerce". But in the case of Amol migration streams increased over time not only as result of industry or commerce but also agriculture.

Migrants were asked "what were your main reasons for migration?" and "what was the main reason for choosing your present quarter?" The answer of the head of household was important because his movement was considered to determine largely the movement of other household members. Each respondent was allowed to give more than one reason for migration. Table 8.8 reveals that the reasons for migration differed between the three migration streams.

Poor economic conditions were the predominant motivating forces for migration in Nabovat quarter while social and personal reasons were important factors for Golshahr and Dabbaq areas. Nabovat residents moved to the city when agricultural activities were suffering from national economic restructuring because of the oil revenue role and which undermined peasant societies (the results of land reform and nationalisation of pastures in pre-revolution era), as discussed before.

A third of heads of households in Nabovat came to find a job as a result of agriculture depression, low wages and unemployment. In Golshahr and Dabbaq social aspirations were the dominant response (45.4 percent) while economic reasons dropped to 24.7 percent. Therefore the better performance of agriculture from mid 1986 onwards changed the attitudes of rural people toward their lives and encouraged them to find a place for the future of their children. Then migration in this area can not be interpreted only by economic factors as Todaro's theory proposed. As one new migrant with two years residence put it: "I am not blind to see how the movement of my fellow villager made him fortunate with education and urban property although at the time of migration he had to sell his only cow, so what he could do I can do with keeping my land in the village and living in the city". This is reminiscent of 'the positive feed back' of Mabogunje's model. Although the prime motives for migration were social and economic forces, many migrants moved involuntarily, such as the transfer of government employees or military service, especially after the revolution and the end of war, most of the volunteer forces in the post-war period were absorbed in a city based organisation like *sepah*, *commiteh* (these military forces were formed immediately after the Revolution and were increased and reinforced by the outbreak of the Iran-Iraq War and were the main defenders of the front lines) also led to the movement of many young and middle aged people from the rural areas.

There is, of course, an important distinction between the factors encouraging migrants to leave their home and the factors determining where they prefer to live in the city. The majority of migrants (77.8 %) considered the price of house/land and the level of rent were the most determining factors in choosing their present quarter. Also 14.6 percent wanted to live beside their relatives and only 6.3 of responses related to access to work. In Nabovat the land distribution

policy attracted many government employees who obtained land at a low price and built their dwelling. In Dabbaq the first housing development was made by a few private construction firms who built small housing units for rural migrants (Table 8.9).

Table 8.9: Reasons for migration in three quarters.

Reasons	Nabovat %	Golshahr %	Dabbaq %	Total %
Finding job as result of agriculture depression	20.3	12.1	9.8	14.1
Working for the landlord with low wages	13.6	10.3	9.8	10.6
Education (especially for children)	15.3	24.1	27.9	22.4
Access to better living and urban utilities	17.0	25.9	26.2	23.0
Transferred by the employer (usually government)	13.6	12.1	9.8	11.8
Military services *	5.1	6.9	8.1	6.7
Natural disasters	8.5	5.1	6.6	6.7
Unemployed	6.8	5.1	3.4	5.1
Total no of reasons given	59	58	61	-
No of heads households	46	49	48	-

(*Revolutionary guard: Sepah, Basige and Commiteh).

Migration for family reasons often develops into a chain, with a tendency for people who have already migrated to the city to act as a source of help and information to others, in particular during the initial period of adjustment. About 60 percent of the heads of households in all three quarters received this sort of help on arrival at Amol. Migrants of small and middle sized cities usually have knowledge about different aspects of urban life but the survey revealed how the

help of friends and relatives was important for migrants and their families. There was a difference between the migrants who came from longer distances and those who moved a short distance; those from remoter villages received more help from their relatives than people of near-by villages. This suggests that the nearer population did not need to stay overnight in the city while their counterpart, because of remoteness of their origins, had to stay a while. Therefore the level of help was related to the place of origin. The most common types of help were the provision of temporary accommodation, and help in finding a job.

Migrants' visits to their place of origin are normally arranged during the annual holidays, migrants who are still dependent on agricultural income also visited their villages regularly especially during work seasons. The survey showed a significant decrease of visits with the length of living in the city (Table 8.10). (calculated $X^2 = 31.11$, critical value = 9.21 at the 0.01 level, $df = 2$).

Table 8.10: The frequency of visits to their place of origin.

Length of Residency	Nab ovat		Gol hahr		Da baq		To tal		Total %	
	V	N.V	V	N.V	V	N.V	V	N.V	V	N.V
<5 yrs	2	0	5	1	8	0	15	1	93.8	6.3
6-10 yrs	2	0	11	2	9	2	22	4	84.6	15.4
11-15 yrs	9	7	10	8	12	9	31	24	56.4	43.6
16-20 yrs	9	10	2	7	1	6	12	23	34.3	65.7
>20 yrs	1	6	0	3	0	1	1	10	9.1	90.9
Total	23	23	28	21	30	18	81	62	56.6	43.4

(*V = visited regularly).

(**N.V = not visited regularly).

8.5. The implications of migration

The survey showed that at all times the migrants of Amol were predominantly from its rural hinterlands especially the plain areas. However the reason for migration changed over the time, as the first migrants moved to the city because of depression of the rural economy, while the recent migrants generally came to the city for better living and future for their children. Thus the period of residency and distance from place of origin were two determining factors affecting the improvement of migrant living conditions in the city. In general migrants were poorer than indigenous people and they also varied significantly from each other. The migrants included different socio-economic groups, with, unusually, the newer migrants having better incomes than the older. Also the analyses indicated, despite the relative richness of new migrants, their use of modern household goods was markedly lower than in poorer (but longer residency) households; it can be argued that the process of urbanisation covers the physical movement of people but they still adhere to the culture of the village. The research revealed that despite increased opportunities of employment for indigenous females, rural migrant women were less likely to be employed; this was related to their lower level of education.

Thus economic changes at the regional level can stimulate population movement and accelerate the process of the urbanisation. One might claim that such displacement of rural residents to urban areas can be conceptualised as ruralisation rather than urbanisation as long as these populations are dependent on a rural income. The main consideration of this research is to illustrate that despite the dependency on agricultural revenues, these populations are urban in orientation, they live in the city, use urban amenities, which are already

overstrained, and their children need education, employment and housing and will never consider themselves rural. Although their parents may have bought land or a house in the city with rural revenues and the help of government, there is no guarantee that agriculture can help the generation raised in the city with a different standard of living and skill, to improve and work in the agricultural sector as their parents did.

Theories have shown that migration is the spatial reflection of economic inequality between rural and urban areas, while the present experience of the north of Iran shows that a decrease of the income gap between Amol and its rural hinterland has not been able to prevent migration. It must be remembered that agricultural prosperity in the north is primarily the result of government intervention and financial help. The question is how long is the government able, or should, subsidise agro-inputs? And do such policies destabilise rural households in the villages? The study has shown that an increase in income level without improvement of the social and economic infrastructure of the villages led to movement to places where they can maximise their benefits. The diffusion of information about the cultural and social opportunities of the cities and a rural household attempts to provide facilities for their children, especially schooling and higher education. In fact the change in the social attitudes and values of rural families is the main factor of migration in this part of the country.

The urban expansion of Amol was accelerated by the movement of the people who have been able to buy a house or land which is leading to the absorption of fertile agricultural lands by suburbs. However, the advocates of intermediate cities' role in balanced urbanisation believe that small and intermediate cities should absorb rural migrants from pouring into the large urban

centres and change to step-migration. It is true, but the point is that such role should not encourage depopulation of rural places, as in the case of Amol despite the drastic decline of the natural growth rate (3.6 in 1986 to 1.8 percent in 1996), still the city has a high rate urban growth (5.6% in 1996) which reflects the accelerated trend of migration. It seems that the complementary stage of rural development after the relative increase of income level has failed to improve rural social welfare. So the policies should prevent such growth and encourage the reinvestment of rural revenues in the rural areas instead of in Amol city and urbanisation.

Conclusion:

The research has shown that despite the relative improvement in standards of living in recent years, there was a marked difference between the indigenous and migrant populations' socio-economic characteristics. The intra-urban inequality of Amol's population reflects the overall disparities between rural and urban areas of Iran. The greater differences were evident between the three migrant and indigenous quarters. The level of income in the indigenous households depended on the location of the quarter; Haraz and Paein's higher income was due to their close relations with the commercial activities of the Bazaar. Barzigar was too far away to benefit from such spillover effects.

The one unmistakable conclusion that can be drawn from the migrant household analyses is that the recent migrants to Amol were generally better-off than their older counterparts, which relates strongly to the recent prosperity of the rural economy. This leads us to the conclusion that rural development, through agricultural productivity, or an increase of rural educated people, stimulated rural-urban

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migration. Sabot's (1979) job 'queuing' framework provides an explanation: that urban jobs go first to those with substantial education, even if such education is not immediately useful. Those with high-school education do not want to remain in villages to work in rice paddies. It can be argued that rural migration to small and intermediate cities is an inevitable consequence of development in rural areas, as long as education is not able to address or relate to rural needs and employment.

CHAPTER-9: DISCUSSION AND CONCLUSIONS

9.1 Discussion

This thesis has focused on the urbanisation process in the north of Iran with particular reference to the Amol township in the central Mazandaran province by researching many inter-related issues. By the end of Second World War, many DCs attempted to step on the road of economic growth through modernisation programs. Industrialisation was assumed as the engine of development which needed a work force drawn from the traditional sector i.e. rural and agriculture. Therefore, in response to such demand, migration seemed a pre-condition for manufacturing activities and so urbanisation was the inevitable consequence of development. Despite the increasing costs associated with urban expansion, modernisation theory generally viewed urbanisation as a positive phenomenon. But after years of practising modernisation in DCs, the promised diffusional growth from more developed areas to less developed places turned out to be a simple assumption which misunderstood the complexities of uneven development in the Third World.

Iran, like other DCs, adopted a modernisation program through national development planning from 1950. It was predicted that the country would become one of the modernised nations of the world through five Plans. The structure of the Iranian economy was and is different from a typical DC, with a low per capita income and foreign exchange constraints. However, in contrast, the Iranian economy displayed significant potential for rapid growth due to high oil revenues fuelling consumption and production through providing resources for industrialisation. Also Iran's economy is different from the rich oil producing states of the Arab world (e.g. Kuwait, UAE, etc.) as it does not suffer from a deficiency of domestic demand for manufactured goods owing to its relative large

population. Therefore, conditions for industrialisation seemed positive. In reality, heavy reliance on oil revenues (more than 60 percent) made the implementation of the Plan's goals vulnerable to the fluctuations in the price of oil on the world market. The evidence from the pre-Revolutionary Development Plans shows that the spillover effects of the dynamic sector (oil) to the traditional and manufacturing sectors have remained weak, and the oil sector has been always considered as an external financier of the development plans.

In spatial terms, the impact of the modernisation policies in Iran generally were concentrated in the urban areas and it was hoped that development would spread to the less developed areas. More importantly, macro economic change in the country totally ignored the social and cultural values of the traditional segment of society as modernisation treated tradition as negative and a barrier for development. Over-emphasis on economic criteria without any relation to the social determinants led to an alienation between two cultures of the modern and the old. Therefore, the rural areas of Iran repudiated 'modernisation'. Later in 1962, the land reform programme was devised to change the social structure of rural Iran. Apart from political motivation, the program destroyed the most important backbone of the economy, i. e. agriculture.

The increasing employment opportunities in urban areas encouraged the rural work force to make its way to the cities. A closer examination of development planning in these decades shows the 'top-down' character of such strategies, and that the central government was the only decision-maker in the planning system. Urban-biased policies encouraged the movement of population from stagnant rural places to the more developed urban areas. Regional planning was insignificant at the provincial level. Therefore, severe regional disparities

appeared as a result of centralised development strategies; this is the paradox of development and urbanisation in Iran.

One of the frequently mentioned problems in the Iranian economic growth literature is the rapid growth of urbanisation. This school of thought blames urbanisation for social and economic problems which are labelled as the 'urban problem'. In fact the 'urban problem' itself is the product of an economic and social system which creates the problem. Thus such a premise falls into the trap of cause and effect relations; the 'urban problem' is the effect of the economic development plans which are the cause.

The early post revolutionary slogans advocated equity between the poor and rich which later appeared as equity between the rural and urban sectors. However, the effects of war imposed enormous constraints on the newly established government, while the general attempts of the post war era to control rapid urban growth have been even less successful. The recent philosophy of development policy suggests that the larger rural places have to change into urban ones by the establishment of a municipality for development to take place. For instance, numerous articles in the Ettela'at and Jomhori-e Islami newspapers reflect the dimensions of this overnight transition: e.g. "Twelve new cities in Iran" (Ettela'at, 18/7/1996); "One hundred large villages will become cities in the Second Development Plan" (Jomhori-e Islami, 9/7/1996); "The villages of Bomehen in Tehran and Qadamgah in Nashabour became cities" (Ettela'at, 15/9/1996).

The Iranian development policies in the post-Revolutionary era were generally based on the internal constraints as the economy came under severe

pressure due to the revolution and the loss of revenues produced by the oil sector owing to a damaging war with Iraq. Therefore the government became self-reliant on its resources. However, there were not any formal plans or attention to national development during the 1980s. Also, the provincial authorities were free to plan according to their priorities. By the end of the War in 1988, the government for the first time became involved in an organised program which emphasised agriculture, contrary to the previous plans. In this period, the oil sector managed to regain its revenues despite the declining trend of oil prices. The real shortage of foodstuff in the 1980s and the failure of the industrialisation policy forced decision-makers to pay serious attention to agriculture, especially in the areas where minimum finance and help could increase output. Therefore there was a situation for the first time which encouraged 'development from below'. One of the most influential policies followed by the government was administrative decentralisation and the delegation of decision-making to the regional level. However, as the study revealed in the case of Mazandaran, it is too early to predict its long-term effects on urbanisation and migration.

One of the policies selected in sympathy with the First Development Plan was the liberalisation of trade. This aimed, by the export of internal commodities, to raise more foreign exchange. Another aspect is the development of free trade zones such as the one on the Persian Gulf. The success or failure of this zone needs to be evaluated over a longer time-span. The liberalisation of trade also led to the direct contact of the internal producers with the consumers of the border provinces. Almost all of the northern provinces (Azarbaijan, Gilan, Mazandaran etc.) are able to trade with neighbouring counties without intervention from the central government. As we have seen, this gave an opportunity to Mazandaran's commercial sector to trade agro-output abroad.

At the local level, an increase of agricultural prices (especially rice) intensified rural-urban interaction and reinforced various linkages between Amol and its hinterland. Thus the promotion of small and medium size towns has the potential to increase agricultural productivity by fostering rural-urban links, but the magnitude of spending necessary to provide the requisite infrastructure in these towns makes this questionable. More critically, the merit of the smaller cities lies in their contribution to rural development and to raising the living standards of the poor in DCs with a weak infrastructure. Rural-urban migration in the Amol township indicated that rural development led to a new form of movement. Therefore the links between rural development and rural-urban migration are so complex that it is unclear whether increased productivity will lead to more or less (in the case of Amol more) migration. In general, the most important determinants of migration flows are macro-economic policies, educational policies and demographic structure. The First Development Plan paid much attention to education, especially for women in rural areas where schooling now became available without challenging Islamic values. Thus social development could fuel migration. In contrast to capitalist societies, where generally individualism prevails in personal decision-making, such development is embodied in the framework of the family.

The rapid increase of population in Amol led to the segregation of a higher income group from the rest of the city. The integration of the Bazaari merchants with the high paid professional workers created a new urban area, which is markedly different from those of the lower income groups. The main factor for such separation was the increase of commercial activities in the central part and of the Bazaar which prompted many residents to leave. In fact, it is the result of increased income in the rural areas which created more demand for

manufactured goods and so stimulated the expansion of trade between Amol and the capital Tehran. Internalisation of trade, however, may have greater impact on the larger cities or the capital, but the increasing tendency toward modern consumer commodities in the region shows the penetrating effects of the world economy into every corner of the globe.

9.2 Conclusions

The first impression gained from the study is that the growth of urban places in DCs and Iran resulted primarily from the natural increase of population due to medical improvements without a drastic decline of birth rates. This was reflected in the demographic structure of the study area, especially as a large part of the population of the middle and small sized cities originated in rural areas which display high fertility. The recent decrease of the natural growth rate from 3.9 % in 1986 to 1.8 % in 1996 was a remarkable achievement of the population policy of the post-war period, but the previous decade's high natural increase is still impacting on urban growth.

Rural out-migration with intra-urban mobility were certain features of population movement in the study area during the period of 1960-1994. As the migration review has shown, the motives for migration were different in the pre and post-revolution periods. This differentiation was the outcome of socio-economic policies which determined the direction of the national development strategies in a hierarchical order. The regions of the country were influenced differently according to their human and natural resources. Thus it was important to seek to understand how socio-economic and political events, such as reform programs, the exploitation of oil, the Revolution of 1979, the effects of war and

post revolutionary development policies, influenced population movements in general and the growth of smaller cities in particular. These events have all directly or indirectly fostered urbanisation at all levels.

The second conclusion of the research is related to the crucial role of intermediate cities in national and regional planning. As was shown in Chapter Four, Mazandaran province has five main urban centres of which four are located in the central part. The spatial distribution of the secondary cities in the province shows that this area needs special attention from regional planners; the provincial centre of Sari and the industrial city of Qaemshahr are sited a short distance apart, and as a result of their growth rate, expansion has resulted in a continuing built-up axis. This form of development will result in a loosely structured conurbation as their peripheries.

The positive role of small and intermediate cities on their hinterlands has been frequently emphasised by different researchers in the development process. However Lipton's 'urban bias' draws the opposite conclusion about the urban role in rural development. The urban bias model has been criticised by many scholars because of its simple generalisations which were mainly formulated according to Lipton's experience in India (Moore, 1984; Corbridge, 1982; Hart, 1977). Both views were taken up in the context of Amol and its hinterland to evaluate whether Amol is a generative or parasitic urban centre for its immediate rural hinterland. In the context of Iran, the concentration of economic and social facilities in the urban centres (in a hierarchical order) and the undermining of agriculture (except of large mechanised farms which generally belonged to the urban-based rich farmers) in the pre-revolutionary era supports the urban bias model. Amol and its hinterland relations were based on a small amount of agricultural products and local urban

artisans with a mixture of modern commodities. The city attracted a large number of the rural population by creating employment in service and construction. The increase of agricultural out-flows from rural areas promoted the income of the farmers in recent decades which may be interpreted as 'rural bias'. The present increase of rural income in the study region is reflected in an increase of rural-urban interaction. In short, there is not a great deal of evidence that this 'increased income' in the rural sector put much surplus value back into circulation in the rural hinterland.

Evidence has shown that i) increased income in the villages led to an expansion of urban business investment either by rich migrants or an increase in purchase power of villagers for urban commodities; ii) the city helped agriculture by organising and funding inputs such as fertilisers, financial support, technical assistance and so on. But it would be wrong to consider such assistance as being from the city because the only funding source was the government, not the high income class nor the Bazaar; iii) the city provided markets for rural products either there or by transporting them elsewhere but the profits from this increased turnover have not been spent on promoting agricultural productivity or rural development. Instead the rural population became mere consumers of modern commodities, or in the case of greater profits, preferred to invest in urban property. Therefore the function of the city is to absorb rural income surpluses and to connect the hinterland to the metropole of Tehran, as it was recorded that more than 70 percent of the city's commodities were provided by the capital. It is true and evident that the standard of living has increased markedly in the rural areas of Amol in recent periods but the real benefits of enhanced agro-product income is seemingly accumulating in the city rather than the hinterland.

Thus urbanisation growth in the Amol region can be explained through two theoretical approaches: internal processes and the influence of world economic restructuring in recent decades. Emphasising only internal factors for agriculture development seems to have insufficient explanatory power for urbanisation growth. The influence of global economic changes has played a crucial role on the country's economy. Iran has been influenced consistently by oil price fluctuations, as was evident during the rapid increases of the 1970s which led to a new trend in urban growth fuelled by investment in urban infrastructure; the world recession in the 1980s left the country with low foreign exchange resources and prompted a different strategy. Abu-Lughod (1996) reasonably pointed out that the major shortcoming of many Middle Eastern urbanisation studies is the over-emphasis of internal factors to the detriment of external ones. She adds that it is quite important to remember that countries with a single-export oriented economy are more vulnerable to market forces. The emergence of a new market in the Caspian Sea region gave local farmers an opportunity to export their products. Therefore, an external factor influenced the trend of urbanisation by intensifying indirectly rural-urban migration and interaction with the mechanism discussed previously.

9.2.1 Rural-urban migration

The study of urbanisation took place in an area in which agriculture is the predominant economic activity, so any change in this sector will affect others. Therefore research on urbanisation which ignores agricultural fluctuations will be misleading in the north of Iran.

The economic policies of the 1960s' decade aimed to transform the country's backward regions by delivering social justice for the mass rural

population through a range of reform programmes, of which land reform and nationalisation of the forest and pastures were predominant. Obviously the study region, as an agricultural pole of the country with its rich forested pastures, was directly influenced by these reforms. One of the structural consequences of land distribution was the break up of the landlord (arbab) and peasant (ra'iyat) system which ultimately led to rural-urban migration. It is important to consider the position of cities in the years after land reform. Studies of urbanisation in Iran have shown that the cities were serving an elite minority and performed a weak economic and social role; in fact the rural economy was the dominant sector. The turning point following land reform was the explosive increase of oil prices; these revenues supported and fuelled the growth of cities on whom priorities were concentrated in the Development Plans. Iran, like many DCs, shifted from a traditional and domestic agriculture economy to become a single producer of a mineral; the rural economy, particularly agriculture, suffered the most in this transition. Also it should be kept in mind that the world market's demand for oil and the consolidation of the national economy within the international market were influential factors in the economic changes of the country.

The ultimate consequence of agricultural marginalisation in the north of Iran and the study area was massive emigration toward the towns and cities. The empirical evidence for Amolian migrants revealed that the prime motive for migration was rural poverty, low income and unemployment in the pre-revolutionary periods; moreover other factors, like the mechanisation of agriculture, created a labour surplus in the rural areas. The state's investment policies, implemented with windfall oil revenues meant that cities offered employment opportunities in services, construction and to a lesser extent, industry. Smaller cities tended to offer more opportunities in commercial activities.

Therefore the nature of migration motives in Amol supports the economic reasons enumerated by Todaro (1971).

The research has shown that the migrants of Amol had maintained their relations with their places of origins, as the majority of them moved without their families and they came a short distance, in contrast to the much greater distances travelled by migrants to large cities of the country. Therefore the migrants of Amol were less likely to cut their ties with their places of origin. In short, pre-revolutionary migration to Amol was due to the depression of agriculture. The revolution of 1979 not only transformed the political administration but also the economic and social policies of the country. Post-revolutionary events, especially the war with Iraq, constrained the newly established government's development plans. The Islamic Republic government which replaced the monarchy system pronounced its priorities to be the needs of oppressed people (*mostazafin*), whether urban workers or rural peasants; the main target of the country's development plans should be self-sufficiency in foodstuffs which enforced a swing away from being only an oil producer to a more diversified economy (Behdad, 1988). In practice the high expenses of the eight years war, the decrease of oil prices in the world market and the economic sanctions imposed by the West enforced a review of the first ambitious plan. Thus the main budget channelled its surpluses to the war effort. The devastating impacts of the war on different sectors of the economy impeded the proper implementation of the national development plans. The agriculture sector was the second most affected after industry in the war zone, for more than ten percent of fertile land was damaged by the occupation by Iraqi forces. Of the five occupied provinces, Khuzestan was a relatively well-developed agricultural region with intensive mechanised farms and also the oil capital; it suffered the most. Moreover the rapid decline of food imports, especially in the

early decade of the revolution, led to a high inflation rate and shortages of foodstuffs. Consequently, the value of domestic production increased markedly. In mid 1986 the government announced that it would support the producers, especially the farmers who concentrated on grains (wheat and rice).

The north of Iran soon came under consideration because of its suitable conditions for agricultural development and its long history of agrarian activities. Rice cultivation is one of the predominant crops of the study area in the central part of Mazandaran province. The research tried to evaluate how agricultural development in the Amol region affected the urban growth of the city and whether the city could play a stronger role in the distribution of the agro-output of the region. As mentioned before, the depression of agriculture in the pre-revolutionary period pushed rural labour surpluses to Amol but in the post-revolutionary era, it was the increase of rural household income which encouraged many families to move to the city. Experience of Taiwanese agricultural development showed that the increase of rural income did not lead to urban growth; because of the spread of industries to rural areas, farm populations were able to take advantage of the higher wages in manufacturing without leaving home, and a large number did so on a seasonal basis. Also good transportation and relatively small-scale low capital intensity operations all helped to keep farm labour employed in rural areas (Mao & Schive, 1995). The lack of a nonfarm sector in the Amol region directed the rural population towards the city. It seems that in the current type of migration, the migrants chose to live in the city to take advantage of the urban opportunities to accumulate income and diversify their household economy while keeping their property in the village. Thus research on migrant areas revealed that the nature of post-revolutionary migration was different:

I) The main motives for movement to Amol have not been economic survival but social aspiration; they prefer to live in a place where their children can get an education and which has better access to urban amenities.

II) The post-revolutionary migrants who moved recently to Amol were better off economically, as confirmed by the newer migrants of the three sample areas in the city. They have been able to buy house sooner after arrival, while the people who had moved in the pre revolutionary era had to stay a longer time in rented accommodation.

III) It is obvious that the recent (post-revolution) urban expansion of Amol was much greater than in the previous period because firstly the number of housing units constructed in recent years was higher and on the periphery, while the previous growth took place inside the built-up areas on a smaller scale. Secondly, the increase of population density in the central part of the city prompted many high income level families to move to the suburb areas, which led to further physical expansion. Thirdly, urban land policy from mid 1986 onward favoured many state employees, who had lived in rented units for a long time. Urban land allocation for housing development was made in the north eastern part of the city.

9.2.2 The function of the city

A number of studies showed that small and intermediate cities can perform many functions to balance the pattern of urbanisation and stimulate the economies of the rural areas, especially in countries with urban primacy. The commercial and service (tertiary) sectors tend to comprise an important source of

employment and income for urban residents, although some scholars regard the tertiary sector as parasitic, rather than productive, and cities with high levels of employment in commerce and services as over-urbanised. The domination of commercial activity in the case of Amol primarily resulted from its strong role as a regional centre which is attributable in part to the lack of a larger city and also the paucity of manufacturing activities. The employment structures of the migrants and indigenous population revealed that more than half of them were self-employed generally in small scale commercial businesses due to lack of alternative employment in manufacturing.

It is necessary to consider the economic structure of the region where the city is located. In the case of Amol, the growth of commercial activities was in response to population increase in the hinterland, and subsequently, the increase in rural household income level which expanded custom for commercial goods. Therefore a change in the rural economy could directly influence the employment opportunities in the city; in other words, the city accumulates the extra income of the rural region and transforms it to the goods and services. For instance, the traditional function of Amol's Bazaar was in harmony with the needs of rural peasants; many traders worked as blacksmiths, producing and repairing agricultural tools and spares such as scythes and spades. The relative mechanisation of agriculture has caused these activities to disappear and be replaced by department stores. Thus, the function of Amol city as a central place of its region is determined by the changes and stability of a rural economy dependent on regional policies for its stimulation. In fact some of the characteristics of Friedmann's 'agropolitan district' can be seen here in a modified way.

Evidence from Amol's day markets showed how the relative commercialisation of agricultural products, mainly rice and fruits, led to a shift from vegetable growing to rice cultivation by large land holders; this created more opportunities for small land-holding farmers to obtain an income by supplying their products to day markets. Thus the urban and rural economies became more inter-dependent.

9.2.3 Intra-urban mobility

From the investigation it is evident that many of the high urban income class moved to the southern part of the city as a result of urban population growth, which had two main effects. First, the increased commercial value of space in the central parts, especially near the Bazaar, caused many households to evacuate their residential units for commercial reasons. Secondly the desire for a larger house and a better neighbourhood encouraged many wealthy Bazaar merchants and some professional people to the Haraz area. In general the central part of the city is still occupied by the majority of middle and the middle upper groups and the presence of the Friday mosque (in the case of South Asia, temples) which is similar to Dutt's model of the Bazaar-based city. Also the increasing trend of movement toward the peripheral areas by rich families illustrates the concentric model.

Therefore urban population increase led to income class segregation, which reflects the existing inequality among the different social groups; it was invisible in the previous spatial distribution of Amol's population. However it is difficult to assert that with the concentration of more population in an urban centre, the gap between poor and rich increases, as Chakravorty (1990) theorised his experience of several cities in Asia and Latin America

The resurgence of the rural economy not only led to urban expansion but also intensified rural-urban interaction. The analysis of the survey of rural commuters to the city showed that the nature of the relationship has changed; in the pre-revolutionary era, rural residents came to the city generally for medical and administrative purposes; however there was some sale of rural products on a small scale. In the new era, relative decentralisation of services has occurred through the establishment of medical centres (*Khaneh Behdasht*), rural banks in which to deposit surplus income, and the opening of rural co-operative (*Sherkat-e Taavooni*) branches to reduce the movement of villagers to the city. These increased services proved useful in the rural areas, rural population desires for urban modern commodities has increased parallel to their income level. As the survey showed, the prime purpose of rural passengers was shopping. Furthermore the city is a source of employment for nearby villages.

9.3 The Future of the Area

9.3. 1 The role of the intermediate city

Iran is one of the countries which suffers from urban primacy as epitomised by the explosive growth of the capital Tehran. Research has shown the crucial role of the city in absorbing rural emigrants. Amol not only was the destination of rural migrants but also has an important function in the rural economy. The city, as provider of various social and economic services, reduced migration toward the capital Tehran. Also the prosperity of the rural economy in recent years is owed to the pivotal function of Amol's Bazaar and other commercial enterprises. The cross-roads position of Amol in the central part of the province gave a great opportunity to link the rural farmer producers to the local,

national and even international markets. However attempts to develop and exploit the agricultural capacity of the region are constrained by the lack of markets for rural products. Despite the remarkable support by government, many of the smaller farmers are still forced to sell to the urban based intermediaries at below market prices; which in the long terms leads to migration. This may be questioned by the fact that even with improvement of income level, migration continues as was evident in the case of recent migrants of Amol. Thus, following the increase of income the complementary stages should be followed by promoting the cultural and social facilities and communications in rural areas.

Agriculture is the main dynamo of the region's economy; any change in this sector will influence others. Rice cultivation is one of the most labour absorbent, but during the last two decades mechanisation of the different stages of this crop reduced the number of rural labourers. This fuelled migration, for instance, last year mechanical trans-plantation of rice was introduced to the Amol region (Ettela'at, 1996, No, 636). Women were the main labour for such purposes; obviously alternative employment is required for this redundant labour.

It is important to provide proper facilities for more research into agricultural problems and to rural areas' social facilities in order to be able to draw up a constructive policy towards reducing out-migration. For instance financial support is needed for agricultural related research to promote the quality and quantity of different crops. The region is blessed with a moderate climate and fairly abundant water supplies but an increase of water consumption in recent years, accompanied by relatively less precipitation, decreased the water supplies for the rice fields; construction of a dam on the river Haraz in its lower section could save water for agricultural and urban purposes.

Moreover Amol is but one of the five main cities of the province. It, with Babol, Qaemshahr and Sari make up an urban pole in the central part of the province. Lo and Salih (1978) believe that regional and urban planning should control the development of intermediate-size cities to prevent the growth of primate cities; however, they fail to stipulate the ways to control or stabilise the growth of smaller urban centres. Although cities like Amol are a service supplier to their immediate hinterland, each of them possesses a special function. Qaemshahr, with a textile industrial based economy, and Sari, as an administrative provincial centre, could have a closer interaction with Amol which would be difficult with weak intra-regional communication. These urban centres instead of inter-dependency on each other have direct and regular contact with Tehran, as was evident in the case of Amol. So expansion of intra-regional communication could strengthen provincial development.

Although many of Mazandaran's smaller cities are located beside the Caspian Sea, there is still a lack of active port services. Establishment and upgrading of existing port installations to trade the region's products, is required as these were one of the important factors in expanding the rural economy in recent decade.

The natural beauty of the region and its location on the way to the holy city of Mashhad and to the Caspian beaches, to which a large number of pilgrimages take place, makes it one of country's tourist areas. So far this sector is less esteemed and has been ignored but the expansion of tourist related activities could provide an additional and complementary source of employment and diversify the economy. As it was the main sector which created employment opportunities for the western cities of the province in pre-revolutionary era, now

this part of the Mazandaran has a high level of unemployment.

9. 3. 2 Rural-urban migration

The research has shown that migration continued, despite the relative improvement of the rural economy and the change in the nature of migration, from economic reasons to social and welfare motives. Migrants preferred to invest in an urban property (house or shop) instead of spending their savings in the village. It clearly shows that investment in rural enterprises has not been as profitable as in the urban from the migrants' perspective. This trend leads to the impoverishment of rural society as the better off families leave the villages. Therefore investment opportunities and security should be provided with respect to agriculture. The majority of rural migrants moved to the city to diversify their income sources. Therefore programmes are needed to encourage villagers to stay in rural areas.

Establishment of small-scale industries which are either directly or indirectly geared to the agricultural economy, such as fruit processing into juices and jams etc. The investment of rural surplus income in such projects can create more employment for rural residents without outflows of capital to the city. The expansion and modernisation of small scale household industries in villages with household investment can create jobs for rural families, e.g. carpet making, which was initiated by the Reconstruction Crusade (*Jihad-e sazandehgee*: a new ministry established after the revolution which mainly implements rural development plans). This is especially important for women in a cultural context in which females are keen to work inside their homes. The decrease of natural growth rates (SCI, 1996) in recent years releases time previously dedicated to child caring.

The study illustrated that many of migrants came to the city for a better life, and that they transfer their rural assets which apparently result in the development of the urban economy. So one might question why should migration to the city be stopped? However the new migrants are still dependent on agriculture; will the second generation with more education and accustomed to an urban standard of living want to work in agriculture (as the government main policy is to strengthen agriculture)? There is a real risk that rural settlements will be reduced to just the agricultural fields of owners who live in the city; a number of villages in Larijan district which previously had a large number of population now consist of only orchard gardens. Above all, can the already overstrained urban amenities support this population?

The majority of migrants invest in the small scale tertiary sector but there will come a time when the market cannot absorb new entrants without diminishing the share of earnings for those already in it, as Bromley (1978) showed in his study of Cali, Colombia. Thus the expansion of urban industry to employ the new migrants can relieve the saturation of the commercial sector. Also urban infrastructure cannot be easily expanded or funded by urban authorities. Therefore the extension of infrastructure in rural areas can provide better living standards by using the rural self-help abilities. It is worth repeating that the migrants of Amol have not been very poor and did not move to live in shantytowns in contrast to the majority of the migrants of large urban centres in Asia and other DCs.

Education was one of frequently mentioned reasons for migration. Many villages are still without a high school but this might be solved by opening one school to serve a number of rural places; strengthening intra-rural transport would

help to facilitate access to the school in the city instead of migration. Since the majority of the villages are located in less than a 50 km radius from the city, an efficient bus service can cover all students commuting to the city. It is obvious that when rural households move to urban places, their contacts with the villages decrease and their priority will be improvement of urban life the longer they stay in the city. Meanwhile the prime ambition of villagers who only commute to the city is to strengthen and improve their rural living conditions rather than migration. Therefore upgrading rural-urban communications to allow for active interaction for education and urban facilities might decrease the trend of migration. Increased interactions, as the survey on Amol and its hinterland has shown, had positive effects on both the rural and the urban economies.

APPENDIX CHAPTER: 3

3.1: Questionnaire No (1):

3.2: Questionnaire No (2).

3.4: Questionnaire No (4).

3.5: Questionnaire No (5).

3.6: General characteristics of the Amol industrial units in 1994

3.7: Type of employment of heads of households.

3.8: Notes

APPENDIX CHAPTER: 3

3.1: Questionnaire No (1):

Housing and Household Survey (Indigenous Quarters)

Date/time
 Quarter:
 Street:
 No. of Questionnaire
 Interviewer:

A. General characteristics of Household:

(1). Total No of household members:

Total Male:	Total Female:
-15 yrs	-15 yrs
16-65 yrs	16-65 yrs
+65 yrs	+65 yrs

(2). No of Literate people:

Total Males:	Total Females:
-15 yrs	-15 yrs
16-65 yrs	16-65 yrs
+6 5 yrs	+65 yrs

(3). No of employed people:

Total Males:	Total Females:
-15 yrs	-15 yrs
16-65 yrs	16-65 yrs
+65 yrs	+65 yrs

(4). Head of household's characteristics(H.H):

a). How old are you?

20-24 yrs	45-49 yrs
25-29 yrs	50-54 yrs
30-34 yrs	55-59 yrs
35-39 yrs	60-64 yrs
40-44 yrs	+65 yrs

b). What is your education level?

- Illiterate (who is not able to write and read)
- Primary (including savad amoozi)
- Secondary (from first to third grade)
- Diploma and high school (from first to forth grade)
- Higher than diploma (college and universities)

c). What is your type of employment?

- Wage and salary (private sector)
- Wage and salary (public sector)
- Self-employed
- Casual jobs
- Unapplicable (supported by children, unemployed)

d). What is your total income per month?

- Lees than 20000 Rials
- 21000-49000 Rials
- 50000-99000 Rials
- 100000-149000 Rials
- 150000-199000 Rials
- More than 200000 Rials

B. Housing characteristics:

(1). Tenure-ship:

- Owned
- Rented
- Others (relatives, state)

(2). If rented, how much do you pay for rent per a month?

- Less than 20000 Rials
- 20000-49990 Rials
- 50000-99990 Rials
- More than 100000 Rials

(3). How many room your dwelling has got?

- 1 room
- 2 rooms
- 3 rooms
- 4 rooms
- 5 rooms
- More than 5 rooms

(4). How many household live in your dwelling?

- 1 Household
- 2 Households
- 3 Households
- More than 3 households

(5). How old is your present building?

- Less than 5 yrs
- 6-10 yrs
- 11-15 yrs
- 16-20 yrs

-More than 20 yrs

(6). How long you are living this accommodation?

-Less than 5 yrs

-6-10 yrs

-11-15 yrs

-16-20 yrs

-More than 20 yrs

(7). Where did you live before moving to this unit?

-City centre

-Yoor (western part)

-Year (eastern part)

-Rural areas

-Other places

(8). What was your main reason for choosing this Quarter?

-Easier access to work place

-Better neighbourhood (cultural environment)

-Access to relatives

-Cheaper accommodation

-Had no choice (heritage)

(9) Do you want to change your neighbourhood?

Yes

No

(10) If yes, where do you want to move?

-Haraz

-Yoor

-Year

-Other parts of the city

-Other places

(11) What is the main reason for leaving this quarter?

- High rent
- Too crowded
- Poor facilities
- Employment related
- Other reasons

(12) what type of materials are used in the structure of building?

- Kiln dried brick and wood
- Kiln dried brick and iron beams
- Cement block and wood
- Brick and stone
- Sun dried brick and mud
- Others

(13) Has your housing got the following facilities?

- Piped water
- Electricity
- Telephone
- Private bath
- Sewage system

(14) Have you got the following household goods?

- Video
- Freezer
- Washing machine
- Vacuum cleaner
- Car

(15) Are you satisfied with living in this quarter?

- Yes, explain please
- No, explain please

3.2: Questionnaire No (2).

Housing and Household Survey (Migrant Quarters)

Date/ Time
Quarter
Street
No of questionnaire
Interviewer

A- General characteristics of the household:

(1). Total no of household members

Males:	Females:
-15 yrs	-15 yrs
16-65 yrs	16-65 yrs
+65 yrs	+65 yrs

(2). No of literate people:

Males:	Females:
-15 yrs	-15 yrs
16-65 yrs	16-65 yrs
+65 yrs	+65 yrs

(3). No of employed people:

Males:	Females:
-15 yrs	-15 yrs
16-65 yrs	16-65 yrs
+65 yrs	+65 yrs

(4). Head of household's characteristics (H.H)?

a). How old are you?

20-24 yrs	45-49 yrs
25-29 yrs	50-54 yrs

30-34 yrs	55-59 yrs
35-39 yrs	60-64 yrs
40-44 yrs	+ 65 yrs

b). What was your job before migration?

- Farmer (owned field or orchard)
- Animal husbander
- Agricultural worker (landless)
- Official and state employee (teacher, officer, ..)
- Others (transport, shopkeeper,....)
- Unemployed
- Pupil

c). What is your present employment?

- Trader, shopkeeper (own shop)
- Official worker (educational, medical state institutions,....)
- Transport worker (taxi driver, public car driver, ...)
- Living on agricultural revenues
- Labourer
- Children's support and retired
- Unemployment

d). What is your total income per month? (August 1994)

- Less than 50000 Rials
- 50001-10000 Rials
- 100001-150000 Rials
- 150001-200000 Rials
- More than 200000 Rials

e). Where did you live before migration?

- Rural places of the mountainous areas (Larijan or Nour)
- Rural places of the plain areas (Haraz, Markazi or Nour districts)
- Rural places in the forest areas (Markazi or Nour)

- Urban places of the township (Mahmoudabad and Reeneh)
- Other places

f). How far is your previous place of residence from Amol?

- Less than 5 km
- 6-10 km
- 11-15 km
- 16-20 km
- 21-50 km
- More than 50 km

g). What were your main reasons for migration?

- Finding a job, as a result of agricultural depression
- Working for landlord with the low wages
- Education (for children or myself)
- For better living place and access to urban facilities
- Transferred by employer (official workers etc.)
- Military services (revolutionary guard: sepah, basige, comiteh)
- Left with parents and relatives during childhood
- Natural disasters (earthquake, flood..)
- Unemployed (unable to find a job)

h). Did you moved with your family or alone?

- Family
- Alone

i). In what accommodation did you live on first arrival?

- Owned (be able to buy house)
- Rented accommodation
- Lived with friends and relatives

j). How long have you been living in Amol?

- Less than 5 yrs

- 6-10 yrs
- 11-15 yrs
- 16-20 yrs
- More than 20 yrs

k). How long have you been living your present accommodation?

- Less than 5 yrs
- 6-10 yrs
- 11-15 yrs
- 16-20 yrs
- More than 20 yrs

l). How often do you normally visit your village?

- No visit
- 1 time a year
- 2 times a year
- 3-4 times a year
- 5-10- times a year
- More than 10 times a year

B- Dwelling characteristics:

a). What is your type of housing tenure?

- Owned
- Rented
- Others (relatives and state)

b). If rented, how much rent do you pay per month?

- Less than 10000 Rials
- 10001-20000 Rials
- 20001-30000 Rials
- More than 30000 Rials

c). What are the main materials used in the structure of your building?

- Kiln dried brick and wood
- Kiln dried brick and iron beam
- Cement block and wood
- Brick and stone
- Sun dried brick and mud
- Others

d). How many room has your home got?

- 1 room
- 2 rooms
- 3 rooms
- 4 rooms
- 5 rooms
- More than five rooms

e). How many households live in your dwelling?

- 1 household
- 2 households
- 3 households
- More than 3 households

f). Has your dwelling got the following facilities?

- Piped water
- Electricity
- Telephone
- Private bath
- Sewage system

g). Have you got any of the following household goods?

- Video
- Freezer
- Washing machine

-Vacuum cleaner

-Car

h). Are you satisfied with your present accommodation?

-Yes, explain please

-No, explain please

3.3: Questionnaire No (3).

Commercial Centres:

Bazaar and Retail shops

Date/ Time

Street

Interviewer

No of questionnaire

(1). What is the scale of your shop activity?

- Wholesale
- Retail
- Mixed
- Inapplicable (services)

(2). What do you sell?

a). Foods:

- Grocer
- Fruit
- Fruit and vegetable
- Baker
- Butcher
- Confectionary
- Rice store
- Dairy
- Others

b). Clothes:

- Men's wear
- Women's wear
- Children's wear
- Mixed

e). Others:

- Textiles
- Carpets and rugs
- Shoes and bags
- Jewellery
- Household goods (electric/non-electric)
- Furniture
- Handicrafts
- Electric and non-electric tools
- Chemist/semi-chemist

f). Services:

- Hairdresser
- Photography/photocopy
- Offices
- Ready and take away food shops
- Clinic and medical laboratory
- Public bath
- Others

(3). Tenure of the shop:

- Owned
- Rented
- Jointly owned
- State owned

(4). Area of the Shop (floor):

- Less than 5 m²
- 6-10 m²
- 10-20 m²
- 20-50 m²
- More than 50 m²

(5). How long has this shop been active in its present function?

- Less than 5 yrs

- 6-10 yrs
- 11-15 yrs
- 16-20 yrs
- More than 20 yrs

(6). If the shop is wholesale, where do you sell the goods?

- Smaller shops in the city
- Rural areas
- Other places in the province
- Tehran and other cities in the country
- Abroad

(7). Where do you provide the goods?

- Rural areas
- Bazaar (in the case of Retail shops)
- Other places in the province
- Tehran and other places in the country
- Abroad

(8). Who are your main customers?

- Rural people
- Urban people

(9). What season of the year is the busiest time for your shop?

- Spring
- Summer
- Autumn
- Winter

(10). Have you plans to change the function of the shop in the current year?

- Yes, explain please
- No, explain please

3.4: Questionnaire No (4).

Day Markets (Bazaar Rooz)

- Date/Time
- Day market name
- No of questionnaire
- Interviewer

(1). Sex and Age characteristics of seller:

Male:

- Less than 15 years old
- 16-65 years of old
- Over 65 years old

Female:

- Less than 15 years old
- 16-65 years of old
- Over 65 years old

(2). What is your main job?

- Farmer
- Housewife
- Student
- Trader
- Others

(3). How long do you attend this market?

- Less than one year
- One to two years
- Two years
- Three years
- More than Three years

(4). Where do you live?

- In Amol
- In village

(5). If in a village, how far is your village from the city?

- Less than 5 km
- 6-10 km
- 11-15 km
- 16-20 km
- 21-50 km
- More than 50 km

(6). How often do you come to market to sell?

- Once a week
- Twice a week
- Three times a week
- More than three times a week

(7). What do you sell in the market?

- Vegetables
- Fruits
- Vegetables and fruit
- Poultry and eggs
- Fish
- Dairy products

(8). Have you got a fixed place in the market?

- Yes
- No

(9). If yes, Do you pay tax to the Municipality?

- Yes, how much?
- No

(10). Are you satisfied generally with your work in the market?

- Yes, explain please
- No, explain please

3.5: Questionnaire No (5).

Bus Station Survey

Date/Time
Station
No of questionnaire
Interviewer

(1). Age and Sex characteristics:

Male:

- Under 15 years old
- 16-65 years old
- More than 65 years old

Female:

- Under 15 years old
- 16-65 years old
- More than 65 years old

(2). Employment Status:

- Farmer
- Animal husbander
- Student
- Official worker
- Housewife
- Others

(3). Which one of following districts does your village belong?

- Haraz
- Markazi
- Larijan
- Nour's districts

(4). In which region is it located?

- Mountainous
- Forest
- Plain

(5). How far is your village from Amol?

- Less than 5 km
- 6-15 km
- 16-20 km
- 20-50 km
- More than 50 km

(6). How often do you travel to the city per month?

- 1 time
- 2 times
- 3 times
- 4 times
- 5 times
- (+) 5 times

(7). Do you travel more frequently compared to five years ago?

- Yes, explain please
- No, explain please

(8). What is your main reason for travelling to the city?

- To sell agricultural products and buy agricultural in-puts
- To do shopping including clothes, food and householdwear
- To work in the city and in an office
- To attend educational facilities such as school
- To contact the head-quarter office in the city
- To visit medical centres (clinics, chemists)
- To visit relatives
- Others

3.6: General characteristics of the Amol industrial units in 1994

Name	Date of establishment	Product	No of workers	Production per month
Babakan Textiles	1981	Thread	1,002	60,000 Tons
Dokht-e Khazar	1980	Cloth	300	70,000 Suits
Jean Mode	1978	Cloth	280	65,000 Suits
Haraz Wool	1982	wool for Carpets	40	3,000 Tons
Iran Electronic	1976	Sockets Switchs	150	50 million Pieces
Groh Sanati Amol (industrial group)	1978	Pip	16	560,000 Tons
Tabari Brick	1976	Bricks	106	50 million Moulds

(Source: Author survey in August 1994).

3.7: Type of Employment of Heads of Households.

Wage or salary earner in the private sector: All persons in the private sector who worked for a wage or salary.

Wage or salary earner in the public sector: All persons who worked either in government or government affiliated organisations for a wage or salary.

Self-employed: All persons who were active in the private sector, or owned all or part of an establishment but worked alone, or were employed, paid or unpaid family workers, and others. Also heads of households who were depended to agricultural (owned lands) revenues are included.

Casual workers: All persons who worked on a casual basis legally (day labourer) or illegally (e.g. street vendors).

Others: All persons who have been heads of household, but economically were supported by others (children, or government).

3.8: NOTES.

Ostan: The largest administrative division of Iran, corresponding to the province. There were 24 Ostans in 1986. One of the recent policies toward local autonomy administration and decentralisation was the division of larger provinces (for instance, Khorasan) to smaller ones (Ettela'at 1/1/1997).

Sharestan: An administrative sub-division of an Ostan.

Bakhsh: An administrative sub-division of Shahrestan, corresponding to the district. Each Bakhsh is composed of two or more Dehestans.

Dehestan: An administrative unit composed of a group of villages or hamlets usually with a natural boundary.

Shahr: According to the 1986 census of Iran, it has been defined as places where there is a municipality, with an administration headed by a mayor regardless of size. But in the 1976 census it was defined as one which contains over 5000 population and also in the case when a place was the centre of a Sharestan with less than 5000 population.

Mahalleh: An administrative subdivision of a city or town by municipality, corresponding to a neighbourhood or quarter.

Sharih: Islam is a religion of law and has rules for all aspects of human life, personal and interpersonal. Islamic law derives from the Quran and the Haddith (saying of prophet) which are interpreted by the Mojtaheedin (clergymen practising religious jurisprudence).

APPENDIX CHAPTER: 4

4.1: Development funds during the First Development Plan
(1989-1994) (in billion rials)

4.2: Urban population of Iran by province in 1976 and 1986.

APPENDIX CHAPTER: 4

4.1: Development funds during the First Development Plan (1989-1994) (in billion rials).

Affairs	Expenditure	%
General Affairs:	<u>519.6</u>	<u>6.8</u>
Statistical and technical general services	55.4	0.8
Information and mass communication	45.0	0.7
public buildings and installation	419.2	5.1
Social Affairs:	<u>2466.4</u>	<u>32.5</u>
General Education	800.0	10.5
Culture and Art	37.5	0.5
Health and medical care and nutrition	456.0	6.0
Social security and well-being	23.1	0.3
Physical Education and youth affairs	50.0	0.7
Urban development	100.9	1.3
Rural development and modernisation	58.0	0.8
Housing	115.6	1.5
Environmental protection	2.0	0.03
Regional development, multi-purpose operations	25.3	0.3
Technical and vocational education	200.0	2.6
Higher education	213.7	2.8
Research	384.2	5.1
Economic Affairs:	<u>3401.4</u>	<u>44.8</u>
Agriculture and natural resources	787.2	10.4
Water resources	158.8	2.1
Electricity	171.2	2.3
Manufacturing	673.6	8.9
Mining	289.6	3.8
Commerce	25.7	0.3
Roads and transportation	1197.3	15.7
Posts and telecommunications	51.5	0.7
Tourism	19.5	0.3
Other Development Expenses:	<u>1200.2</u>	<u>15.8</u>
Reconstruction of war damaged and bombed rural	850.2	11.2
urban zones	350.0	4.6
Total	<u>7587.6</u>	<u>100</u>

Source: Plan and Budget Organisation, the First Economic, Social and Cultural development Plan of Islamic Republic of Iran (1989).

4.2: Urban population of Iran by province in 1976 and 1986.

Province	1 9 7 6			1 9 8 6		
	Total pop.	Urban (%)	No of cities	Total pop	Urban (%)	No. of cities
Central (Markazi)	1,165,703	87.2	32	1,082,109	44.0	15
Tehran	-	-	-	8,712,087	86.5	20
Gilan	1,581,872	29.2	19	2,081,037	37.7	31
Mazandaran	2,387,171	32.5	37	3,419,346	38.5	47
East Azarbaijan	3,197,685	37.2	34	4,114,084	48.6	40
West Azarbaijan	1,407,604	31.7	14	1,971,677	45.8	20
Bakhtaran	1,030,714	42.9	10	1,462,965	56.2	14
Khozestan	2,187,118	58.3	24	2,681,978	55.4	24
Fars	2,035,582	42.9	28	3,193,769	50.9	34
Kerman	1,091,148	32.2	13	1,622,958	43.0	22
Khorasan	3,264,398	38.1	32	5,280,605	48.3	47
Esfahan	1,969,965	63.0	42	3,294,916	64.1	48
Kurdestan	782,440	24.3	7	10,784,153	39.7	10
Sistan/Bluchestan	664,292	24.5	7	1,197,059	40.7	11
Hamadan	1,088,024	29.9	12	631,179	37.4	12
Charmahal Bakhtiari	394,357	35.6	12	1,505,826	36.4	12
Lurestan	933,939	31.5	8	1,367,029	46.7	10
Ilam	246,024	19.8	4	382,091	41.0	13
Kahkiluyih & Buyi...	244,370	12.6	3	411,828	27.0	5
Bushehr	347,863	34.2	5	612,183	50.0	11
Zanjan	580,570	24.9	5	1,588,600	43.0	14
Semnan	492,113	38.7	10	417,035	58.7	11
Yazd	356,849	61.2	5	57,402,876	66.5	12
Hormozgan	462,440	26.7	6	762,206	40.4	13
Total	33,708,744	47.0	373	49,445,010	54.3	496

(Source: SCI, Iran 1976 and 1986).

APPENDIX CHAPTER: 5

5.1: Urban population and annual urban growth rate of Mazandaran

5.2: The population of Mazandaran by township.

APPENDIX CHAPTER: 5

5.1: Urban population and annual urban growth rate of Mazandaran

Towns and Cities	Total Urban population				annual growth rate		
	1956	1966	1976	1986	56-66	66-76	76-86
Sari	26287	44547	70753	141020	5.4	4.7	7.1
Gorgan	28380	51181	88033	139430	6.1	5.6	4.7
Amol	22252	40076	68968	118242	6.1	5.6	5.5
Babol	36251	49973	68059	115320	3.3	3.1	5.4
Qaemshahr	23055	38998	63377	109288	5.1	5.0	5.6
Gonbad	18347	40667	60721	86100	8.2	4.1	3.7
Behshahr	16172	26032	32166	52261	4.9	2.1	3.7
Aliabad	2039*	105271	17918	31173	18.0	5.5	5.7
Tonekabon	7626	119643	19981	29380	4.6	5.3	3.9
Chalus	9758	14887	25782	29030	4.3	5.7	1.2
Babolsar	7237	11781	18810	28810	5.0	4.8	4.3
Bandar Turkman	8284	13081	17339	28358	4.7	2.8	5.0
Noshahr	2717	9016	16263	28216	12.8	6.1	5.7
Ramsar	-	-	19293	25352	-	-	2.8
Neka	-	6318	10803	23604	-	5.5	8.1
Azadshahr	990*	3850*	8761	21509	14.5	8.9	9.4
Kurd Kui	9855	11321	14745	21014	1.4	2.7	3.6
Feraidoonkenar	5039	8882	13944	20994	5.8	4.6	4.2
Joibar	3405*	12063	13251	18942	13.5	0.9	3.6
Amirkola	4584*	10215	12779	18295	8.4	2.3	3.6
Kalaleh	723*	2291*	6559	15511	12.2	11.1	9.0
Agh-ghaleh	1605*	4068*	6960	15006	11.2	5.5	8.0
Minodasht	-	-	5818	13907	-	8.8	9.1
Galogah	4982*	7326	10015	13629	4.0	3.1	3.1
Katalem-sadat...	2255*	3123*	9305	13509	3.3	11.5	3.8
Nour	2492*	4083	7281	13055	5.1	6.0	6.0

Towns and Cities	Total 1956	Urban 1966	population 1976	1986	Annual growth 1956-1976	rate 1966-1976	1976-86
Mahmoudabad	1628*	3973*	7098	11856	9.3	6.0	5.3
Gomishan	5168	6391	7975	11704	2.1	2.2	3.9
Galikesh	409*	2730*	5150	11545	20.9	6.6	8.4
Bandar Gaz	4693*	6100	7346	11335	2.7	1.8	4.4
Ziraab	1244*	3533*	6488	9595	11.0	6.3	4.0
Rostamkola	4143*	5689	6642	9290	3.2	1.6	3.4
Abasabad	718*	1432*	5290	8169	7.1	14.0	4.4
Khoramabad	1956*	2776*	5445	8154	3.6	7.0	4.1
Shirgah	1647*	3176*	4917*	7452	6.8	4.5	4.2
Saghikalayeh	813*	1203*	4714*	7087	4.0	14.5	4.2
Khanbebin	910*	2885*	6352	7063	12.2	8.2	1.1
Polsefeed	2110*	2879*	3843*	6523	3.2	2.9	5.3
Nashtaroud	1249*	2045*	3283*	4760	5.0	4.8	3.8
Kelarabad	720*	779*	2442*	4267	1.1	12.1	5.7
Alamdeh	1074*	1630*	2526*	4035	4.3	4.5	4.8
Kelardasht	865*	1210*	2974*	4030	3.4	9.4	3.8
Marzanabad	1241*	785*	2835*	3889	-4.5	13.7	3.2
Keyakola	142*	1922*	2189*	2964	29.5	1.3	3.1
Reeneh	798*	944*	1166*	1225	1.7	2.1	0.5
Ala'asht	1177*	640*	1074*	890	-0.6	5.3	-1.9
Ramian	2746*	4808*	5719	7535	5.8	1.8	2.8

-=Data not available *= At the time these places counted as villages

(Source :SCI, 1956, 1966, 1976 and 1986; Zanjani, 1989).

5.2: The population of Mazandaran by township (1956-86).

(1956)

Township	Total Pop.	Urban Pop.	No. of Cities	(%)
Amol	152211	22251	1	14.6
Babol	188192	48470	3	26.1
Behshahr	71359	16172	1	22.7
Sari	129168	26278	1	20.3
Qaemshahr	175675	23055	1	13.1
Gorgan	189248	51687	4	27.3
Gonbad	130933	18347	1	14.0
Tonkabon	182532	7626	1	14.1
Noshahr	80701	12475	2	15.4

(1966).

Township	Total Pop.	Urban Pop.	No. of Cities	(%)
Amol	17152	40076	1	23.4
Babol	26775	80851	4	30.2
Behshahr	113181	45395	4	40.1
Sari	204982	44545	1	21.7
Qaemshahr	203087	50961	2	25.1
Gorgan	309680	98601	6	31.8
Gonbad	284855	40667	1	14.3
Tonkabon	128870	11963	1	9.3
Noshahr	110351	23853	2	21.6
Nour	47347	4083	1	8.6

(1976).

Township	Total Pop.	Urban Pop.	No. of Cities	(%)
Amol	232475	76061	2	32.7
Babol	348618	113592	4	32.6
Behshahr	139986	59627	4	42.6
Sari	262877	70753	1	26.9
Qaemshahr	245557	83116	3	33.8
Gorgan	422932	165952	8	39.2
Gonbad	367674	99080	7	26.9
Tonkabon	159989	59312	5	37.1
Noshahr	146799	42045	2	28.6
Nour	60264	7281	1	12.1

(1986).

Township	Total Pop.	Urban Pop.	No. of Cities	(%)
Amol	332678	131323	3	39.5
Babol	487946	195057	4	37.5
Behshahr	216997	98984	4	45.6
Sari	370515	141020	1	32.1
Qaemshahr	284944	131194	3	46.1
Gorgan	345448	154436	2	44.7
Gonbad	529099	164173	7	31.0
Tonkabon	160451	61817	6	38.5
Noshahr	209172	69208	5	33.1
Nour	78081	13055	1	16.7
Bandar Torkman	92522	40062	2	43.3
Ramsar	60402	38861	2	64.3
Savadkuh	73127	24360	4	33.3
Aliabad	75097	31173	1	41.5
Kurd Kui	102867	32349	2	31.4

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