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Migrants, Mobility and Urban Low-Income Housing in
Developing Countries: A Case Study of Squatter Settlement
in Tehran - Iran.

by

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Thesis submitted for the degree of Doctor of Philosophy
(Ph.D.) to the Departments of Town and Regional Planning,
and Geography, Faculty of Social Sciences, University of
Glasgow.

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To:

my parents

and

my brothers

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E. Mahmoudkalayeh

ABSTRACT

The main focus of this thesis is squatter housing in Tehran. In order to study this, the thesis commences with an examination of the nature of and trends in migration to Tehran. Two forms of migration are studied. First, rural-urban migration and second, intra-urban migration. The thesis analyses the factors involved in the initiation and the development of these movements. The housing situations of migrants are examined in detail, and particular reference is made to the implications for the future development of housing policy in Iran.

To get the context for the empirical study, a literature review is undertaken. This examines theoretical and empirical approaches to the study of migration and low-income housing in developing countries. I then briefly describe the political geography of Iran with specific reference to the history and administration of city planning. This section concludes with an examination of government data on the processes of urbanisation and migration in Iran, particular emphasis being placed upon the development of Tehran.

The second empirical section analyses the result of a survey of 264 households which I undertook between February and June 1986. The survey was performed in two squatter settlements in Tehran and provides detailed information of the housing and socio-economic characteristics of households pre- and post-migration and the housing aspirations of the squatters. The study highlights the importance of home-ownership for migrants and analyses in detail the processes by which migrants adjust to become permanent urban residents.

Analysis of the results of the survey leads on to elaboration of the linkages between the processes indicated and the history of housing policy. I conclude by discussing the importance of individual and community aspirations and

needs in determining the future of housing policy. These are indicated to have relevance for developing countries other than Iran.

CHAPTER ONE

LITERATURE REVIEW

Introduction

This study begins with a review of research on housing the urban poor in less developed countries. The review makes specific reference to squatter settlements, and considers different ways in which the problems of the urban poor may be analysed in order to achieve a better understanding of the roots of housing shortages and the mechanisms by which these shortages may be tackled.

Housing, as a necessity of life is a topic of considerable interest and concern to most people. Decent housing is not only desirable, but also widely regarded as a basic human right because without it many other needs cannot be met. For any country an adequate standard (above minimum) housing is a pre-requisite to achieving improvements in the health and well being of its people (Turner, 1967; U.N., 1976a; Drakakis-Smith, 1987). Therefore the provision of good housing should be a matter of high priority for government, industry and the professions of a country.

In Third World countries the last few decades have seen an increasing migration of people from rural to urban areas in search of employment, and desiring access to better education and medical facilities (Findlay & Findlay, 1987; Population Reports, 1983), (more details will be discussed in part three of this chapter). The results of this migration stream has been increased demographic pressure on the housing and labour markets of the major cities of these countries. This has added to the existing housing crises brought about by rapid natural increase amongst the indigenous population and inadequate investment in new housing stock (Grimes, 1976:7; Lowder, 1987:132; Skinner & Rodell, 1983:1) and the constraints on the housing market

resulting from the traditional controls on access to new stock and adaption of old stock for new residential purposes (Drakakis-Smith, 1988).

Migrants, and indeed the urban poor, being unable to attain access to the housing market by other channels have instead established "illegal" substandard housing in squatter settlements around the outskirts of Third World cities, as well as on vacant land within these cities.

This chapter reviews some aspects of the literature on squatter settlements starting from a consideration of the definition of squatter settlements. It then considers the statistical importance of squatter settlements and the mechanisms responsible for the creation of squatter settlements, prior to turning to reviewing the social and political implications of squatter settlements. It concludes by identifying new research directions on the topic.

1.1 THIRD WORLD HOUSING AND DEFINITION OF SQUATTER SETTLEMENTS

Housing Market

The urban housing market can be defined within a framework of supply and demand. In fact the effective housing demand is, in statistical terms, a function of income levels and the price of housing and other goods (Grimes, 1976:82). Since the 1950s, in the housing markets of Third World countries demand and supply have been affected by two factors. Firstly, new investment in the housing sector by the state and commercial interests has been of a type which has reduced accessibility to new housing to many people due to high housing costs and the mechanisms by which credit has been made available. Secondly, technical progress in the construction industry has given rise to houses with high quality but at very expensive prices, which low income

households have found difficult to meet. By contrast housing built by traditional methods has been cheaper but often has failed to reach the standards demanded by municipalities' illegal building codes (Lowder, 1987).

By raising the cost of housing to all, the process of delivering housing services to the poor has become more difficult. Therefore more families than necessary have found themselves unable to afford suitable housing, and low income groups have been least able to compete.

Typically, the housing market in urban areas of developing countries can be divided to four types, differing in their accessibility to finance and land (Lowder, 1987). Three types involve legally constituted corporate bodies; the government, such as Ministry of Housing; private institutions, such as Pension Fund, charities and employers and third commercial companies. State housing can only be built if funds are provided through taxes, or allocation of budget or from international creditors. Private institutions are usually self financing, but commercial companies are only self-financing to the extent that part of their capital arises from the deposits of future clientele and much of their activities depend on credit obtained from the finance market. In these three types, the building process is entirely in the hands of specialised labour, whether in the designing, programming or construction phases. The dwelling unit is not occupied before completion and provision of basic water, sewage, and electrical services. Also financial mechanisms supporting the process are institutionalised.

Fourthly, there is the unauthorised sector composed of large numbers of petty entrepreneurs, artisans and individual households. The duration and priorities of construction are determined by family preferences and resources. Labour inputs in the construction of dwelling units are partially or totally provided by the family. Also construction is totally self-financed, for there are no savings or loans

mechanisms to support this type of house construction activity. The unauthorised sector depends on small individual investment staggered over long periods; interest charges are avoided as payments are made immediately in cash (Lowder, 1987; Vernez, 1976). Therefore from the above, it can be seen that significant differences exist between these systems in the financing of their operations (Table 1.1).

All the systems face increasing competition over land. Land is widely recognised as a major component in housing provision both for the poor and the rich (Drakakis-Smith, 1988:162; Lowder, 1987). Table 1.1 shows the way lands are provided in different systems. The state may have inherited lands set aside for native reserves, or for future expansion. Where these are non-existent or insufficient, it must expropriate or purchase land on the open market. Private institutions such as religious institutions (Catholic Church) in parts of Latin America have significant endowments of land. The commercial sector purchases the land for housing provision and this sector selects residents purely on their capacity to pay for the accommodation (Lowder, 1987). This is shaped by the increased demands for land for all uses and frequently for speculation. The combinations of high prices for land and construction material and services means that the majority of house seekers cannot afford these kinds of housing. In these situations households are forced to lower their expectations and settle for lower quality accommodation structurally, spatially, and locationally (Grimes, 1976:83). Therefore, for them the best solution is land with some basis of legality, even if the purchase does not yield a title, such as when it has not been zoned for residential purposes (Lowder, 1987; Gilbert, 1983). If that option is not available, the last alternative is to squat on unused private or public land. Unauthorised housing takes a great many forms. Its illegality may arise from the tenure of the land; by seizing of land without the owner's permission or purchasing it illegally without permission from the municipality. And also the quality of the dwelling below

TABLE 1.1: Characteristics of Housing Delivery Systems in Third World Countries

<u>System</u>	<u>Producers</u>	<u>Finance</u>	<u>Land</u>	<u>Scale of Scheme: Type of Unit</u>	<u>Users</u>
State	Ministry of Housing Autonomous Agency Welfare Department Planning Department Ad hoc Agency	Budget allocations earmarked funds soft loans	Inherited expropriated purchased	Large: multifamily, standard design, core housing	Civil Servants supporters displaced populations
Private Institutions	Employers Pension Funds Churches Charities	tax relief savings endowments donations	purchased endowed gifted	varied: single & multifamily, standard design	employees depositors selected beneficiaries
Private Commercial	Commercial Banks Savings Banks Pension Funds Land Developers Construction companies Real Estate Agencies Rich individuals	commercial loans mortgages	purchased	varied: mostly single family units, varied styles, exotic	those able to raise cash or obtain a mortgage
Illegal	Small landowners or developers Artisan builders Poorer individuals	personal savings self-help	inherited purchased seized	varied: single family units, form evolves with time	self-selected usually poor

Source: Lowder (1987: 13a)

acceptable standard or norms, or because of the location (Lowder, 1987; Drakakis-Smith, 1987; Potter, 1985; Gilbert, 1982; Abrams, 1964).

The variety of terms employed points to an important characteristic of such unauthorised housing, namely their extreme diversity with regard to formation, physical fabric and type of inhabitants. Although the terms "squatter settlement" or "illegal settlement" are frequently used, they are now increasingly regarded as being disparaging (Drakakis-Smith, 1981) and sometimes misleading (Gilbert, 1982).

Definition of Squatter Settlements

There is still some argument about the exact definition of a "squatter settlement". The literature on squatter settlements is filled with many definitions that emphasise different conceptual approaches. Turner (1969a:508) coined the term "autonomous urban settlements" by which he was referring to an "urban settlement, whatever its duration or expectations may be, that takes place independently of the authorities charged with the external or institutional control of local building and planning". The United Nations prefer to use the term of "informal" settlement or "spontaneous" settlement. They have also been referred to as uncontrolled, unauthorised and marginal settlements. In addition, many countries have local generic names for squatter settlements. In Turkey they call them Gecekoundus (built overnight), in Mexico City they are known as barrios de los Paracidistas, colonias populares, vecindades, or barrios pobres, in Delhi, Bombay, Calcutta and Karachi, they are termed bustees, Jhoupris and Jhuggis, in Manila, barungbarongs, in Bogota they call them barrios, in Moroccan cities, bidovilles (tin-can towns), in Tunisia gourbivilles (hut towns), in Jakarta and Kuala Lumpur, kampungs (the slum dwelling of homeless people) and favelas in Brazilian cities

(Abrams, 1964; Turner, 1968; Anthony, 1979; Gilbert, 1982:83; Drakakis-Smith, 1981; Payne, 1984; Chabbi, 1988; Dwyer, 1975).

In Iran, various local names are also used to indicate the growing problem of squatter settlements. For example terms include Zagheh (subterranean housing without using any material for construction), Halla-bee-abad (tin-can developed), Kapar (mat huts), Alunak (a one room dwelling which is constructed of used materials), Hashee-eh-ne-sheen (marginal residences, Go-od Neshinan (pit residences) Zoorabad (developed by force), and Chador (tent), (University of Tehran, 1972).

Therefore much confusion still remains in the use of the term "squatter settlement". The first person who made a systematic effort to arrive at a precise definition of "squatter settlements" in the context of housing crises was probably Charles Abrams. According to him the main characteristic of the squatter settlement is "the forcible preemption of land by landless and homeless people" and "squatting is part of a desperate contest for shelter and land" (Abrams, 1964:12). Therefore Abrams' theoretical definition of squatter settlements is based on the mode of urban struggle for the land by force, which is either government-owned or is privately owned. Abrams drew mainly on the experience of Latin American countries. However, in the Iranian case even those migrants living legally in rented or owner-occupied accommodation which does not meet municipality standards for housing are also considered as squatters. But using Abrams' definition they would not be considered as squatters. According to Drakakis-Smith, (1979:25) the latter kind of accommodation can be considered to be slums since they are "legal, permanent dwellings which have become substandard through age, neglect and/or subdivision into micro-occupational units such as rooms, cubicles or cocklofts".

Johnstone (1979) has identified two types of housing, "conventional" and "unconventional" housing. He defines as unconventional housing residential units, that are "not developed through established regulated, legal and/or socially acceptable channel and which do not utilize the recognised institutions of housing, that is, planning and licensing authorities, land alienation and purchase, commercial banking and real estate systems; and which does not conform to modern standards of construction and health, style and tastes" (Johnstone, 1979:19). Therefore he believes that the term squatter can no longer be applied to all the urban poor. He defines squatter housing as one type of unconventional housing - that part illegally built on land for which the residents have no title deeds. The other type of unconventional housing is vernacular in style, based on traditional architectural forms and some degree of legitimacy with regard to the land it occupies.

Drakakis-Smith (1981) criticises Johnstone's ideas on the basis that his definition of squatting relates only to the illegal occupation of land. He points out that much of the low quality and makeshift housing found in Third World cities also contravenes legislation in relation to types of building materials and methods of construction. This type of definition does not necessarily ensure that the correct statistical and cadastral information has been obtained. McAuslan (1987:49) contrasts the definition of squatters in developed and developing countries. He believes that "a squatter is a person who has taken over land, a house or building and occupies it without lawful authority to do so". In fact the second part of this definition is applied in the cities of Western Europe to people who take over existing buildings (blocks of offices, flats or derelict houses) and convert them to living accommodation as is done in London, Amsterdam and Berlin. But in the case of Iran, after the revolution in 1979 a number of vacant houses and flats were illegally occupied by the low-income group without permission. These flats and houses had been built in a modern style by people who had a high position in the

previous regime of the Shah. They were left vacant, because their former occupants had fled the country after the revolution. So from McAuslan's definition these people would be squatters on the basis of their illegal occupation of the property. In post-revolutionary Iran, however, they are not popularly considered to be squatters because of the circumstances surrounding the occupation of the property. In Third World countries the term squatting is most commonly used to refer to the illegal occupation of land. Squatters do not own the land or they have bought it illegally. Their houses are usually made of temporary materials. There are many urban residents who have no stable place of residence (Gilbert, 1982:85; Dwyer, 1975; Drakakis-Smith, 1981:87; Payne, 1984; Turner, 1967:168).

It is also relevant to note that in many Third World cities the poorest members of urban society do not live in squatter settlements but are homeless, living and sleeping in parks, under bridges or in the street at night (similar to the situation of certain elements of society in some European cities). According to the above definitions these people are not considered to be squatters and are known as "homeless people" (Abrams, 1964).

However, it is essential to remember that different definitions reflect different philosophical approaches to the housing issue and that squatter housing is formed in several ways. Generalisation in such a situation is dangerous. This diversity also means that any of those terms used to describe such housing (whether it be spontaneous dwellings, shanties, irregular settlements, self-help homes, or even squatter settlements) is often misleading. For example, the squatter settlement, is a misleading term to describe a dwelling built on purchased land; the term shanty is inappropriate for houses built by brick and stable materials in a consolidated area in the sense that many such urban developments have been highly organised by their leaders to avoid eviction (Gilbert, 1982). Despite the difficulties outlined above it remains

necessary for any policy or piece of research work on these settlements to have a proper definition of 'squatters'. In the remainder of this thesis, the term squatter housing will be used to refer to housing which is built on land for which the residents have no title deeds. In other words the squatters have taken over land either by invasion without permission from the land owner (public or private), or by buying a piece of land from a landowner who has no right to sell because he himself bought the land illegally, or the land is located outside the municipality's boundary and has no right to be built up on.

These forms of illegality have multiple implications for the way in which squatters relate to the rest of the housing market and indeed to their attitudes to their own housing and that of their community.

1.2 STATISTICAL IMPORTANCE AND CREATION OF SQUATTER SETTLEMENTS

1.2.1 Growth of squatter settlements

Accurate statistics on the growth of squatter settlements in urban areas of developing countries are difficult to obtain. This is partly a consequence of the problems of definition of squatter settlements, mentioned above although inadequate methods of data collection also affect the situation. For example, some authorities underestimate the size of their squatter populations by ignoring communities outside the official urban limits (Drakakis-Smith, 1981).

The growth of squatter settlements has been closely linked to rapid urbanisation. Over the past several decades it has taken place in most developing countries. Urban population growth in developing countries can be attributed both to high rates of natural increase and to migration from rural areas. Rural-urban migration occurs in most urban areas in

Third World countries, but specially to those centres where external economic influences have acted as a catalyst to a western form of modernisation (Findlay & Findlay, 1987).

In developing countries it has been estimated that about 40 per cent of all urban growth is caused by in-migration and reclassification of some rural areas to urban, and 60 per cent is caused by natural increase amongst current city dwellers (United Nations, [D.I.E.S.A], 1980:175). One study by the United Nations of 26 metropolitan areas in the developing countries found that migration accounted for more than 50 per cent of population growth in six of the metropolitan areas (Seoul: South Korea, Sao Paulo: Brazil, Accra: Ghana, Bogota: Colombia, Belo Horizonte: Brazil, and Tehran: Iran), (United Nations, [D.I.E.S.A], 1985a:17). In most Third World countries however migration has been replaced by natural increase as the leading source of urban population growth.

The combination of these two trends in the cities of developing countries has resulted in an annual population growth rate of over 10 percent (Table 1.2). The obvious problems that over-rapid population growth has brought about include the illegal settlement of land and the deterioration in urban living conditions; congestion, pollution and increasing pressure on inadequate housing resources and psychological stress amongst the urban population of larger cities of Third World Countries (Ulak, 1978; Findlay and Findlay, 1987). Capital cities often have experienced growth rates two to three times the national rate. If urban growth rates are high, rates of population increase in squatter settlements have been even higher with rates of increase commonly twice or three times the rate of urban growth as a whole (United Nations, [H.C.S.], 1978:3). The demographic magnitude of metropolitan population growth is well illustrated by the case of Mexico City, which grew from about 2.5 million inhabitants in 1952 to 16 million in 1982 - within 30 years. During the period 1970 - 1982 alone, Mexico City added over 608,000 persons annually to its

population (Table 1.2). Some other cities whose population also almost doubled during the period are Rio de Janeiro, Karachi, Nairobi, Lima, Jakarta, (Table 1.2).

A world bank study has projected that the number of cities with populations over a million will increase from 90 in 1975 to about 300 by the year 2000 (Payne, 1984:1). According to United Nations' projections urban population growth is expected to continue in Third World Countries but at different rates in each continent and culture area. For example, net migration contributed between 7 per cent in Uruguay and 62 per cent in Turkey to urban population growth (United Nations, [D.I.E.S.A], 1985a:4).

It would appear from United Nations' statistics that the bigger the unit of settlement, the faster it is likely to grow. It has been estimated that, by the year 2000, twenty four other metropolitan areas will join New York and Tokyo in the super-city class, i.e. super-conurbations or connected metropolitan areas with populations of more than 10 million people. Mexico City, Shanghai, and Sao Paulo (13,240,000 people in 1980) would appear to be the first cities likely to enter this category, followed by Peking, Bombay, Buenos Aires, Rio de Janeiro, Seoul, and with Jakarta, Karachi, Tehran, Delhi, Manila, Lima, Bangkok and Bogota not far behind (United Nations, 1976a:1985a). As Figure 1.1 shows by the year 2000, eight of the 10 largest cities in the world will be in developing countries. Each will have more than 13 million people, and the two largest, Mexico City and Shanghai, will each have more than 25 million (Population Report, 1983). One of the most intractable problems associated with these large cities is the proliferation of squatter settlements as part of their urban structure. Squatter settlements have become a major urban form in Third World's towns and cities of all sizes (Dwyer, 1975).

TABLE 1.2 GROWTH OF SQUATTER SETTLEMENTS IN SELECTED CITIES IN DEVELOPING COUNTRIES.

Country	City	Year	City Population		Population in slums & squatter settlements	
			Inhabitants (Thousands)	Annual Growth rate (%)	Inhabitants (Thousands)	% of City Population
Ethiopia	Addis Ababa	1966 ^a	680	5.5	612	90
		1970	-	-	-	<u>90^b</u>
Turkey	Ankara	1965 ^a	979	-	460	47
		1970 ^a	1,250	5.0	750	60
		1980	2,003 ^c	7.0 ^d	1,450 ^c	<u>72^c</u>
Colombia	Bogota	1969 ^a	2,294	7.3	1,376	
		1980	4,254 ^e	-	3,060 ^f	<u>68</u>
Morocco	Rabat	1970 ^a	500	-	-	-
		1971 ^a	530	6	293	<u>60</u>
Sri Lanka	Colombo	1972 ^a	562	-	245	44
		1973 ^h	-	-	-	57 ^g
		1980 ^h	614	-	365	<u>60</u>
India	Delhi	1970 ^a	3,877	5.7	1,400	36
		1983 ^h	5,000	-	2,600	<u>52</u>
Mexico	Mexico City	1952 ^a	2,372	-	300	14
		1966 ^a	3,287	2.3	1,500	46 ^g
		1970	8,700 ⁱ	-	4,002	46
		1982 ^h	16,000	-	8,000	<u>50</u>
Zambia	Lusaka	1965 ^a	167	-	29	17
		1969 ^a	262	12.0	124	48
		1981 ^h	540	-	250	<u>46</u>
Indonesia	Jakarta	1961 ^a	2,906	-	827	25
		1972 ^a	4,576	42.0	1,190	26
		1980	7,038 ^e	4.9 ^e	3,237	<u>46^{k,l}</u>
India	Bombay	1967 ^e	5,208	-	1,302	25
		1971 ^a	6,000	3.6	2,475	45
		1983 ^h	8,000	-	3,500	<u>43</u>
Peru	Lima	1961 ^a	1,716	-	360	21
		1970 ^a	2,877	5.9	1,148	40
		1980 ^m	4,960	4.8	2,132	<u>43</u>
Kenya	Nairobi	1965 ^a	332	-	64	19
		1970 ^a	535	10.0	177	33
		1978	959 ^{h,n}	7.8 ⁿ	364	<u>38^h</u>
Philippines	Manila	1970	3,495 ^e	4.5 ^e	1,223	35 ^k
		1980	5,335 ^e	4.2 ^e	2,000	<u>37^h</u>
Pakistan	Karachi	1968 ^a	2,910	-	600	21
		1971 ^a	3,428	5.6	800	23
		1985 ^p	7,000	-	2,500	<u>35</u>

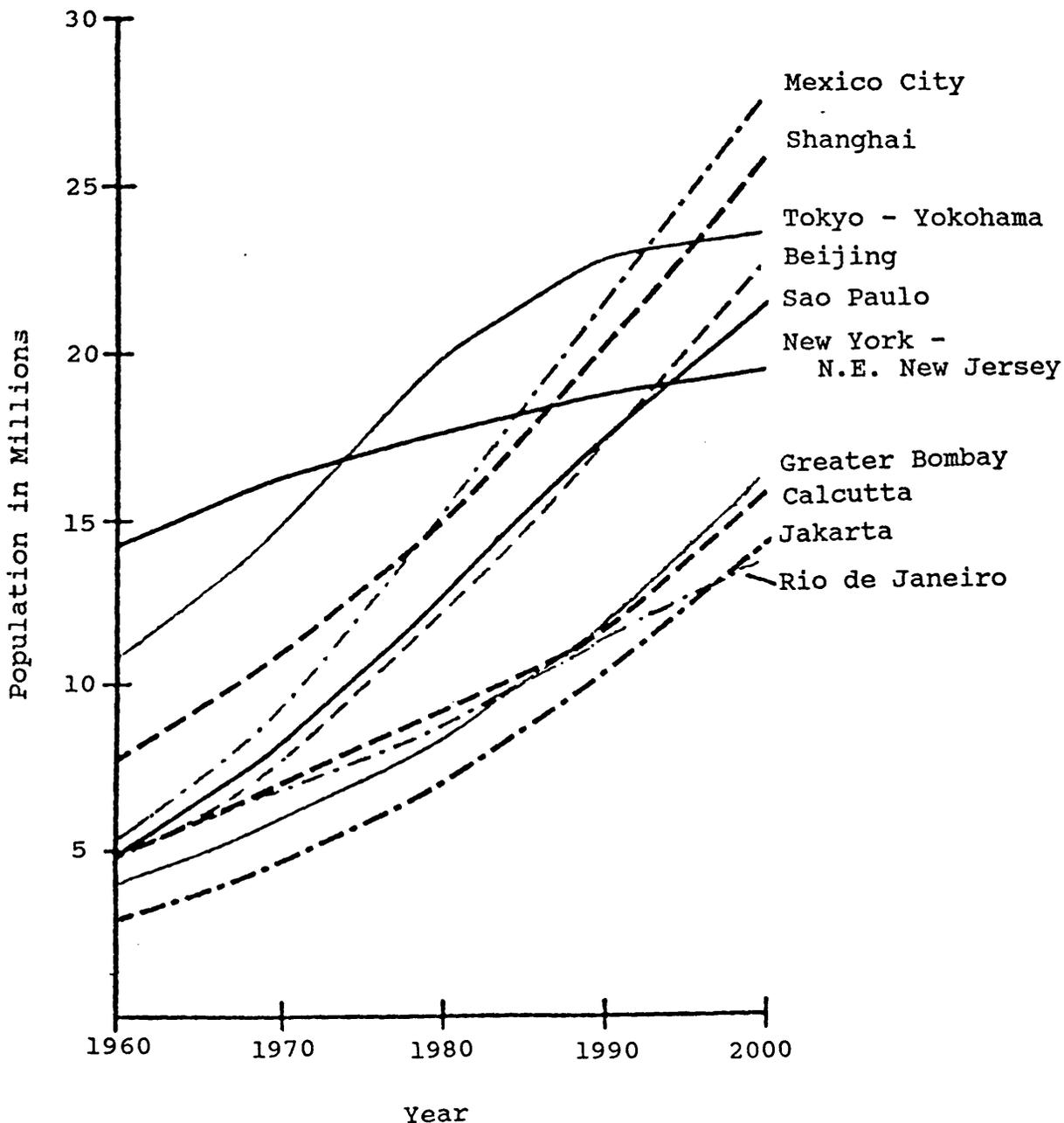
Continued Table 1.2

Country	City	Year	City Population		Population in slums & squatter settlements	
			Inhabitants (Thousands)	Annual Growth rate (%)	Inhabitants (Thousands)	% of City Population
Brazil	Rio de Janeiro	1961 ^a	3,326	-	900	27
		1970 ^a	4,855	4.4	1,456	30
		1980 ^q	9,154	4.9	3,051	<u>33</u>
Malaysia	Kuala Lumpur	1968 ^r	463	-	150	32
		1973 ^r	540	-	156	30
		1975 ^s	739	-	221	<u>30</u>
Thailand	Bangkok	1970	3,100	3.7 ^j	620	20 ^g
		1980	5,100	4.2 ^j	1,275	<u>25^t</u>

Sources:

- a) United Nations (1976a); Table 48 PP 159-164
- b) Payne (1984:2)
- c) Danielson and Keles (1985:41)
- d) Tokman (1984:89)
- e) United Nations, (D.I.E.S.A) (1985a), Table 1, P.11
- f) Population in slums and squatter settlements is based on t survey in 1973, which there were 600,000 illegal dwellin (Ospina J; 1988:45), and number of occupants per home we 5.1 persons (Gilbert and Ward; 1985:50).
- g) Drakakis-Smith (1981:58)
- h) McAuslan (1987:132-135)
- i) Ward (1984:150)
- k) Drakakis-Smith (1988:153)
- l) Silas (1984)
- m) Lowder (1987:158)
- n) Chana (1984:17)
- p) Niented (1986:24)
- q) Allen (1988: 5,6)
- r) Aiken, (1981:164)
- s) Johnstone (1979:23)
- t) Buranasiri (1983:121)

Figure 1.1 Ten Largest Metropolitan Areas
in the year 2000: Population Growth, 1960-2000



Source: United Nations (UN). Department of International Economic and Social Affairs. Estimates and projections of urban, rural and city populations, 1950-2025: the 1980 assessment. New York, UN, 1982. In Population Report, (1983:247)

Table 1.2 indicates the importance of squatters as a proportion of the population of various cities in the developing countries. However, it has to be pointed out that this data does not make a distinction between slum and squatter populations, as discussed in the previous section. It should also be noted that the term "squatter housing" does not necessarily describe the quality of housing. Overall trends are difficult to discern because of extensive variations in definition between individual countries.

In many developing countries the inhabitants of squatter settlements are rapidly becoming the majority of the urban population (Table 1.2). All the cities in Table 1.2 had squatter settlements population which formed more than 25 per cent of the total city population. More than one-third of these cities had squatter settlement populations which formed half or more of the urban population. For example, in Ankara, 60 per cent of the city population were living in squatter dwellings in 1970 and the annual growth rate was 9.5 per cent. By 1980 the squatter population had risen as high as 72 per cent of the city population (Danielson & Keles, 1985:41; Tokman, 1984:89). Also Drakakis-Smith (1981) has shown that in Istanbul, there were about 300,000 gecekondu (squatter houses) in 1960 which housed 25 per cent of the total city's population. After ten years the figure has risen to 899,000 gecekondu and the total population was 2,247,000. Therefore, 40 per cent of inhabitants were living in gecekondu, with an annual growth rate of 11.6 per cent. In Delhi, 52 per cent of the city population lived in squatter settlement in 1983 and more than 50 per cent of Mexico City inhabitants lived in squatter settlements (McAuslan; 1987).

Site and Location of squatter settlement

The site of squatter settlements varies greatly with local conditions and the availability of land. Squatter settlements arise on vacant land, usually on the outskirts of the city or on undesirable land within the city. Typical sites for squatter settlements include steep hillsides

adjacent to the city as in Rio de Janeiro, Brazil (Allen, 1988), Caracas, Venezuela (Dwyer, 1975), and Karachi, Pakistan (Niented, 1986), in Ankara, Turkey (Drakakis-Smith, 1981) and swamp lands as in Bangkok (Tanphiphat, 1983). They are also found along river banks on land subject to flooding, as in Montego Bay, Jamaica (Eyre, 1972) and Colombia (Dwyer, 1975), Kuala Lumpur (Aiken, 1981), (Tehran, author's own record). Similarly, land adjacent to railways and roads is also often occupied by squatters, as in the case of Kuala Lumpur (Aiken, 1981).

In Salvador, Brazil and Peru for example, settlements have been built in areas with mountains of garbage (Allen, 1988; Dwyer, 1975; Mangin, 1967; Gilbert and Ward, 1985). The settlements sited on this kind of low value land usually provide the most complicated environmental problems, and lesser opportunities of subsequent upgrading. Although there is no generally accepted theory of squatter settlement location (Dwyer, 1975:32) Dwyer has suggested that the largest are almost always peripheral. Dwyer also notes that, as the urban area expands, the "ideal" location for major squatter settlements may well move out centrifugally by the normal processes of invasion and succession.

1.2.2 THE CREATION OF SQUATTER SETTLEMENTS (PROCESSES)

Overview

This section of the literature review is concerned with the emergence of the squatter settlement and the ways squatter settlements have been created in Third World countries.

Many studies by experts in the Third World Cities have shown that squatter housing is generally outside the planning framework and is usually located in the least desirable parts of the city and often without any services. Usually squatter settlements contain dwellings which are designed and built by the occupants themselves or with the help of relatives and friends on illegal land. While these are

general characteristics there are important differences between one country and another in the way in which squatters obtained land and in which squatter settlements emerged.

There are several major ways that individual families become residents of a squatter settlement. The first and most widely known is the organised squatter invasion by relatively large groups. This system is most frequently found in Latin America. The second system is a much slower process where individual or small groups of people occupy the land by gradual infiltration. This is common throughout the Third World countries, but is particularly the case in Asian and African Cities (Drakakis-Smith, 1981). Other ways of becoming resident in a squatter settlement through unorganised invasion and illegal sub-division will be discussed later in this Section.

Organised Squatter Invasions

Squatter invasions can be organised or unorganised. At particular times organised invasions have been the main form of land acquisition in Latin American cities as shown by Turner (1969a) and Dietz (1977) in Lima and Ray (1969) in Venezuelan cities, and Mangin (1963) in Peru.

From these studies it can be seen that organised land invasion has been widely used by the poor to get land for housing and that squatter invasions are well organised operations which usually have been planned before the invasion of lands.

Turner (1967) has shown that planning for an invasion usually involved selecting an organising committee, screening those who want to take part and getting approval or backing from politicians or political groups interested in the support of the residents for the future but in

secret. Usually most of the people involved in the invasion have some amount of experience of urban life and they know how careful they should be in undertaking the invasion.

Turner (1967) has shown in his study that the process of invasion and establishment varies according to the local political and physical conditions. Where possible, the site is laid out in building plots as quickly as possible as allocated by the organising committee. In Lima the Cuervas invasion was well organised and took place at night involving several hundred men, women and children who had camped along a railway nearby. After some clashes with police eventually the invaders were allowed to stay as a temporary measure. Then some five weeks later, they set up an encampment on a part of the land on Christmas Eve. At the site the association hired five surveyors to set out the blocks and individual plots, with the association paying about \$1000 for the work which took two months to complete. Although permission was granted temporarily, there was enough time for the invaders to settle.

In Venezuela land invasion has been the normal means by which the poor have obtained urban land. For example, in Valencia approximately 45 per cent of housing in the city is on land occupied initially through invasion (Gilbert & Ward, 1985:98).

Most studies show that invasion generally occurs on publicly owned or community land, but Gilbert and Ward (1985) believe that it depends on the political situation. For example in Valencia, most invasion occurred on private land since the authorities did not defend private land as effectively as public or community land. This was because of local electoral politics. Government policy towards controlling invasions has often been the deliberate refusal of services to certain new invasion settlements. This policy has been applied to invasion on both public and private land.

Usually invasion is successful due to political involvement. Ray (1969:33-34) believes that contact with at least one of the political parties that shares governing power in a city is an essential criterion for successful invasion. This link is essential because it protects the leaders of an invasion against official reprisal. Organised invasion also can be seen in European cities. In London squatter invasions may be planned as carefully as land invasion in Lima. In suburban Ilford, one group decided to squat in empty municipally owned houses to draw attention to the plight of London's homeless. Careful meetings were held and they established a committee to organise the transport, food, furniture, barricades, time, place and date. Possible accommodation was well investigated and they planned against any theft of gas and electricity.

Three families were selected and moved in early on a Saturday morning to give a full weekend for consolidation. When the selected families had entered, there was a rapid politicisation of the squat, with crowds gathering and speeches being made to justify the occupation. At this stage police left the problem to the Local Government as the houses were their property. The squatters struggled for three years and after that some of the occupied houses were legally transferred to squatters via a Housing Association (McAuslan, 1987).

Another example of organised invasion can be seen in Karachi (Van Der Linden; 1982). Islam Nagar settlement in Karachi was invaded during the night. It was planned in advance by a minor local politician who wanted to enhance his position as a leader, or had humane reasons for helping poor people. Before the invasion took place the leader made a provisional map of the settlement and during the invasion, he marked 60 square yard plots for the settlers.

The interesting point was that the time for the invasion was perfectly planned from the leader's point of view, because it coincided with the time when former Prime Minister

Bhutto's government was ended and when it was anticipated that political parties - and specially those which had been opposed to Mr Bhutto - would let them develop their settlements. Thus, protection was expected from the party to which the leader belonged; but this did not protect the squatters from the authorities. Very soon after the invasion the Karachi Development Authority's demolition squad destroyed the huts and the settlement's leader was put in jail. Following this, the squatters sent applications to the High Court in an attempt to set their leader free. Eventually he was released on bail by influence of the Local Party. Meanwhile, Karachi Development Authority's demolition squad had together with the police and some other official visited the settlement and had demolished all the rebuilt houses. The residents stayed in the open for a few days. Some of them left the place, but a majority started rebuilding their houses. Then a residents' committee was set up and negotiations started with the police and an agreement was reached that, for the time being, houses would remain undisturbed. Eventually, a court order was obtained, which forbade the Karachi Development Authority touching any structures pending investigations into the allegation that the land of the settlement was, in fact, a graveyard.

This example shows that organised invasion is not always easy or successful, especially when the authorities' protection is weak. However, the squatters' success in Karachi shows that courts often seem more sympathetic to the plight of squatters than any other branch of government, and that there are some lawyers willing to help squatters.

Other Forms of Invasion

There are other ways in which squatter settlements emerge such as "unorganised invasion" and "illegal sub-division".

The term "unorganised invasion" was used by Van Der Linden (1982), for the most common type of squatter settlement in Karachi. When several hundreds of thousands of refugees

from India had to find shelter, the most obvious method was to select a piece of vacant land and build on it without any previous plan for the occupation. There was hardly any planning for the layout of the settlement and the first settler did not pay any money for the illegal occupation and tenure was very insecure. This method of settlement is much more vulnerable to demolition especially in the initial stages. Usually, in this type of invasion things take place quickly and settlers endeavour to get some sort of security by inviting more families to join them. In fact, some sort of 'organisation' may be present. For example the first settlers could be relatives or have the same village background as later squatters.

Illegal Sub-Division

The other type of land acquisition is through illegal sub-division, which can be seen in many Latin American and Asian cities, e.g. Bogota, Mexico City (Gilbert and Ward, 1985) and in Karachi, (Van Der Linden, 1982).

Squatting can come about by the illegal sub-division of government land by private persons or by illegal sub-division of the property of private land owners. This system provides considerable security of tenure and usually it takes place far from the city centre. Throughout Mexico City the illegal sub-division and sale of lots by land owners usually without services is well-known. Illegal sub-division for sale represents the single most important form of land alienation in Mexico City.

Similarly in Bogota, the illegal sub-division or, as it is known locally, "pirate urbanisation" is a very common form of land acquisition for the poor (Gilbert & Ward, 1985).

In Karachi Van Der Linden (1982) showed that "illegal subdivision" was very common and occurred through the sale of government land by private persons. He has identified certain important characteristics in the illegal subdivision settlements which include:

- (1) The security of tenure is very high in spite of the fact that settlers do not get documentary proof of their unofficial rights. Protection against eviction is guaranteed by leaders, who can obtain protection from politicians or key persons in administration.
- (2) Settlers have to purchase their piece of land with money. Often the first settlers pay a small amount of money for their plot. By the time the squatters take up residence, the price of plots has risen. Whatever the amounts paid, selling and buying of land in the settlement is characteristic of squatters. Often speculation occurs to a considerable extent.
- (3) Leaders plan the layout of the settlement and organise the sale of the lots and the provision of basic services.

Squatter Infiltration

The final main mechanism by which squatter settlements emerge is infiltration. This is a slow process more typical of Asian and African urbanisation (Drakakis-Smith, 1981:60).

Mangin (1967) suggested that when there is little active opposition to squatting, this type of squatter settlement is more likely to happen in the cities. Because this situation makes it much easier for the individual to move into existing settlements by getting help from friends and relatives.

Infiltration ignores official land allocation or transfer systems. The land, if apparently unoccupied or unused, is seen as a resource and is used by those who need it. The official system has the choice of either accommodating the new land uses resulting from popular pressures or trying to resist them in the name of property rights or proper planning and public health policies. Payne (1977) has illustrated this tension in his case study of Rouse Avenue settlement in Delhi. The site was ideal for migrants or refugees coming to the city. The first huts were built well before partition in 1947 and took the form of temporary structures built against the high brick wall that runs the length of the site. Once it was clear that early squatters would not be evicted, other families moved in and building became more rapid. Houses were single storey, some temporary and others permanent.

At the time of the study, most of the site was built up and accommodated more than 2000 people at a density of over 1000 per acre.

The vast majority of households were owner-squatters, though there were a number of tenants who shared with other relatives. Although the settlement was not made part of Delhi's master plan it acquired semi-legal status in the 1960's after the settlement achieved sufficient internal solidarity and external influence for it to be regularised by Housing Authorities.

Although the settlement now claimed a quasi-legal status allowing some improvements to be made, it still was officially illegal and there was no long-term security for its occupants. Therefore they were reluctant to finance long-term improvements.

In some cases the infiltration system is encouraged by the authorities through their policies as Johnstone (1979) has shown from examples in Peninsula Malaysia. Kuantan is a settlement which began as a legal Malay settlement, although

all the early residents were ex-squatters who had moved by force from their original houses to the present settlement on condition of paying land occupation fees. Many residents failed to pay these fees and subsequently were regarded as squatters.

The occupants were therefore never recognised as owners of the land but were legal tenants who annually paid a sum of money which gave them the right to live on government land for that year. Those who did not pay this sum were regarded as illegal occupants. After several years the settlement had degenerated into a no man's land and the majority of the occupants had erected semi-permanent buildings. As the settlement became increasingly crowded, groups of newcomers started to occupy the adjoining land and to settle and build entirely illegal squatter houses. The result of this, today, is a settlement with a wide variety of housing forms with varying standards of construction, amenity and legality, ranging from illegal squatter shacks to legal houses. Therefore it appears that the process of infiltration may be facilitated by involvement of the local authority.

The infiltration process has also been extensively researched in Ankara, Turkey, where the development of gecekondu first started to appear in the 1930's and were built in relatively central locations, unsuitable for middle class development. The initial public response to these illegal settlements was shaped within the framework of Law No. 486 passed in 1924, which enabled the municipal authorities to demolish any buildings constructed on land for which the occupier had no legal title.

However, the law was interpreted in such a way that if the building was occupied, a court order was required before any inhabited dwelling could be demolished. Thus a squatter would try to slip on to unoccupied land in or around Ankara, erect the shell of a house and move in before the police realised he was there. In other words this has helped the

squatter and created a process in which the shell was completed first to give a lived in appearance. Since legal procedures took a considerable time, the squatters were usually safe after achieving this appearance. While the main intention of this law was to prevent illegal settlements, its actual consequence was to facilitate their expansion (Payne, 1977; Drakakis-smith and Fisher, 1975; Tokman, 1984).

To summarise the discussion so far, squatter settlements appear in various ways in different countries through illegal processes. In some cities of Third World countries squatter settlements are developed primarily through organised invasions of public and private lands. Usually most of the people involved in organised invasions have some experience of urban life. It is not normally necessary for a successful invasion to be well organised, but the success of the invasion depends to a considerable extent on the political situation and the extent to which it affords officials' and politicians' protection from the consequences of their actions.

Squatting which comes about by illegal sub-division provides considerable security of tenure but usually happens far from the city centre. This method of land acquisition, as seen in the cases of Bogota and Karachi results in settlers purchasing their piece of land even although they may not have permission to build on it. Usually this system is tolerated by officialdom, and can operate more openly and on an individual basis.

"Illegal sub-division", or "pirate urbanisation", and unorganised invasion may take place in the form of infiltration, a slow process involving movement from one settlement to another. It happens when there is little active opposition to squatting. In some cases the infiltration system is encouraged by authorities through their policies.

Most policies and official systems allow these processes to take place when the market cannot provide land for the poor. The processes involved seem (perhaps only to a limited extent) to ensure that housing quality is poor. Dwellings often have to be put up very quickly. Services such as water and electricity may be withheld for many years. The risks of this form of settlement discourage major fixed investment by the residents in their housing, thus constraining the quality of the housing stock.

The processes involved have been succinctly described by Abrams (1964:14) almost three decades ago. Squatting arises from the "migration of refugees because of fear, hunger, or rural depression, the quest for subsistence in the burgeoning urban areas, and simple opportunism". He has argued that it is also the by-product of urban landlessness and housing famine. Surplus rural labour and the greater opportunities for labour in the towns combine to speed migration. "When there is no housing for the migrants, they do the only thing they can - they appropriate land, more often publicly owned land, from which there is less fear of being dislodged. Sympathy with the squatters' movements or lack of a consistent official policy encourages further squatting".

1.3 MIGRATION

1.3.1 Internal Migration

Having shown in the previous section that migration is a key process responsible for much of the urban population growth which is taking place in the Third World, it now becomes pertinent to consider in more detail the literature on human migration.

This section reviews the literature on urban growth resulting from internal migration and attempts to explore the causes and pattern of internal migration in developing countries. Internal migration movements of the rural-urban

rural-rural, urban-rural or urban-urban types have been examined by geographers, sociologists and economists. Here the concern is with rural-urban migration and with theories which help to explain these aspects of migration in developing countries.

Since 1885, when Ravenstein's (1885) famous "Law of Migration" was formulated, there has been much interest in the pattern and forms of internal migration in the countries of the world. His "laws" are broad observations on the relationship between migration on the one hand and factors such as distance, stages, economic motives, migratory currents and countercurrents, and urban-rural differences, on the other hand. Basically, he was concerned with explaining the causes of migration and presented empirical evidence which led to the following conclusions:

- (1) Most migrants only move a short distance. In other words, the rate of migration between two points is related to the distance between these points;
- (2) Migration proceeds by stages. People tend to move first towards the nearest towns and then to more rapidly growing cities;
- (3) Each main current of migration produces a compensating countercurrent;
- (4) Migrants moving the longest distances usually prefer to go to one of the great centres of commerce or industry;
- (5) Townsmen are less likely to migrate than rural residents;
- (6) Migration streams will increase over time as a result of development in the means of transport and the growth of industry and commerce;

Also he added that bad or oppressive laws, heavy taxation, an attractive climate, uncongenial social surroundings and even compulsion, all have produced and are still producing streams of migration, but none of these streams can compare in volume with that which arises from the desire inherent in most men to better themselves in some material respects (Ravenstein, 1889:286). He examined "pull" and "push" factors in migration and stressed that economic motives were always predominant in the list of factors influencing migration.

Lee (1970:288) claims that in spite of criticisms, Ravenstein's observations "have stood the test of time". He defined migration as "a permanent or semi-permanent change of residence. No restriction is placed upon the distance of the move or upon the voluntary or involuntary nature of the act" (Lee; 1970:290). Lee proceeds to develop his own theory of migration based partly on Ravenstein's Laws. He states that migration involves four general factors associated with (1) the area of origin. (2) the personal factors. Underlying his theory there are two sorts of forces working in different areas which lead to push movements from a rural setting and to the pull factors to urban areas. Movement between places is affected by a number of intervening obstacles which include costs and effort of moving.

The effect of each of these variables will vary with the personal characteristics of the potential migrant. Some of these are constant through the individual's life while others are associated with stages in the life cycle. Personal feelings, intelligence and awareness of conditions in other areas affect an individual's evaluation of the situation at his point of origin, and the likelihood of seeking more knowledge about the situation at potential destinations. This depends also upon an individual's personal contact structures (e.g. relatives, friends and other sources of information). He further maintains that

"the decision to migrate..... is never completely rational, and for some persons the rational component is much less than the irrational" (Lee, 1970:292).

Thus the push-pull formula suggests that a potential migrant will be subjected simultaneously to centrifugal forces at his 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. Clarke (1972:137) believes that in the areas of departure, population pressure, modernisation of methods of commercial production and a stagnant economy have been the push factors while the rapid increase of employment with better working conditions and higher urban wage rates are the major pull factors. According to this theory, the push comes from deteriorating conditions in rural areas forcing migrants to seek a livelihood in cities, and pull is exerted by the cities to attract rural migrants because of desired and increasing opportunities.

Neo-classical Models

Todaro criticised aspects of Lee's formulation and proposed an economic model of migration based on the assumption that migration is primarily the product of rational economic decisions by individual migrants. He argues, with reference to numerous case studies, that "migration is no longer viewed by economists as an unambiguous beneficent process necessary to solve problems of growing urban labour demand. On the contrary, migration today is being increasingly looked upon as the major contributing factor to the ubiquitous phenomenon of urban surplus labour and as a force which continues to exacerbate already serious urban unemployment problems caused by growing economic and structural imbalances between urban and rural areas, because

rural-urban migration continues to exceed rates of urban job creation and to surpass greatly the capacity of both industry and urban services" (Todaro, 1976:2).

By emphasising the imbalances between rural and urban areas, Gugler and Flanagan (1977) came to the conclusion that in West Africa the imbalance in life chances between the rural and the urban sectors, characterise the pattern of urbanisation. Such imbalances appear to be consistently biased toward the interest and concerns of a small group of decision makers (Gugler and Flanagan, 1977).

Todaro (1977:220) argues that the decision of the individual to migrate is a function of two variables (a) the difference in real income between rural and urban areas and (b) the probability of obtaining a job in the city.

The distinctive feature of his model was the emphasis on the expected income rather than merely considering rural-urban wage differentials and the probability of obtaining a job in the urban sector as an important factor in the individual's decision to migrate. In other words the migrant may find difficulty finding regular wage employment in the initial period, but he expects this probability to decrease over time as he becomes able to broaden his urban contacts. It therefore is still rational to migrate, even though expected urban income is lower than expected rural income in the initial period of urban residence.

The shortcoming of Todaro's theory is the assumption that rural-urban migration decisions are based on entirely economic motives. Todaro upholds the view that "the underdeveloped economy consists of two sectors: (1) a traditional agricultural subsistence sector characterised by zero or very low productivity 'surplus' labour, and (2) a high productivity modern urban industrial sector into which labour from the subsistence sector is gradually transferred" (Todaro, 1977:215).

In fact, it can be argued that surplus rural labour is gradually withdrawn from traditional agriculture to provide cheap manpower to expand the growing modern industrial complex.

Therefore neo-classical economic theories towards rural-urban migration consider population movement as a rational response to better employment opportunities and high wages. Most of these theories maintain that migration is directional, flowing from high unemployment areas or ones with low wage rates to more favourable areas until an equilibrium is reached between the supply and demand for labour.

Some writers believe that the economic variables are not solely responsible for migration. Amin, for example has criticised Todaro's model: "First the approach is descriptive, not explanatory and secondly, the approach assumes economic rationality on the part of the migrant" (Quoted in McGee, 1977:198). Amin does not accept the view that the decision to migrate is made with full knowledge of the variables of income and potential employment. He believes that migrants do not all come from poorer rural to richer areas. For example, Amin would argue that marked regional variations in the income levels of the population of the west coast state of Peninsula Malaysia is primarily a reflection of the pattern of colonial development. In this instance historical patterns of colonialism rather than current labour market conditions or income patterns hold the real explanation for the pattern of labour migration. Also it is commonly argued that rural demographic pressures have forced people to move to the cities even though there is considerable unemployment there (Schultz, 1971; McGee, 1971).

Nagi (1976) argues that the migrants do not move to the cities or towns because of demand for labour by developing industrial activities. Instead, he proposes that the major cause of migration is the pressure of population on the land

in the rural areas. This causes economic pressure in the rural areas and forces people to move to the cities to find employment and livelihood. He sees "over-urbanisation" as merely a consequence of this push from the rural areas, rather than because of demand for labour by developing industrial activities in the cities and towns.

Sjaastad (1962), approaches rural-urban migration differently. He argues that there are other variables to be considered in migration than merely economic ones. He has placed migration in the framework of 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 costs of migration were broken down into monetary and non-monetary costs. The former include expenditure on food, lodging and transport expenses involved in migration. Non-monetary costs include foregoing earnings during the period spent in travelling, searching for and 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 earning between two regions may continue to exist without encouraging migration because of the costs of migration may exceed the observed regional differences in earnings.

Migration costs may not be of as much relevance to the study of migration in developing countries as they are in developed countries. In most studies of migration, the surveys show that almost always migrants in developing countries stay with relatives or friends; thus food and housing costs are a very low investment compared with the expected return from an urban job.

Flinn and Converse (1970), in their study of Columbia proved that relatives and friends played a particularly significant role at the time of migration helping new migrants to settle in the city. Assistance ranged from paying for transportation to assisting in securing employment.

Kim and Lee (1979) came to the conclusion that one of the important factors accounting for variations in the propensity for rural-urban migrants to return to their place of origin was the extent to which migrants were able to tap into a support network in the city of destination. Isolated or poorly connected migrants often found after a short period of time that were not able to integrate successfully in either the social, economic or cultural environment, and were therefore more prone to return to their place of origin.

It is not surprising given these findings, to encounter in the literature much evidence of people migrating in developing countries to cities where they have relatives or friends. As Browning and Feindt (1971) have shown in Monterrey, Mexico, over 80 per cent of all migrants had relatives or close friends already living in the places to which they moved, and most of the migrants were initially housed by them. This factor therefore affects the migrant's choice of destination. The most important element in choosing where to locate initially within the city also has to do with where kin or friends are already established, since they usually provide early accommodation and assist in obtaining work (Vaughan and Feindt, 1973). Migrants 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 these jobs the work is intermittent and income varies from one day to the next (Krausse, 1979; Papanek, 1975) though these may be low-level jobs in relation to urban standards, moving

increases income and improves the occupational status of most migrants. Due to serious unemployment in developing countries the migrant cannot expect to secure a highly paid urban job immediately. Therefore migrants on their first entry to the urban labour market will either become totally unemployed or will seek casual and part-time employment in the urban labour market (Todaro, 1977).

This is a process of urban adjustment, the main factors encouraging or discouraging the migrants to remain in the city is the availability of accommodation and work. Mabogunje (1972:198) stated in his rural-urban systems framework (Fig 1.2) that "the urban control sub-system operates at the opposite end of the migrant's trajectory to encourage or discourage his being absorbed into the urban environment. Absorption at this level is of two kinds: residential and occupational." Once migrants have secured employment, their commitment to urban life will be greater and the probability of their reversion to rural life will be less. 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 rural areas were lower than amongst those migrants who remained in the city. However, the return migrants were able to make slightly more money than non-migrants from their communities of origin even though their skill levels were lower than those of non-migrants. One of the reasons why these return migrants failed to adapt to urban life was the difficulty of finding a job. This led them to become dependent on urban money lenders (Lipton, 1980).

The overwhelming majority of rural-urban migrants initially move to the city on an individual basis. Many move to cities in search of jobs during the seasons when they are unoccupied in rural areas. After some years working in the urban area on a temporary basis, migrants realise that they could live there on a more permanent footing and could adapt themselves, socially, economically and culturally. They may then consider bringing their family from the rural area to

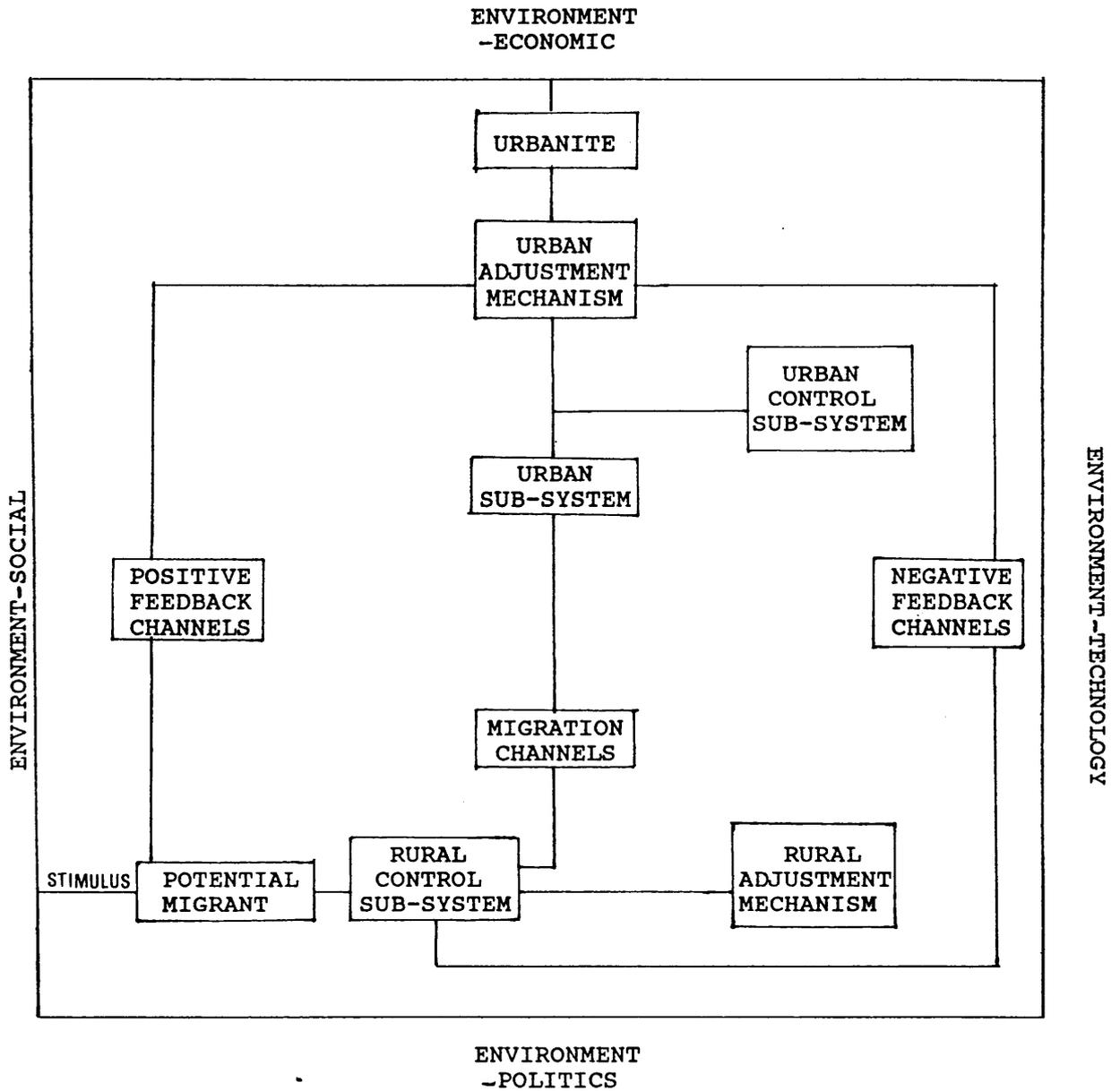


FIG. 1.2 A SYSTEMS SCHEMA FOR A THEORY OF RURAL-URBAN MIGRATION

"MABOGUNJE MODEL"

join them (Eames, 1967). A study by Sen in Calcutta showed that a very large proportion of migrants who had moved to the city in search of jobs initially left their families behind. This may have been due to a number of difficulties in the city, and in particular the lack of provision of housing and the inadequacy of their incomes to meet the living expenses of their family in the city (Eames, 1967).

From the perspective of this thesis the key issue emerging from the literature on this issue is therefore that the accommodation requirements of migrants changes through time. Upward occupational mobility will often be accompanied by changes in residential location within the city. This is a function not only of income levels but also is closely related to the length of stay in the city and the increasing commitment by the migrant to spend at least part of his working life there (Mabogunje, 1972).

Thus it can be argued that the residential relocation of a migrant is not proof that he has become a permanent resident of the city, but it does reflect a change of status and commitment to the urban environment. The large numbers of migrants living in rented accommodation in reasonably good locations in a Third World city may in fact be less likely to remain in the urban labour housing markets and more likely to return home than the migrants resident with their families in squatter settlements. Indeed, Lipton (1980) has stated that one of the things that increases pressure on migrants to return home is the rising level of urban rents. This triggers either return migration or residential relocation in a less expensive housing sector.

Most rural migrant workers live in rented accommodation during their early years in the city. The duration of residence may not be considerable as Gilbert (1983:467) has shown from his studies in Bogota and Mexico City: 51.5 per cent of the respondents to his survey had lived in rented accommodation for less than one year, 19.0 per cent for 1.0 - 1.9 years and only 10.3 per cent for 2.0 to 2.9 years.

The type of job and residential occupancy which a rural migrant secures in the city can be crucial in determining how soon he/she becomes committed to urban life.

There are some other factors which can affect the success of a migration move to an urban area. Harvey (1975) has suggested that information prior to migration is a very significant contributory factor in population relocation. In operational terms distance has been regarded as a very good surrogate for measuring information flow. Riddell & Harvey (1972) suggested that propensities to migrate to urban centres tend to decline with distance. Also Adams (1968) supports this with a Columbian example where the proportion of migrants to the larger towns and cities decreased as travel time increased; but in the more remote areas a higher proportion of migrants were moving into nearby villages and towns.

Mabogunje's (1972) model (Fig. 1.2) suggests that the decision to migrate to cities depends on the type of information migrants receive from earlier migrants to the city. Information from a particular city may be positive or negative. For example, difficulties in finding jobs or a place to live or the general hostility of urban society may be reported. The effect of this negative feedback will be to slow down further migration from rural areas to that particular city, and inversely positive feedback will encourage migration.

Therefore, in passing on this information, distance is an important factor. Those living close to a potential urban destination will receive much more information about it and other things being equal will be more likely therefore to make an informed move to the urban area. Similarly, migrants moving to an established destination (to which many previous migrants from his/her area have moved) will be better informed than a migrant going to a new and "untested" location. Migration flows have therefore a spatial bias and once established are self-reinforcing.

Housing briefly summarised selected aspects of academic debate concerning migrant decision making. It is important briefly to note that many migrants' moves are involuntary, especially in less developed countries. Migration is often triggered by other factors like war or internal political conflicts or by macro-economic changes.

These matters may have a much more fundamental influence in changing the pattern of migration than the kinds of behavioural factors discussed above. Drakakis-Smith (1987:31) points out that "migration usually occurs initially in response to events (natural, economic, social or political) over which those affected have little control". If this is true then behavioural theories of migration will have only limited explanatory power, and an understanding of the timing of migration flows is more likely to be found in macro economic theories explaining structural changes in society and in the economy. For example, at a 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 (1970:293) points out that in these circumstances the social statuses 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 the same time as a result of the chaotic situation, intervening obstacles are removed so it allows the volume of migration to increase to large urban centres. One example of this was the volume of internal population movements in South East Asia which were associated with the ravages of the Pacific War which resulted in hundreds of thousands of people becoming refugees across the region (Ng, 1975:188). In this

thesis clearly the disruptive effect of the Iranian Revolution provided a major stimulus to similar types of population distribution.

Migration and Systems Theory

It is important therefore in examining migration within a systems framework such as Mabogunjes (1972) to bear in mind the powerful influence of the environmental context. Any migration system is influenced by social, economic, technological and political environments (Fig. 1.2). The relationship between these environments and the migration system is open and continuous. When the individual receives a stimulus to move, the potential migrant will be affected by rural control sub-system, for example, family control, local community or relatives etc. in his decision whether to remain in the rural area or to move to an urban area. Once the decision to move has been taken the migrant enters a migration channel, which introduces him to certain aspects of the urban economy and society. The urban control sub-system which relates to housing, economic opportunities (jobs) and social network in the urban area, can help the migrant to adjust himself to the new urban environment and eventually to become an "urbanite". In fact the urban control sub-system can operate either to encourage or discourage the migrant from becoming part of his new environment. The urban control sub-system can be identified with the city administration and other employment agencies, which are operating under national laws. For example, the city administration might provide cheap and adequate housing which would make the transition of the rural migrant easy or it might provide obstacles to migrant settlements making it to the urban system for the migrant to gain a foothold in the housing market.

Apart from housing and job security the provision of amenities and services may be a vital factor in persuading a migrant to commit himself to the urban life. Impressions of success or failure are constantly being transmitted as

positive or negative feedback to the place of origin and influence subsequent migration. In fact the control subsystem is critical in determining the volume of future population transfers from rural to urban areas within the migration system. However, control sub-systems do not fully determine flow characteristics (Pryor, 1975).

This section of the literature review has evaluated some of the theoretical dimensions of rural-urban migration research through discussion of the different factors which may influence the decision to move and the pattern of migration. The review of the literature has shown that although some useful surveys have been carried out on migration impacts in Third World countries, there remain many gaps in migration research on the consequences and impacts of migration on both areas of destination and origin. Among the consequences of migration to urban areas are inadequate housing both quantitatively and qualitatively, and the growth and spread of squatter settlements. In the next section analysis is attempted of how squatter settlements emerge as a result of intra-urban movements.

1.3.2 Intra-urban Migration Among The Poor

This section of the review considers the intra-urban movement of migrants and the factors that influence their movements.

Rapid city growth in developing countries, due to immigration and natural population increase, has made it difficult to control or accommodate the entire urban population. The consequence of this has been the growth of squatter settlements and the straining of the ability of cities to provide public services. However, squatter settlements are only one part of a more complex housing market and are not necessarily the worst part of it. To understand their role in this market and the part they play

in the housing history of migrants in the city we must trace the whole pattern of these migrants' movements within the city.

In this section, I shall examine other studies of these patterns of intra-urban movement in the cities of developing countries. I shall look first at the location of migrants' accommodation when they first arrive and where they eventually establish their homes. Then attention will be given to the tenure and dwelling characteristics of the houses through which these people move. The length of time the migrants need to become established city-dwellers, and to settle into a secure and stable dwelling environment involving home ownership will also be considered. Lastly, an attempt will be made to elucidate the main reasons for intra-urban migration between different residential areas.

There have been a series of models explaining residential movements in the cities of developing countries, dealing with different patterns of urban residential location in relation to different stages in a migrant's progress through life. The best known model of these processes is Turner's (1968) model, and much subsequent research has been based on his model. Turner's (1968) model seeks to explain low-income intra-urban migration patterns as a product of three variables: location, tenure and shelter. Turner distinguishes three phases in the residential movement of migrants. These he termed the early transition, mid-transition and late-transition stages. In the early transition recently arrived migrants ("bridgeheaders") favour cheap rented accommodation in the central city, often a subdivided portion of a large house vacated by a high income family that have moved to a new residential area in the suburbs. In the central city, the migrant's search for work is easier and usually he has little interest at this stage in house ownership or in high quality accommodation. However, as the migrants gradually integrate in the job market and when a foothold has been obtained, they achieve a "consolidation" phase and begin to seek to move out to the

urban periphery to have their own dwelling. At this stage the emergence and development of squatter settlements are a product of "consolidators'" search for a permanent settlement. Several investigations have confirmed the theory of Turner and the classic stage model for a variety of cities throughout the developing world. As an example Morse (1971:22) in his survey of the literature of Latin American urban research considers this pattern to be the most common and he points out that "once arrived at the urban destination, it is now widely accepted that Latin American migrants characteristically proceed to inner city slums, which serve as staging areas for invasions of peripheral land". Also Mangin (1967:68) reports similar finding in his study. "The majority of residents of a (squatter) settlement have been born in the provinces and have migrated from farms or small towns. They have also come largely from tenements, alley, and other slums within city limits where they settled upon arrival".

But in Middle Eastern cities this movement varies as some squatters have migrated directly from rural area as well as movement from the crowded central areas of the city or "medina". The greater age of the cities has given rise to slum areas which are coincidental with the old quarters or "medina" - the bazaar and narrow twisting lanes with traditional courtyard houses which were the heart of the medieval Islamic city. The overcrowding of "medinas" soon caused population movement outwards to other parts of the city. Departure of the wealthy medina families left property vacant to be taken by newer and poorer migrants to the city (Drakakis-Smith, 1980; Findlay, 1982; Micaud, 1976).

In Ankara, Drakakis-Smith & Fisher (1975) have noted a slightly different pattern with movement being from central squatter settlements rather than from central slums. Turner (1968) recognised that, the two stage model might work differently in "late transitional" cities. For example in Mexico City the opportunities for cheap rented accommodation

were lacking early squatter settlements soon became integrated in the urban structure. The growth of Mexico city has been so rapid that what had been the periphery in 1950's, with its ring of squatter soon became an "inner-ring", with no scope for expansion since it had been surrounded by other forms of urban development. As a result many of the original inhabitants moved further out to newer squatter settlements. They were now prepared to rent or sell their dwellings to "bridgeheaders" or to poorer newcomers either from the provinces or from the central area of the city. Later, as a result of commercial expansion, inner ring accommodation for the poor declined in quantity and consequently became more expensive, accelerating the process of the two stage movement.

There are a number of studies that criticise Turner's model. Vaughan and Feindt (1973) in Monterrey, Mexico, have revealed that the two stage model of movement is not necessarily true for all cities in the Third World. They concluded that migrants, upon arrival in Monterrey, Mexico, were dispersed throughout the city and were not heavily concentrated in any particular area. When the migrants moved within the city they did not follow a simple pattern. There were moves in all directions from the centre outwards.

However, they pointed out that the movement out of the central area was more than from other parts of the city in line with Turner's (1968) model. Unlike Turner, most of these migrants did not go to the periphery but to an intermediate location. However, the type of residential area in intermediate locations, whether low-income or high income, was not clearly established. This might support the "late transition" phase of Turner's theory.

Several other studies have investigated Turner's "late transition" phase in more detail. Flinn and Converse (1970) have shown in Bogota that, after the migrants arrived in the city, many made a number of intra-city moves before settling in the peripheral shanty towns. In making these many

migrants considered themselves to be upwardly social mobile. Also Ward (1976) in his study in Mexico City showed that the residents of newly formed low income settlements in peripheral areas of the city had rarely lived in the classic inner-city rented accommodation but in rooms in the consolidated low income settlements of the city.

An important study by Conway and Brown (1980) of intra-urban movement has attempted to reformulate Turner's model. They have argued that the two-stage process "does not continue ad infinitum" (Conway & Brown; 1980:99). They suggest that the evolution of the intra-urban structure of low income residential areas will follow a three-phase model: early phase of urbanisation, continuing urbanisation phase and a later urbanisation phase. As urbanisation proceeds three distinct zones emerge (Fig 1.3). The city centre core; inner city low income settlement, which has become legitimised and peripheral low income areas.

They believe that Turner's proposed two stage model relates to the early phase of urbanisation, when "bridgeheaders" in the inner city (zone 1) move to the periphery (Zone 2) after they become 'consolidators', making it possible for the inner city (Zone 1) to provide new vacancies for new migrants. But with continuing urbanisation the inner city (Zone 1) is not any more the main reception area for new low income migrants. At the same time the housing supply declines due to the expansion of the commercial core. Also the earlier peripheral squatter settlements eventually become legitimised settlements and with pressure from the community on authorities become provided with essential services. Therefore, zone 2 becomes the initial reception area for new in-migrants rather than the inner-city (Zone 1). The established owner/occupier usually builds extra rooms as rental units, or subdivides a plot and sublets it to the new migrants to construct their own shelter. At the same time new low-income settlements (squatter settlements) are still growing in peripheral areas on vacant land. This new ring of peripheral settlements (Zone 3) may be filled by

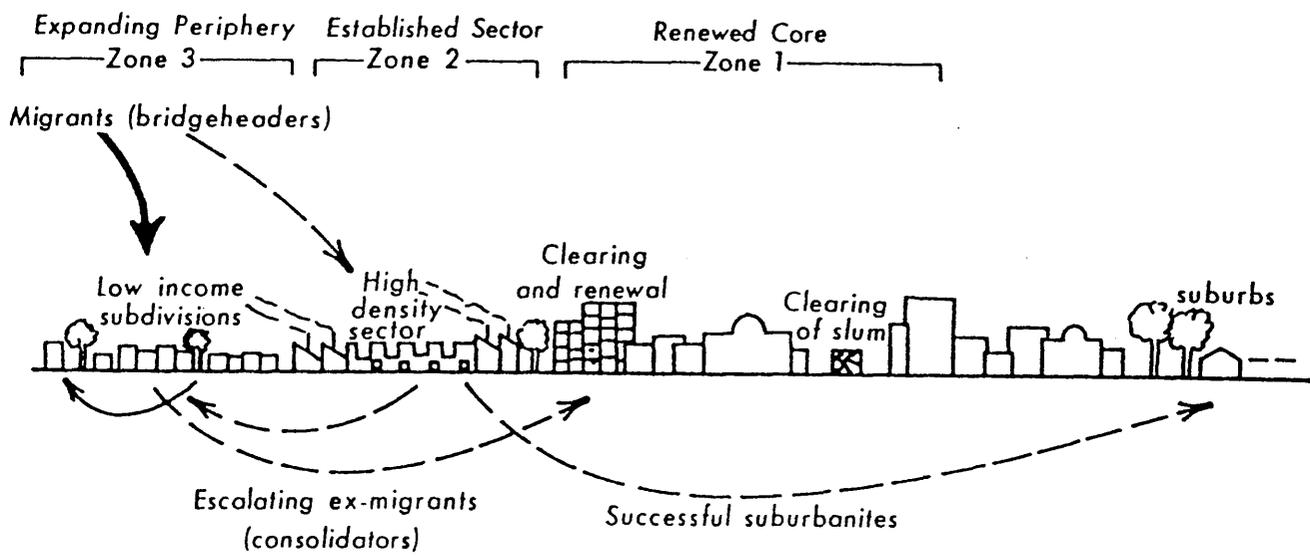


FIG 1.3 CONWAY AND BROWN'S MODEL OF THE LATE PHASE OF URBANISATION ZONES OF LOW INCOME SETTLEMENT AND DIRECTION OF INTRA-URBAN MOVEMENT (1980:103).

successful inner city consolidators and consolidators from Zone 2, who seek security in a place of their own, even if the condition of the property is not entirely satisfactory.

The residents of the new squatter settlements are mostly from Zone 2. This is the continuation of the bridgeheader-to-consolidator process. The renters move to the peripheral area because they cannot afford home ownership in Zone 2. They therefore look for the security of home ownership in Zone 3. Also over time inner-city tenements come under threat of urban renewal and block clearance. This may force eviction to peripheral areas or even further away in the late phase of urbanisation. Zone 1 does not act any more as a reception area and immigrants move directly to Zone 2 and Zone 3 with increasing proportions moving to lower density peripheral areas (Fig. 1.3). In general this type of direct move to the peripheral area would seem to conform with Turner's thoughts about the late transitional city.

Usually when the density in Zone 2 increases and the rent rises, the latest waves of in-migrants must look elsewhere and the periphery (Zone 3) becomes more diversified in its housing arrangements to accommodate this increase in potential demand. But it should be borne in mind that the form of squatter settlements at the periphery is fundamentally a reflection of the socio-economic characteristics of the migrants themselves. This is also supported by Dwyer (1975:50), who points out that, "for the Third World as a whole, spontaneous settlement is seldom, if ever, formed exclusively by in-migrants coming directly into the city".

This is substantiated by Gilbert and Ward (1982), who in their Mexico study found that a high proportion of the residents of the surveyed squatter settlements had come from nearby or more distant older settlements. Also it was confirmed by Flinn and Converse (1970) that the average

resident of three peripheral shantytowns in Bogota were not newcomers but had previously resided in inner city slums or working men's "barrios".

Usually the migration process involves movement from rented accommodation in older settlements to owner occupation in peripheral settlements. This takes some time and should not be seen as a stage of only short duration.

Gilbert (1983:467) show this in his study in Bogota where 38 per cent of his sample of squatters had previously lived in rented accommodation for more than 10 years. Only 24 per cent had lived in rented accommodation for less than 3 years, and they were still waiting to move to the peripheral settlement to become owner occupiers. Therefore many had lived for a long period in rented accommodation.

Gilbert (1983) explains this long period in terms of rational economic motives and concludes that the income of the head of household of those tenants who had lived for less than 10 years in rented accommodation is one-third higher than those who had lived there for 10 years or more. He also points out that there might be two possible explanations for this long period. It might either be due to low household income or to increasing difficulty of obtaining plots. The first would suggest that the renters are saving money to purchase plots and that eventually become home owners. The second suggests that plots are becoming more scarce and that some or many of the tenants have had difficulty becoming owners. Therefore long-term tenancy is not through choice but through necessity (Gilbert, 1983).

Here, it can be argued that the timing of the move from rented accommodation to home ownership in the periphery also depends on the political structure of the city.

In fact residential patterns are not an outcome of migrant choice but more the product of constraints imposed by the availability or otherwise of land for housing, which is largely controlled by the private sector. Supply of these lands depends on factors such as changing land values and rents, alternative land uses and government legislation (Gilbert and Ward, 1982).

By necessity it has only been possible to review a few theories of intra-urban movement in Third World cities. The consensus of opinion would seem to suggest that most low income migrants first live as renters in the inner city, usually in poor but legitimate settlements. Later they move to become owners in peripheral, low income settlements which will frequently be illicit or insecure.

1.4 THE POLITICAL IMPACT OF SQUATTER SETTLEMENT

There are many studies (e.g. Turner, 1968; Gilbert & Gugler, 1981; Danielson & Keles, 1985; Castells, 1983) in the Third World countries which show that squatters have been the beneficiaries of political competition. Because of squatter's voting power, it has often become attractive for local political leaders to canvas support from the votes squatters offer. This situation has sometimes enabled squatters to obtain at least some recognition of their needs. This provides a measure of security and has enabled them to receive some services, such as water, electricity, and surfaced road. Usually, squatter housing has been permitted to develop when major political parties or governments require the political support of the poor. To some extent it can be argued that provision of housing and services is not absolute, depending on the planners and professionals attitudes, but it also reflects the strength of political pressure exerted by the poor. Collier (1976:133) argues that land invasion was permitted in Lima by the authorities because of the pressure from the poor. In India it has been seen that the majority of poorer settlements in the cities vote for the ruling congress party

and that has resulted in improvements in the physical environment of these areas even in cases when this action contradicts the Government's own master plan (Payne, 1977).

At the same time squatters themselves may benefit temporarily from political power contests which demand their vote towards the improvement of their housing conditions; but sometimes it happens that particular settlements may get special treatment toward improvement because their settlement has been targeted as a showpiece by a political party seeking to win an election.

Gilbert (1982:111) stated that in many Latin American cities provision of services is a function of political support; "barrios" that promise to support a powerful personality or political group may receive water, electricity and a road as part of their deal, and in Venezuela "barrios" get some sort of benefit according to the future of the particular political party with which they are linked.

In Turkey, as the political struggle for power became more evenly balanced between two main political parties, squatters started to receive recognition of their illegal occupations and were provided with many facilities such as roads, electricity, water connections and surfaced road (Drakakis-Smith, 1976; Danielson & Keles, 1985).

From the beginning of the 1950s, when the ruling Democratic Party in Turkey realised that by giving land deeds it could gain favour among the squatters, all the major political parties promised squatter dwellers titles to gain votes. At the same time squatters tried to get firm promises on titles for their dwelling from the parties, and then supported them during the elections. To have land deeds, freed the squatters from the fear of eviction or demolition by local officials. Without deeds, squatters were not eligible to participate in official improvement programmes. As a result of this situation more and more squatter houses secured land deeds, and squatting became less risky, unfortunately this

also brought a great increase in the number of migrants towards the city. As squatter areas grew, political views began to change and the deterrents to illegal settlement increased. The politicians who were elected and had promised some form of security often came to help squatter constituents who were threatened by local officials. Some of them came directly to help the squatters and join them in opposition to police action (Danielson & Keles, 1985).

Sewell (quoted in Danielson & Keles, 1985:173) has shown an example of political intervention in a Ankara squatter settlement:

"The first gecekondu.... were destroyed by police. But they were rebuilt then joined by additional houses. After about ten were built, the local housing control officer decided to shift tactics. Police began to destroy all water connections in the new community. Each day water cans were upset and jugs broken. The populace appeared discouraged, so that police considered victory only a matter of time. Then one day when the police patrol climbed the hill to search for water, a fire department water tank was found stationed at the top. Upon inquiry, the local control officer discovered that it was there at the request of the local Democratic assemblyman. The war was over".

In this case, eventually the city government had no choice but to provide services for squatters since the squatters' political influence was growing.

Therefore, it can be seen that political interest groups play a large part in urban planning for squatter settlements. In Latin America, Koth, Silva, and Dietz (quoted in Mangin, 1967:82) state that, "probably most importantly, political agitators in urban slum areas find fertile ground for spreading doctrines of conflict and social disorder and efforts to improve housing may decrease conflict".

In Kuala Lumpur (Malaysia) the migrant settlements of the city were not politically active but did give support to opposition parties which operated within the Parliamentary structure and sought to improve their position democratically, (McGee, 1971:143).

So it can be said that squatters have organised effectively for political action, and the principal political resource of squatters is their vote. For this resource to be effective, squatters' leaders who had the vote had to be able to deliver large number of votes behind the favoured party or candidate.

There are many theories stating that the urban poor have no revolutionary potential and many have argued that the urban poor are politically more conservative. Weiner (1961, 1967) in Calcutta, and Turner (1969a) and Mangin (1967) in Latin America, came to the conclusion that urban poor vote in general is often more conservative than the middle class vote.

Turner (1969a) divides urban settlers into two main groups; "bridgeheaders", who are too preoccupied with their own problems to concern themselves and their families with other political matters; and the "consolidators", who have almost established themselves in urban society, and are politically active but are by nature conservative. Turner goes as far as to describe the squatter settlements as potential urban "safety belts".

Generally squatters' aspirations are to have a regular income, a house of their own with enough services and to see their children in school. If aspirations for upward mobility are not in the long run satisfied, then some political action may occur, but this tends only to involve mobilising as a group to defend their homes and to further their aspirations toward upward mobility. Mangin and Turner have found in Latin America that, the dominant ideology of most of the active *barriada* people is "work hard, save your

money, trust only family members (and then not too much), outwith the state, vote conservatively if possible, but always in your own economic self-interest, educate your children for their future and as old age insurance for yourself. Aspirations are towards improvement of the local situation with the hope that children will enter the professional class" (Mangin, 1967:84-85).

Usually the form of political participation by the poor is through "demand making"* which is a conventional form of participation. By presentation of their needs to the political system they hope that positive responses will be forthcoming from officials (Kazemi; 1980). They usually act through their local leaders, which in most squatter settlements in the Third World countries the political power rests in the hands of a small group of religious leaders particularly in Muslim society and small businessmen who are strongly conservative, but there is no uniform relationship and in many societies religious leaders can be quite militant. In fact more consistently conservative in this respect are the small businessmen to whom most poor squatters are frequently in debt and for whom they will vote (Drakakis-Smith, 1987).

Political participation through demonstration, collective violence, protests, and other forms of radicalism are not a common feature of the squatter in the urban area of most Third World countries. Many studies have proved this statement, eg. Cornelius (1975), Mangin (1967), Turner (1969a) Weiner (1961) has shown that in Calcutta during political conflict and unrest the demonstrators came from

* Demand making has been defined by Cornelius (1975:167) as "individual or collective action aimed at extracting certain types of benefits from the political system by influencing the decisions of incumbent government officials".

many different social classes, but that the most violent demonstrations were by those people who formed the core of the middle class. Also Kazemi (1980:82) has shown in his study that "violent political action in Iranian cities is more in the domain of tradesman, people from the bazaars and more recently the factory workers". And he has come to the conclusion that the poorest migrants are not involved actively as a group in the politics of the city and they have low levels of political awareness and organisational investment.

In the case of North Africa in 1984 and 85, the introduction of measures by the government of Tunisia, Morocco and Sudan to remove food subsidies and to increase prices of basic food stuffs were the main reasons for riots and violence (Seddon, 1986). Rioters demanded the government to rescind the price rises in basic goods, especially food stuffs, since this was one of the most important items needed by poor households, who live close to the bread line at the best of times.

Therefore the desperate situations of the urban poor and their acute needs made them demonstrate and riot. This situation gave some opportunities for the political opposition but the riots were short-lived.

In Tunisia, for example, the disturbances broke out at the end of December 1983 in a region where political opposition to the regime was known to have existed and had been openly manifested a few years before the disturbances (Seddon, 1986). Therefore, this shows that having an active political opposition in the region increased the potential for protest.

Also in Khartoum in Sudan in 1985, popular protest against an increase in the price of basic goods (food stuffs) within a week was transformed into a movement of political opposition which forced the military to intervene through a coup d'etat. The early street demonstrations and violence

which was met by the state was an important factor in the development of an organised movement of opposition to the regime, although "the bread riots" themselves lasted only a few days (Seddon, 1986).

Therefore it can be seen that the bread riot was a tool or resource for the opposition to undertake other political activities. According to Seddon (1986:188) in the demonstration in Khartoum students chanted "we will not be ruled by the World Bank, we will not be ruled by I.M.F. (International Monetary Fund)", while the unemployed urban poor in the crowded protested only at the increasing cost of living.

Although, they were both principally demanding that the increase in the price of food stuffs be rescinded, the students seemed to be approaching it in a more political way than the unemployed urban poor. Here it can be argued that the uneducated urban poor are unaware of political issues behind the increases in the price of bread, and that they are more concerned about their cost of living than the World Bank.

Sewell (quoted in Turner; 1969a:527) suggested in his study of Turkey some reasons why squatters are not usually radically involved in politics and have quite conservative attitudes towards the governments.

"Government officials and intellectuals in Turkey have frequently expressed concern that the residents of gecekondu will become dangerous radicals of the left..... Despite the substandard living conditions, however, several forces are operating to counter such a trend at this juncture. The migrants are principally villagers with a deep devotion to their religion and a surprisingly powerful sense of Turkish nationalism.... Secondly, the vast majority of the gecekondu residents have accomplished significant social and economic mobility in a relatively short period of time...

thirdly, these migrants had developed a sense of responsibility towards their sizeable investment in the gecekondu and they seem anxious to avoid any action or suggestion that would jeopardise themselves, their houses or their community".

Therefore from the above, it can be seen that historically the urban squatters in Third World countries do not engage in collective acts of radicalism and political protest unless mobilised under special circumstances which affect their lives and even then act only in a limited fashion to protect their housing and employment, or to keep down their living costs.

1.5 Socio-Economic Characteristics of Squatter Settlements

This section will investigate the socio-economic characteristics of squatter settlements and their place within urban society. Therefore, it is necessary firstly to define poverty and its causes; secondly to investigate how poor housing can be considered as a form of poverty; and thirdly, to review squatters' work activities and their role in urban economy.

Definition

Poverty is a phenomenon which exists in every society. Writers have approached the definition of poverty in many different ways. For example, Townsend (1979) defined poverty as follows: "Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or are at least widely encouraged or approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs and activities" (1979:31). And he goes on to define the

deprived as those who lack the type of diet, clothing, housing, environmental, educational, working and social conditions, activities and facilities which are customary (Townsend, 1979:413).

Ringen (1988:353) has distinguished between (a) subsistence and (b) deprivation definitions of poverty. The subsistence definition suggests "People are poor if they do not have the resources which are deemed necessary to achieve a certain minimum level of consumption". And the deprivation definition suggests: "People are poor if their standard of consumption is seriously below what is considered decent in their society so that they are, in effect, excluded from the ordinary way of life and activities of their community".

Here, two questions may arise: What are the 'resources'? and what are the 'standards of consumption'?

In fact some consider resources in terms of money or income as many societies define 'Poverty levels', in terms of incomes, below which households are recognised as poor. The "level" usually varies from one society to another according to some internal standard of assessment and points to the relative nature of the concept (Herbert & Thomas, 1982:415; Ringen, 1988). But a number of writers (Lloyd, 1982; Eyles, 1987) argue that poverty is not relative but absolute. Poverty may be correlated with powerlessness or be associated with ignorance through lack of education, or insecurity and long working hours which inhibit political action. In other words, absolute poverty means an insufficiency in basic necessities like inadequate food, clothing and shelter, which threaten a certain kind of life. Also the absolute concept of poverty is stressed by Joseph and Sumption as "an absolute standard of living to which the poorest and most incapable shall be entitled. An absolute standard means one defined by reference to the actual needs of the poor and not by reference to the expenditure of those who are not poor" (Quoted in Donnison, 1988:368).

Therefore, it is necessary to identify what people in the country concerned regard as the needs of the poor or the basic necessities. And this can be measured as 'socially perceived': "items become necessities only when they are socially perceived" to be so (Mack and Lansley, 1984:38). The 'basic needs' and necessities stated by International Labour Office at the World Employment Conference held in Geneva in 1976, included two elements. "Firstly, they include certain minimum requirements of a family for private consumption: adequate food, shelter and clothing, as well as certain household furniture and equipment. Second, they include essential services provided by and for the community at large, such as safe drinking water, sanitation, public transport and health, education and cultural facilities... it is important to recognise that the concept of basic needs is a country-specific and dynamic concept. The concept of basic needs should be placed within a context of a nation's overall economic and social development. In no circumstances should it be taken to mean merely the minimum necessary for subsistence; it should be placed within a context of national independence, the dignity of individuals and peoples and their freedom to chart their destiny without hindrance". (Quoted in Townsend, 1984:5-6).

However, it is acknowledged internationally that the quality of human existence depends at least in part on meeting the most basic needs. Today these are recognised as basic human rights. Today, poverty means a living standard so low that it excludes people from the community in which they live (Donnison, 1988).

In fact, when people have a way of life that excludes them from these basic necessities, then they are considered to be poor and do stand out as different and to some extent they are excluded from the main stream of society by their unacceptably low standard of living in itself. And the consequence is to be ashamed about their standard of living conditions or humiliated. Donnison (1982:228) states that "poverty may entail hardship. But it is fundamentally

about inequality, exclusion, powerlessness and humiliation. Thus although money is crucial, poverty is also a question of relationships and rights; a question of how people are treated by teachers, doctors, employers, landlords and officials".

In fact, in a society (especially a Third World society) at the one end of the social spectrum there are the elites - strong, powerful, wealthy, often having close links with government officials, police, large land owners and traders.

In contrast at the other end there are poor households usually having little power and frequently uneducated and ignorant of the law. They have little by way of assets apart from their labour. Such desperate families are frequently exploited, as they are highly dependent on the assistance of others (Potter & Binns, 1988).

In the Third World the magnitude of poverty and inequality has scarcely diminished and some argue that very little real development has occurred (Potter & Binns, 1988). Some argue that in developing countries poverty is increasing because technological modernisation has produced growing social and economic disparities (Santos, 1979). One manifestation of this is the housing market where inequalities in opportunities may be readily observed, and where allocation mechanisms result in the spatial segregation of poor and rich elements of the urban population.

As was mentioned earlier, deprivation takes many different forms in society. Poor housing may arguably be claimed to be the single most serious form of deprivation. Generally, squatters in Third World countries are known as the urban poor due to their housing and environmental conditions.

Environmental Health

It is clear from the majority of studies that squatter settlements are generally lacking in services of even the most basic kind, and that this leads not only to inconvenience, but also to ill health (Gilbert & Gugler, 1981; Payne, 1984; Wellings, 1988; Dwyer, 1975; Drakakis-Smith, 1981; Grimes, 1976). Squatter settlements everywhere are likely to have a high incidence of those disorders caused by overcrowding and insanitary conditions, particularly impure water supply and lack of drainage, sewerage or refuse disposal. The comparative lack of community services such as medical facilities put squatters at even further disadvantage.

Aiken and Leigh (1978) have shown in South East Asia (Kuala Lumpur: Malaysia), that because of the general absence of piped water, sewerage facilities, and hygienic surroundings, squatters are subject to various disease hazards. A particularly serious problem for the young is the threat of Dangué Hemorrhagic Fever, a viral disease that may result in high mortality. The main carrier of this disease, the mosquito, finds ideal breeding sites in discarded cans, tyres, household water containers, roof gutters and elsewhere in squatter settlements.

Also the location of settlements can be the cause of particular environmental problems (such as being adjacent to rubbish dumps on land at risk from flooding. Grimes (1976:15) describes Natzahualcoyotl, a settlement of over 1 million adjacent to Mexico City and located on a dry salt-lake bed. In the wet season, typhoid is a hazard, aggravated by widespread flooding, and in the dry season dust increases the spread of pneumonia. Therefore the problems of bad housing and environment have serious effects on the residents' health. And this in itself further accentuates poverty. As Mack and Lansley (1984:22) point out: "health

and poverty remain deeply interlinked. It is not just that the poor are likely to have worse health than others, but also that ill health is itself a cause of poverty".

Squatters in urban areas of the Third World are deprived in terms of a low standard of living, but are they the poorest of urban areas? Dwyer has noted that "it is extremely unsafe to generalise about the socio-economic characteristics of squatter settlements, not only within nations or within regions, but even within single cities" (Dwyer, 1975:67). And Santos supporting this argument notes that "Indeed, the shantytown will not include all the poor of a city, nor will it embrace all those who could be defined as 'poor' according to a common criterion" (Santos, 1979:30). And Abrams (1964) has divided poor urbanites into three classes in terms of housing. First is the large class of homeless or street sleepers. These are often more recent migrants or refugees or those who did not have the ability or failed to assimilate. These people live in abject poverty. Second are the slum or tenement dwellers, who occupy densely built up areas of the older parts of cities. Their problems are overcrowding with shortage of basic facilities. Third, are the occupants of squatter settlements with whom this thesis is concerned and whose poverty stems from the illegality of their housing situation.

Several studies, however, have shown that the occupants of squatter settlements are not the poorest people in the urban area (Santos, 1979:30). Although residents of squatter settlements may not be the poorest people of city, they often cannot meet their most basic needs, such as adequate shelter, a clean environment and medical care. Therefore, this low standard of living and social status excludes them from the rest of urban society.

Review of the literature suggests that the majority of squatters are engaged in informal sectors activities. (Table 1.3 identifies the main characteristic of the formal

and informal sectors of the urban economy in Third World cities). As a result the majority of squatters are not only economically marginal, being involved in the urban labour market only in activities such as petty trading, hawking or prostitution, but they are also socially and politically marginal. Therefore, the overall image of these urban residents has inevitably been fairly negative. Research shows that they are stigmatised and suffer from a 'culture of poverty'. They are often thought of as peasants within the city lacking skills, education and familiarity with modern elements of the city (Gilbert & Gugler, 1981; Lloyd, 1979:1982; Santos, 1979).

Table 1.3 Formal and informal sector characteristics

<u>Informal Sector</u>	<u>Formal Sector</u>
Ease of entry	Difficult entry
Indigenous inputs predominate	Overseas inputs
Family property predominates	Corporate property
Small scale of activity	Large scale of activity
Labour intensive	Capital intensive
Adapted technology	Imported technology
Skills from outside school system	Formally acquired (often expatriate) skills
Unregulated/competitive market	Protected markets (e.g. tariffs, quotas, licensing arrangements).

 Source: Drakakis-Smith (1987) *The Third World City*.
 Methuen, London. P.65

The informal sector of the urban economy is heterogenous, participating in small businesses such as repair and maintenance work, petty production, house building and other such activities. Usually people have irregular hours of work, are not given credit facilities and have low productivity.

Although the 'informal' and 'formal' sectors look so different (Table 1.3), they are highly interdependent. In many respects growth of the informal sector is a result of the development of the formal sector. To some extent the informal sector produces not directly for its customers, but for industry in the formal sector (Lloyd, 1979). Many of the economic advantages of informal activities arise from the small scale of operations which enable workers to adapt to changing economic opportunities within what are often unstable national economies. Some informal activities undoubtedly serve to subsidise the formal sector by allowing formal enterprises to make large profits while paying low wages (King, 1977).

However, it has been observed that informal sector activities are often self-contained helping the urban poor to feed, clothe and house themselves with little government help. At the same time they subsidise the formal sector through low-wage production at low input cost. This acts as a subsidy to the formal sector providing cheap goods and services for formal sector workers. In other words, it may help with the expansion of formal sector activities. Some argue that this linkage is an exploitative relationship with the formal sector gaining at the expense of the informal sector (Drakakis-Smith, 1987; Sanyal, 1988; Bromley and Birkbeck, 1988).

Recently, the term 'informal sector' has become less popular because the self-containedness of the sector is rather limited. Most studies now refer to petty commodity or petty capitalist production which is a little more precise and which reflects the subordinate nature of the activities involved (Drakakis-Smith, 1987; Lloyd, 1982).

The urban capitalist sector gains profits in several ways from those in petty commodity enterprises. This occurs directly through petty commodity workers paying taxes, licence fees, fines etc. Also there are indirect transfers that benefit the urban capitalist sector. These occur

because everyone in the urban area, rich or poor, can buy goods or services produced by the petty commodity sector. Therefore their activities keep down the cost of living for rich people. At the same time poor people must buy certain goods and services produced by capitalist enterprises. These purchases mean a profit for the manufacturer and constitute an income transfer from poor to wealthy population of the city (Drakakis-Smith, 1987:72-73).

Therefore, it can be seen that the petty commodity activities of the poor in urban areas are quite beneficial to urban capital and to the wealthy of the city.

Drakakis-Smith, (1987) concludes that this situation explains why urban authorities do not prevent or remove such enterprises from the city. They only try to control certain types of activity which would otherwise interrupt the modernisation process. Unfortunately, one such form of intervention is the squatter settlement.

Therefore, to summarise, the processes of modernisation have brought into existence and financed the expansion of the petty commodity sector in Third World cities. Secondly exploitation of this sector has reinforced poverty in urban areas and contributed to the movement of the urban poor in to squatter settlements.

Poverty and its related causes in Third World countries may be getting worse, because of the effects of technological processes associated with economic change. There is some evidence of increasing exploitation of the urban poor. Poverty is not only a function of disposable income. It is also a relative state arising from lack of access to key resources such as information, social networks, and decision making processes. Although squatters may not be the poorest people in urban areas they still remain a major deprived group in Third World urban society.

1.6 HOUSING POLICIES AND SQUATTER SETTLEMENTS

An important task in the formation of a housing policy is to clearly define its aims. On humanitarian grounds or within welfare economics the over-riding aim, is often described as the achievement of an adequate quality of life for the residents (Burns and Mittelbach, 1972). In housing provision most house builders seek profit; most employers seek minimal infrastructure costs for employees; most governments' housing policy is oriented toward production and financing of units with occasional specification of quantity and quality, rather than toward quality of life outputs that housing is intended to generate (Burns and Mittelbach, 1972).

At a conference of International Labour Office (ILO) in 1953, it was resolved that "adequate housing accommodation and related facilities are one of the essentials of a good life, one of the fundamental requirements of an efficient, satisfied labour force, and one of the foundations of satisfactory community life" (Quoted in Burn & Grebler, 1976:96). In similar manner, a United Nations Committee in 1970 stressed two vital functions of (urban) housing as: "(a) It constitutes part of the necessary framework that gives shape and support for the individual, the family and other primary groups; and (b) it organises and distributes amenities of basic value to the individual and the group in which the individual participates" (Quoted in Burns and Grebler, 1976:96).

In each country, the style and kind of housing people want is different and may change quite fast in relation to other changes in their environment (Donnison, 1967). Any country's housing policy should consider these changes in relation to other trends such as the rate of economy growth and the desired quality of life of different elements of the population.

Housing problems seem not to relate to issues of solely resource availability or technological expertise. Housing problems also arise due to difficulties (a) in deciding and planning for what is in economic terms attainable and (b) in implementing distribution mechanisms to achieve these goals.

What is more disturbing is the fact that even the very limited resources allocated to housing are not always efficiently deployed - i.e. the resources are sometimes misused. In certain instances, housing policies through the projects which they fostered have made housing problems more intractable than before project implementation.

There have been many attempts to solve the housing problems of low income groups, but for the sake of simplicity it is convenient to identify two distinct approaches: "technology transfer" and "self-reliance". Technology transfer has largely been unsuccessful in attempting to take housing solutions from developed societies and to modify them for application in developing countries. This approach has some advantages in coming close to satisfying some middle class aspirations in developing countries, but is inadequate in other respects. The failure of this approach is evident on three different counts:

- (1) Lack of realism as to how adaptive technology is.
- (2) A complete misunderstanding of people's needs.
- (3) A poor use of available resources (Angel & Benjamin, (1976)).

The most common feature of this approach has been squatter settlement clearance and relocation of the squatters in new public housing (high rise buildings and large scale projects) on the periphery of the city. Transferred technologies usually are very costly, involving imported materials and even labour. Housing constructed in this way eventually ends up as middle income accommodation simply because it is beyond the financial capability of the poor

(Drakakis-Smith, 1987). The high costs relate not only to construction costs but also to the expense to the residents of living on the urban periphery, far away from relatives and the labour market (Angel & Benjamin, 1976; Drakakis-Smith, 1987). Imported house designs are also often unsuitable relative to geographically specific cultural conditions. This in turn brings about undesirable living conditions (Khavidi, 1978) for the occupants, and may result in more rapid deterioration of the building fabric. Squatter clearance and relocation policy will be discussed in more detail later in this section.

Since man is a social being the planning of a residential unit must fit into a socially functioning system. Any plan which is incompatible with the socio-cultural and economic life of the people, if forced upon them, is bound to have a negative social and emotional effect, thus making human relationships in the community impersonal. This ultimately jeopardises neighbourhood relationships and produces neighbourhood which is more a physical entity than a functioning social community (Gans, 1968).

Arising from the above argument is the second approach involving "self-reliant" intermediate technology. This approach attempts to draw on people's traditional capabilities to build for themselves. It is successful in overcoming the three difficulties listed in relation to the "technology transfer" approach. Thus the poor have been able to apply this approach more successfully. Nevertheless it has failed to win widespread acceptance as a solution to housing problems because of a lack of proper financing and security, and also in some Third World cities a lack of genuine participation in decision making by the low income groups for which the housing policies have been designed.

Participation in self help programme implies an active role for the residents concerned, and most successful programmes contain explicit references to the importance of this aspect of housing policy (Payne, 1984). As well as public

participation in the planning process, successful housing policies also need to tap appropriate forms of urban finance.

The poor require a very different financial system to meet their needs. Squatters improve their houses as their families grow, and as they acquire small savings. To take advantage of these energies, and to assist in financing, new kinds of loan are needed which involve small sums of money and which last over long periods of time. (Angel & Benjamin, 1976).

Therefore, to achieve an appropriate housing improvement, the security of tenure, genuine participation of residents in decision making and suitable financing are important factors. If these are provided then the rewards of a housing policy may be very great in helping to reduce poverty and in giving people confidence and greater respect.

These points have been succinctly stated by Turner (1972a:174). He pointed out that "housing action depends on the actors' will. The dominant actors in economies of scarcity are the people themselves. They must be free to make the decisions which most concern them. In order to make the best use of scarce housing resources, most of which are in any case possessed by the people themselves, each household must have an adequate choice of alternative locations, of alternative forms of tenure and, of course of alternative structures and ways of building".

In the text which follows the experience on these two approaches which have so far been outlined will be investigated in the light of specific examples.

Squatter Clearance and Relocation

A frequent policy in Western Europe and North America in the 1950's and 60's for dealing with housing problem, was the forced demolition and redevelopment of urban areas. A similar demolition and relocation mentality has applied in many developing countries to squatter settlements. Squatter settlement demolition has sometimes involved the redistribution of the residents to their places of origin (Findlay, 1982), but more frequently has simply involved expelling them beyond the city boundaries.

Inevitably this approach has had no enduring result and has only led to migrants building new squatter settlements in other parts of the city or even back in the same place as the earlier demolished settlements. For example in Ankara, Drakakis-Smith (1981) reports that one squatter rebuilt his dwelling four times on the same site.

Governments of many Third World countries adapted this approach by building low cost public housing of a multi-storey type on cheap land in remote areas on the outer periphery of the city. Most designs and required materials are imported from industrialised countries. Although this policy may be convenient to city planning, it often yields unsuitable housing solutions for the persons forced to live in peripheral estates and it has not been very affective in the sense of helping the poor in most Third World countries. Often the new housing has not proved suitable owing to its distance from the work place of the occupants. Financing these projects needs large amounts of capital. Therefore, residents have to pay a regular rent or mortgage despite the irregularity of their incomes. Futhermore the rent levels are often so high as to prohibit access to the housing by the urban poor. This is so even when housing has been heavily subsidised by the governments involved (Payne, 1977; Drakakis-Smith, 1981:87; Gilbert and Gugler, 1982; Turner, 1968).

In Latin America about 75-80 per cent of the low income urban population are unable to afford the payment required for the average unit of low cost official housing even though the interest rates are in fact subsidised. For example, in Mexico City (Nonoalco Tlaltelolo neighbourhood) the government built houses which were too costly for displaced low income families. As a result the housing was still only partially occupied many years after their construction (Turner & Goetze, 1967; Turner, 1972b).

When squatters are resettled in areas distant from their former housing a further problem is the lack of any sense of community, because of separation from friends and families. Perhaps more important is the problem that the new housing is often too distant from the urban labour markets where these low income families work.

In Manila (Phillippines) of 5975 squatter families sent to live in the new housing development at Sapang Palay in 1960, only 41 per cent were left by 1969 (Hollnsteiner, 1977:313). When the squatters were relocated they had to deduct from their income, the expense of transportation to the city, or split the family by having the bread winner stay in the city. So this situation made many of them return to other more central parts of the city. This was the same in other government housing estates like, Bulacan, Carmona Cavite (Poethig, 1971:123).

In Kuala Lumpur, the relocation housing provided by the government in the Klang Valley may have provided the squatters with security of tenure and with vital services, but it faced other problems such as the long distance to work and poor construction standards. Overcrowding in multi-storey apartments also increased incidences of illness, and residents complained about the level of rent, electricity and water charges relative to their low wages (Aiken, 1981).

Another important point is the cultural dimension of housing policies. This is particularly important to Islamic cultures such as Iran. Failure of many public housing projects to consider traditional religious values has contributed to their downfall. Islamic teaching has had a great influence in the social desires of people in particular with regard to housing form and functions. For example, in Islamic countries, in spite of a great movement toward modernisation and westernisation the introduction of "western type" houses with open yards and outward looking windows and multi-storey apartments have not replaced the traditional so called oriental houses with a walled courtyard, offering privacy particularly for women within the house (Al-Azzawi, 1969:91-92).

At a conference on housing problems in developing countries at Dhahran in 1978 there was a call for a return to traditional architectural forms in the Islamic World. And it was emphasised that "low cost housing made possible by modern technology is difficult to reconcile with beautiful designs which conform with local social and religious beliefs" (Blake & Lawless, 1980:259).

In most developing countries housing programmes have failed for a diverse range of reasons and Iran is not exceptional in this. As Khavidi (1978) has shown in his study of the housing estate of Nohm Aban in Tehran. The project was designed to house displaced squatters at a location far from the city centre, yet the estate was neither planned as a self-sufficient nor self-contained unit. Furthermore it was expensive given the economic conditions of the families expected to occupy the houses. The social fabric of the community was weak, and he concluded that dissatisfaction regarding housing in this neighbourhood was the result of a lack of understanding by planners and administrators with respect to the importance of maintaining the traditional values and aspirations of the families who were going to live there.

In contrast to other Third World countries, both Hong Kong and Singapore have gone into intensive housing programmes by applying the above approach and seem to have been successful in providing public rented housing. During the 1960s and 1970s public housing has been provided in Hong Kong on a very considerable scale and in proportional terms probably more than in any other part of the developing countries (Dwyer, 1975).

Hong Kong's public housing programme began in 1954 and financed the construction of over 400,000 residential units. These accommodated more than two million people or 44.5 per cent of the population (Drakakis-Smith, 1981:160). The goal of this massive housing programme was to eliminate squatter huts. In fact, the major part of the public housing programme was resettlement housing, but was not based primarily on the need to help the poorest sections of squatters in the community. Instead all families in any clearance area were offered resettlement regardless of income (Dwyer, 1975).

Therefore squatter clearance and relocation has seldom been successful in Third World countries. Due to limited financial resources and rapid urbanisation, most developing countries, can not afford to adopt relocation policies which adequately overcome their housing crises. Demolition and relocation policies in most cases serve only to absorb large amounts of capital investment to minimal effect and resulting in only marginal improvements in housing quality (Payne, 1977).

Demolition and relocation programmes have frequently come under attack with demolition of housing being described as the worst of all possible strategies. As Abrams has cynically noted as long ago as 1964, "In a housing famine there is nothing that slum clearance can accomplish that cannot be done more efficiently by an earthquake" (1964:126).

In the light of the above arguments it is worth evaluating other policies and programmes concerning squatters, which although imperfect, have in general been more effective than demolition and relocation strategies.

Self Help Programme

In the 1960s it became clear to some governments that the energies of squatters themselves could be used to help reduce the cost of providing new housing. In particular labour costs could be saved by using squatters' energies to provide better houses for themselves. Government helped mostly in areas such as land development, the provision of materials and finance and in the training of low income households in the technologies of environmental upgrading (Drakakis-Smith, 1987). The squatters' inputs came in the form of labour, limited capital and perhaps most important, commitment to the project.

By implication this approach to the housing problem implied a return to a more laissez-faire perspective as noted by writers such as Dwyer (1975), Wilsher and Righter (1975), and Payne (1977). The result was amongst other factors the acceptance of continued uncontrolled low density urban sprawl and a heavier burden on local authorities in terms of the provision of infra-structure and other utilities to squatter settlements. In the second place, the approach encouraged people to have greater confidence in their residential situation.

More recent work on housing policy has attempted to make links between the self-help housing approach and the mode of production (Rakodi, 1980:8). For example Burgess (1978:1105) has argued that: "The debate between 'state-assisted self-help' and 'official housing' policies is situated in the context of the conflicting interests of the different fractions of capital tied to the housing process". According to this line of argument the housing problem in Third world societies can best be understood as the product

of capitalist development rather than the product of particular technological or organisational system (Burgess, 1978:1126). He concluded that as long as the capitalist mode of production remained intact, the current fashion for self-help housing policies would result in unfortunate consequences for low income groups and that these approaches could "only be implemented alongside rather than instead of existing state housing policies" (Burgess, 1978:1127).

In spite of some criticism, self-help policies have been widely used in recent years in the Third World countries and the majority have in terms of certain limited criteria been successful. The following sections look at how these policies have in some circumstances been successful and under what conditions they failed, and seek to identify what are the most important issues for future planning and policy making.

There are two general types of policy which have been advocated in relation to self-help housing. These can be described firstly as "upgrading" existing squatter settlements and secondly the "site and services" approach involving the provision of a plot of prepared land with basic infrastructure utilities and access to social services.

Upgrading

In the early 1970's the awareness grew among governments and international development agencies, such as the World Bank and United Nations, that squatter settlements should not be looked at as a mere symptom of housing problems of the urban poor but rather as their contribution to the solution of housing shortage and instead of demolishing a squatter settlement, they should be regularised and upgraded so that the existing housing will be preserved and the housing condition for the residents will improved. According to the United Nations, the objectives of settlement upgrading are to incorporate "the initiative, organisational ability, and

capacity for work of the marginal population in the urban community" to achieve "the greatest social benefit with the limited resources available" (Payne, 1984:3). In fact, the principal objective of upgrading has been to reduce the costs of housing improvement for squatters so that households are able to afford dwellings with services and without residential dislocation (Drakakis-Smith, 1981; Payne, 1984). But in practice, the successful achievement of the above objectives has depended on the way that a government has promoted upgrading projects. Consider for example the case of service provision to squatter settlements. In many countries lack of co-ordination between agencies and participation of residents has resulted in services ceasing to operate after a short time and as a result upgrading programmes have lost all momentum. Sometimes, infrastructural and social improvements have been much more costly than the upgrading costs to individuals of making other improvements to their dwellings, mainly because specialist labour has had to be employed. So squatters have found it difficult to meet their needs at a cost which they could afford. More important in upgrading projects than the provision of infrastructure is the way that land tenure is affected by the policy.

The contention is that squatters are aware of the implications of their illegal occupation of urban land; hence the fear of forceful rejection has made them erect temporary structures that could easily be dismantled and reassembled somewhere else. Turner for example has consistently stressed the need for residents of squatter settlements to have security of tenure as the most fundamental requirement in the development of their dwelling units. "Government policy should be based on the provision of the elements of environmental security - appropriate conditions, tenancies, and investment opportunities - rather than on the direct construction of new buildings" (Turner & Goetz, 1967:123).

By contrast those from the left of the political spectrum such as Burgess (1978:1120; 1982) argue that the legalisation of tenure of land will merely facilitate the penetration of commodity relations in land, where hitherto they either did not exist or were underdeveloped. In other words, he maintains that if the state legalises land occupied by squatters, it will only allow a market valuation of the land, which otherwise would have been invaded or bought illegally at lower prices. In effect, he believes that legalisation of tenure is only justifiable if it is accompanied by state regulation of market prices, both in peripheral urban land and in the inner city. Government intervention in the land tenure system as a mechanism to upgrading squatter settlements may therefore have very complex ramifications.

Research by Poethig (1971) in South East Asia showed that the guarantee of land, either in the city or in close proximity gave squatters the initiative to make improvements. They provided their own houses at little or no expense to the government, but they did require the assurance from the government that electricity, water, drainage and roads work be made available.

In Zambia however giving land title deeds to squatters in an upgrading project was frustrated by lack of finance, staff and an inadequate information base (Zetter, 1984). Elsewhere it has been found that the system of legalising land occupation simply resulted buying up the land and later evicting the poorer owners. (McAuslan, 1987; Zetter, 1984). In Tunis petty capitalists were responsible for land subdivision amongst squatters, and were used to help put pressure on the state to provide services for these neighbourhoods (Chabbi, 1988). By allowing purchasers of plots to spread their repayments over time, the pirate subdivider of the land also became obligated to the residents. The money collected was recycled locally into commercial activity. Subdividers also became well-known local personalities settling conflicts and legal disputes,

thus establishing themselves within the local political structure. They helped administer infrastructure improvement schemes and the distribution of state services. During this period subdividers never had any conflict with the state and never engaged in any legal proceedings against them. (Chabbi, 1988).

In Ismailia in Egypt an upgrading very different to that in Tunis emerged. The government decided it was necessary to give security of land tenure to the residents. The price of the land was set deliberately very low, with repayment over 30 years to make sure that even those with very low incomes would be able to afford the land. It was also proposed that money from the sale of the land would be used for the provision of basic infrastructure, in the settlement. But at the stage of implementation of the project it was realised that due to inflation the price of land would have to be greater than initially intended. As a result the payback period was reduced from 30 years to 10 and then to 5 years. Downpayments were introduced at 25% of the total value for the cheapest plots. Despite these obstacles the result was an enormous improvement in the squatter settlements with no less than 900 families in Ismailia benefitting from this upgrading scheme (Davidson, 1984).

Site and Services

Having reviewed the upgrading approach to self-improvement of low income housing it is now possible to turn to the site and services approach. The strategy of site and services involves the provision of building plots with basic infrastructure, utilities, (road, water, electricity etc.) and access to social services, to low income households. Usually plots are then sold or leased and the new occupiers either build the house themselves or contract out. This type of scheme is designed to provide a planned framework within which people build their own houses as their resources permit (Drakakis-Smith, 1981;1988; Payne, 1984; Dwyer, 1975; Bamberger, 1982; Grimes, 1976). From the

residential point of view the advantage of site and service housing is that it provides security of tenure with adequate infrastructure and the freedom to occupants to build according to the resources available to them.

In most site and services schemes residents have to pay regular instalments for the land and initial service installation and other payments such as rates and taxes. At the same time households are expected to invest in the construction of their own building. Experience has proved that such projects can be difficult for the poor. In some projects in Mexico for example, only 50 percent of plots were occupied 1½ years after they were made available (Ward, 1984). In Nigeria one such project was located adjacent to the highest standard residential area of Benin city. This location resulted in a high standard of building, but placed the scheme out of the reach of the urban poor. Indeed the location proved a strong attraction to high income households (Ozo, 1986).

The basic criticism of site and service programmes is that they do not benefit the poorest families (Ward, 1982). The problem may arise because recovery costs are often very high (Payne, 1984) or because of the administrative and institutional frameworks within which the schemes have been planned and delivered (Drakakis-Smith, 1988:1987). Therefore in site and services schemes their affordability to the target population is very important, and it is the government's responsibility to ensure the policy considers this problem.

For example, in the Egyptian example quoted earlier the government was responsible for the subdivision of land, allocation of legal tenure, and provision of services. The land was priced in a way that was affordable to the target income group. Also, 'delayed freehold' tenure was proposed with freehold being given after five years, depending on the project conditions being met. This was mainly to prevent any land speculation. It should be borne in mind that the

main reason for low prices was that the government possessed the land, which made it easier to sell at lower prices (Davidson, 1984).

The most valuable form of subsidy that government can make, is to ensure that suitably located land is made available to the agencies implementing site and service projects free or at minimum costs with proper control in transferring the lands to the target group. For example, in Jamaica, it has been shown how the government granted security of tenure with proper control. Households were granted a 40 year lease on the lot. The government released a statement that the lot was transferrable (i.e. inheritable) "but for the first five years, first option should be given to the Ministry if the allottee desires to remove. Thereafter he can sell but the new resident has to be approved by the Ministry. To facilitate sales, etc. each person will be given individual titles. Penalties applying will be built into the lease agreement. The ultimate penalty is expulsion and re-possession of the lot by the Ministry. Persons can sublet with permission from the Ministry" (Quoted in Shankland Cox Partnership, 1977:203). In this type of security, the government retains its stake in the freehold which may prove valuable in later years when planning improvements and change may be needed. It prevents land speculation.

One of the main advantages of site and service schemes is that it reduces the need for future unauthorised developments (Payne, 1984; Davidson, 1984). Since the majority of the residents of squatter settlements are intra-urban migrants from conventional rented accommodation it is important to provide such a scheme for these low income groups, by giving them priority and to prevent any further illegal settlement. However, while individuals can build their own houses, they cannot provide services for themselves. This needs collective effort, and proper control and management. The government therefore has to mobilise economic and technical resources to provide

affordable housing for the urban poor. Since the rest of this thesis is primarily concerned with squatter settlements where upgrading has occurred, it is not necessary to go into any further detail on site and services scheme.

Community Participation

In the context of squatter settlement upgrading, community participation can be defined as the voluntary and democratic involvement of the beneficiaries of a scheme, through their contribution to the execution of the project in a decision making capacity with respect to setting the goals, formulating the project structure and preparing and implementing the plans (UN, chs [Habitat], 1985:1-3).

The United Nations (Habitat, 1976b:255) has recommended that in upgrading schemes "an institution should be designed to encourage and facilitate public participation in the decision making process at all levels". To achieve participation has not always proved easy but where it has been achieved the results have pointed to the value of involving squatters in the planning process as has been shown by Anthony (1979) in the case of Colombian squatters, by Danielson & Keles (1985) in Ankara and Istanbul and by Jere (1984) in Lusaka. In each of these cases the cooperation and participation of squatters was greatly to the benefit of the final scheme. It is not always possible however to motivate squatters to participate in general upgrading schemes, and low income households are often suspicious of the goals of such schemes. For example squatters may believe that upgrading will lead ultimately to an increase in their rent or in land prices.

In Maseru Township in South Africa, the improvement of urban squatter settlements failed because of the residents' non-involvement and bad administration. As noted by Wellings (1988:265-266) with reference to this case:

"the present position of municipal and local government in urban areas is minor and secondary in importance. The national government has controlled it down to the minutes detail, and reduced its natural sources of revenue. Moreover, there is no popular participation in the process of urban government. Councils are either non-existent as policy making bodies, or else their decisions may be ignored and approved at the will of the executive or higher levels of government".

This situation has been the most important reason for the failure to deal with the problems of Maseru's squatters.

Therefore, proper community organisation with good leadership is important to assist community development with strong co-ordination with government agencies. It is in the government's interest that members of the community be encouraged to help with improvements. Community organisations not only keep the government in touch with the aspirations of the residents, but they also provide the means for responsible action in community development. Poethig (1971:125) has asserted that "(Community) organisation becomes the training ground for the people's participation in the creation of more responsive national institutions, insuring the strengthening of the processes of democratic government".

Therefore from the above review it can be concluded that the aim of any housing policy should not be to consider only the quantity of dwelling units provided but to be concerned with the final quality of life of the residents. Many studies have shown that the primary problem of low-income housing is not only a lack of resources or technological knowledge, but also an inadequate planning and decision making system to achieve desired improvements in the housing stock.

To summarise the "technological transfer" approach has failed in most Third World countries. New housing has often not been very effective in helping the poor because it has not been planned in relation to their social, cultural, and economic situation. By contrast the use of a local technology approach has been more successful in overcoming squatter housing problems, because this approach involves squatters in attempting to improve their housing environment. The success of self-help schemes does however rest with the government seeking to offer security of land tenure and some sort of control on land prices and adequate infrastructure.

1.7 Conclusion - Research Directions and Hypotheses

Studies have shown that there are some problems regarding the definition of squatter settlements. It is necessary for any policy or research regarding these settlements to have a proper definition. In this study, the term squatter housing will refer to housing which is built on land for which the residents have no title deeds. This form of illegality has multiple implications for the way in which squatters relate to the rest of the housing market.

The phenomenon of squatter settlement forms part of the accelerated urbanisation process. From the evidence it can be seen that squatter settlement growth is fast and is not a passing phenomenon, but a widespread and significant form of human settlement in developing countries. Therefore they must be accepted and included as part of the urban context.

Squatter settlement appears in various ways in different countries. In some cities of Third World countries squatter settlements have developed primarily through organised invasions of public and private land. Usually most of the people involved in this type of occupation have had some experience of urban life. Also organised invasion is very much dependant on the political situation. Another type of squatting comes about by illegal sub-division; settlers have to purchase their piece of land illegally; but it does

provide considerable security of tenure. Usually this system is tolerated by officialdom, and can operate more openly.

"Illegal sub-division" or "private urbanisation", and unorganised invasion may take place in the form of infiltration, a slow process by which individuals become residents of squatter settlement, by moving from one settlement to another. This is more typical of Asian and African urbanisation.

Migration constitutes the principal process responsible for urbanisation and consequently is intimately linked both with urban growth and with squatter settlement growth. The review has shown that a number of theories exist regarding rural-urban migration and the main factors leading to this movement. Neo-classical economic theories consider this movement as a rational response to better employment opportunities and high wages. By contrast behavioural theories explain the process in relation to the decision making process and places great emphasis on the perceived utility of a new place relative to the utility of the existing place of residence. Research would seem to point to the choice of destination being strongly influenced by the presence of relatives and friends already in cities or towns.

Acceleration of the migration process and the volume of migration can be influenced by other factors such as war and internal political conflicts (e.g. revolution). Therefore the migration system is influenced by social, economic, technological and political environments.

Among the consequences of migration to urban areas are increased pressures on inadequate housing stocks. This has resulted in the growth and spread of squatter settlements and new stresses on the ability of city authorities to provide public services.

Also the review has highlighted theories on intra-urban mobility. These suggest that most low-income migrants first live as renters in the inner city, usually in poor conventional areas. Later they move to squatter settlements on the periphery to become owner occupiers. Ironically this will frequently be a more insecure tenure, but does allow family reunification and reflects a greater commitment by the migrant to the city.

From the political point of view, urban squatters in Third World countries do not engage in collective acts of radicalism and political protest unless mobilised under special circumstances which affect their lives. These circumstances are usually related to the need to protect their housing or employment. Their fundamental concerns are centred on efforts to obtain better housing and employment for themselves and their family members. The struggle to achieve their basic needs leaves little room for any other political activities. The literature also shows that squatters tend to live in considerable poverty, lacking proper housing and a clean environment which may adversely affect their health. Migrants commonly find their jobs in the so-called informal sector or petty commodity activities, as self-employed persons or work for a small family business.

Typical migrants' jobs include street vending, construction, crafts and for women domestic services. These activities are often very beneficial in servicing the city including rich groups within the urban area.

Although squatters may not be the poorest people living in urban areas they should still be considered as deprived mainly because of their lack of proper housing. A number of policies were reviewed which seek to overcome squatter housing problems. The evidence suggests that squatter clearance and relocation has failed in most Third World countries. And this approach was not very effective in

helping the poor, in terms of their social, cultural, and economic situations. But this approach satisfies middle class aspirations.

Studies have shown that self-help housing has been widely successful in overcoming squatters' housing problem. The advantage of this approach is that it achieves direct involvement by squatters in their housing and environment, by gaining their participation in the decision making process and through direct investment both in financial and labour terms. Upgrading squatter settlement is the most successful type of self-help, but there are a number of factors that must be considered for a project to be successful.

Firstly, granting security of land tenure is necessary. This should occur only after the residents have been consulted regarding the type of land title and repayment arrangement. Otherwise there is the danger that they may not be able to afford making this commitment given their low income levels. Government intervention and control of land prices are a further requirement for a successful upgrading project.

Secondly, genuine community participation is desirable with strong co-ordination with government agencies. The help that residents need and can obtain vary depending on the type of housing and environment and with their aspirations.

The review has also shown that upgrading of squatter settlements, sites and services can be achieved in an integrated fashion. Site and services programmes can help prevent further illegal settlements by giving priority to the poorest households who live in conventional rented accommodation, and by upgrading housing situations in squatter settlements, thus helping to overcome housing shortages in the urban areas of the Third world countries.

Application of Theories to the Case of Tehran

Above it has been attempted to review some of the theoretical input of different aspects of squatter settlements, its causes and problems in Third World cities, and they were discussed. On the basis of the themes which have been identified, it is now appropriate to select hypotheses which the author sought to examine for the squatter settlements of Tehran, Iran. These fall into four sections:-

- 1 - Rural-urban migration
- 2 - Intra-urban mobility
- 3 - Political impact of squatters
- 4 - Housing Policy for the urban poor (squatters)

As a result of the 1979 revolution in Iran new trends in migration (rural-urban and intra-urban) emerged. During and after the revolution in 1979 the Government's policy towards urban land changed. This affected the use of urban land and resulted in the expansion of the urban limit and introduced an era when land was given to low income groups in order to let them build their own houses. From this action the government hoped to increase support for the less fortunate groups in the population and at the same time to overcome some of their housing problems and to satisfy some of their housing demands.

This change of policy was inevitably likely to motivate more of the rural population to move residence in search of better life opportunities in urban areas. Effectively there was a dramatic increase in the "pull" factors operating in favour of urban areas. In a situation where inner urban areas are not well prepared to accommodate new waves of migrants, (e.g. in terms of services), it is not surprising to discover that squatter settlements mushroomed around Iran's larger cities, and that expansion of the administrative limits of the urban area resulted in movement into these areas by low-income migrants. This situation

brought about a wide range of problems both for existing and new city dwellers in terms of a shortage of proper housing and environmental facilities and services. This was also true for the government which found it difficult to tackle many of these problems.

The field survey undertaken by the author attempted to collect data on some of the issues discussed above in order to identify and measure aspects of: (1) the rural-urban migration pattern in Tehran, and to assess the impact of in-migration on destination areas; (2) intra-urban movements among poor migrants and their movement to two squatter settlements; (3) the political impact of squatters and (4) housing policy for low income groups and in particular for squatters.

Therefore, the following hypotheses which are divided in four sections were tested and the results are reported in detail in later chapters:

1. Rural-urban migration:

- (a) The main motive of migration is economic i.e. migrants move into the city because of expectations of greater real income due to a perception of better employment opportunities and also because of deteriorating income opportunities in rural areas.
- (b) Rural migrants usually move to cities directly without any intermediate residence in a regional centre or small town near to their place of origin.
- (c) The help of kin, friends and relatives is of the greatest importance in securing a migrant's success in the urban area. The level of support is likely to be related to the location of the province from which the migrants have come.

- (d) Home ownership and job security factors are very important for the migrant in adjusting to urban life.
- (e) The volume of migration increases in relation to certain key historical events affecting the economic and social structure of their regions of origin and destination.

2. Intra-urban mobility

- (a) Squatters moved to these settlements from consolidated low income neighbourhoods nearby, rather than either from classic central city slums or directly from rural areas.
- (b) Squatters had lived in rented accommodation in the above areas before becoming owner occupiers in the squatter settlements.
- (c) This process has been accelerated, on the supply side, by changes in the political and economic situation.
- (d) Socio economic constraints are the main determinants of movement patterns to squatter settlements.

3. The Political Impact of Squatter Settlement

- (a) Squatters are the beneficiaries of political competition in the urban arena and are of considerable political interest.
- (b) Squatters are not politically radical and mainly participate in a conservative fashion in the political process. They are not politically active unless political decisions directly affect their living conditions.

4. Housing Policy for the Urban Poor, Particularly Squatters

- (a) Upgrading of squatter settlements is an appropriate policy in the search to provide enough housing for the urban poor.
- (b) For a successful upgrading project two steps should be taken. First, grant security of tenure; second, seek genuine community participation and co-ordination between government agencies.

CHAPTER TWO

IRAN

This chapter is concerned with the spatial and administrative structure of Iran. It looks firstly at some of its general geographical characteristics and secondly at the government system in pre and post-revolutionary (1979) times. Thirdly, it will discuss urbanisation, population growth, and patterns of internal migration in Iran.

2.1 General Physical Characteristics

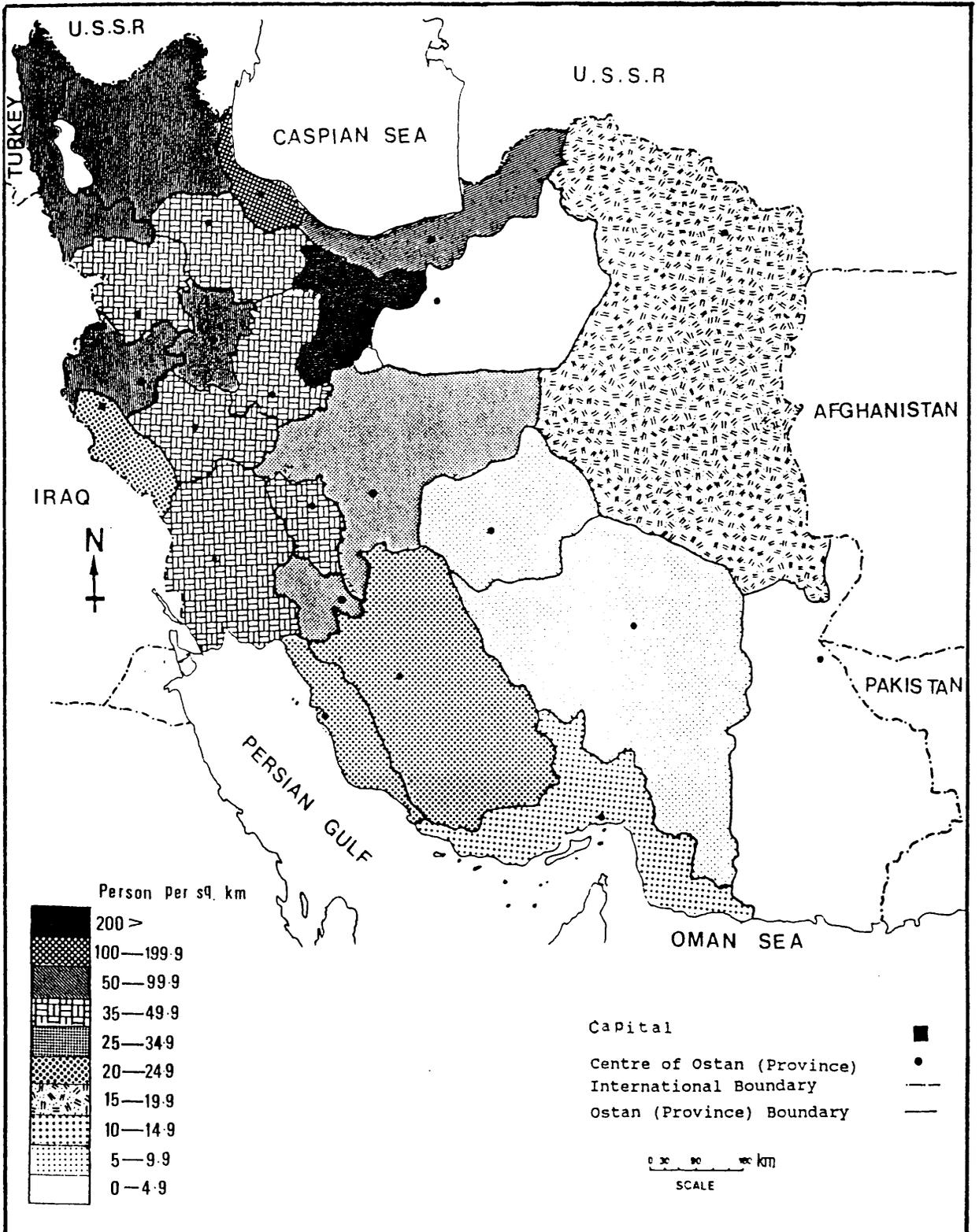
Iran is a country of 1,648,000 square kilometers, almost as large as all nine countries of the European Common Market.

The map of Iran (Fig. 2.1) resembles a distorted square leaning towards the west. Its longest borders are with Russia on the north for over 1600 km and Iraq on the west, but it also shares frontiers with Turkey in the north-west, Afghanistan in the east and Pakistan in the south-east. Iran has boundaries on two seas: 630 km on the Caspian where it faces Russia, and 1880 km. on the Persian Gulf where it faces Iraq, Kuwait, Saudi Arabia and the other Gulf states. At least 50 per cent of the total land area is desert, with much of it being in the centre of the country (P.B.M. Statistical Centre of Iran, 1986; 1988). On three sides of the country there are massive mountain ranges which isolate it from the world.

In terms of physical features and climate there are at least four large physical regions: the shores of the Persian Gulf, the Elburz and Zagros mountain chains, the high plateau and lastly, the shores of the Caspian Sea.

The settled population lives in about 15 per cent of the total area and is concentrated mainly around the western, southern and northern edges of the country (Fig. 2.2). The

FIG. 2.2 POPULATION DENSITY OF IRAN: 1986



SOURCES: i) P.B.M.I. Statistical Centre of Iran (1986) Salname-y Amari 1364, Tehran, Iran (in Persian)

ii) P.B.M.I. Statistical Centre of Iran (1988) National Census of Population and Housing 1365 Selected detailed Results, Tehran, Iran.

1986 census distinguished 24 administrative divisions (Ostan) or Province, 195 Shahrestan, 501 Bakhshes , 497 Shahrs and 1583 Dehestans . (Fig 2.3).

2.2. System of Government

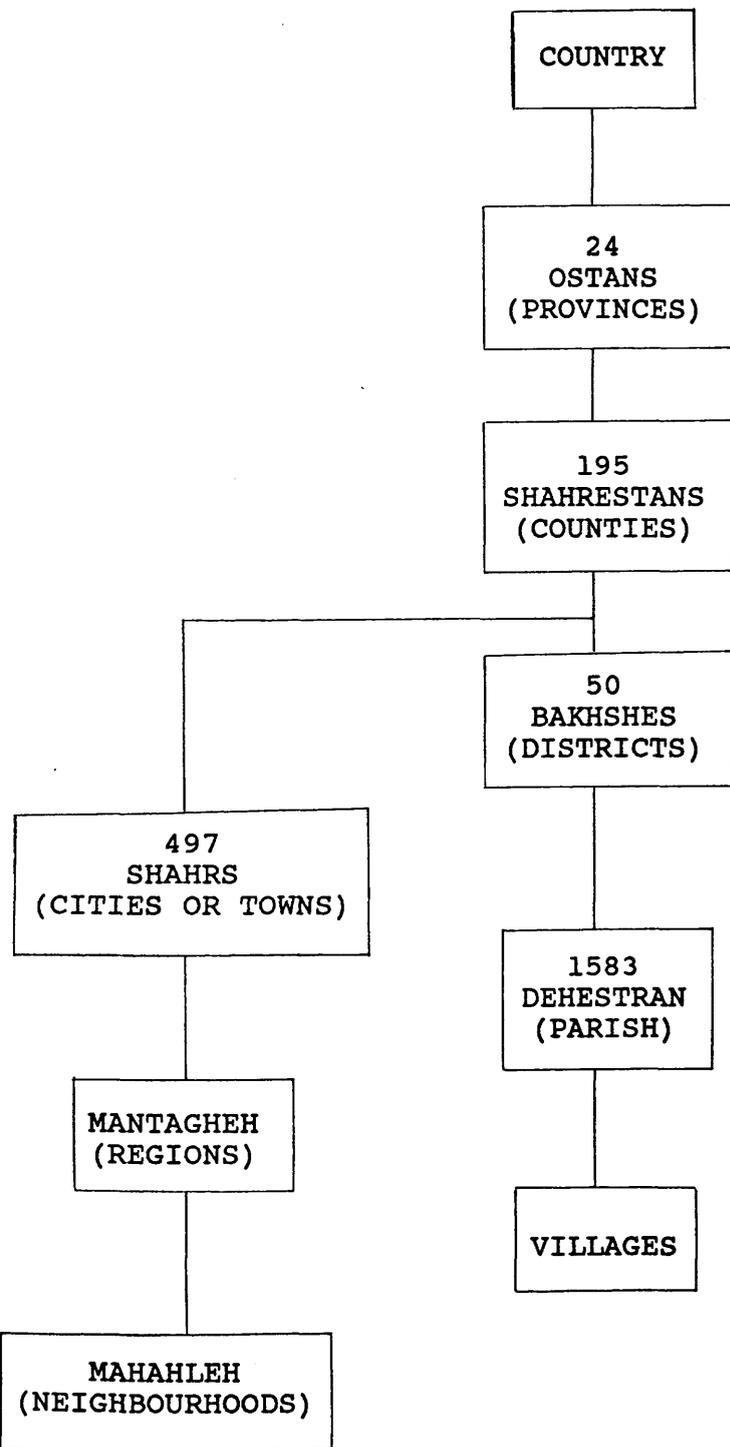
2.2.1. Pre Revolutionary, 1979

Until February 1979 Iran was a monarchy. The constitutional monarchy was granted in 1906. The Chief of state, Mohamad Reza Pahlavi succeeded his father, Reza Shah, in 1941 (Graham, 1978). The constitution divided government into three independent traditional units of executive, legislative and judicial.

The independent legislature was in the form of a lower house of Parliament, called Majlis. It consisted of 268 members elected every four years. The upper house, or senate, had 60 members, half elected and half appointed by the Shah. One half of each of these groups had to be from Tehran, and the other half from the Ostans (Provinces). Within each Ministry, a deputy minister directed the civil service staff, and the departments were administered by a director-general (Abbott, 1977; Fatemi, 1982).

Iran for administrative purposes was divided into provinces (Ostan) (P.B.M., 1986; Ministry of Housing and Urban Development, 1977). Every province (Ostan) council was chartered by a Governor-General (Ostandar) appointed by the Shah on the recommendation of the Minister of Interior and was composed of two representatives appointed by each county (Shahrestan) council. Members of county (Shahrestan) councils were elected directly by the people ward by ward and had 15-20 members depending on their size. The councils were headed by a county governor (Farmandar) who was appointed by the Governor-General (Ostandar). Shahr (City) councils were also elected directly by the people and were

FIG. 2.3 ADMINISTRATIVE DIVISIONAL ELEMENTS IN IRAN, 1986.



composed of up to 30 members depending on their size. The city mayor was controlled by the council, the Governor General (Ostandar) and by the Ministry of Interior.

In Iran at this time there were about 21 different ministries, most of which continued working after the revolution under the same name, although several new ones have been added (Table 2.1). Each Cabinet Minister was supported by civil servants with offices in Tehran and in each of the Ostans (Provinces). Administration was highly centralised, policies being initiated or inspired by the Shah, advised by the Supreme Economic Council of Cabinet Ministers. The Governor-General's (Ostandar) responsibility was nominally for actions of the state within his province. He also was supposed to perform ceremonial duties, and was responsible for the appointment of all Chief Directors of ministerial bureaux. The local representatives of different ministries were accountable to the relevant district governor (Bakhshdar). The Governor-General (Ostandar), County Governor (Farmandar) and his District Governors were responsible for the efficient operation of local government in their areas. In the provinces, the representatives of the ministries were all effectively guided by the central office in Tehran, in term of sectoral policy directions (Ministry of Housing and Urban Development, 1977; Qahari, 1985; Fatemi, 1982).

Table 2.1 List of Various Ministries in Iran

Under the Shah's Regime	Under Islamic Republic Regime
Ministry of Imperial Court	Ministry of Plan and Budget*
Ministry of Health	Ministry of Health and Remedy and Medical
Ministry of Finance and Economic Affairs	Ministry of Training Finance and Economic Affairs
Ministry of Water and Power	Ministry of Power
Ministry of Housing and Urban Development	Ministry of Housing and Urban Development
Ministry of Information and Tourism	Ministry of Oil*
Ministry of Road and Transportation	Ministry of Road and Transportation
Ministry of War	Ministry of Defence~
Ministry of Post, Telegram and Telephones	Ministry of Post, Telegram and Telephones
Ministry of Industry and Mines	Ministry of Metals and Mines
Ministry of Commerce	Ministry of Commerce
Ministry of Interior	Ministry of Interior
Ministry of Labour and Social Affairs	Ministry of Labour and Social Affairs
Ministry of Co-operatives and Rural Affairs	Ministry of Industry+ Ministry of Heavy Industry+
Ministry of Culture and the Arts	Ministry of Culture and Islamic Orthodoxy~
Ministry of Justice	Ministry of Revolutionary Guards Corps*
Ministry of Science and Higher Education	Ministry of Culture and Higher Education~
Ministry of Agriculture and Natural Resources	Ministry of Agriculture~
Ministry of Foreign Affairs	Ministry of Foreign Affairs

Ministry of Training and Education

Ministry of Training and Education

Ministry of Social Welfare

Ministry of Reconstruction Crusade (Jihad-e-sazandegi)

Ministry of Intelligence of Islamic* Republic of Iran

* New Ministries established after Revolution 1979

~ Changed the name of Ministries after Revolution 1979

+ Separated from other Ministries after Revolution 1979

Sources: i) Plan and Budget Ministry (1986:39)

ii) Lenczowski. G (1978)

In practice the constitution only served as a point of reference when convenient (Graham, 1978). The difference between the executive authority of the Shah and an independent legislature and judiciary was non-existent. All were part of the monarch's executive arm. In fact the Shah was head of all three branches of government - executive, legislative and judicial as well as being commander of the Armed Forces. The Prime Minister and Cabinet Ministers and members of the Supreme Court were all appointed by Shah. In fact the system of government and its administration was highly centralised, and responsive only to him. This organisational structure was sustained mainly to protect the Shah and his throne from any threats, such as military coups d'etat and strong political rivals within his own organisation (Fatemi, 1982).

Because of this fear, the Shah operated his system effectively by himself as the sole decision making authority in every significant phase of Iran's political affairs. (Fig. 2.4 shows the organisation of flow chart of its administrative system). The Shah regularly had control over the meetings of council, commissions, and even over special committees and gave specific orders on issues ranging from the price of eggs to the duration of medical education, and from wages for the workers to the rail and road systems (Fatemi, 1982). All important decisions were made by

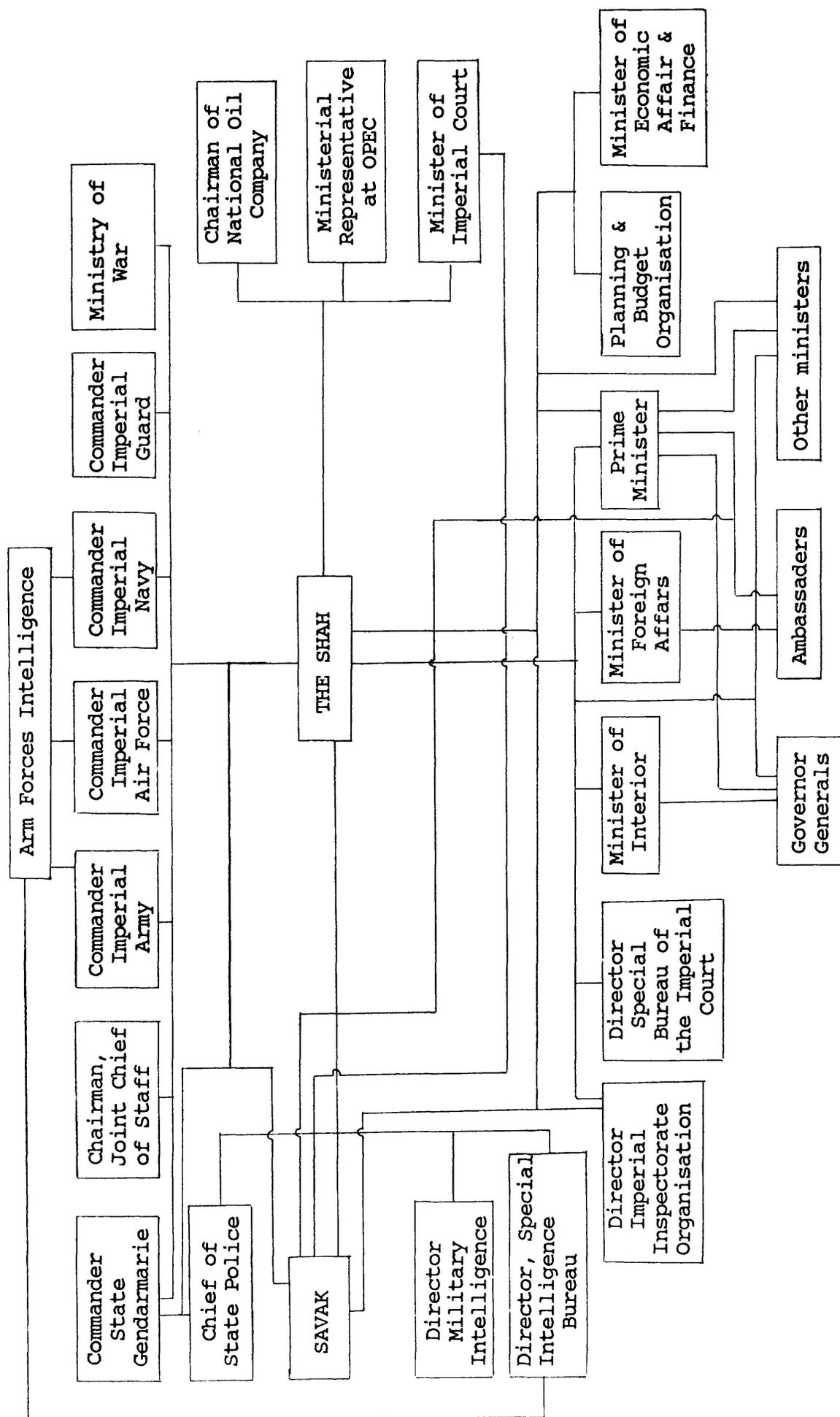


Fig. 2.4 The Shah's Administration System Mid-1960s to Mid-1977

Source: Fatemi, 1982:50,51

imperial decree as well as some less significant ones. In fact the Shah perceived the value of the traditional and fundamental principal of rule and divide.

The functions of government organisations and institutions, such as the Prime Minister's office and cabinet, the majlis; the provincial governors and the press were either controlled, monitored or duplicated by the Shah himself or by his Imperial Inspectorate, SAVAK (State Organisation for Security and Intelligence) (Graham, 1978) Appointments of any individuals in the government such as Prime Minister, ministers, governors, military commanders, as well as of positions of lesser significance such as managing directors of government agencies, needed the SAVAK's approval. SAVAK had influence in every government institution, including semi-government organisations (Halliday, 1979).

The Shah's main concern within his administrative system was with the military and the oil industry (Fatemi, 1982; Ramazani, 1982; Halliday, 1979). The Shah's dream was to transform Iran into one of the world's five major conventional military powers. Therefore, he sought American military assistance and military equipment for the armed forces in Iran, since he wished to be a fully-fledged American ally, and he used every tactic to establish and deepen American involvement in Iran. The purchase of sophisticated American weapons by the Shah especially after the 1973 explosion in oil prices, created problems in logistical maintenance and training which were beyond the country's capacity.

The Shah had a great involvement in military affairs. For example no military plan could take place without his permission nor could any officer above the rank of second lieutenant be transferred from one branch to another of the military system without his approval. No general could visit Tehran or meet another general without his permission. So he had full control in every aspect of the military in Iran (Fatemi, 1982; Halliday, 1979).

Before oil was discovered, Iran was a relatively decentralised state in which several groups had considerable power and autonomy. Oil income and its growth, and Iran's relations with the oil consuming west reinforced the trend towards centralisation which grew under the Pahlavi regime (1921-78). In order to establish a centralised government system, income was needed to build up the armed forces, police forces, the bureaucracy and government control over the economy. The income for these and other programmes came increasingly from oil, with dramatic growth after 1954 due to oil nationalisation and after the 1973 world oil crisis.

The Shah's approach to economic modernisation favoured the rich over the poor, big over small enterprises in both industry and agriculture, and the urban over the rural population. These policies have been accused of producing excessive inflation, profits, corruption, rapid urban migration, and overcrowding and concentration of enterprises and wealth in government and a few private hands. They encouraged a large infusion of foreign capital, technicians and military advisers. The way oil income was handled in Iran intensified the economic and cultural split between two cultures: the rich who were influenced by western experts and the traditional, poor and bazaar classes (traditional merchants, money lenders and artisans) (Halliday, 1979; Ramazani, 1982; Bill, 1982).

It has been argued that there are a number of factors which caused the collapse of the Shah's regime. First, his rapid modernisation policies alienated a large part of traditional Iranian society, such as the clergy and bazaar merchants. His modernisation plans were mainly concerned with industrial development and sought to change the traditional Iranian society to a westernised society. Secondly, strategic and military considerations made Iran highly dependent on the United States (Ramazani, 1982), as shown in late 1973 by the way he handled the American political problem by granting diplomatic privileges and immunities to American military personnel in Iran.

The Ayatollah Khomeini condemned the Shah's plan and considered it as a "document of enslavement for Islam and the Koran and hence illegal". "The world must know that all the difficulties faced by the Iranian nation and Muslim peoples are because of aliens, because of America....." (Quoted in Ramazani, 1982:15). Generally eminent members of religious establishment (Ulama) were opposed to the Pahlavi modernisation programme. This was not surprising since it was the Shah's overall strategy to destroy their existence and influence.

Therefore American influence in Iran (politically and economically) increased the power of the political opposition and it was one of the roots of the revolution. Some believe (Fatemi, 1982) that it was the Shah's organisational hierarchy and the way it was operated which brought sudden disintegration of his system. When he lost control of it, this enabled the Iranian Revolution of 1979 to succeed.

2.1.2 Post Revolutionary 1979

Power was finally seized by the revolutionary forces in Tehran on February 11, 1979. The current system of Government is based on the Islamic religion. It was established in the wake of a referendum in which according to Iranian authorities, 98.2 per cent of the voters approved of it (Hiro, 1987:108). Then an "Assembly of Experts" (Majlis-i Khobregan) was elected on 3rd - 4th August, 1979 instead of the "constituent assembly". Its seventy-five members were to study the draft constitution, and produce the final version for another referendum. The new constitution was approved by the 'Assembly of Experts' on 15th November and it was then ratified in a referendum held on December 2-3, 1979. This won 99.5 per cent of the votes cast (Ramazani, 1980). This constitution was practiced for almost a decade prior to its amendment on 28th July, 1989. According to this recent constitutional amendment, the post of the Prime Minister was abolished and direct

responsibility for the Council of Ministers was left to the President. The president was to have a first deputy and several other deputies. With the agreement of the President (who is currently Ali Akbar Rafsanjani), the first deputy undertakes responsibility for administering the council of ministers and co-ordinating the duties of the other deputies.

Concerning judicial power, responsibilities are left to the head who is appointed by the Leader of the Revolution (or Velayat-e Faqih, who is currently "Ayatollah Ali Khamenehi", succeeding Ayatollah Khomeini). Among other amendments to the Constitution are those concerning the leader of the revolution whose duty is to determine ways by which the number of majlis deputies can be increased (Kayhan 1989a:6).

The Islamic Republic is based on a parliamentary system and follows the principle of separating executive, judicial, and legislative powers for the administration of the country. This system operates within an Islamic legal framework.

Therefore, today a large number of clerics are in charge of Iran's social, economic and political affairs. In the first Iranian Islamic Consultative Assembly (Majlis Shora-e Islami) elected in the spring of 1980 there were 213 deputies elected. Of 200 identifiable deputies, 43 were clerics (Mullahs). This number increased to 55 after the by-election of July 24, 1981 which was called to choose a new president and to finalise the replacement of those deputies who had been assassinated in the bombings of June 28th, 1981 by an opposition group. Seventeen of the 27 newly elected Islamic consultative Assembly were clerics. Since that time the clerics (Mullahs or Ulema) have been more active in political affairs and more numerous than ever before. In the second Islamic Majlis elections of April-May 1984, it was estimated that the number of qualified clerics involved varied from 90,000 to 12,000 (Hiro, 1987). Most of

those elected belonged to the Islamic Republican Party (with membership of influential clerics such as Ayatollah Ali Khamenehi, current leader of the Revolution).

The Islamic government of Iran is run under the leadership of religious jurists. They must know the Sharia (Islamic doctrines) thoroughly, and must be absolutely just in its application. Principle two of the constitution describes the Islamic Republic as 'a system based on the belief in ... religious leadership and continuous guidance, and its fundamental role in the permanency of Islam's Revolution'. Principle five 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 efficient administrator, religious jurist; and recognised and accepted as leader by the majority of the people" (Assembly of Experts, 1979; Ramazani, 1980).

It means that there is a system supervising the government of the country which guarantees that it conforms to the methods and functioning of Islamic precepts. The "Valie Faquih" (currently Ayatollah Ali Khamenehi, succeeding Ayatollah Khomeyni), is responsible for supervision of the system.

The duties and powers of the leader are listed in principle 110 of the Constitution. As the commander-in-chief of all armed forces, he has the 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 presidential candidates, and appoint the president on his election, or dismiss him after the supreme court has found him politically incompetent and in violation of his legal duties towards the Islamic

Consultative Assembly (Majlis). He has the right to appoint the chief judiciary power and the Islamic Jurists on the Council of Guardians.

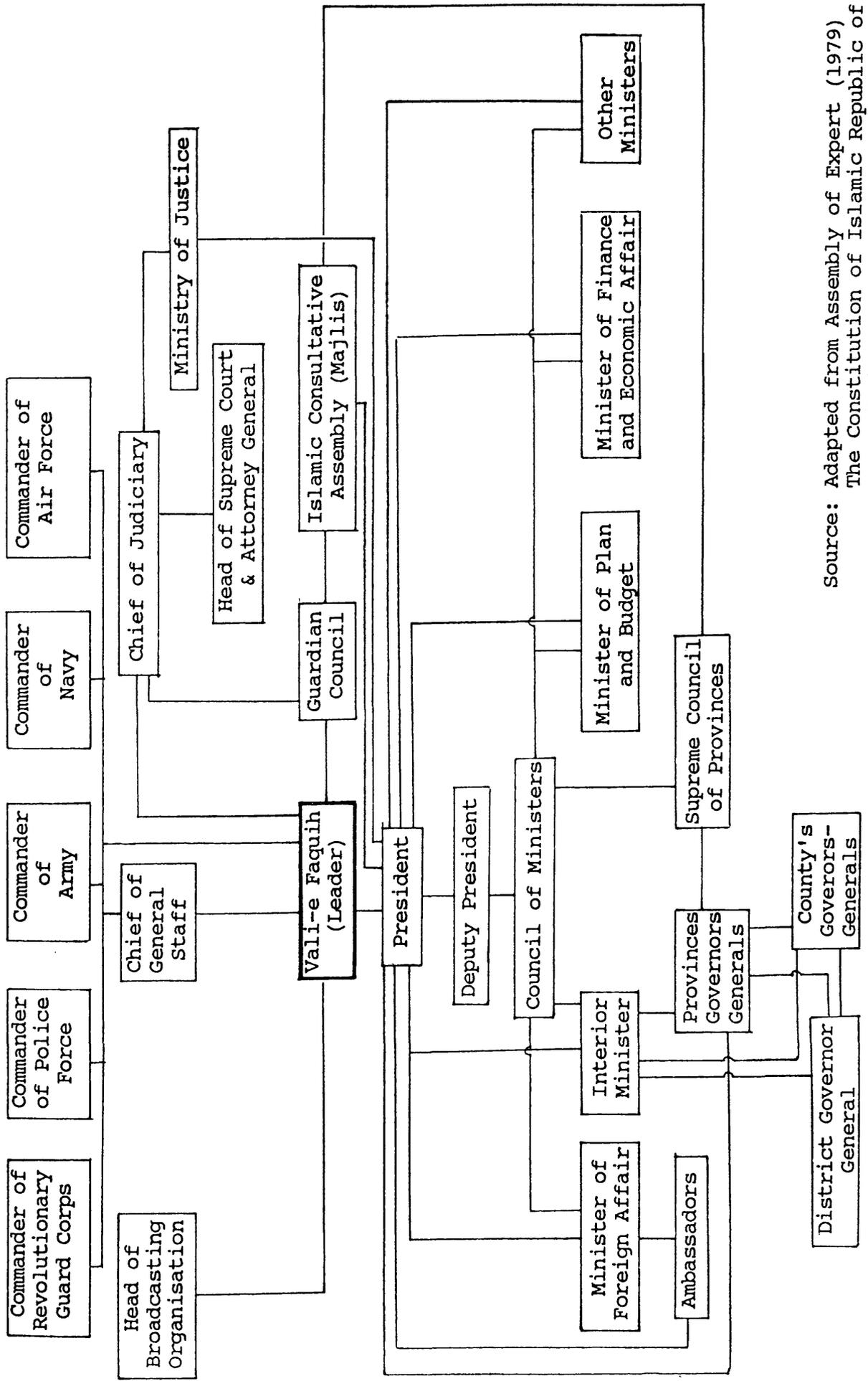
In fact, the Leader is a cross between the chief justice and the head of state. Next to the Leader of Islamic Revolution (Valie Faquhi), the President (who must be Shia) is the most powerful figure. He is responsible for implementing the constitution; and he is the head of the executive power, except for affairs pertaining directly to the leader. 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, Table 2.1 shows the present ministries while Fig. 2.5 shows other aspects of the Islamic Republic of Iran's Administration system.

General governors (Ostandar), county governors (Farmandar), district chiefs (Bakhshdar), and other authorities that are appointed by the government are obliged to obey the councils' decisions as long as they fall within the limits of the Council's power.

Also there is a Supreme council of provinces, whose objective is to prevent discrimination and gain cooperation in development and welfare programmes for the provinces. It has the right to make plans within the limits of its duties and submit proposals to the Majlis (Islamic Consultative Assembly) either directly or through the government. These plans are then studied by the assembly.

Therefore from the above it can be seen that decision making even in post-revolutionary Iran is quite centralised. The people have been given more right to involve themselves in decision making such as in electing council members. However, control remains strongly linked to central government and the system is based on Islamic rules with every responsible post in the government being a religious person dedicated to Islam. Religious commitment is

Fig. 2.5 Aspects of the Islamic Republic Administration System



Source: Adapted from Assembly of Expert (1979)
 The Constitution of Islamic Republic of Iran. Kayhan, 1989a; Vatani, M.H. 1985.

therefore the main difference by comparison with the previous regime, rather than differences in structure or in levels of centralisation.

2.3. Urbanisation in Iran

The basic feature of urbanisation is the concentration of the population in 'urban' areas, and the growth in the number of urban centres. Urbanisation usually refers to more than just demographic increase. It implies a socio-economic process which results in changes in the urban environment and its structures of production, distribution and employment, or combination of the above (Clarke, 1980; Roberts, 1978; Slater, 1986). As far as urban growth is concerned there are three components: natural increase, net in-migration and changes in city boundaries as a result of the incorporation of previously rural areas (Slater, 1986).

Iran, like many other developing countries has experienced a high rate of urbanisation. In the nineteenth and twentieth centuries, Iranian cities could be said to have entered the modern age. The increase in the commercialisation of agriculture; more trade with the west and the development of manufacturing industries, banks, and an export-oriented economy helped to transform the traditional Iranian cities - urban centres such as Tehran, Tabriz, Shiraz, Isfahan, and Yazd all increased in population (Issawi, 1971:26-27).

Prior to World War II, much of the Iranian population remained rural. In 1900 only approximately 21 per cent of the population lived in the urban areas. By 1940, the urban population still comprised only 21.9 per cent of the total population, but because of the overall population growth of about 4.69 million people, there was absolute growth in the urban population (Bharier, 1971). In the post war period there was a marked increase in the proportion of population living in cities (Table 2.2 and Fig 2.6). By the 1976 national census, more than 46 per cent of the population lived in urban areas - defined by the census organisation as

Table 2.2 Urban and Rural Population of Iran:
1900-1986 (in millions)

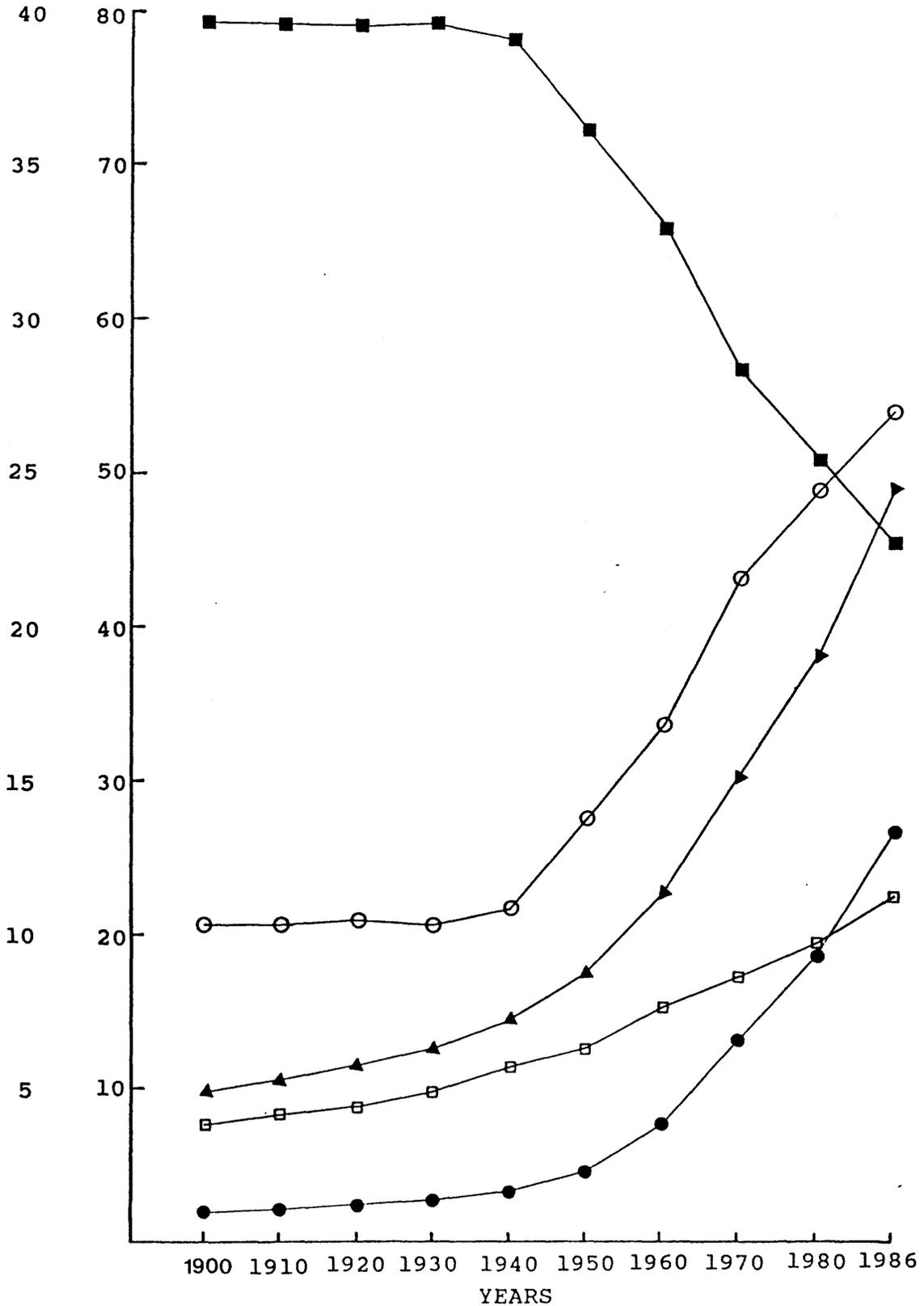
Year	Total	Urban	% Urban	Rural	% Rural
1900	9.86	2.07	20.9	7.79	79.1
1910	10.58	2.22	20.9	8.36	79.1
1920	11.37	2.39	21.0	8.98	79.0
1930	12.59	2.64	20.9	9.95	79.1
1940	14.55	3.20	21.9	11.35	78.1
1950	17.58	4.89	27.8	12.69	72.2
1960	22.83	7.76	33.9	15.07	66.1
1970	30.35	13.10	43.1	17.25	56.9
1980	38.34	18.80	49.0	19.54	51.0
1986	49.44	26.84	54.3	22.60 *	45.7

* This includes the mobile population such as nomads, who are largely engaged in agricultural activities and are 0.5 per cent of total population. They are considered as rural population.

- Sources:
- i) Adapted from Bharier, J (1971:27). Economic Development in Iran: 1900-1970, Oxford University Press, Oxford.
 - ii) Plan and Budget Ministry, Statistical Centre of Iran (1985:57) Salname-ey Amari 1363, Tehran.
 - iii) Plan and Budget Ministry, Statistical Centre of Iran (1988), Gozideh-ey Natayij-i Tafsili-ey Sarshumari-yi Umumi-yi Nufus Va Maskan, 1365, Tehran.

Fig 2.6 Pattern of Rural & Urban Population Growth 1900-1986

Millions Per cent



- Percentage of rural population
- Percentage of urban population
- ◀ Total population in million (absolute)
- ◻ Rural population in million (absolute)
- Urban population in million (absolute)

localities with 5,000 people or more. By 1986 the proportion had increased yet further although the census had redefined "urban" as a settlement of 10,000 inhabitants or larger (P.B.M. Statistical Centre of Iran, 1987).

In fact in the 1966-1976 period, the urban annual growth rate was 4.9 per cent (Alizadeh & Kazerooni, 1984). By comparison after the 1979 Islamic Revolution, the process of urbanisation advanced even faster. According to the 1986 Iranian national census, 26.84 million people lived in urban areas, which was 54.3 per cent of total population, and in the 1976-86 period the urban population increased by 5.5 per cent annually (P.B.M.I. Statistical Centre of Iran, 1987; 1986).

There are at least three factors explaining the sharp percentage increase in the urban population in Iran during the decade between the two national censuses of 1976 and 1986. There was firstly, natural increase in the population accounting for about 15 million people (P.B.M.I. Statistical Centre, 1987 and unpublished data from statistical centre of Iran). In fact the population increase in the period 1976-86 was double that of the period 1966-76. Secondly, boundaries of some cities expanded to include villages and rural areas located around the cities, so that a portion of the rural population became urbanites without actually having migrated. Thirdly, the population of some rural areas increased to the point of surpassing the 10,000 threshold and these areas were thus recognised as urban centres. According to the Statistical Centre of Iran, in 1976 there were 373 cities. This increased to 497 in 1986 (P.B.M. Statistical Centre of Iran, 1987).

Although the growth in the urban population will continue in the future, it should be borne in mind that only a handful of the largest cities have dominated urban life in Iran. This has been especially the case for Tehran the capital and a few large cities. Table 2.3 shows that in 1956, for example, there were only 18 cities with a population of

Table 2.3 The Structure of the Distribution of Urban Population based on the size of Cities in 1956-86 in Iran.

	1956		1966		1976		1986a	
Population urban centres Thousand	No. of urban centres	% of urban centres	No. of urban centres	% of urban centres	No. of urban centres	% of urban centres	No. of urban centres	% of urban centres
-50,000	181	38.6	241	31.2	328	27.5	399	8.3
50,000-100,000	9	10.5	15	10.9	22	9.7	47	12.9
100,000-250,000	6	16.6	8	11.9	15	13.6	31	17.3
250,000-500,000	2	9.1	5	18.2	4	8.5	11	12.8
500,000-1,000,000	-	-	-	-	3	12.1	5	11.9
1,000,000+	1	25.2	1	27.8	1	28.6	4	36.8
TOTAL	199	100	270	100	373	100	497	100

a - Due to Iran-Iraq War some of urban and rural areas in the war zone could not be surveyed.

Sources: i) P.B.M. Statistical Centre of Iran (1986) Salnameh Amarie 1364, Statistical Centre of Iran, Tehran, Iran (In Persia)

ii) Alizadeh and Kazerooni, (1984:69) Mahajerat va Shahrneshini Dar Iran, Planand Budge Organisation, Tehran, Iran (In Persia)

iii) Nazari, A.A. (1989) Population Georgraphy of Iran Gitashenasi, Tehran, Iran (In Persian PP 173-86)

50,000 or more. This number increased to 29 by 1966, to 47 by 1976 and to 98 by 1986. The number of people living in cities of 50,000 or more increased from 3.68 million in 1956 to 24.70 in 1988. By contrast the table shows only one city with a population of one million or more up to 1956. This urban zone represented 25.2 per cent of the total urban population in 1956, 27.08 per cent in 1966 and 28.6 per cent in 1976. By 1986, three other urban zones crossed the million threshold and the four cities together accounted for about 36.8 per cent of total urban population of Iran. These cities were Tehran, Mashhad, Tabriz and Isfahan (Table 2.4). Table 2.3 also shows the number of cities with populations of between half a million and one million have increased, and the population of this category has almost doubled. The cities in this category are Shiraz, Bakhtaran, Ahvaz, Qom, Karaj (Table 2.4). The great urban growth of the largest cities is mainly due to an exodus from rural areas, smaller cities and more importantly from cities in the war zone. Figure 2.7 shows the pattern of urban population growth in the period 1976-86. The highest rates of growth are in Tehran Province (City of Qom, Karaj and Varamin) and in cities receiving migrants from the war zone and along the Afghanistan border.

Table 2.4 Population distribution in nine largest cities in Iran : 1956-1986

City	1956	1966	1976	1986
Tehran	1,512,082	2,719,730	4,530,223	6,022,079
Mashhad	241,989	409,616	667,770	1,540,425
Isfahan	254,708	422,045	661,510	1,190,282
Tabriz	289,996	404,413	597,976	1,144,003
Shiraz	170,659	269,865	416,408	896,559
Bakhtaran	125,439	187,930	290,600	632,171
Ahvaz	120,098	206,475	334,339	589,529
Qom	96,499	143,557	187,203	550,630
Karaj				539,691

Sources:

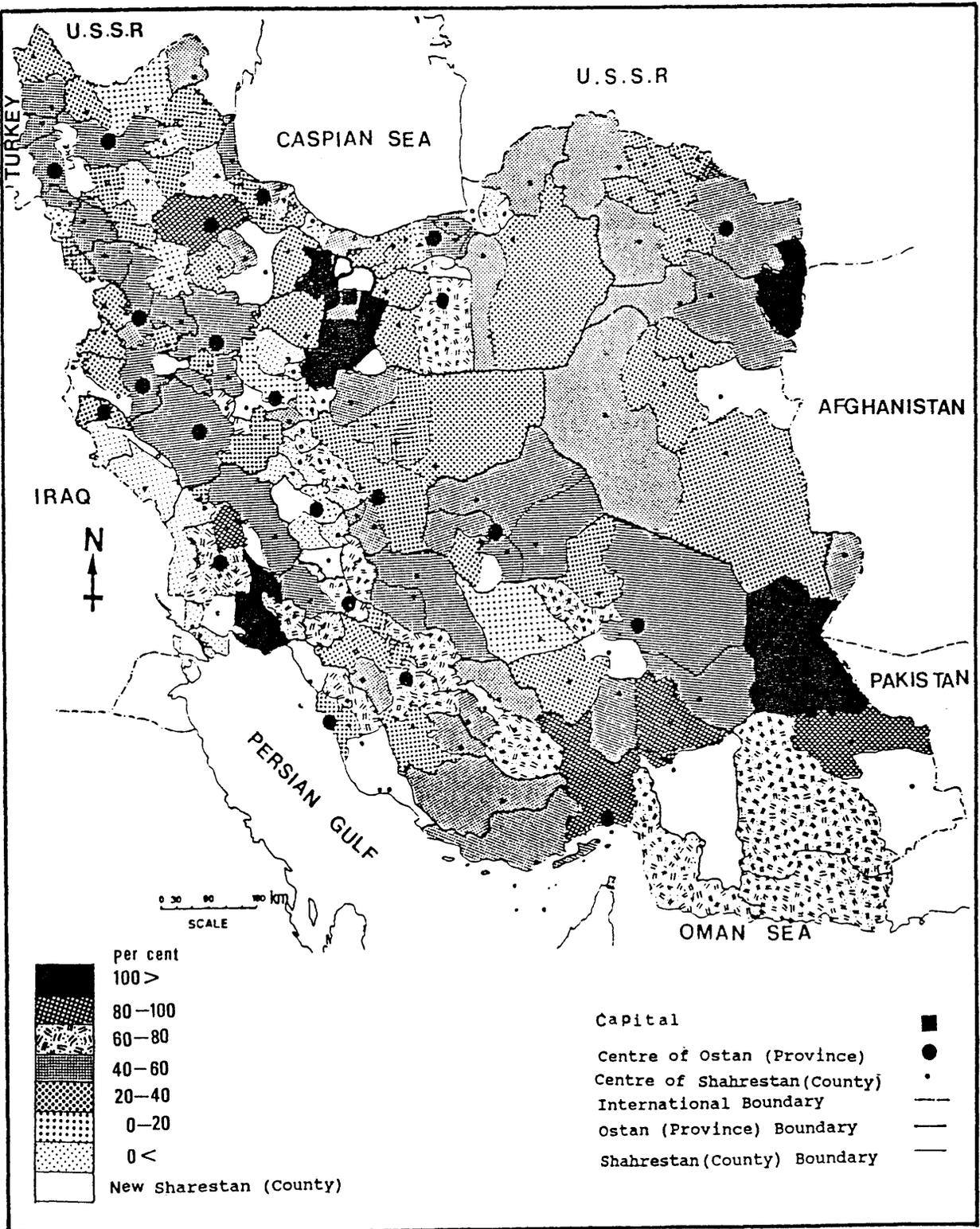
- i) P.B.M. Statistical Centre of Iran (1986:60)
- ii) Nazari, A.A. (1989:175)
- iii) AliZadeh, M. & Kazerooni, K. (1984:62-65)
- iv) Plan Organisation, Statistical Centre of Iran (1968a)

2.3.1. The Pattern of Internal Migration

Migration is the predominant force in dictating the redistribution of human resources in response to changing patterns of opportunities. In Iran the imbalance resulting from the unsteady forces associated with modernisation has caused some areas to expand employment opportunities rapidly, while others have been stagnant or have declined (Hemmassi, 1974; Clark & Costello, 1973; Costello, 1977).

The great importance of migration studies in Iran is matched by a lack of direct data on this vital aspect of population change. The main source of information for such investigations is indirect data on place of birth recorded by the census of Iran.

Fig 2.7 Urban Population Growth in Iran: 1976-86.



Source: Nazari (1989: 182).

The high degree of mobility which exists in Iran is revealed in Table 2.5. In 1956 only 10.98 per cent of the population were classified as migrants. By 1966 this had increased to 12.85 per cent, and by the year 1976, the rate of internal migration had reached a peak involving 22.6 per cent. By 1986 the level had been reduced once again to 20.60 per cent (P.B.M. 1987; Nazari, 1989). The recent reduction may be because of some changes in the internal boundaries of the country. Of those born in another locality 57 and 58 per cent were from the same province in 1976 and 1986 respectively. There is also evidence in the census to show that most of the migration is short distance. Table 2.6 shows that there has been relatively little migration to rural area by contrast with the scale of migration to urban area. This is true of both the 1976 and 1986 censuses. Although, there is 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 in migration in and to urban area could be due to (a) the high cost of living especially in urban areas since the country was at war and inflation was high. Officials put inflation at around 28.5 per cent in 1988-89 but economic experts say it was at least four times higher (The Independent, 1990; Alviri, 1989:20). (b) During the 1986 enumeration period the war against the cities had started with bombing going on. This was a reason for some people to move to rural areas for safety. As Table 2.6 shows from a total rural population in 1976, 94.5 per cent had been born in the same place. By the 1986 census this proportion had decreased to 87.5 per cent. This suggests that migration to rural areas had increased, with moves being mainly from other provinces. These movements rose in significance from 2.7 per cent of the total in 1976 to 8.7 per cent 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).

Table 2.5 The Pattern of Internal Migration in Iran, in relation to place of birth. 1956-1986 (in thousands).

Year	Number of people born in same place		Number of people born in another place and another Province at the enumeration		Percentage of migrants				
	A	B	C	C+B					
1956	18,955	16,815	89.02	741	3.9	1,340	7.08	2,081	10.98
1966	25,778	21,798	87.5	1,232	4.8	1,991	7.7	3,223	12.85
1976a	33,709	25,893	78.8	4,392	13.03	3,246	9.63	7,638	22.66
1986b	49,423	38,488	77.8	5,953	12.1	4,181	8.5	10,134	20.60

a - 178,911 (0.5 per cent) born in other countries are not included.

b - 787,103 (1.6 per cent) born in other countries are not included.

Sources: Adapted from i) P.B.O. Statistical Centre of Iran (1981) National Census of Population and Housing November 1976, Serial No. 186. Tehran, Iran.

ii) P. B. M. Statistical Centre of Iran (1986) Salnameh Amarie 1364, (In Persia), Tehran, Iran

iii) P.B.M. Statistical Centre of Iran (1987) Sarshomari-ey Omumi-ey Nofus Va Maskan Kolle Keshrar, Bar Asase Natayij-i-Yek Dar Sad Khanevarha. Mehr 1365. Tehran, Iran

iv) Nazari, A.A. (1989) Population Geography of Iran. Gita Shenas: Tehran, Iran.

Table 2.6 The Pattern of Migration in Rural and Urban Area of Iran 1976-86

	RURAL		URBAN	
	1976	1986	1976	1986
Number of people born in same place of the enumeration	16,872,196	19,563,314	9,020,647	18,709,549
	94.5	87.5	56.9	69.7
Number of people born in another place in same Province of enumeration	476,137	551,101	3,924,827	5,401,362
	2.6	2.5	24.7	20.1
Number of people born in another place and another Province at the enumeration	487,426	1,949,055	2,757,600	2,232,428
	2.7	8.7	17.4	8.3
Born outside the country	27,305	285,880	151,606	505,222
	0.2	1.3	1.0	1.9
Total	17,854,064	22,349,351	15,854,680	26,844,561
	100.0	100.0	100.0	100.0

Sources: i) P.B.M. Statistical Centre of Iran, 1987, Table 3, P.15
 ii) Nazari, 1989, Table 23 and 24.

Table 2.7 show the percentage of rural-urban population in relation to urban population increase. In the period 1956-66 rural-urban migration accounted for 41 per cent of urban population increase and while in the period 66-76 this increased to 44 per cent (Hesamian & Etal, 1984). Between 76 and 86 it decreased to 37.9 per cent for the reasons mentioned earlier in this section (P.B.M. 1987).

Table 2.7 Urban population increase and percentage contribution of rural-urban migration.

Period	Increase of urban population	Percentage of growth due to rural-urban migration
1956-66	3,475,000	41.0
1966-76	6,059,680	44.0
1976-86	10,989,881	37.9

Sources: (i) Hesamian and Etal, 1984.
(ii) P.B.M. Statistical Centre of Iran, 1987;1986

According to a study by Alizadeh and Kazerooni (1984), between 1976-82 net migration to urban areas of the country involved more than 3,322,000 people. Of these 1,500,000 (45 per cent) were migrants from the war zone and the remaining (55 per cent) were from rural areas.

According to Statistical Centre of Iran (P.B.M. 1987:3) of the total population who had not been born in the same place as that of numeration, 7.8 per cent had migrated from rural to urban places, 7.7 per cent were urban-urban migrants, 3.2 per cent rural-rural moves and 1.5 per cent 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.

It should be borne in mind that the Iran-Iraq war broke out at the beginning of 1980. The movement of inhabitants from the war zone started at the end of 1980 and by 1982 most refugees had resettled in other parts of Iran. In fact after 1982 the refugee migration almost stopped.

Table 2.8 shows, firstly the high percentage of migration to urban areas in different provinces of Iran for the 1976-86 period. Secondly, it shows substantial variation between different cities and provinces.

It can be seen that there is a contrast between the northern and western cities with high rates of in-migration and the southern and eastern regions with lower rates of city ward migration. The main exceptions to this pattern reflect the effects of the war.

In conclusion, the general pattern of urbanisation in Iran which has emerged from the analysis is as follows:

- (a) Greater concentration of population in the urban regions after 1940, but this was especially so after 1976.
- (b) Uneven distribution of the rapidly urbanising population, accompanied by a rapid increase in the number of urban centres.
- (c) A greater level of population concentration in the larger cities such as Tehran over time.

These trends are evident in terms of the material presented in the next chapter, which relates specifically to the physical, demographic and socio-economic growth of Tehran.

Table 2.8 Number and Percentage of Rural to Urban Migrants by Province (1976 - 86).

Place of last residence before migration (Province)	Total number of migrants	Number of migrants in or to urban areas	Percentage
Tehran	739,380	491,382	66.5
Central	100,492	87,154	86.7
Gilan	168,527	121,701	72.2
Mazandaran	229,656	153,272	66.7
East Azarbaijan	459,995	374,943	81.5
Bakhtaran	229,742	163,033	70.9
Khuzistan	745,083	554,621	74.4
Fars	218,767	158,433	72.4
Kerman	104,814	67,183	64.0
Khorasan	423,380	302,084	71.3
Isfahan	217,874	149,449	68.6
Sistan Baluchistan	89,805	55,545	61.8
Kurdistan	185,620	135,104	72.8
Hamadan	162,483	126,076	77.5
Chahar Mahal and Bakhtiari	40,665	33,181	81.6
Luristan	149,164	117,343	78.6
Ilam	57,038	42,619	74.7
Kahkiluyih and Buyir Ahmad	35,466	19,223	54.2
Busher	43,922	25,238	57.4
Zanjan	177,469	129,946	73.2
Semnan	34,323	27,425	79.9
Yazd	36,333	26,468	72.8
Hormozegan	42,884	26,188	61.0

Sources: Adapted from P.B.M. Statistical Centre of Iran, 1987, Table 4, PP 16-18.

CHAPTER THREE

TEHRAN

Tehran, the capital of Iran, has been chosen as the study area and therefore, this chapter will look at: 1) its history and physical development periods; 2) demographic changes with a discussion on migration to Tehran and its pattern; 3) the residential structure of the city based on its different social classes; and 4) the history and growth of squatters in the city.

3.1 History and Physical Development

Tehran is by any definition a primate city. Tehran's primacy, has been developing slowly over the years. The history of Tehran goes back several centuries to when it was an insignificant small village.

The name of Tehran is first mentioned in one of the writings of Theodosius the Greek towards the end of the second century B.C., as a suburb of Rags (Rey). The oldest available document in Persian on the name of Tehran shows that it has existed since before 850 A.D. (Gita-shenasi, 1985).

The term "Tah-ran", which later was pronounced "Tehran" in the Persian language has a meaning of "end of foot", because Tehran was located at southern foot of Alborz mountains (Najmi, 1983:227). Therefore, this explains the residential behaviour and defence tactics of these early inhabitants. Whether the stimulus was hot weather or outside enemy attack, the residents used to get protection by moving deep down into their dwellings which were built underground (Najmi, 1983).

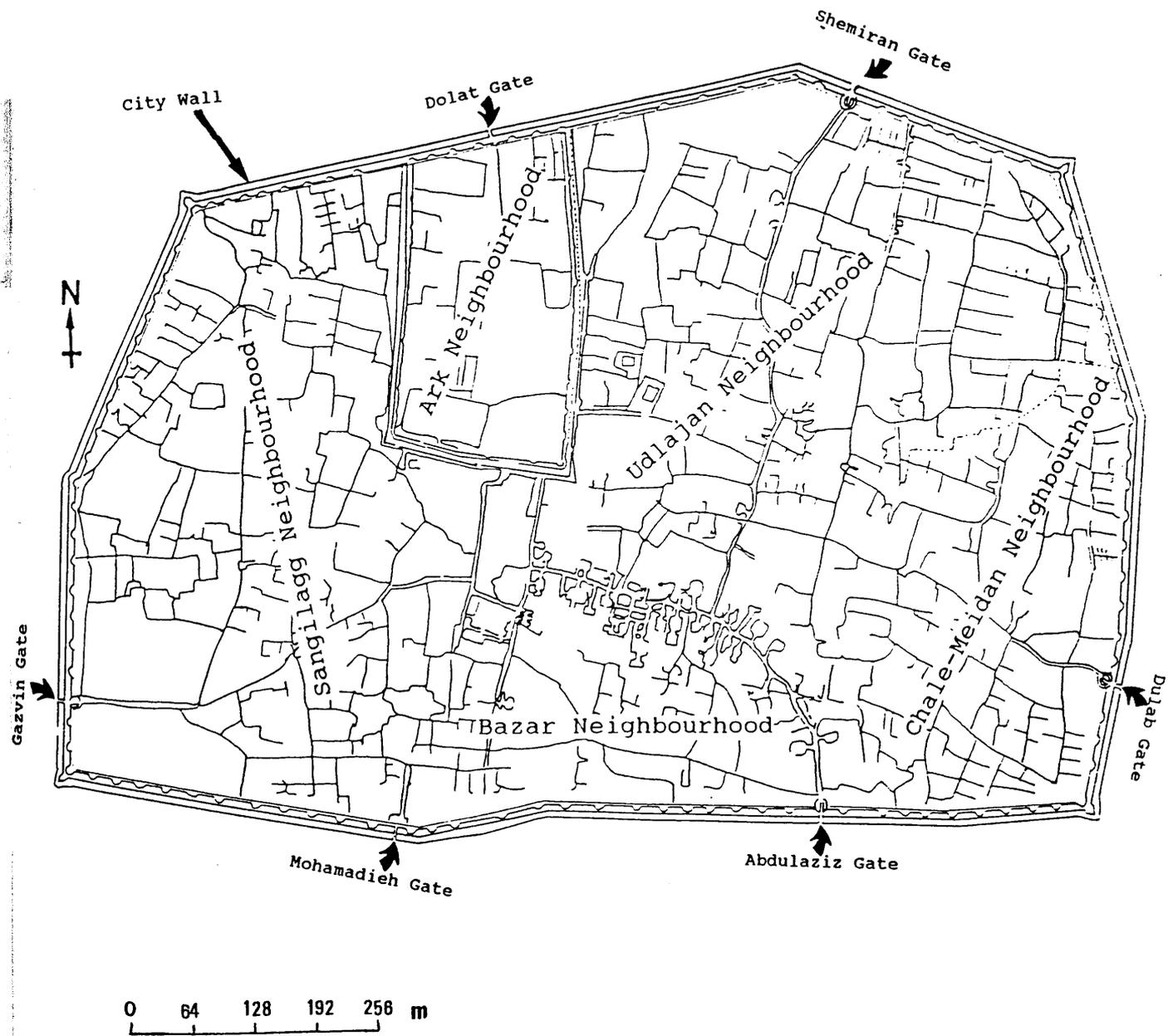
In the reign of the Safavid kings Tehran gradually became famous and its improvement and expansion in particular started in the reign of Shah Tahmasb the First (1524-76).

He had great interest in Tehran because of its wholesome water and gardens and the suitable hunting fields around the city. In 1561 he ordered a wall to be built around the city with four gates for the defence of the city and 114 towers (the number of chapters in the Quran) (Sultanzadeh, 1983).

Under the Afshar and Zand rulers, Tehran continued to grow in importance. The city was first considered for development as the seat of government in 1786 during the reign of Karim Khan Zand (1750 - 79). He initiated construction of government offices and a royal building. For a time he even considered the possibility of making Tehran his capital, but later chose Shiraz (Najmi, 1983).

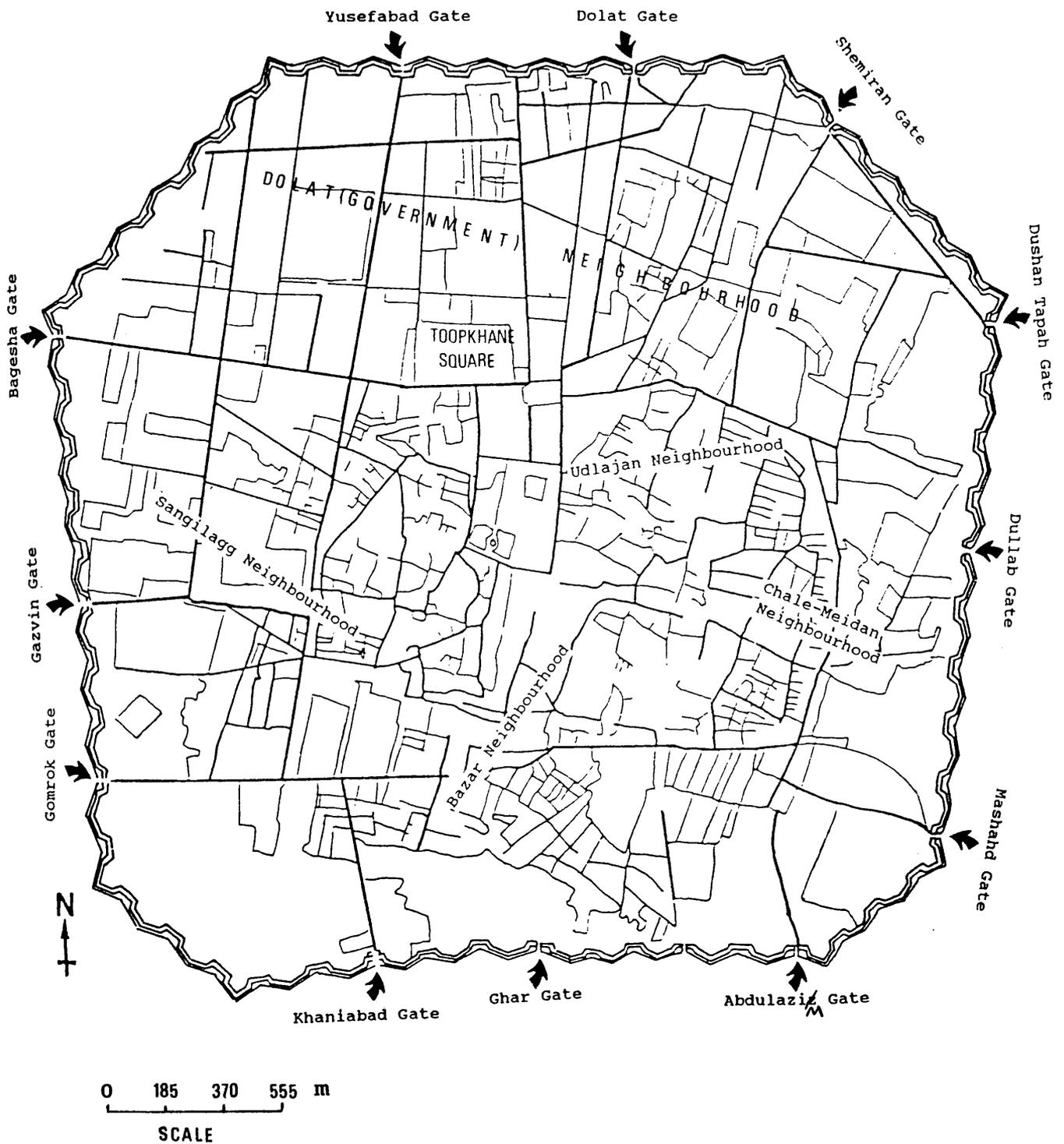
By the beginning of Qajar dynasty (1779-1925) the modern history of Tehran had started. Agha Mohammad Khan Qajar was interested in the location of Tehran on the east-west highway connecting many major cities (Fisher, 1968). In 1786 he made Tehran his capital, and from then on Tehran was named the seat of the crown and the centre of government (Najmi, 1983). Tehran developed under the different rulers of the Qajar dynasty as shown by the construction of many different large mosques, schools, palaces and bazaars. In 1860 Nasereddin Shah Qajar (1848-1896) ordered a map of the city of Tehran at a scale of 1/1000. Although the team preparing the map did not have the necessary technical equipment and instruments and as a result distances and dimensions had to be measured by human paces and angles were only measured approximately, the map is of particular importance in showing the shape of city and the forms of streets and districts (Fig. 3.1) and also for historic reasons (Gita-Shenasi, 1985). It reveals the old and genuine face of the city of Tehran. Urban developments in the first twenty years of the reign of Nasereddin Shah made statesmen revise the plan of the city, with expansion in every direction and with new walls, ditches and gates. In 1870, Nasereddin Shah ordered the preparation of a new map for Tehran; which was printed and published in 1894 (Fig. 3.2). The wall encircling the city was measured at 19,200

Fig 3.1 The First Map of Tehran: 1860



Sources: i) Gita Shenasi (1985:4-5)
ii) Najmi, N (1983:226)

Fig. 3.2 The Second Map of Tehran, 1884.



Source: Gita Shenasi (1985:6-7)

metres, the population was estimated at about 250,000, and the number of houses at 9,000 (Gita-Shenasi, 1985). In the late Qajar period suburban life emerged outside the walls thus dividing the city into modern and old residential quarters. At this time the centre of the city had extended to the north beyond the walls and around the Meidan-e Toop Khaneh (public open plaza). The wealthy and elite of the urban community were attracted to these northern areas. Some of the well established families also began to move towards the northern suburban areas and villages of Tajrish, Qulhak and Yosefabad (Khavidi, 1978).

The beginning of fundamental developments in Tehran and its modernization date from the mid 1920's. In 1925 Reza Khan ended the Qajar Dynasty and founded the Pahlavi dynasty and became Reza Shah (the father of the Shah, who was overthrown in the 1979 revolution). The changes and developments in Tehran which have been continuing since then can be divided into four stages as follows: i) 1925 - 1941 (the reign of Reza Shah). In these years the ditches around the city and city gates, which had been built in the reign of Nasereddin Shah Qajar, disappeared. With the building of streets and modern buildings, the city expanded in every direction and with improvement of old alleys and avenues and the creation of new streets and boulevards, Tehran's irregular shape was turned into a fairly geometric one (Brunn & Williams, 1983; Bahrameygui, 1972).

ii) 1941 - 1953 (1941, beginning of reign of Mohammad Reza Shah). As a result of the second world war and the political problems and difficulties of its aftermath, little development took place at this stage.

iii) 1953 - 1978. In these years Tehran developed rapidly, with the creation of new streets and motorways and newly built districts and townships and also huge buildings, Tehran ranked amongst the largest cities of North West Asia. Rapid urban population growth and high inter and intra-urban mobility produced in the city a remarkable housing shortage,

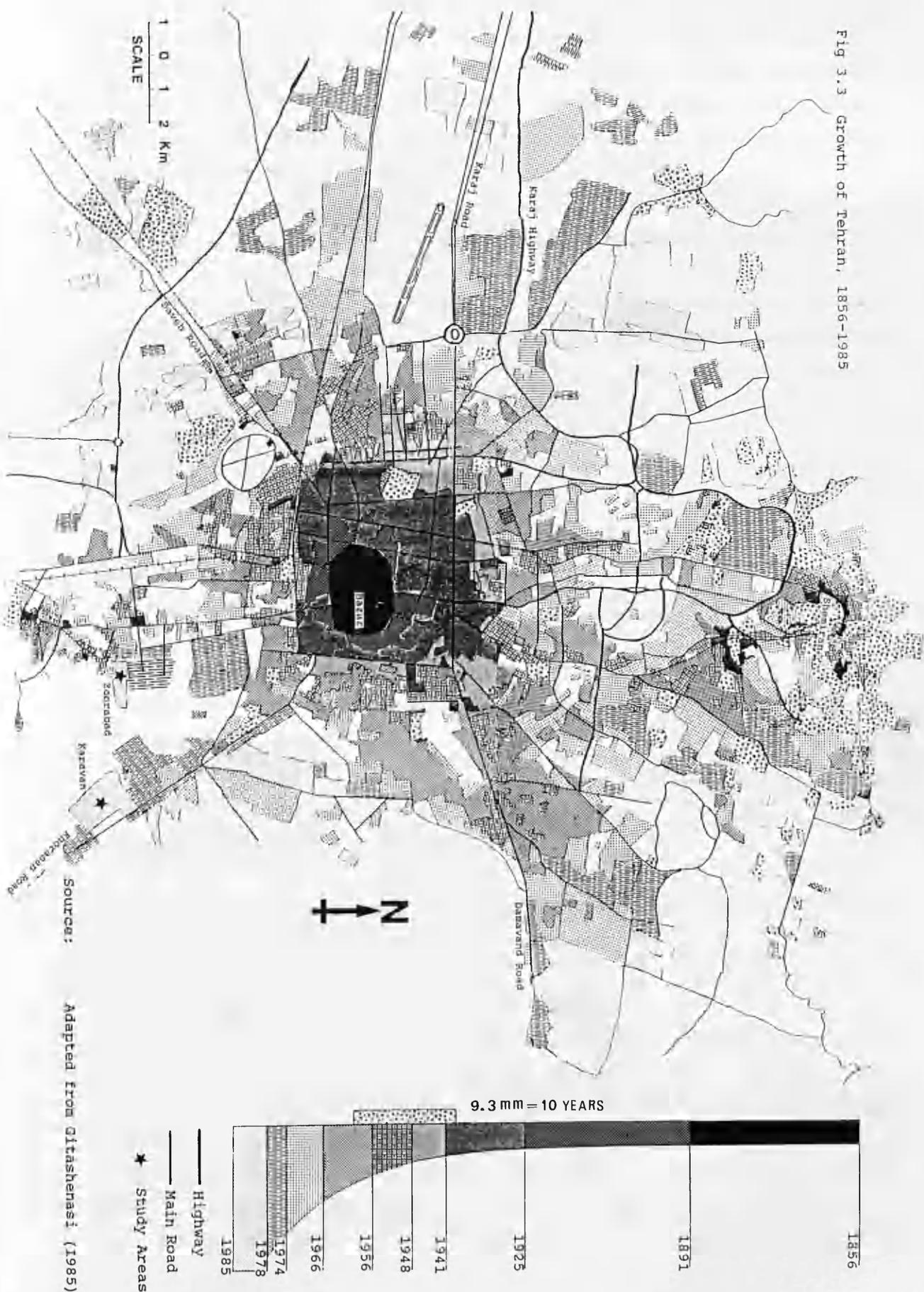
as well as problems of residential segregation, and in particular residential segregation based on social class (Connel, 1973; Mozayeni, 1974; Brunn & Williams, 1983).

iv) During and after the 1979 revolution. In these years Tehran has expanded out of all proportion in every direction. The intense expansion of Tehran in these years is due to a chaotic situation during the revolution and the creation of cheap houses around the city boundary. Growth resulted in the emergence of more squatter settlements and further expansion was encouraged by phenomena such as the Iran-Iraq war and the rush of war victims to Tehran (Fig. 3.3 shows the stages of expansion of Tehran).

Twentieth century improvements in communications have meant Tehran as focal point of the Iranian economy has been very well linked to other cities and areas in Iran and indeed to other countries. All the ministries, central offices and scientific centres of Iran are situated in Tehran. In addition to being the centre of gravity of Iran's political and administrative system, Tehran is of particular geographical importance from the view point of the world economy and international political affairs. All these forces have resulted in accelerated population growth, but in turn rapid growth has brought a range of socio-economic problems and in particular housing problems, with difficulties of services provision for all the inhabitants of the city.

Tehran is the centre of Tehran province, a province with an area of about 28,220 square kilometers and a population of 8,712,087 and consisting of 20 urban centres, 23 smaller subordinate areas known as Baksh and 50 Dahestans (P.B.M. Statistical Centre of Iran, 1988) (Fig. 3.4). The area of Tehran city is about 600 square kilometers consisting of 20 self-governing municipal districts.

Fig 3.3 Growth of Tehran, 1856-1985



3.2 Population Growth and Migration to Tehran

At the time of the first census in 1884 Tehran had a total population of only 155,736 (Tabrizi, 1985). This population was concentrated in the five main quarters of Dolat, Odlajan, Chalemaydan, Sangalaj and Bazar as marked in Fig. 3.2 (Table 3.1).

Table 3.1 Population distribution in the first census of Tehran, 1884

Districts	Population	% of total population
Odlajan	36,496	24.7
Chalemaydan	34,547	23.5
Sangalaj	29,673	20.1
Bazzar	26,674	18.2
Ark	3,014	2.0
Outside city districts	16,853	11.5
Total	147,256a	100.0

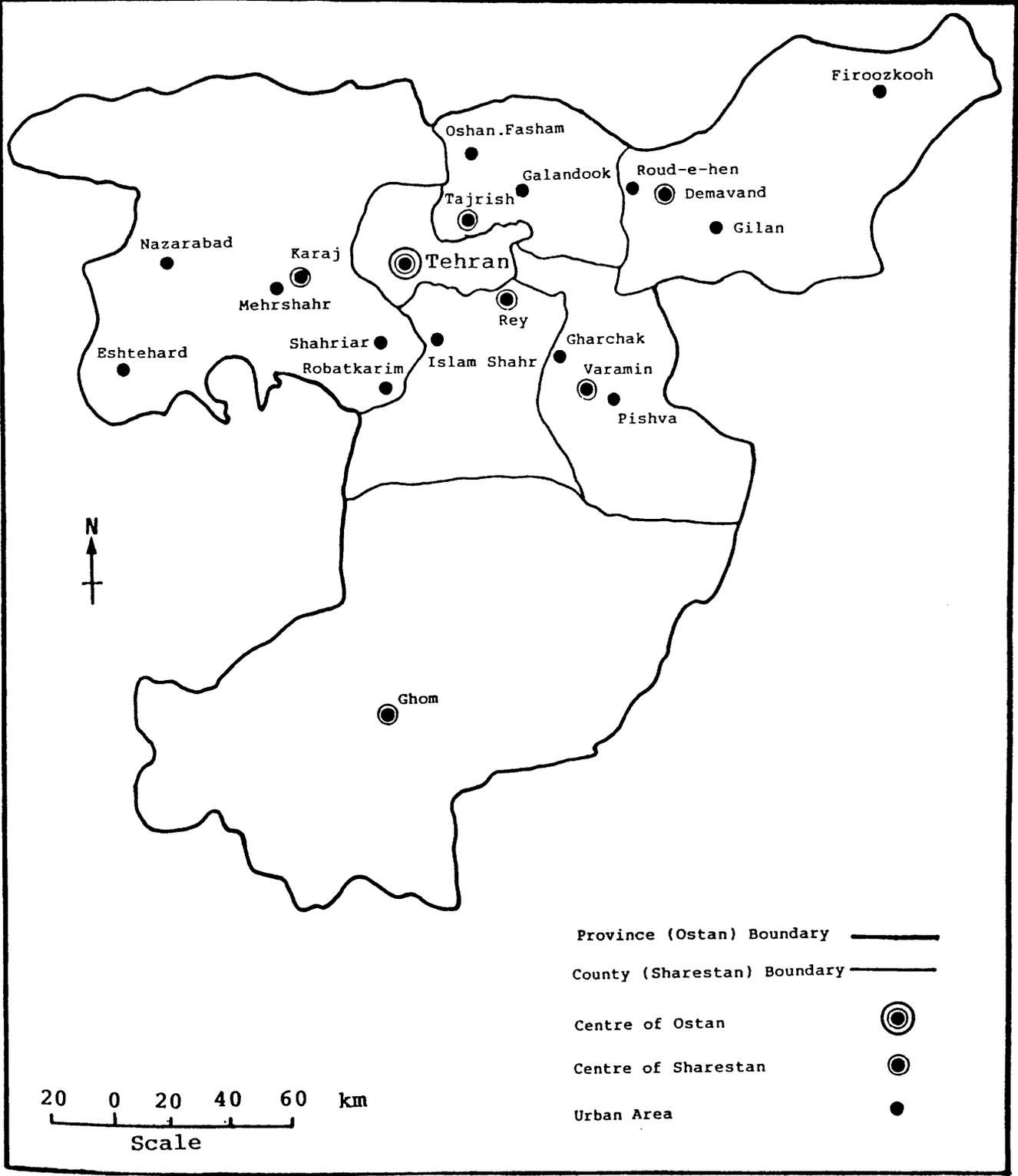
a - Total population does not include military personnel (8480 persons)

Sources: i) Tabrizi, A (1985:39)
ii) Kazemi, F (1980:20)

Most of the population therefore lived in closely packed residential quarters within the old wall.

Up until the beginning of the 1920s population growth was not fast. At the beginning of the century annual growth is estimated to have been about 1.85 per cent. In 1785 the population is estimated to have been about 27,000 and while the figure for 1921 was about 265,000, making it the largest city in Iran (Tabrizi, 1985). After 1921, there was a higher growth rate and the average annual growth rate reached 5.9 per cent (Fig. 3.5). Growth was especially rapid during the

Fig. 3.4 ADMINISTRATIVE DIVISION OF TEHRAN PROVINCE.



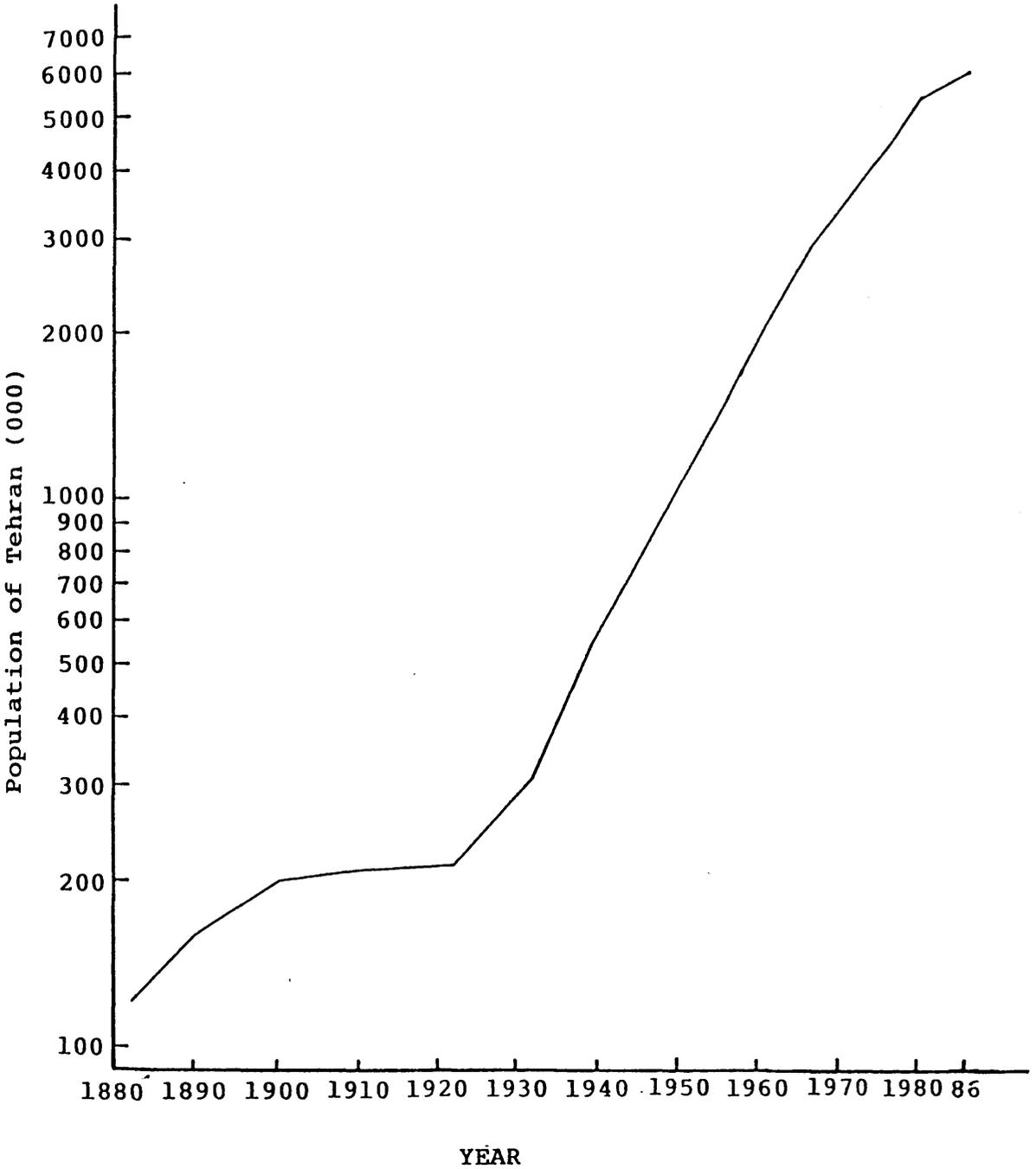
Source: Ministry of Plan and Budget, Statistical Centre of Iran (1986) *Kozide-ey Natayej-e Tafsily Sarshomari-e Omoumi-ey-Nofous Va Maskan Ostan-e Tehran*, 1365, Tehran, Iran.

reign of Reza Shah (1925 - 41). His efforts to achieve westernisation and industrialisation, transformed Tehran into the dominant centre of the Iranian economy. Between 1956 and 1979 Iran developed stronger relations with the metropolitan cities. In 1956, the population of Tehran was 1,512,082 which was 25.4 per cent of total urban population and in the following decade up to 1966 it increased to 2,985,000, and its share of the total urban population increased to 27.7 per cent. This trend towards the greater concentration of urban population in the primate city increased even further in subsequent years (Costello, 1981). By 1976 almost 28.7 per cent of the total population was concentrated in Tehran. By 1986 the trend had been reversed for the first time with the percentage dropping to 22.4 per cent (Table 3.2). The population in 1986 was estimated to be 6,022,079 (but according to unofficial reports it was between 8 to 10 millions (Kayhan, 1989b:5). This difference between official and unofficial figures as mentioned earlier could be because of the very unusual characteristics of the enumeration period which was during the war.

Although the rate of primacy in Iran is declining the absolute increase in the population of Tehran remains rather alarming. It is expected that by the year 2000, 13.6 million people will reside in Tehran (Kayhan, 1989b:5) and that it will be the eighth mostly populated city in the world.

If one accepts the official figures for 1986 of 6,022,029 then Tehran is the second largest city in the Middle East. By 1980, Cairo had over 6 million (Khalaf, 1983) and it was estimated that by 1987 it would reach 8.9 million (Beaumont & et al, 1988:217), Istanbul with 4.4 million in 1980 is in the third position (Danielson & Keles, 1985) and in 1985 Baghdad with a population over 3 million is in fourth place (Beaumont & et al, 1988).

Fig 3.5 Increase in Tehran's Population: 1880-1986 (Semi Logarithmic scale)



Sources:

- i) Tabrizi (1985: 43-44)
- ii) P.B.M. Statistical Centre of Iran, 1986 Census, Unpublished Document.
- iii) P.B.O. Statistical Centre of Iran (1981b).
- iv) Nazari (1989).

Table 3.2 Tehran's population growth and percentage to total national and urban population (Thousands).

Year	Tehran's population	Percentage of total national population	Percentage of total urban population
1956	1,584	8.3	25.4
1966	2,719	10.55	27.7
1976	4,530	13.4	28.7
1986	6,022	12.2	22.4

Sources: i) P.B.O. Statistical Centre of Iran (1981b)
 ii) P.B.M. Statistical of Iran (1987)
 iii) Nazari, A.A (1989)

In the 1980s, Tehran's primacy was reflected not only in its population size, but also in its functional dominance. It had 43 per cent of all available medical doctors in Iran, more than 60 per cent of medical specialists and more than 40 per cent of industrial production units (Kayhan, 1989c). Unfortunately, no systematic data are available for the city of Tehran as far as the distribution of social services and amenities is concerned. There is, however, some information on the province of Tehran as a whole. Given the fact that Tehran comprises about 70 per cent of Tehran province's population, the available data can be seen as adequately portraying the situation of service distribution. In 1986 Tehran province had 25 per cent of pharmacies, 30 per cent of cinemas, 66 per cent of all published newspapers and magazines and 26 per cent of all sport establishments (Kayhan, 1989c). Therefore from the above it can be seen that other Iranian provinces suffer somehow from a relative shortage of social services. Such inequality in the distribution of services undoubtedly has encouraged migration to Tehran.

Table 3.3 shows the average annual growth rate of Tehran's population from 1956 until 1980. This was mostly due to migration and to a lesser extent natural increase.

Keddie (1960), Adibi (1977) and Halliday (1979) have provided fuller analysis of Iranian migration than is necessary here.

Table 3.3 Percentage of average annual growth of Tehran population 1956 - 80

Year	Total Growth %	Migration %	Natural Growth %
1956-66	5.5	3.2	2.3
1966-76	5.2	3.1	2.1
1976-80	5.3	3.2	2.1

Sources: i) P.B.O. Statistical Centre (1981b) Nataiji-i Amargiri-e Tehran 59, Tehran, Iran (In Persian).

ii) Municipality of Tehran, Planning Organisation of Tehran (1981) Gozaresh-e Mogadamati va Magtahi-e Barnameh Rizie Va Maskan-e Shahr-e Tehran No. 98, Tier 1360, Tehran PP5-6

iii) Tahoori, A (1972) Bar-resi-e Vaz-e Maskan Dar Shahr-e Tehran, Ministry of Housing and Development, Mehr. 1351 Tehran Iran PP3-5 (In Persian)

On the basis of their work it would be fair to suggest that five main factors account for most of the migration of 1950s, 1960s and 1970s to Iranian cities. (1) population pressure in rural area (2) Technological advance and mechanisation of agriculture, (3) soil erosion, drought and

ownership system (4) the development of transport and mass media and an increase in literacy, (5) concentration of better life opportunities in urban areas.

Migrants to Tehran have come from all parts of the country, and have quite diverse socio-economic and cultural backgrounds. According to 1986 census about half of Tehran's population was born outside the city; about one-quarter (750,000) of this migrant population was born in Tehran and Markazi (Central) provinces, one-fifth in the north-west provinces of the country, and one-tenth in Gilan and other provinces in the country (Nazari, 1989:164). This figures shows the importance of distance from place of origin to destination in explaining the volume of migration.

A sample survey undertaken in 1976 showed that 41.9 per cent of in-migrants were either seeking jobs or better jobs and 32.5 per cent had moved because of family reasons in connections with relatives (Municipality of Tehran 1977:25). This and many other surveys confirm that the main motives for migration are related to the labour market and the search for better living conditions.

According to the census data, the total population of 6,022,079 of Tehran in 1986 consisted of 1,375,461 families with an average of 4.4 persons per household (P.B.M. Statistical censuses unpublished data). This compared with the previous census of 1976, when there was a total of 981,701 households with an average of 4.6 persons per households in Tehran (P.B.O. Statistical Centre, 1981b). In the last ten years the population increased by 30.8 per cent, while the size of the average household decreased to 4.3 per cent. This trend meant that many more housing units were needed in Tehran each year in order to meet the rise in housing demand.

However, in addition to population growth contributing to housing demand there were also other causes of new demand for more and better quality shelter and living space. Part

of the increased housing demand resulted from the breakdown of the traditional extended family and the demand for housing for smaller nuclear families. Another reason for increased demand is the way that aspirations for a higher standard of living has been associated with a need for more housing space to accommodate modern equipment such as refrigerators. In addition to this, the search for individual privacy and personal living space as well as room for interaction with other household members has also increased pressure for more housing space.

Therefore, as a result of all the above mentioned socio-economic and behavioural changes, and Tehran's rapid and unplanned growth due to migration there has been a vast increase in housing demand. Shortage of housing units for the low income groups has been a particularly serious problem. This has resulted in more squatter settlements emerging around Tehran, especially after the 1979 revolution, and has made the division the city between south and north more visible from a services provision point of view.

3.3 Tehran's Residential Structure

As noted above, after the second world war, a rapid increase of population in Tehran caused a shortage of housing and resulted in the outward expansion of residential areas. Speculative landowners started to build houses with little consideration for urban planning, such as minimal space requirements, and the need to provide adequate lighting, drainage, ventilation and access to public sanitation. Planning regulations proved ineffective, and irregular building spread especially to the west of the city. At the same time in the Central residential area, the rising congestion encouraged those Tehranis who could move out to settle in other parts of the city, particularly to the north of the city, and especially in areas such as Qulhak and Shemiran. In these areas large villas with gardens were constructed by wealthy Tehranis.

The pattern of the residential land use mainly shows a fairly orderly distribution in a south-north direction with low-income groups residing in the south, the high income groups in the north and middle income groups in between (Bahrambygui, 1972; Meier, 1974). This broad division of residential areas is mapped in greater detail in Fig 3.6.

The first major residential division of Tehran includes many new high rise apartment buildings and expensive detached family houses and villas with modern and western style architecture located in the northern suburbs of districts 3, 1, 7 and some parts of district 2, such as Sharak Garb. These districts are occupied mostly by high income groups including the social and political elites and high-ranking government officials. The most expensive neighbourhoods in which upper class people live are in the north of Resalat highway, such as, Vanak, Ghytarieh, Shemiran, Golhak, Sadatabad (new), Sharak Garb (new) and Ekhtaria. Plates 3.1, 3.2, 3.3, 3.4 and 3.5 show the typical kind of houses in the northern part of Tehran.

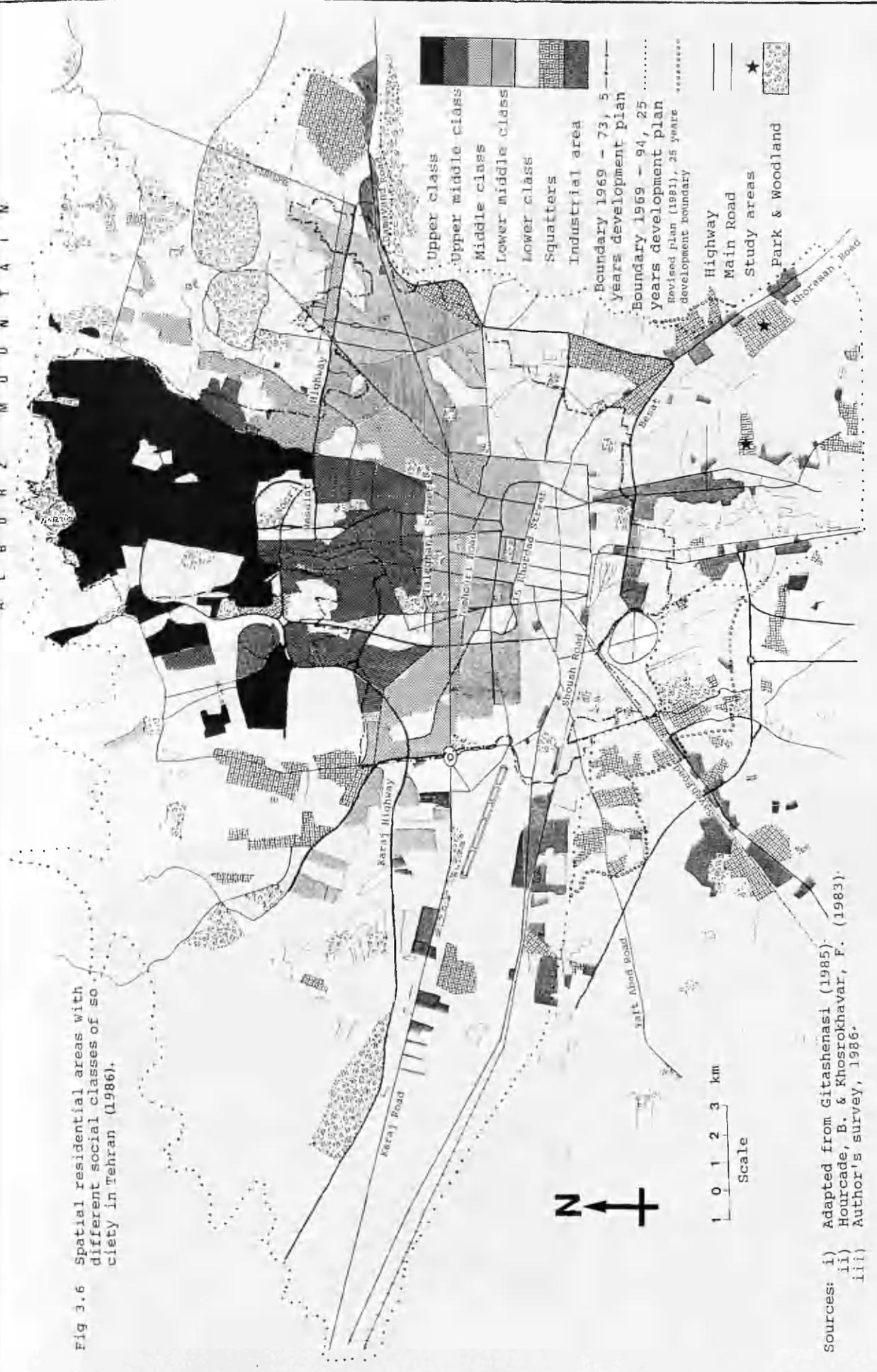
The second major spatial and residential division of Tehran consists of middle class families of self employed businessmen and government employees. They occupy predominantly the area north of Bazar. Here one finds vast residential areas which have been built in the mid-twentieth century and which themselves may be divided into three categories. 1 - Lower-middle class people who reside close to the old commercial centre, between 15th Khordad Street and Jomhuri Road. 2 - Middle class people who reside around Jomhuri Avenue and Taleghani Street. Residential areas are mixed with commercial land use especially along the major roads. 3 - The upper middle class live north of Taleghani Street, an area which includes some modern and multi-storey apartments (Fig. 3.6).

FIG 3-5 Spatial residential areas with different social classes of 20 study city in Tehran (1986).



Sources: (I) Adapted from Gitashenas (1985).
 (II) Hourcade, B. & Khosrokhavar, F. (1983).
 (III) Author's survey, 1986.

Fig 3.6 Spatial residential areas with different social classes of society in Tehran (1986).



Sources: i) Adapted from Gitashenasi (1985);
 ii) Hourcade, B. & Khosrokhavar, F. (1983);
 iii) Author's survey, 1986.

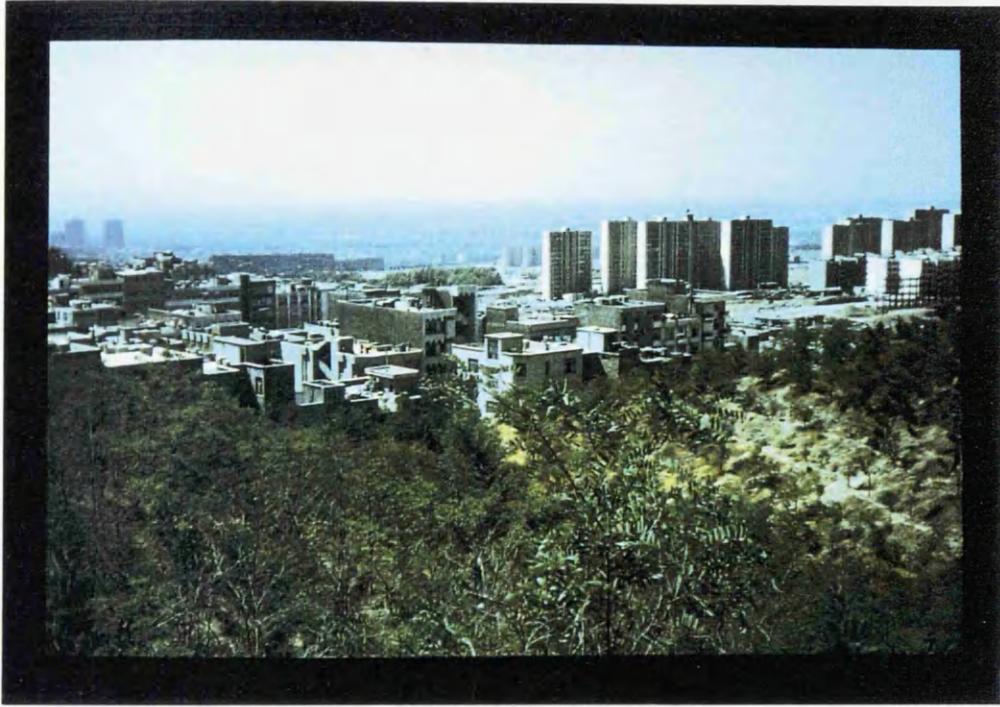


Plate 3.1 A View of Tehran with its New Developments
in the North



Plate 3.2 A Typical
Expensive Apartment in
Sharak Garb in North
Tehran. This was a New
Development Built During
Shah's Regime.



Plate 3.3 View of Sharak Garb Neighbourhood North of Tehran with Different Type of Buildings.



Plate 3.4 An Example of Modern Architecture in the Very High Class Neighbourhood North of the City (Sharak Garb).



Plate 3.5 A Villa in a Pleasant Area of North Tehran
(Golhak Neighbourhood).

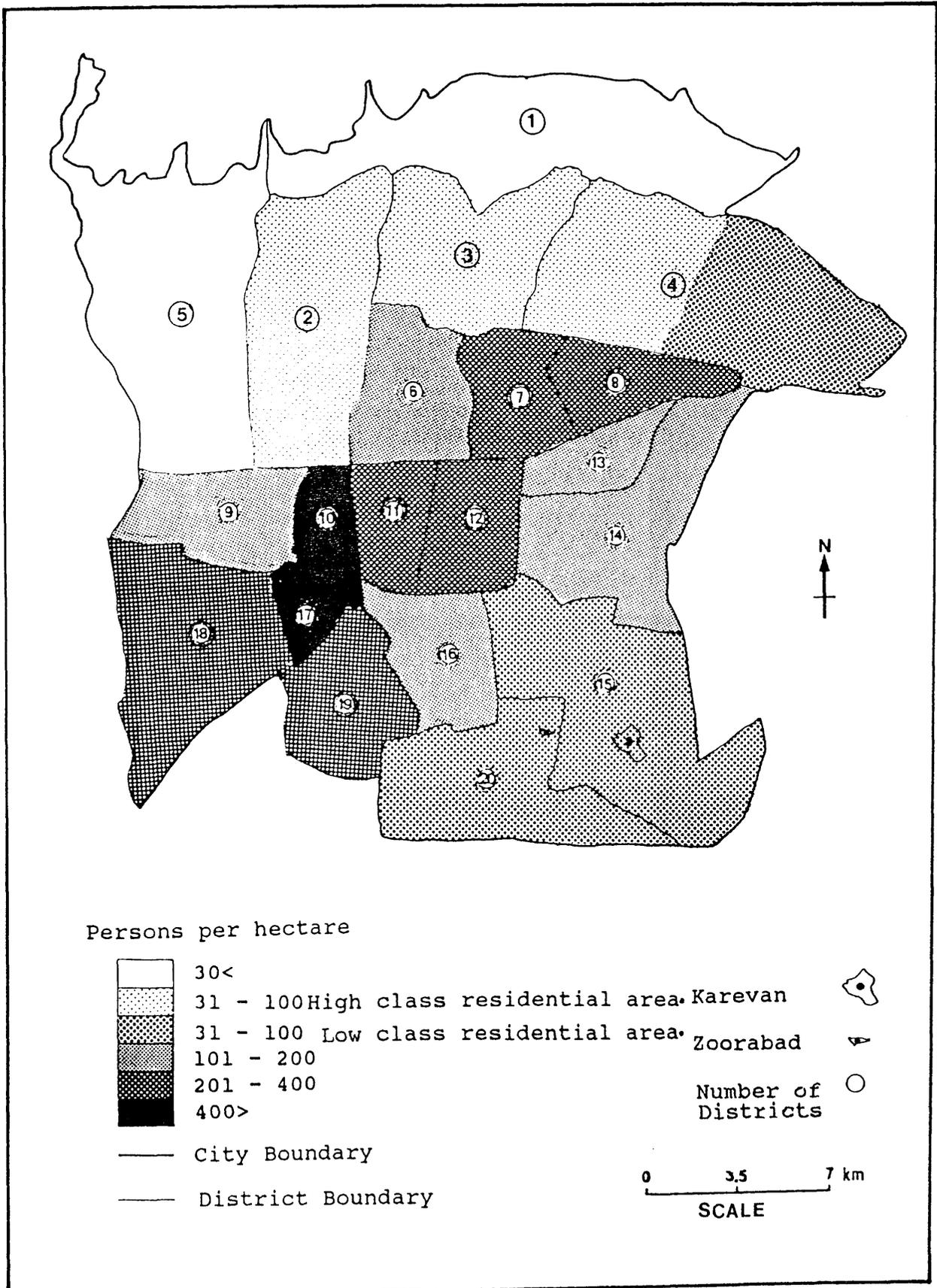


Plate 3.6 A Modern Apartment in a High Class Area of
Tehran (Yousefabad).

The third major residential division is the southern residential area of the city, which is located to the south of the Bazar (district 12). The houses of Southern Tehran can be classified into two broad groups: firstly, large houses containing several rooms which were originally built by wealthy merchants around the Bazar but the majority of which are now occupied by low-income families and often by three or more families. High population densities of 201-400 persons per hectare have been recorded. The second group of houses in the southern area are those built between Shoush Street and Rey, which include districts 16, 17, 19, 20, 18, there one finds the highest population densities. In districts 17, 18 and 19 more than 400 persons per hectare have been recorded. Districts 20 and 15 have lower densities with 31-100 persons per hectare (Fig. 3.7). There are no tall apartments in the south and buildings are mostly constructed of brick and iron specially in districts 15, 16 and 20 in the form of one or two-storey houses, often including a courtyard, a small pool and a small vegetable garden. This type of house is very common in Javadieh, Khazaneh and Khaniabad. Moving towards the south edge of Tehran, one finds the majority of houses are two to three rooms, as well as some one room dwellings. (In Chapter 8 Table 8.17 the characteristics of dwelling units in Tehran are shown in more detail).

According to the Statistical Centre of Iran, in 1980, the average number of persons in a household is 4.13 persons in Tehran as a whole and the average number of persons per room is 1.52 persons (P.B.O. Statistical Centre of Iran, 1981b). The rent in these houses are less than any other part of Tehran therefore is more populated area. In district 20 a high proportion of housing units have only one room or at most 2 - 3 rooms (more detail is given in Chapter 8, Table 8.17). The residents of these districts are low income migrants from other provinces, who because of the low rent and cheaper accommodation have come to live in these areas. Before the revolution low income households were particularly severely affected by the rapid increase in the

Fig. 3.7 Location of Zoorabad and Karevan relative to the pattern of Population Density in Tehran's 20 Administrative Districts



Source: P.B.O. Statistical Centre of Iran, Tehran, 1981b.

cost of rented accommodation elsewhere in the city. For many migrants, the exponential rise in the price of even low-income housing destroyed their hopes of ever owning a home, but the 1979 revolution created new opportunities for them to enter the housing market. At this point they invaded or bought cheap land contributing to the expansion of the urban fringe through the formation of new settlements such as Zoorabad and Karevan.

3.4 History and Growth of Squatter Settlements in Tehran

The high rate of rural urban migration to Tehran therefore led to the formation and expansion of squatter settlements in Tehran. The emergence of squatter settlements in significant numbers began during the 1950's. They are commonly referred to as God-Neshinan (pits on the outside). These "pits" were in effect abandoned sites where quarrying and gravel excavations had occurred. The location of these "pits" provided low-income migrants with shelter near to their places of employment. The residents of these settlements were initially threatened and later forced out of their shacks (Ettelaat, 1958). However, the forceful removal of squatters was not effective. Soon after, the settlements appeared again. In the period 1956-67, a large community project (Nohom-e-Aban) was built in the south of the city with 3,800 two-room low cost housing units. By early 1967 it was claimed that all residents of squatter settlements in Tehran had been transferred to this new community, and that squatter units had been demolished (Bartsch, 1971:20; Housing Organisation, 1972).

A survey of Tehran's squatter settlements was undertaken in 1972 by the Institute for Social Research of Tehran University (University of Tehran, 1972). It was the first time such a kind of survey had been carried out and to date it remains the only comprehensive survey of squatter settlements in Tehran. According to the survey, there was a total of 428 spontaneous settlements with 3,780 households

in Tehran (University of Tehran, 1972). The highest concentration of squatter settlements (61.4 per cent) were to the south of Tehran.

According to the survey 45 per cent of squatter settlements were started during the five years prior to the 1972 survey (University of Tehran, 1972). Since lack of public services was not a sufficient deterrent, the government threatened and carried out further destruction of squatter housing using bulldozers. The residents of these settlements organised some resistance to the government's action (Katouzian, 1981), but the only effective strategy was construction of settlements outside the official city limits. This continued until the fall of the Shah's regime in 1979. After a chaotic situation during the period of the revolution itself a number of regulations and limitations affecting low income urban housing were lifted. Migrants were now able to build their dwellings without fear of them being demolished the next day by government agents. Given the availability of land, new squatter settlements grew rapidly not only on the outskirts, but also in the built up areas of the city, along the highways and adjacent to factories (Fig. 3.6) such as along Saveh Road, Vali-Asr, Chaar-dongeh, Sadegieh, Nemat-Abad, Dolat-Khah, Shad-Shahr and Mehdieh; also along Khorasan Road, Masoodi-eh, Karevan and in north east of the city along Damavand Road where there are large numbers of industrial complexes and where Khak-sefid settlement is located. In the west, settlements such as Tehransar and Shahr-ak-e Cheshmeh appeared in the north west, settlements such as Bagh-e Feyz and Mahmood Abad. So far no census of the population of these settlements has been carried out, but an estimate can be made. At the time of the author's field work in 1986 there was an estimated fifty squatter settlements. If the average number of dwellings of each settlement was between 1,500 - 2,000 units and the average number of people in each dwelling was about 6.9 (According to the data from two settlements studied by the author), then the total population of these settlements would be between 517,000 and

700,000. Therefore, this shows the excessive growth of squatter settlements after the revolution 1979, and the demand for cheap housing. With the rapid development of squatter settlements in various geographic areas around Tehran, the municipal government was faced with various kinds of problems: the maintenance of law and order in the city, problems related to hygiene such as health services and provision of other services; also, overcrowding, unemployment and poverty. There is need for a proper study and policy evaluation of the wider situation to overcome these kinds of problem in Tehran.

However, from the above it can be concluded that Tehran represents the largest concentration of population, dominating Iran's urban hierarchy. Tehran's rapid growth stems from its position as capital of the country and from the subsequent national functions which it controls as the centre for education, cultural and industrial activities as well as being the centre of gravity of Iran's political and administrative system. These functions have resulted in a great redistribution of population from rural areas towards the capital for employment opportunities. This situation has brought different socio-economic problems and in particular housing problems, with the rapid growth of squatter settlement around the city, and difficulty in providing services for all inhabitants of the city. This has especially been the case since the 1979 revolution.

CHAPTER FOUR

THE PLANNING AND HOUSING SITUATION IN URBAN IRAN

This chapter is mainly concerned with the planning and housing situation and is divided into two sections: The first section is on the situation before the revolution and will discuss urban planning and its evolution, the national development plans regarding housing programs and development, methods of construction, use of building materials and finally land policies regarding housing programmes. The second section will discuss the situation in the post revolutionary period taking into account the country's ideological view of planning and the objectives of urban planning. This is followed by a discussion on the housing situation after the revolution for low income groups and the consequences of the expansion of Tehran's boundary due to the growth of squatter settlements. Consideration is given to the government's policies on housing problems, such as rent control policy, restrictions on the purchase of housing and land; and finally the land policy.

The Pre-Revolutionary

4.1 Urban Planning and its Evolution

As a consequence of all the rapid changes in Iran's cities, in particular Tehran, many urban problems have arisen, whose complexity have resulted in concerns among all citizens as well as the government itself.

For the first time, in 1913, a Municipal Act was passed consisting of five chapters and 108 articles. This act was very primitive and was mainly concerned with street cleaning and control over fair distribution of bread, meat and other substances with reasonable prices for all the people (Mozayeni, 1974). By 1920, a relatively modern municipality was created during the Constitutional period in Tehran and in 1925, a new law, consisting of 70 articles, was enacted

by Majlis. Finally, in 1930, a comprehensive law was passed in which the duties and responsibilities of the municipality were defined (Iran Almanac, 1966: 603).

According to this act, a city council had to be established in every city, headed by the mayor (who was appointed by the Ministry of Interior) to change and update the city map (Iran Almanac, 1966, 603). This law failed and after four years city councils were abolished and the Ministry of Interior was given charge of all municipalities. This situation existed until 1949 when the law of independence of municipalities was passed (Clark, 1980). Although the legal and administrative basis of city planning in Iran faced shortcomings and difficulties, some progress was made in implementing some physical aspects of city planning. In Reza Shah's time (The father of the late Shah) reign (1925-41), he personally had an eye on the modernisation of the cities. In this period, Iranian cities underwent drastic physical changes, which in some cases led to the transformation of the city's character with disregard for traditional physical features. The legal basis of this modernisation was the street widening act of 1933. Some other physical changes took place, such as renovating old squares and demolishing many city walls and many believe that as a result, for example in Tehran, "most of the fine Qajar architectural heritage was destroyed" (Clark, 1980:165). New buildings replaced the old to accommodate government or administrative functions such as police headquarters, banks, or railway stations (Gita-Shenasi, 1985).

After 1945, urban planning activities were related to national development plans which started in 1948. During the first development plan (1948-55) feasibility studies were carried out with regard to urban development and attention was given to provision of urban facilities such as water supplies, electricity production and street surfacing. Implementation of these projects only began in the second development plan (1956-62) with efforts to improve

municipalities' administrative organisation (Plan Organisation, 1961). During the second plan period the implementation of 516 projects involving the construction of urban facilities was started. Of these 329 were completed during this period and the continuation of the remainder was transferred to the third national plan (Plan Organisation, 1961).

During the third national plan (1963-67) priority was given to projects in the following order: water, electricity, housing, hygiene, safety and street surfacing. Urban areas to the extent of their needs, and poorer urban areas benefitted from more advantageous loans and larger grants. Also there were some administrative changes during this period, one of the important ones being the transfer of executive affairs related to urban development from the plan organisation, to the newly established Ministry of Housing and Development. Also during the third development plan the first steps were taken regarding the preparation of a master plan for Tehran and 16 other cities and forecasts for the co-ordination of urban infrastructure expansion within a rational framework (Plan Organisation, 1961). In 1965, a Council called the High Council for city planning was created, which consisted of eleven members, including seven ministers, who were mainly concerned with urban affairs (Mozayeni, 1974). The Council's responsibility was to review and approve the master plan submitted by municipalities on behalf of the Plan and Budget Organisation, and to adapt general policies for urban planning, co-ordinate and centralise duties relating to the preparation of urban planning regulations.

Another important measure taken during the third plan was the training of technical and administrative municipal staff, by establishing courses at a post secondary education in the Faculty of Engineering and Tehran Polytechnic. But there were great problems regarding the implementation of the proposed plans due to lack of qualified technical staff for administrating, maintaining and operating new urban

facilities and also a lack of specialised and experienced consulting engineers in urban development, and a lack of proper statistical data regarding cities. In the case of the Tehran master plan, the consultants were asked to draw their own legislative proposals and to show the way it should be implemented (Clark, 1980).

However, the third plan failed to reach its target and remaining activities were continued in the fourth development. The main objectives of the fourth development plan regarding urban planning was the continuation and completion of the third plan's projects and preparation of new urban master plans. In this period further master plans for nine additional cities were approved by the high council of urban planning. Also the preparation of guide maps for small urban areas and detailed programmes for selected projects of the existing plans of major cities, by technical bureau of municipalities in provincial centres, it was during the fourth plan that the Ministry of Development, changed to Ministry of Housing and urban development. In selection of urban areas for which the master plans were prepared, the priority was given to those cities with high population growth rate; and this was considered as future development pole in regional development programmes (Plan Organisation, 1968b).

The fourth plan's objectives with regard to urban development faced some difficulties. Most of the master plans could not be implemented for most areas and it became only an obstacle for development activities (Mozayeni, 1974).

In 1973 the fifth national development plan started and the main objective of the plan with regard to urban affairs was the improvement of the quality of urban life. Social and economic factors were to be taken into account in the implementation of development programmes rather than concentrating only on physical planning (Clark, 1980). Another objective was to train technical staff and urban

planners and to systematise urban planning operations and the provision of guidance and control over urban development.

One of the important changes in this period was the introduction of the plan and budget organisation. Its duties were: planning and preparation of budget, supervision of projects through various related government organisations and evaluation of work performed in government departments. Another objective of the fifth plan was to decentralise decision making to the provincial areas. Under the fifth development plan cities with population over 200,000 and certain other cities had new comprehensive plans prepared.

There were still problems in this period such as lack of coordination between the municipalities and the Ministry of Housing and Urban Development and other ministries. For example, the army, which was the largest housing developer, did not come under municipal control (Costello, 1981).

Iran's urban planning had many other weaknesses, some of which arose from westernised models of development and a tendency to ignore the country's traditions and culture. By 1978 the implementation of the urban plans discussed above stopped due to the level of unrest and the revolution.

4.2 Housing Situation and Policies in Urban Iran, 1945 - 1979

As well as reviewing urban planning in relation to Iran's national plans, it is useful to specifically review the evolution of housing policy.

4.2.1 The Third Development Plan (1963-67)

The first two plans paid little attention to housing issues. It was only at the beginning of the Third Plan period that the government realised that housing activity was of special urgency and importance and that it needed a proper housing

programme. The first edition of the plan did not have a special chapter on housing, but from the beginning of the plan period in 1963, a range of projects were proposed and approved by the plan organisation. In the 1960's along with the awakening of the country's economy there was a great boost in the construction sector, so much so that it formed some 6 per cent of Gross National Product (G.N.P.). It was on this basis that a new chapter entitled Housing and Construction was added to the revised edition of the plan (Plan Organisation, 1968b:249).

The objective of the plan regarding housing was the construction of low-cost housing for low-income groups, with particular attention being paid to government employees, and also to squatter clearance (P.O. 1961, 160-61). In 1964, the Ministry of Housing and urban Development was set up to organise housing in Iran, and the construction departments of the other Ministries were dissolved and responsibility for implementation of construction projects was transferred to the Ministry of Housing and Urban Development. During this period 2,973 residential units (one to seven rooms) were constructed which helped the situation as far as the residential requirement of government employees was concerned. Also 4,320 units of low-cost housing were built during this period as well as some 10,000 other housing units (P.O. 1961: 163; P. O. 1968b:250).

In this period the government's aim was, by undertaking many construction projects and by making the necessary loans through the Rahni bank, Iran (Mortgage Bank of Iran), to build new residential areas. Among those projects were newly-built houses in Kan, located six kilometres north-west of Tehran, low-cost public houses in Naziabad, and other low cost housing. But the government encountered some problems in these projects due to financial, social, legal, technical and administrative difficulties. After completion of the low-cost houses, the demand for the new housing was so great that as soon as the public housing was made available at below market prices, the influential lower-middle classes

manipulated the allocation procedures for the subsidised housing in such a way as to rapidly produce a black market for such housing. The houses were eventually leased or sold illegally to the occupiers and as a result were not placed in the hands of the really low-income groups (Diba, 1980).

Also, it is apparent that none of the above government housing assistance programmes were targeted for the squatter settlements or poor self-employed families of Tehran. This was simply because public housing policies and regulations were designed to meet the needs of government employees and higher income groups. Since most of the poor households were not state employees, and did not have secure jobs with a regular fixed monthly income or did not have sufficient savings for a deposit they could not get a bank loan.

The government therefore realised that it was necessary to become directly involved in constructing and planning some housing for low income groups. The government built the first model neighbourhood community in a modern sense in single and two storey houses with courtyards, known as Kuyi Nohome-Aban, located in the southern section of Tehran. This consisted of some 3,450 three-room housing units. In 1967, several squatter settlements were demolished and residents were transferred to these housing units (Bartsch, 1971). Following this, the government attempted to prevent the formation of new squatter settlements particularly those located in view of the major roads (Kazemi, 1980).

During the third plan, approximately 200,000 housing units were built by the private sector (I.A. 1969: 403). Numerically the impact was therefore considerable. But it was mostly middle to upper class people who benefitted from these new buildings and there was also a geographical basis with most credit being extended to construction schemes in the Tehran area (Table 4.1). It was during this period that the Rahni Bank, Iran (Mortgage Bank of Iran) endeavoured to establish and develop a housing savings fund so as to reduce as far as possible its dependence on government resources

for credit. Instead it saw its interests as lying in borrowing money from private sources in order to provide the powerful Iranian middle classes with enough credit to purchase or build housing (P.O. 1961; 163).

In the third plan period in spite of the construction of about 47,000 residential houses every year in urban areas, there remained a critical housing shortage with demand outstripping supply. In Tehran according to 1966 census, 43,477 (40%) families lived in one room and these families were often larger than those living in more than one room. About 21 per cent of these families had more than 8 members.

Table 4.1 Private sector investment in urban construction projects in Third Development Plan (1963-67)
Million Rials (in 1968, 75 rials = US\$1)

	1963-64	64-5	65-66	66-67	1967-68	63-68 Total	Average Annual increase %
Tehran	7128	8995	10477	11270	12521	50391	12.5
9 Other large urban areas	2403	3780	3367	3921	4246	17717	10.9
Other	4885	5501	6543	7438	7360	31727	11.5
Total	14416	18276	20387	22629	24127	99835	11.9

Sources: Iran Almanac; (1969:403) + Author's Calculations).

4.2.2. The Fourth Development Plan (1968-73).

The main objective of the fourth plan as regards housing provision consisted of constructing 275,000 new housing units in urban areas of which 250,000 units were to be constructed by the private sector and 25,000 by the public sector (P.O. 1968b:251). The Rhani Bank encouraged construction of large housing complexes in the form of flats or apartments in the hope of discouraging the construction of small housing units of the type which had served to expand the limits of the urban areas in the 1950s and 1960s. Table 4.2 shows the number of structures completed by the private sector in urban areas by type of use during the period of the Fourth Plan. For the five years period, residential units alone comprised 84 per cent of all structures completed. From the data it would appear that without doubt housing comprised the major part of private sector expenditure on structures in urban areas.

Once again the type of housing produced did not alleviate the problems facing low income groups. Since they were too expensive, only certain people could afford to live in these houses which were mostly for middle to higher middle classes. For example, the average floor space of dwellings increased from 138 to 191 square metres, while the average cost increased from 62 to 133 dollars (in 1972, 76.5 Rials = US\$1) per square metre (McCutcheon, 1979). In Tehran, the situation encouraged more squatter settlements, as it was reported that about 20.3 per cent of Tehran's squatter units were built in 1971 (Kazemi, 1980).

In response to government recognition of the housing problem, a proposal emerged to encourage apartment construction and prefabrication (McCutcheon, 1979).

Table 4.2 Number of structures completed by the private sector in urban areas by type of use and total cost (Current Price. In 1972, 76.5 Rials = US \$1)

Year	No. of structures (1,000 (=100%))	Type of use (per cent)				Total* cost (million rials)
		Residential	Residential with business	Commercial	other	
1968	50	88.0	4.2	6.3	1.3	24,000
1969	47	85.2	5.2	8.2	1.5	18,250
1970	51	88.3	4.1	6.2	1.4	24,131
1971	65	71.1	12.6	11.5	4.8	27,059
1972	70	89.1	4.9	5.2	0.8	35,788
1968-72	283	84.0	6.5	7.5	2.0	

* Land Price is not included

Sources: Iran Almanac 1969: P 255

Iran Almanac 1972: P 431

The government decided to take some steps to provide credits and financial help specifically to low income groups. The government's income classification of the population at this time was as listed below:

1 - Low income group	25% of urban population
2 - Under average income group	32% of urban population
3 - Average income group	29% of urban population
4 - Above average income group	11% of urban population
5 - Well-to-do income group	2.5% of urban population

Priority was given to providing credit to groups 1 to 3 above to help them build their own houses (I.A. 1972:421,428). This was clearly a major redistributinal

task, yet despite this the majority of urban housing units were built during the plan by the private sector (256,000 units, residential and residential with business) compared with only 37,000 by the public sector (I.A. 1975:256). Housing constructed by the government during the plan period was nearly 70 per cent more expensive than the average cost of other residential structures during the same period, simply because the houses built continued to be larger and better than average (McCutcheon, 1982). Therefore, yet again low income groups found it difficult to have access to these supposedly "low cost" houses because of their price.

4.2.3 The Fifth Development Plan (1973-77)

The fifth national development plan began in March 1973. It was more concerned than its predecessor to play an effective role in housing, especially for low income groups.

The major objectives for the housing sector under the fifth plan were: 1) to reduce the existing overcrowding in housing units for various groups, particularly low income groups; 2) to improve existing housing from a social, cultural and a sanitation point of view (P.B.O. 1973:116).

Under the Fifth Plan, the housing target originally was 740,000 units, 575,000 of which were supposed to be built by the private sector and 165,000 units by the public sector (P.B.O. 1973) though due to the very fast increase of the rate of urban population as shown in Table 4.3 much more housing than this was needed.

Table 4.3 Percentage of total population living in urban area. Iran (1973-78)

Year	Percentage of population living in urban area
1973 - 74	43.5%
1974 - 75	44.4%
1975 - 76	45.7%
1976 - 77	46.5%
1977 - 78	47.5%

(Sources: I.A. 1976:221)

At the same time there was a rapid rise in oil prices which resulted in a surge of foreign exchange income. Therefore a revision of the fifth Development Plan became necessary. One outcome was an upward revision of the plan to provide 810,000 residential units in urban areas, of which 550,000 were to be built by the private sector and the rest by the public sector. Of these 71,000 were for low income groups (I.A. 1975:221).

During the first three years, the Fifth Development Plan failed to meet its target in both sectors. For instance the number of structures built and completed in Tehran in 1974-75 was only half of those built in 1969-70 whereas the cost had more than doubled at current costs (Table 4.4). This shortfall was partly because of shortages of building materials, but also because of spiralling wages amongst construction workers and rising land prices.

By 1976 the Central Bank of Iran reported that high cost of housing had contributed to approximately 50 per cent of the rise in the cost of living (C.B.I. Bulletin, 1977). Examination of the distribution of the increase in floor space of dwellings shows that the investment was mainly taking place at the upper end of the income scale and most of the housing investment was for the upper income groups.

Table 4.4 Number and cost of structures completed in Tehran
1969 - 74. (76.5 Rials = US\$1)

Year	Number of structures completed	Cost of Structures (million rials)*
1969	13,973	11,685
1970	10,450	13,582
1971	10,308	12,590
1972	10,485	18,072
1973	10,756	26,974
1974	6,941	22,605

* Excluding cost of land

Source: Iran Almanac; 1976:222

The acute shortage of housing particularly for the low income groups in urban Iran had become a pressing social and political issue. In an attempt to reduce the problems in Tehran, in April 1974, following the Shah's instructions property experts of the Ministry of Housing and Urban Development started to purchase undeveloped lands within the city limits of Tehran and other cities, then to place all such land in a land bank to be used in future for public amenities (I.A. 1971:253 & 1974:23). The Parliament issued a Bill that stated that houses which had been left deliberately unfinished by their owners for speculative purposes be completed, and which forced apartments left vacant by their landlords to be leased (I.A. 1978:281)). The Government also ordered its ministries to postpone all construction which was not urgent in order to ease the demand for construction materials and building workers, until the housing crisis had been resolved (McCutcheon, 1979). New restrictions were also introduced on the issuing of construction permits for the private sector, especially in Tehran (C.B.I. 1974:91).

By these policies the government was trying to divert the construction industry away from the luxury market to the provision of housing for low income groups. But these policies came rather late and were in any case inadequate given the desperate needs of the urban poor. Pressure from builders and speculators led the government to lift the ban (Graham, 1978).

In line with the above policies, there was an increase in the building of apartment complexes. This policy and the introduction of prefabricated building methods was widely used without understanding its nature and implications. One of the many problems of this policy was that nearly all parts for prefabricated housing had to be imported. Also much of the construction equipment had to be brought in. For instance in 1974, 838,000 tons of cement was imported to Iran. This increased to 2 million tons by 1977 (Ministry of Housing and Urban Development, 1980:127).

As noted earlier, in order to tackle housing problems, the government during this period not only had to tackle construction problems, but also required policies and land in order to try to keep down costs. From 1973 onwards urban land prices rose so rapidly that prices could only be quoted on a daily basis in some places. For example in most cities land which had sold at only 10 to 20 rials in 1972 (76.5 Rials = US\$1) per square metre in 1969, was selling for 1500 to 2000 rials per square metre by 1974 (I.A. 1977:247). In the back streets of southern Tehran, land was being sold at 40,000 Rials (US\$600) per square metre. In more northerly parts it was double this price, and in the most desirable areas, such as the major plazas or squares, it was as high as 300,000 Rials (US\$4,500) per square metre.

Against this background of land speculation and rising costs, some new policies were introduced during Fifth national Plan. These were in the form of new taxation and land subdivision regulations preventing the re-parcelling of plots. The anti-land speculation Bill of 1974 sought to

impose a limitation on the number of transactions on a certain plot. The Bill maintained that transaction of urban land plots lacking buildings proportionate with the size of the land would be allowed only once. Further transactions would be permitted only after construction of buildings proportionate to the size of the land had been completed. Otherwise transactions would be subject to taxation (I.A. 1975: 257-58). This policy and other measures were not effective and speculation continued simply because of non registration of transactions.

In 1975 a new department called "land organisation" was established by the Ministry of Housing and Urban Development to permit the compulsory purchase of the land which had not been under cultivation for some time. This was done in order to permit the implementation of some of the low cost housing projects for civil servants and low income families. This organisation was confronted by many obstacles in taking possession of land due to loopholes in related regulations (Pakdaman & Zenouz, 1979).

In May 1978 a Bill called the "Land Price Stabilisation Law" was introduced by the government to control land prices and to discourage land speculation. This law sought to establish a "fair" price for land in urban areas, with the fair price of land being equal to the "transaction value" fixed for the zone in which the land was located. However, this Bill never came into operation because of the revolution in 1979 (I.A. 1978:202).

Despite the many problems discussed above in relation to housing policies and land prices it would be fair to conclude that during the Fifth Plan house construction did accelerate as a result of government policies. However construction activities never reached the targets set by the plan. By the end of the plan the total housing completed was only 390,769 units (built by the private sector). This was 159,231 housing units less than the target (C.B.I. 1978:118). According to Kazemi (1980), by 1977, housing was

the major problem for the non-squatting migrant poor in Tehran. In his survey, he showed that only about 18 per cent of migrants owned their dwelling units with an average distribution of three persons per room. Many of them lacked basic urban services such as piped water and electricity. Many others resided in rented rooms.

Therefore the high price of housing in Tehran in the mid-1970s effectively eliminated any possibility of home ownership for most recent migrants. For most of them, even the hope of buying a single room had become a distant dream. By 1978 as the revolution was picking up momentum, the construction industry, like other economic activities, came to a standstill.

4.3 Post Revolutionary Urban Planning

From the time of the Revolution until March 1979, the implementation of all planning legislation ceased. It was only then that the first meeting of High Council on urban planning was held to discuss the planning situation in the country. Since the new regime had rejected the Shah's westernisation policy, the Council believed that the previous master and detailed urban plans were inappropriate to Islamic culture and its social context. Principle 4 of the new Constitution emphasised that: "All civil, penal, financial, economic, administrative, cultural, military, political etc. laws and regulations should be based on Islamic rules and standards. This principle of the Constitution, and other laws and regulations as well, and any determination in this connection will be made by the religious jurists of the Council of Guardians" (Assembly of Experts, 1979:10). Therefore they decided to form a committee which consisted of: The Ministries of Interior, Economic Affairs and Finance, Housing and Urban Planning, Culture and Higher Education, Power, Agriculture and Rural Development, Defence, and Islamic Orthodoxy; the Chairman of Plan and Budget Organisation and Chairman of Environmental Protection Organisation.

The Committee was headed by the Ministry of Housing and Urban Development. The Committee's responsibility was to formulate the new legislation for preparation of plans in accordance with Islamic Laws. After several months of discussion the new legislation was approved in December 1979. The legislation was mostly concerned with decentralisation of administrative functions at provincial level, and gave more responsibility at the local level with more involvement of the public in decision making and preparation of plans. Figure 4.1 shows the structure of the planning organisation.

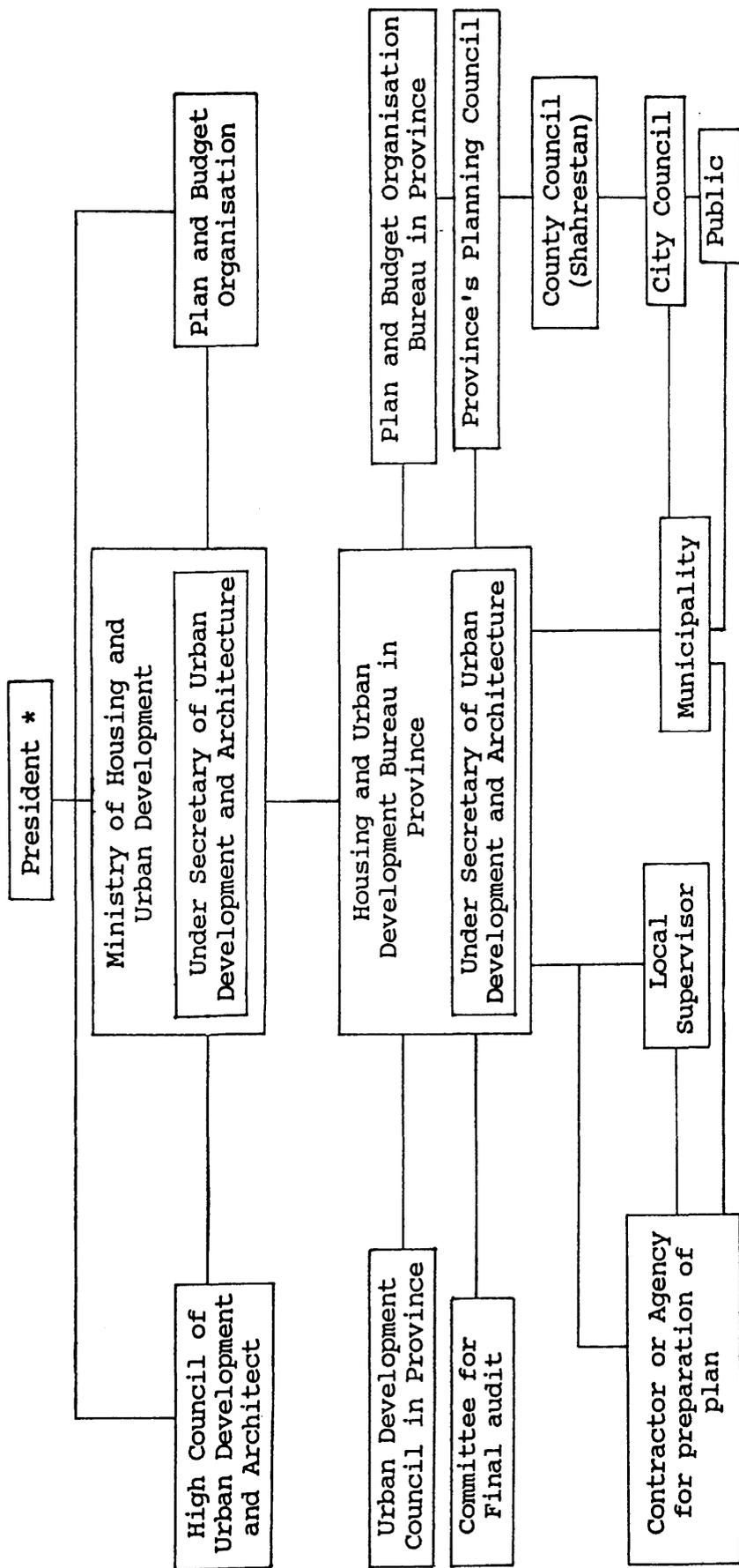
The objective of the structure was to provide appropriate organisations for efficient work. One of the most important developments was the establishment of an under Secretary of Urban Development and Architecture based in the Housing and Urban Development Bureau in the provinces. This official is intended to respond to the problems of implementation of plans in urban areas. As can be seen in Fig 4.1 the Under-Secretary of the Urban Development and Architecture in the provinces is part of the Ministry of Housing and Development, but has a crucial role in ensuring communication between and action by the Plan and Budget Organisation and the Urban Development Council.

The planning committee decided that some existing plans needed amendment and some were rejected completely, because the plans were not in accordance with Islam and the revolution (Ministry of Housing and Urban Development, 1982a). There were therefore in the post 1979 period some important shifts in policy and planning practice.

4.4. The Housing Situation and Policies in Urban Iran, 1979-1990

The goal of this section is to explore and explain the influence of urban housing policies since the revolution on moulding the living conditions of the urban poor. In order to do this it is necessary to consider the ways in which the

Fig 4.1 The Structure of the Urban Planning Organisation



* This was the Prime Minister up until the 1989 amendment of the constitution (more detail in Chapter 2.)

Source: Ministry of Housing and Urban Development (1982) Barnameh-rizie-ey Shahri Dar Iran (Gozashteh, Hall, Ayandeh), Tehran, Iran.

tools of urban planning legislation, such as building permits, and the mechanisms of housing policy such as rent control have impinged on the housing market of Tehran. Before turning to detailed analysis of topics such as these, it is necessary to briefly return to considering the nature of urban housing policies under the Shah. Under the Shah's regime the enforcement of urban planning policies was relatively strict. This is not to say that these policies were either balanced or adequate to deal with the severe urban problems faced by cities such as Tehran (Clark, 1980; Costello, 1981), but to suggest that legislative mechanisms combined with political will ensure a degree of consistency between the written codes on housing and physical planning and the reality of urban development. In the case of Tehran the urban plan launched in 1969 projected developments over a five and twenty-five years period, and attempted to identify the physical extensions of the city which might and should emerge over these time spans. The plan therefore established a framework for the physical extension of the city, in relation to two sets of new boundaries which would in due course have legislative significance. The desired spatial evolution of the city in relation to those boundaries was identified by the plan (Fig 3.6).

As has been outlined in the previous section, the severe pressures which the housing market faced resulted in the government increasingly seeking to adopt solutions which might rapidly improve the situation. Unfortunately, these solutions were often inappropriate or ineffective.

4.4.1 Revolution, the Housing market and Growth of Squatter Settlements

By late 1978, urban regulations were not respected any more and anarchy transformed itself to urban revolution. In spite of the serious problems of housing which existed during the last years of the Shah's regime migrants did not build many squatter houses. This was perhaps because of the cold winter conditions of 1978 which may have deterred new

settlement. Fig. 4.2.1 and 4.2.2 shows an aerial photograph of the author's two study areas in southern part of Tehran, Karevan and Zoorabad, taken in 1979. The photographs show a small number of dwellings in Karevan and only vacant land in Zoorabad. This reveals that the rapid growth of squatter settlements in these parts of Tehran must have occurred after the revolution of 1979.

Naturally, after the overthrow of the Shah, the urban poor and new migrants were impatient to have their share of the promised fruits of the revolution, and housing was considered as one of their main demands. They hoped that the government would carry out the promised revolutionary measures regarding the control of housing prices and transactions. These expectations brought about an impossible situation on the housing market in Tehran, and the changes which were to follow were spectacular. On the one hand was the chaotic situation which inevitably followed the revolutionary upheaval and on the other was society's expectations and vast public pressure for change. This led many land and house owners to offer their property for sale on the market or to allocate their surplus property to the needy for fear of confiscation of their whole property by the government. This caused a rapid and intense fall in prices and a growth of illegal housing.

Tehran expanded on the spatial plan in the southern part of the city and the new twenty five year plan boundary was introduced in 1981. Twelve new settlements were incorporated in Tehran by the new boundary and as a result became eligible to benefit from the facilities and services of the Municipality (Municipality of Tehran, 1981b) (Fig 3.6).

Also some of the settlements within the old boundary which had not been recognised by the municipality for residential development were considered as development areas and were entitled to municipality facilities and services such as Karevan (the study area).

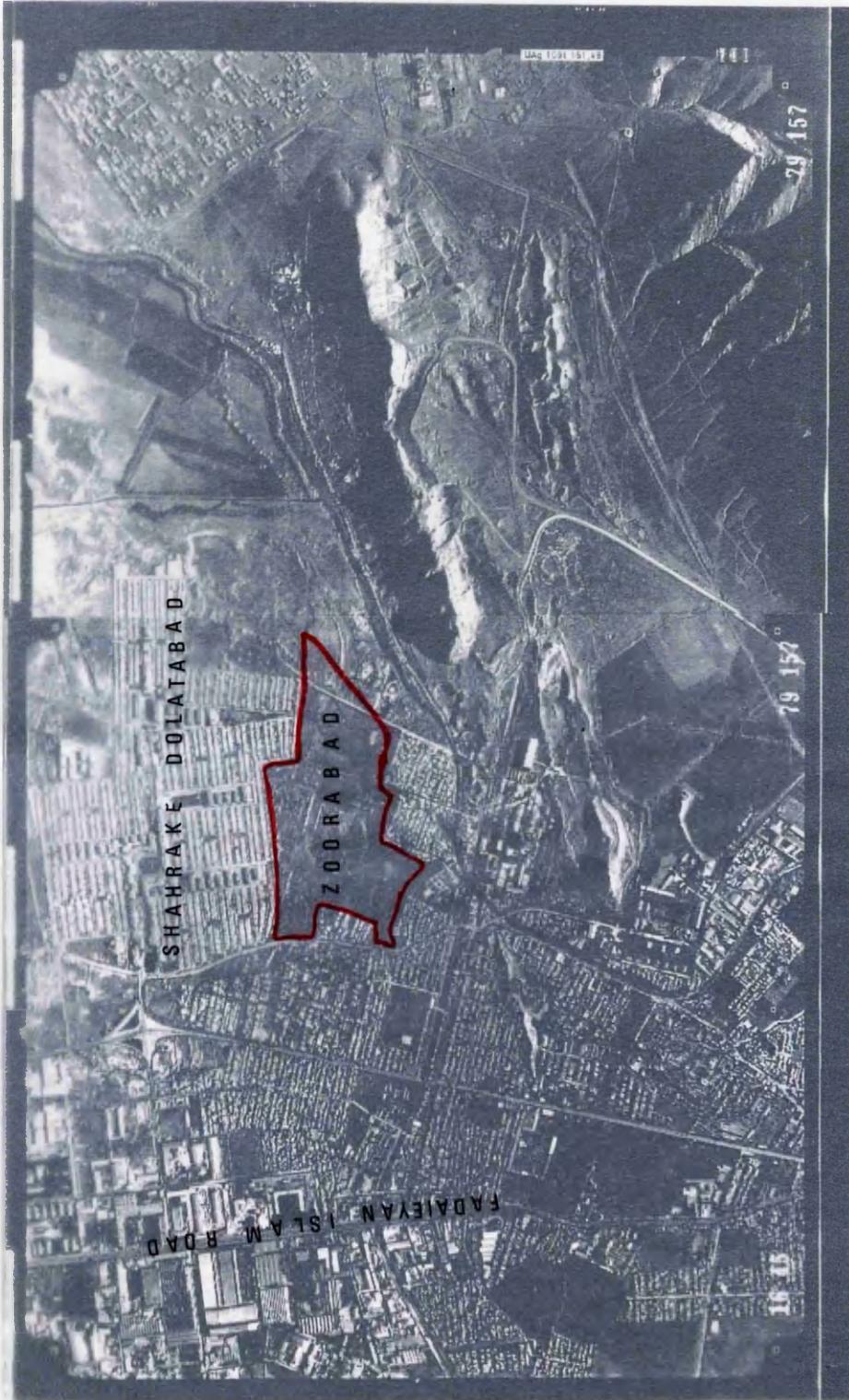


FIG 4.2.1 AERIAL PHOTOGRAPH OF ZOO R A B A D, 1979.



FIG 4.2.1.1 AERIAL PHOTOGRAPH OF ZOORABAD, 1979.

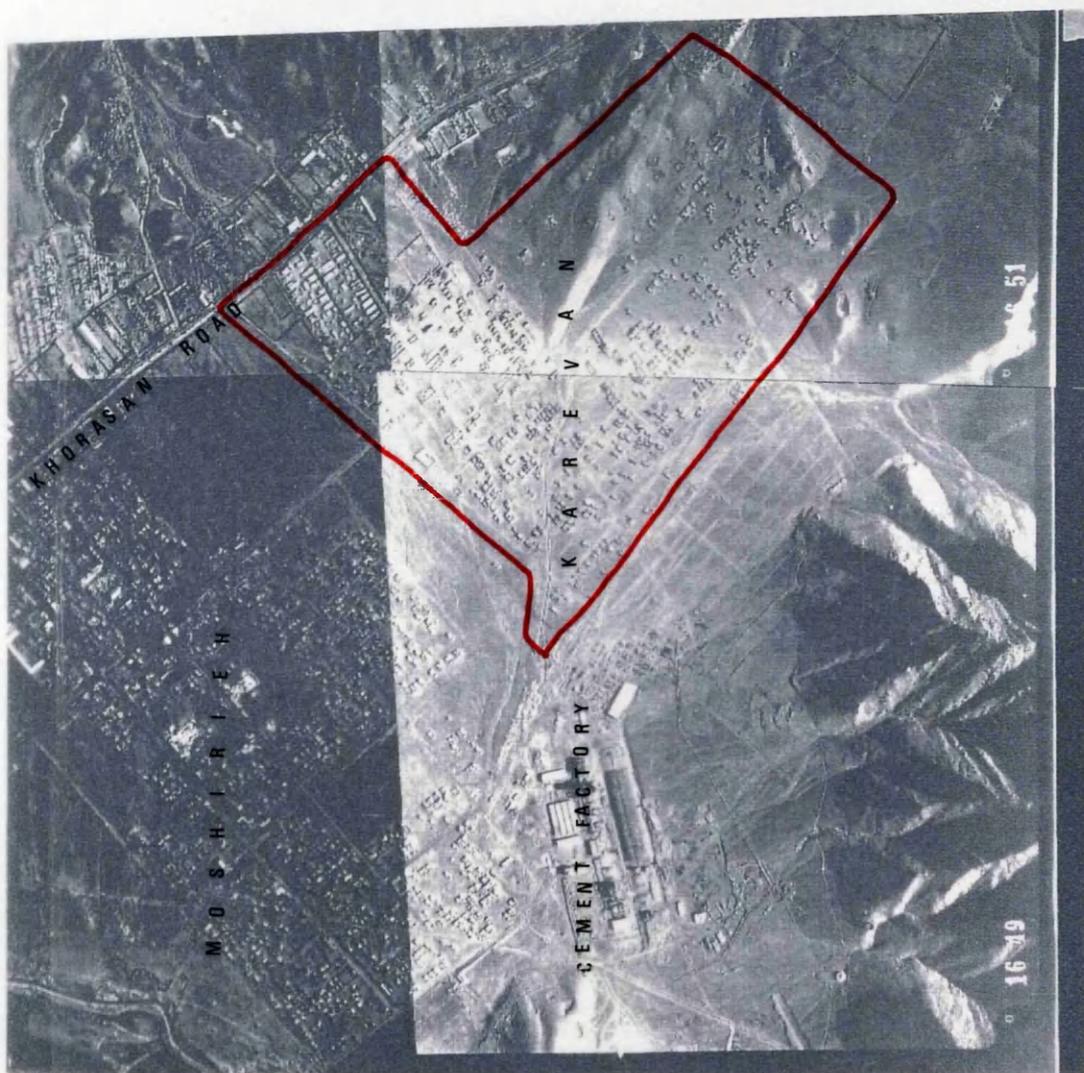


FIG 4.2.2 AERIAL PHOTOGRAPH OF KAREVAN IN 1979.



FIG 4.2.2 AERIAL PHOTOGRAPH OF KAREVAN IN 1979.

In this connection one may mention the Government's measure in 1980 to increase the districts covered by the Tehran Municipality from 12 to 20, which was adopted owing to the large number of residential units outside the boundary. In 1979 and 1980 about 42 per cent of the investment made in Tehran was devoted to the areas outside the boundary. The number of building works started outside Tehran's boundary in 1979 increased 292 per cent (compared to the previous year). With the increase in the number of districts covered by Tehran Municipality, these activities were considered as being within the boundary. Although this solved the housing problem of many of the urban poor, it brought about numerous other problems such as those of providing services, in particular water and electricity (C.B.I.R.I, 1984a: 190-91).

Therefore during the two years 1978-79 all the previous regulations regarding the housing market were overturned, and the large developers and land owners left the country because of the political events. This situation made the land and housing market fall into the hands of the petty bourgeoisie and working class who were active in bringing about the fall of the Shah's regime. These groups sought to fulfil some of their aspirations by building their own accommodation. The municipality allowed this partly because it was difficult to control these developments and also because they could not politically be seen to be putting pressure on lower income groups.

The phenomenon was legitimised by Imam Khomeini, who in March 1979 in his speech during the opening ceremony of the Housing Foundation (Boniad-e Maskan)* said: "No one in any part of the country should suffer from lack of housing" and added that "the Housing Foundation is to be financed mostly

* Housing Foundation - (Boniad-e-Maskan): This foundation was set up to promote and provide shelter for low-income groups in the country.

through private donations to be deposited in bank account number 100". He appealed to the public and asked his followers to perform their "religious duty" by giving financial support to the foundation. Other possible financial sources, he noted, would be the government (Kayhan, 1979b).

This Islamic approval of changes in the housing market was used systematically against the administration in their intermittent effects to enforce the law against illegal transactions of vacant land.

As Table 4.5 and 4.6 and Fig 4.3 show there is a considerable difference between the number of construction permits issued during the period of 1978 - 1981 and the number of buildings completed. Large number of buildings were therefore constructed without permission, or by those who had previously gained permission but who did not have the means to construct their dwellings before due to the high prices of building materials or some administrative obstacle.

Table 4.5 also shows that the average floor space of completed buildings declined from 530 square metres in 1975 to about 200 square metres in 1980. This trend emerged because builders after the revolution were eager to construct small and inexpensive housing units. Figure 4.3 expresses this change in graphical form taking 1974 as a base year and relating housing statistics to a base of 100 for 1974. The figure also shows that the number of the completed buildings increased rapidly (more than doubled) in the 1978-80 period and that in 1981 it started to fall again. It should be borne in mind that these data concern the number of buildings rather than accommodation units. The figure confirms that a switch occurred from the construction of large buildings and complexes in favour of small individual houses.

Table 4.5 Newly Completed Structures in Tehran by the Private Sector (1975 - 1983).

Year	Number of buildings completed	Total floor space (100 sq.m.)	Average floor (sq.m.)	average price (per sq.m.)
1975	10,043	5,327	530	12,139
1976	8,020	5,340	666	13,884
1977	14,540	5,555	382	18,350
1978	15,566	5,212	335	20,309
1979	37,676	7,844	208	13,157
1980	43,347	8,921	206	15,708
1981	15,171	4,288	283	18,973
1982	11,700	4,001	342	20,000
1983	7,696	2,668	347	25,000
1984	10,058	3,465	343	

Sources: i) The Central Bank of Iran: Economic Report Balance Sheet Annual Report: 1979b (1358), 1981 (1360), 1982 (1361) and 1983 (1362), Tehran, Iran.

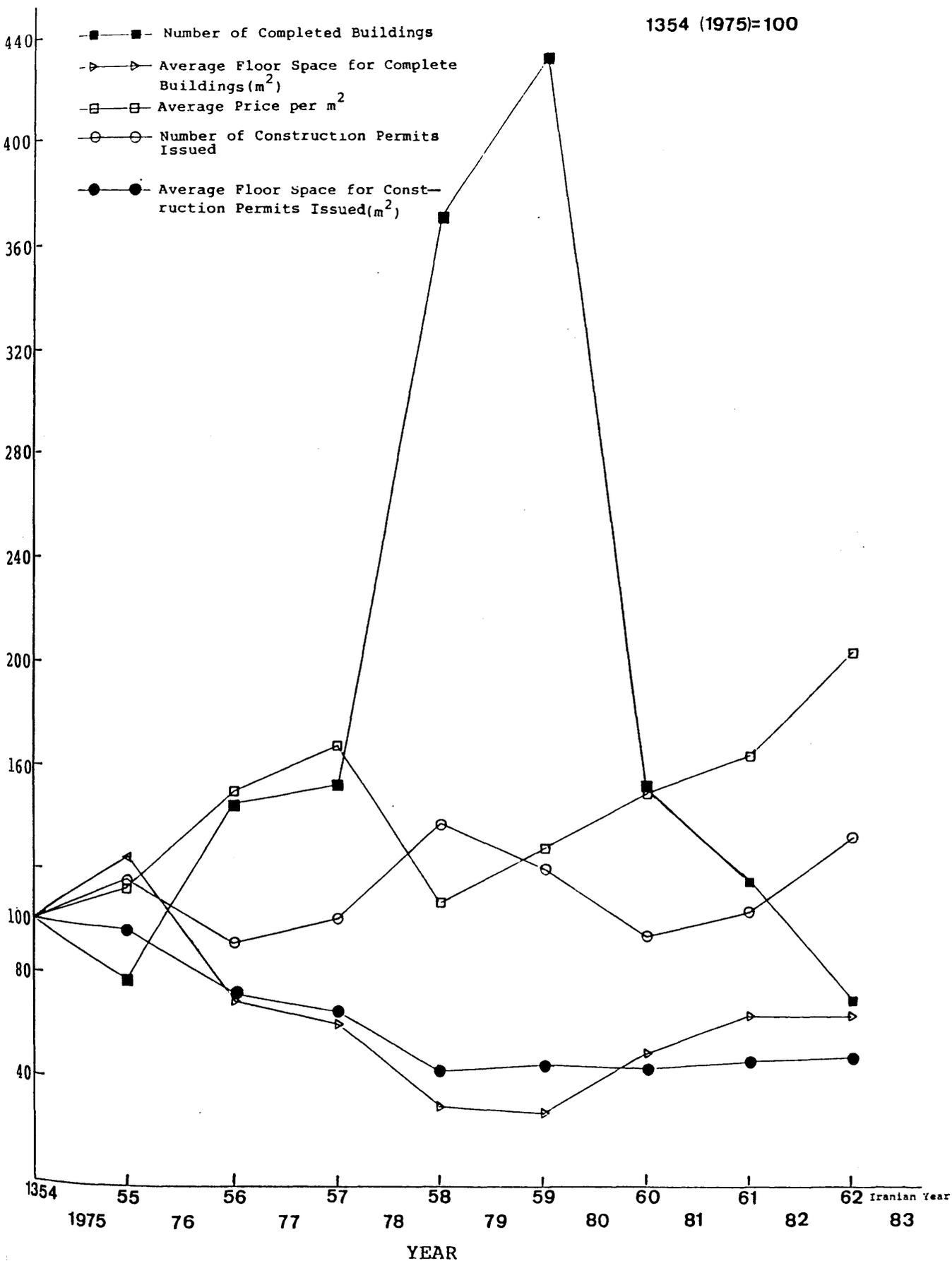
ii) Hourcade B. and Khosro Khavar F. (1983)

Table 4.6 Construction Permits issued to the Private Sector (1975-83)

Year	Number of Permits	Total floor space (1000 sq.m.)	Average floor space (sq.m.)
1975	10,803	7,615.0	704.9
1976	12,428	8,534.6	686.7
1977	10,078	5,093.2	505
1978	10,831	5,057.3	467
1979	15,073	4,598.4	305
1980	13,073	4,215.3	323
1981	10,198	3,221.2	316
1982	11,519	3,837.8	333
1983	14,437	4,995.1	343

Sources: The Central Bank of Iran, Economic Report and Balance Sheet Annual Report, 1979b (1358); 1981 (1360); 1982 (1361); 1983 (1362). Tehran, Iran.

Fig 4.3 New Building Constructed by Private Sector and Construction Permits Issued



Sources: B.M.I.R.I. 1979b (1358), 1981 (1360), 1982 (1361), 1983 (1362)

From an investment point of view in the mid to late 1970s private sector developers due to the uncertainty associated with the possibility of a revolution were not prepared to make investments in housing. For example construction activities in the private sector declined by 26.9 per cent in 1978 compared with investment in 1977 (Table 4.7). At the beginning of 1979 private investment increased due to the propensity for constructing inexpensive units in Tehran. Construction activities reached their peak in 1979-80 (C.B.I.R.I., 1979a).

Table 4.7 Investment by the Private Sector in New Structures in Tehran 1977-83 (and % change on the previous year)

Year	1977	1978	1979	1980	1981	1982	1983
Million* Rials	156,152	114,135	130,002	127,736	87,596	105,094	169,039
Percentage change (current prices)		-26.9	+13.9	-17.4	-31.4	+19.9	+60.8

* Excludes cost of land

Source: C.B.I.R.I., 1979b; 80; 81; 82; 83; 84 Annual Report, Tehran, Iran.

Speculation on completed houses was equally high in the latter part of the Shah's regime. After the revolution many people sold their houses at low prices and fled the country. Some of the empty buildings and incomplete constructions were taken over by low income families who were organised by left wing political groups (Kayhan, 1979c). Other empty buildings were confiscated by the new regime (revolutionary council). The responsibility for distribution of confiscated buildings was given to the Housing Foundation (Boniad Maskan) with orders to rent or sell them to government employees, and people who had been actively

involved in the revolution, martyrs' families, and those who had been residing in Tehran for more than ten years and who did not own any sort of accommodation (Kayhan, 1979b; C.B.I.R.I. 1984a) (More details of applicants' conditions will be discussed later in this section).

Inevitably distribution of these houses did not benefit the really low income groups. Instead it was mostly people who had some connection with the organisation who received them. This brought about a mass of complaints from low income groups much to the embarrassment of the Housing Foundation and the government. For example, in April 1979 due to this kind of maldistribution the head of Eskin (a construction company, under the Oppressed Foundation*) was arrested because of his corruption (Kayhan, 1980a).

4.4.2. Rent Control Policy

There were also some other factors that encouraged an increase in illegal housing in Tehran arising from the new policies introduced after the revolution. The extreme shortage and high cost of accommodation in the private rented sector was a matter which the new government felt might be a cause of the growth of illegal housing. It was not therefore surprising that they introduced a new rent control policy. The first step which the new government took was in relation to the "Landlord and Tenant Relationship" Law. This was the last law of its kind passed before the revolution (July 1977) to reduce tenant insecurity.

* Oppressed Foundation (Boniad Mustazafin) was formed in 1980 by order of Ayatollah Khomeini to consolidate the properties of the Shah's regime and the assets accumulated by others through improper means, and to devote the income for the welfare of the Mustazafin (Oppressed).

The Law rejected Article 464 of the Civil Law which stated "the cancellation of a tenancy agreement upon the expiry of the terms" and instead laid down new conditions for the cancellation of a tenancy by the landlord such as if the property had been sublet, was needed for the personal accommodation of the landlord, was on the verge of collapse, or if the tenant had failed to pay the rent (Nakhost Vaaziri, 1981).

After the revolution, the government sought to give more rights to tenants who were considered as lower income groups. In April 1979 the Revolution Council passed a Bill on the basis of which all Court Orders for eviction resulting from non-payment of the rent by tenants or the cancellation of the agreements by the landlord were stopped for six months. Following this policy, in October 1979, the Revolution Council sanctioned a Bill on the reduction of rents of residential units. This Bill declared a reduction of 20 per cent in all rents and also a tax reduction for those landlords whose sole source of income was receipt of rents (Ministry of Housing and Urban Development, 1981; Nakhost Vaziri, 1981). This measure which could have been significant in reducing housing costs, in practice only reduced rents by 1.5 per cent in the four months after the Law was passed (M.H.U.D., 1981:100).

Simultaneous with the legal measures taken to reduce rents, a Bill was passed by the Revolutionary Council on the use of empty houses by the homeless. The "Housing Transaction Bureau" was also set up to control and reduce house prices. With an eight-point plan, this bureau was empowered to reduce and fix the price and the rent of residential units (C.B.I.R.I, 1984a) and to maintain and lease properties left vacant after the reduction. Those owners who were interested in renting out their properties and demanded a guarantee for the regular payment of rent were able to achieve this through the Bureau. The Bureau fixed rents at between 4 and 7 per cent of the value of a residence (Nakhost Vaziri, 1981). This was up to 40 per cent less than market rates

(Dejkam, 1985). On the basis of the plan, ten transaction centres were established in ten different areas in Tehran and the landlords were duty bound to provide specifications of their houses to these centres (Kayhan, 1980b).

In practice the above Law was not very successful because it interfered with so much existing tenancy agreements and led to owners either refraining from renting their residences or doing so on the "black market" with all its associations with substantial "key money" payments.

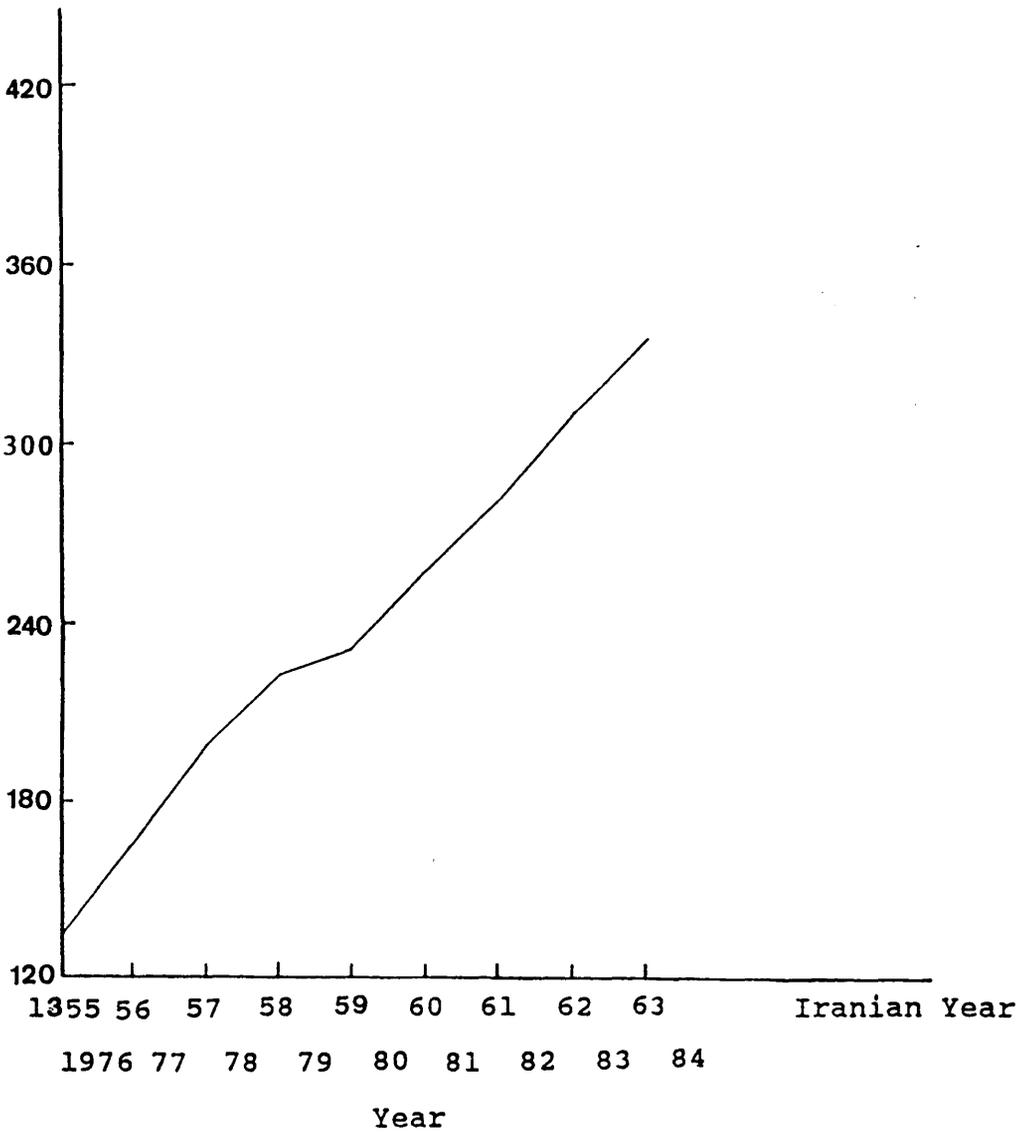
The government realised that problems were occurring and in February 1980, the "Housing Transactions Bureau" was dissolved, and the Bureau was declared as disbanded after only eight months of activities (Nakhost Vazir, 1981).

As a result, in November 1980 the Law stopping the issue of eviction orders was abolished in the Parliament (Majlis), and until the sanctioning of a new landlord and tenants Law (in April 1984), the 1977 Law on this matter was re-enforced.

The level of rent inflation therefore became even worse in the early 1980s, as Fig 4.4 shows. If 1974 rents are taken as a base of 100, then by 1976 they had increased to 133 and by 1984 to 350. Although in 1979 the increase was slowed down, this did not last long and in later years it got even worse. At the end of the agreed tenancy terms most landlords either forced the tenant to leave or increased the rents. But in Articles 8 and 9 of the new "Landlord and Tenant Relationship" Law (April 1984), while specifying the circumstances for eviction, the legislation for postponement of eviction was re-introduced. Article 14 of the 1984 Law argued for the necessity of fixing rent for a five year period and left the fixing of the rent regulations to be approved by the Ministry of Housing and Urban Development and the Ministry of Justice (Dejkam, 1985).

Fig 4.4 Rent Index of Urban Area of Iran.

1353 (1974) = 100



Sources: i) C.B.I.R.I. (1984b:77)
ii) Ministry of Housing and Urban Development,
(1980:99)

In spite of the 1984 law, residential rents continued to increase, and the receipt of "key money" and "hypothech"* is still common. For example an examination of property advertised in newspapers by this researcher showed that in 1987 in Tehran, a three bedroom flat in district five in the north west of the city, had a rent of 90,000 rials (US\$1,236) per month plus 2,000,000 rials (US\$27,473) for the key money; for a one bedroom flat in the north, the rent was 80,000 rials per month plus 2,000,000 rials for the key money; for a two bedroom flat in east (district 8) the rent was 50,000 rials (US\$687) per month plus 4,000,000 rials (US\$54,945) for the key money; for a one bedroom flat in the west (district 10), the rent was 50,000 rials plus 1,000,000 rials (US\$13,736) for key money; for a two bedroom flat in the centre or south of the city, the rent was 50,000 rials plus 1,000,000 rials for the key money; and in district six in the south of Tehran a one bedroom flat for hypothech was about 4,500,000 rials.

Also according to Central Bank of Iran, rents increased by 10.5 per cent in 1983 in relation to the previous year and by a further 14.1 per cent by the end of 1984. (Dejkam, 1985:256).

According to the 1986 census by the Statistical Centre of Iran (unpublished data) on average 36 per cent of household income (93,886.5 rials or US\$1289.6 per month) in urban areas was spent on housing which includes rent, electricity, water and heating. But according to unofficial reports in Tehran in 1987 most of the 700,000 households living in rented accommodation spent at least 50 per cent of their income on rent (Kahyan, 1987b).

* hypothech: amount of money paid by the tenant to the landlord as security for a debt (instead of monthly rent) without transferring possession or title, for a period as noted in their contract.

Therefore, in practice the 1984 Law did not prevent increases in rent and clashes between tenants and landlords continued. Being under tremendous financial pressure, tenants sought to escape from being a tenant of this housing sector. As a consequence there was continued demand for self-help housing on land on the urban fringes. In particular, in Tehran the expansion of construction activities outside the boundary of the city accelerated and reached a climax in the post-revolutionary years. During the years 1979-80, more than 40 per cent of the investment in housing stock in Tehran was outside the city boundaries (C.B.I.R.I. 1984a). In 1979 alone the number of new buildings on which construction was started outside the city boundaries increased by 292 percent compared with the similar figure for 1978. Constructions outside the city limits of Tehran expressed as a percentage of all constructions begun in 1978 in Tehran was 59 per cent but rose to 75 per cent in 1979 (C.B.I.R.I. 1979b). Therefore one can see that the extent of problems in the rented sector of Tehran was one factor contributing to further squatting.

4.4.3 Restrictions on Housing Demand Policy

As was mentioned above, the "Housing Transaction Bureau" was not successful in meeting demand at an acceptable price. The result was a continued increase in illegal transactions at high prices. However, the "Housing Transaction Bureau" Bill was cancelled in March 1980. The government then introduced new regulations aimed at reducing housing prices and preventing speculation and further unplanned urban expansion. The government approved a Bill on "Transactions Procedures for Housing Units" in July 1980. This Law was enforced in Tehran with the opening of the "Bureau for Issuing Housing Transaction Authorisations" (C.B.I.R.I., 1984a).

Under this Law only married people (or those with family responsibilities) with at least 10 years residence record in Tehran, and without another dwelling or land of their own,

were eligible to apply for an authorisation to purchase property (Javaz Kharid) (C.B.I.R.I. 1984a). The intention of this Bill was to prevent further migration to Tehran, and to curb speculation on the housing market.

This Bill was enforced until July 1985, when it was cancelled and housing transactions were permitted without any restrictions (Iran Press Digest, 1985). The Bill not only failed to achieve its aims, but also introduced new problems to the housing situation in Tehran.

A large number of people rushed to obtain purchase authorisations (Javaz Kharid) of whom only a small fraction could obtain houses in reality. During the four years of the enforcement of the bill, the Ministry of Housing issued a total of 502,232 authorisations, of which only 25 per cent led to people obtaining real housing (Iran Press Digest, 1985).

In practice the Bill could not prevent migration to Tehran. Migrants to Tehran might be placed in two groups: the first group were too wealthy to bother about the authorisation and had no real problem buying a dwelling on the black market. This meant that they violated the law and also dodged paying taxes. The second group, who were the urban poor found it difficult to buy a house with these restrictions; therefore they settled on the urban fringes, thus automatically expanding the squatter settlements on the outskirts of the city.

In some cases to obtain the ten years residency certificate they gave a bribe to those in charge of implementation of the Law. They could provide a testimony of their ten years residency by producing a petition from their neighbourhood testifying that he/she was living in Tehran during this period. It was easy to provide this kind of petition through friends and relatives. A number of gangs involved in such acts of bribery were found and arrested (Kayhan, 1985:5).

In the case of migration this Bill sometimes had a negative effect. For example, anybody who had lived in Tehran for eight years, if he had an opportunity for better employment in other parts of the country would not migrate because he preferred to wait until his residence was for ten years, in order to be able to obtain a purchase certificate (Javaz Kharid). For example during the Author's Fieldwork in 1986, a number of households who intended to move to another city or village, stated that they had not done so because of the purchase certificate regulations. In one case in Karevan the head of household, who was living in rented accommodation stated that:

"Tehran is too expensive to live in, with such high rents that I want to go back home. But I am waiting to obtain my purchase certificate; because to be able to purchase a house or land it is necessary to have this certificate. I am not eligible because I have been living in Tehran less than ten years. In fact I am only a couple of years short, so I want to wait until I get my purchase certificate (Javaz Kharid), so that if I want to return to Tehran, I would be able to buy a house or land. Since the law has now been cancelled, I am thinking of going back home as soon as I can".

The other main reason of abolishing the Bill was ideological. The government found some members of parliament arguing that "restriction on ownership of housing units is not stipulated by the Sharia and is some sort of restriction of freedom" (Iran Press Digest, 1985).

According to Islam "there are two types of individual claims to property: (a) property that is a result of the combination of the individual's creative labour and natural resources and (b) property that is obtained through financial exchanges, or what Islam recognises as the rights to those less able to utilise society's resources, such as those benefitting from grants or inheritance" (Mallat, 1988:48).

The Bill did not reduce the price of housing units, but severely increased them. According to some studies, (Dejkam, 1985:268) the average increase in the price of housing units in the first year of implementation of this Bill was about 40 per cent and on average the increase over 4 years was 275 per cent. In fact this price increase was not only because of the law but resulted from many other constraints and pressures.

4.4.4. Land Policy

Since urban land was the key issue in the provision of housing, after the revolution one of the first issues which the government and other concerned institutions tackled was the urban land situation. The first step was the "Abolition of urban derelict (Mavat)* land ownership" Bill which was approved by the Revolutionary Council in 26 June 1979 (Vatani, 1985:480).

"According to Islamic Law, derelict (Mavat) land is not considered as belonging to anybody and thus belongs to the Islamic government. The title certificates registered by the previous regime, were considered neither in the national interest nor in accordance with the Islamic Law" (Ibid:480).

The Bill included the nationalisation of urban derelict (Mavat) land, in order to give everyone the legal ownership rights to a small piece of land just large enough for one dwelling unit. Those who were already owner-occupiers and at the same time owned other plots of land, were declared to have no legal right to these plots (Vatani, 1985:481).

* Derelict "(Mavat)" land is legally defined as a piece of land which is left without any use and no kind of development or building has been made on it.

According to the Bill, an "urban land organisation" was established in every city. This organisation while issuing certificates to land owners not affected by this Bill, took possession of derelict (Mavat) land, and allocated it to deserving individuals and organisations. The allocation of land was meant to be in accordance with the conditions of Article 65 of the urban land law which are: (1) not having residential units or urban land, (2) being at least 25 years old and being married, (3) having lived in Tehran for at least 10 years (five years in the case of other cities), (4) and having enough financial resources to build a house at the time of receipt of the contract (Ministry of Housing and Urban Development, 1982b). Within the first year of implementation of the Bill, no transaction on land was permitted in Tehran and other large cities. The urban land organisation was able to allocate a limited amount of land, in relation to housing needs. This situation brought about illegal land transactions and resultedⁱⁿ an increase in land prices. In some parts of Tehran the price of land reached about 150,000 - 200,000 Rials for a square metre. For example a piece of land in the eastern Tehran which was sold in 1982 illegally for 30,000 rials, at the beginning of 1985 reached 80,000 rials in value (Dejkam, 1985).

However, during the enforcement of this Law, the Islamic Revolutionary Council (the predecessor of the Islamic Consultation Assembly-Majlis) passed a Law, by which a revolutionary court was set up in the municipality. The court was empowered to prosecute and punish those who occupy urban land illegally and transferred urban land using ordinary documents, thus effectively helping the enforcement of government programmes and acting as a guarantee for the above Law. A short period after its establishment, the above court completely changed its function. Instead of putting on trial and punishing those involved in illegal transactions of urban land and law breakers, it became a bureau for allocating urban land and encouraged the illegal land occupiers and carried out land transactions using ordinary documents (Sabeti, 1985).

From the beginning of 1982 the Shar' Magistrate (Hakem-e-Shar) in charge of the above court, with the collaboration of the Mayor at the time and Tehran Municipality officials, started to interfere with the legal duties of the Ministry of Housing and Urban Development (which is itself against the constitution) by allocating land to particular individuals in various revolutionary institutions and to some favoured officials.

In the process of allocating the land, they tried to involve all the organisations and institutions responsible for the enforcement of law and justice; and so in a very calculated move to taint all those responsible for the Law's enforcement.

As Table 4.8 shows from 1979 until 1983 a total of 6,405,003 square metres of land in 21,444 plots was distributed in Tehran. Of this 81.5 per cent was allocated by the Shar Magistrate (Religious Magistrate) and 18.4 per cent by other organisations and revolutionary institutions and some individual land owners. The full names of these organisations and details of their land allocations is given in Table 4.8.

Because of the political atmosphere some of the big land owners themselves distributed some of their land among the people with or without receiving any payment. As Table 4.8 shows 150 plots (36,000 sq.m.) were allocated by Haj-aga Jalali without construction permits. The main reason was to indicate support for the revolution, and to prevent any action by the government to confiscate the rest of their lands.

In fact allocation of land by the above institutions and by the Shar' Magistrate is not clearly recorded and thus it is not known whether payments were involved. If land was allocated freely, there is no record of the basis on which public property or people's property was given away. For example, Sabeti (1985) shows in his study that in a number

Table 4.8 Details of Land Allocation in Tehran, 1979-82.

The Body allocating the Land	Without construction permit			With construction permit			Total					
	Plots	% (sq.m.)	Area (sq.m.)	Plots	% (sq.m.)	Area (sq.m.)	Plots	% (sq.m.)	Area (sq.m.)			
Shar' (Religious) Magistrate	15433	90.31	516746	93.6	299	6.86	56538	6.4	15732	73.4	5223998	81.6
Housing Foundation (Boniat Maskan)	1247	7.31	271216	4.92	2285	52.41	660617	74.6	3532	116.5	931833	14.5
Martyr Foundation (Boniat Shahid)	43	0.26	12900	0.24	565	12.96	73200	8.3	608	2.8	86100	1.4
Owgaf (Religious Organisation)	15	0.09	2000	0.03	9	0.21	3959	0.4	24	0.2	5959	0.09
Foundation of the Oppressed (Mostazafin)	195	1.15	30878	0.56	403	9.2	30235	3.5	598	2.8	61113	0.95
Revolutionary Guards Corps	-	-	-	-	400	9.18	30000	3.4	400	1.8	30000	0.45
Telecommunication	-	-	-	-	400	9.18	30000	3.4	400	1.8	30000	0.45
Haj-agh Jalali	150	0.88	36000	0.65	-	-	-	-	150	0.7	36000	0.56
Total	17083	100.00	5520454	100	4361	100	884549	100	21444	100	6405003	100
Illegally occupied	1600		452100						1600		452100	
Total	18683		5972554		4361		884549		23044		6857103	

Source: Municipality of Tehran, Urban Planning Organisation (1983:10)

of cases Shar' Magistrate has addressed his orders to such neighbourhood Councils as Sadat Abad, Bagh Feyz or Tehransar (situated in the north-west of Tehran) (Fig. 3.6) or to individuals. Those receiving land would then have recourse to these councils or individuals to receive land. Therefore as a result of such a chaotic state, a large group of people took advantage of the situation by forging orders and decrees or by claiming to have them, took part in occupying, dividing and committing illegal occupation of land. The policy therefore encouraged further squatter settlements to appear. As Table 4.8 shows 1,600 plots (452,100 sq.m.) were invaded and occupied illegally.

Although as a result the housing problems of some low income families were solved, numerous other problems such as provision of services (in particular water, electricity and sanitation) cropped up. Despite these problems the situation caused a decrease in land prices (Table 4.5).

However, besides the problem of allocation of land mentioned above, there are some general weaknesses in implementation of the Law by the Land Organisation. Owing to non-centralisation of information on the issuing of "Development Certificate" analysis could not be carried out very accurately and as a result there was the possibility of some profit-seeking individuals taking advantage of the situation. The separation of urban land into derelict (Mavat) and wasteland (Bayer)* and planning to develop them also caused some difficulties for the Land Organisation. On the other hand since preparing the land for allocation needed vast resources and plenty of time some problems cropped up and as a result, allocation of urban land became very limited.

* Bayer Land: With records of improvement or development but having gradually turned into the state of derelict (Mavat) Land.

This caused urban land ownership and its transactions to become subjected to the "urban land" Law passed by the Islamic Consultative Assembly (Majlis) in 1981 and by the Government Council in May 1982 (Vatani, 1985).

It might be argued that it is too early to evaluate the impact or shortcomings of the Land Laws of the 1980s, and that adjustments might be made as the problems arise. A preliminary analysis of this Law in relation to the squatter households raises a further question: that of affordability, particularly since no measures were introduced in terms of granting credit to enable the construction.

In fact, the type of accommodation chosen by squatter households reflects the fact that this proportion is very low or non-existence, and actually a considerable proportion of these families would be unable to pay for housing.

The Iranian Land Policy was lacking in taking into account the squatter household issue up to 1985 (Article 39 in Appendix 1) when the government made some effort to give them the right of land ownership on their dwellings. It also amended Article 147 (Appendix 1) which was approved in 20 June 1986 of "the Registration of Documents and Property" Law Policies for squatter households, since there is no direct policy in relation to the upgrading of existing squatter communities.

This may be a step toward improvement of squatter settlements since the land tenureship is the most important factor for squatters for improving their housing and environment.

Therefore, it can be concluded that before the 1979 revolution housing policies were not appropriate to overcome housing problems for low income groups. The wider use of apartment complexes, using western and modern technology and ignoring traditional methods did not alleviate the problems facing low income groups, because they were too expensive

and only certain people (mostly middle to upper-middle classes) could afford to live in such houses. Since new forms of housing were out of reach of low-income groups, inevitably they had to move to cheaper accommodation - usually to small rented units or to illegal squatter settlements on the outskirts of the city. New government housing did not satisfy the needs of squatters and sometimes forced them to return to squatting.

After the revolution, due to the chaotic situation, the urban poor and new migrants desired to have their share of the promised fruits of the revolution. Housing was considered as one of the main demands of people. The new regime's policies, which were more concerned with low income groups, were not effective and even encouraged more migration and illegal occupation. Examples of such policies reviewed in this chapter were rent control, restriction on housing transactions, nationalisation of urban derelict land, and inappropriate allocation of land by revolutionary organisations.

The discussion has argued that there has been a lack of an appropriately directed policy toward squatter settlements and there is need for a more focused policy to prevent further squatting. This might be achieved by providing land together with some credit so that low income groups could afford to buy a piece of land and construct a building of their own. For example, Article 65 of the Land Law restricted the allocation of land by imposing the condition that recipients should have enough financial resources to build a house at the time of receiving the contract, a condition which made it difficult for low income groups who did not have any saving or regular income to benefit.

CHAPTER FIVE

METHODOLOGY

In previous chapters an attempt has been made to review the literature on a range of different aspects of squatter settlements while in the chapters which follow many of these issues are taken up in the context of this researcher's work in Tehran. This chapter links these two parts of the thesis by considering the methodology used. The methodology effectively is the means by which some of the questions raised in the literature review may be answered by the author's field work.

Between September and December 1985, the author collected secondary information on Tehran's squatter settlements and visited a number of academic and government institutions such as the universities of Tehran and Chamran, the Ministry of Housing and Urban Development, the Statistical Centre of Iran, the Plan and Budget Ministry, the Province Office and the Municipality of Tehran. It was considered necessary to interview people who had some knowledge of housing and migration matters, such as the mayor and officials in the Ministry of Housing and Urban Development, policy makers and other housing officers who were responsible for local planning and development control in the municipality of Tehran, and also bodies and agencies who were responsible for the supply and planning of public services, such as electricity, water, transport, education and health.

After making extensive site visits to different parts of Tehran, accompanied by local planners, two squatter settlements were chosen for more detailed field work (Karevan and Zoorabad in districts 15 and 20 respectively) (Fig. 3.7). These settlements were selected to represent the squatter populations of Tehran. The selection was based on a review of the available literature and the author's

personal familiarity with the city. They were chosen because of the differences in the form of illegal land occupation which took place in the two settlements.

5.1. Study Areas

Karevan

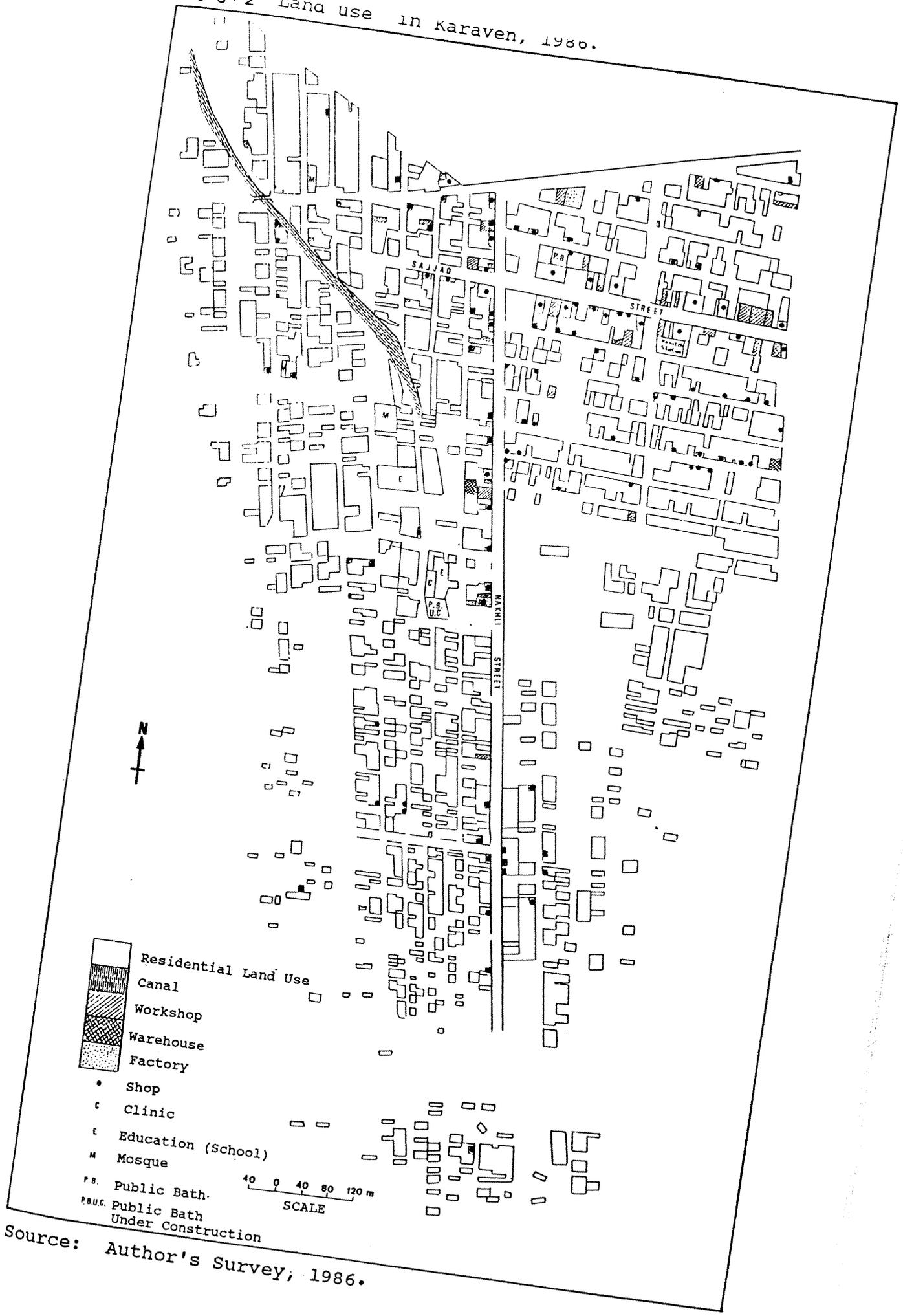
Karevan settlement is located on the south-eastern edge of Tehran (Fig. 3.6) and in the south-east of district 15 (Fig. 3.7) where low-income families live. As Fig. 3.6 shows the settlement is adjacent to the Khorasan main road and Moshireh neighbourhood which consist of private low income dwellings constructed by traditional methods. There are only small industries nearby such as garages, warehouses, stone cutting factories, bus body manufacture along the Khorasan Road, and a cement factory on the east side of the settlement.

In 1976 only about 56 households with a population of around 230 were living in this settlement. Most worked as farmers on small amounts of cultivated land (Municipality of Tehran, 1980). Its population by 1979 increased to about 3,800 with 820 households (Municipality of Tehran, 1983). The aerial photograph (Fig. 5.1) shows the dwellings in 1979. By 1986 it had increased to about 2,700 households with a population of more than 15,000 people and with 2,324 dwelling units (Author's survey, 1986) (Fig. 5.2). This shows the extent of growth after the 1979 revolution. Karevan has grown very rapidly in an illegal subdivision of land in which large parcels of unimproved derelict and cultivated land were sold without official permit by private land owners. This was usually done through a number of estate agencies acting as middlemen between the big land owners and the people. The land owners had given authority to these agencies to sell the land in the area at cheap prices. Usually lands were divided into plots of around 120 sq.m. and sold illegally with only informal documents and no proper record of the transactions.

FIG 5.1
 AERIAL PHOTOGRAPH IN
 1979 AND LAND USE IN
 KAREVAN IN 1986.



Fig. 5.2 Land use in Karaven, 1986.



Source: Author's Survey, 1986.

Zoorabad

Zoorabad settlement is located to the south of Tehran (Fig. 3.6) in the north-eastern part of district 20 (Fig. 3.7). This is a low income residential area of the city. (Fig. 3.6) adjacent to districts of government low income public housing (Dolat-abad) and other dwellings which have been constructed by the traditional methods in one to three storey units such as Javanmard Gassab, Zahair-abad.

The settlement has the advantage of benefitting from facilities such as shops, a clinic and schools, which have been built for the government public housing (Dolat-abad). There are large number of industries and factories along Fadahian-Islam Road. The residents are mostly employed in these factories which include leather and textile industries, soap factories, an aluminium works and many warehouses (Fig. 7.2).

Zoorabad in Persian means "developed by force" which itself reflects its illegality. Zoorabad's land was owned by the director of the Dolat-abad construction company and was to be made available for further construction of government housing. But after the revolution these lands were invaded and occupied illegally and were sub-divided by the occupiers themselves mostly in 120 sq.m. pieces. The aerial photographs show the area of empty vacant land that existed in 1979 and the changes that took place between 1979 and 1986 (Fig. 5.3).

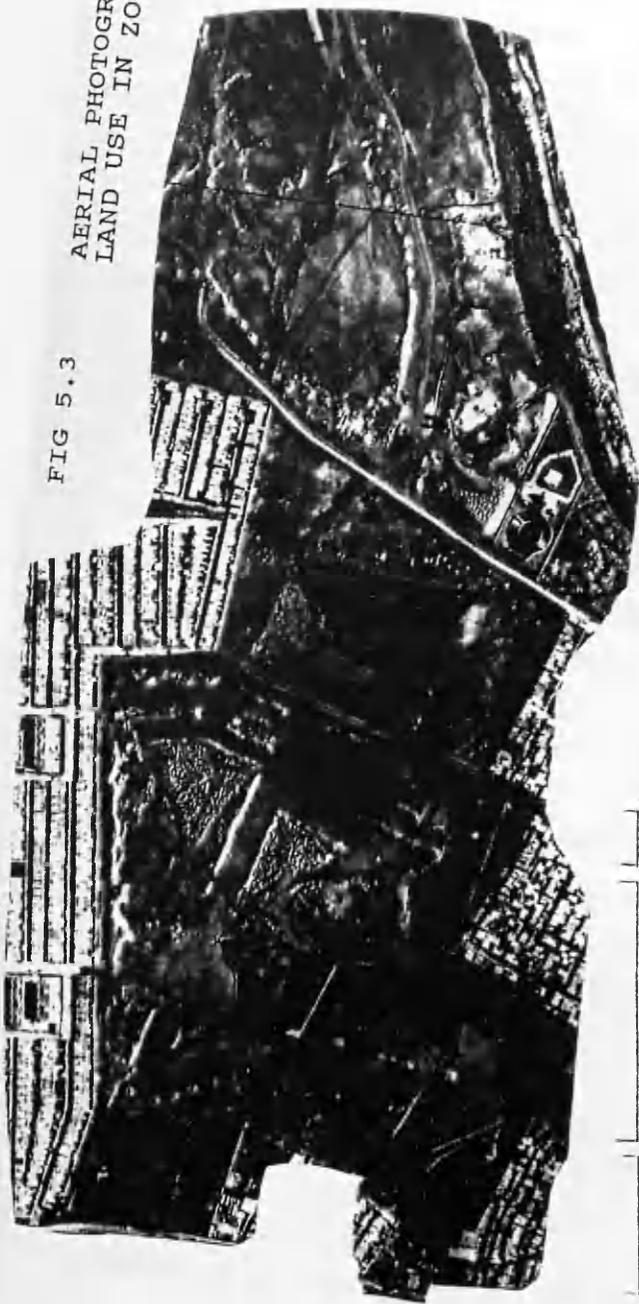
By 1986 there were 1181 dwellings with about 1,300 households and a population of about 8,000 people in the settlement (Author's Survey, 1986).

5.2 The Questionnaire

After returning to Glasgow in December 1985 the questionnaire was prepared for the household survey of the two settlements. It was divided into five major sections

FIG 5.3

AERIAL PHOTOGRAPH IN 1979 AND
LAND USE IN ZOORABAD IN 1986.



(Appendix 2). The first section concerned household's composition. The second part was designed to elicit from the migrants information about their background, their motives for coming to Tehran and employment before and after migration, and their migration history. The third part was devoted to the resident's previous housing conditions while the fourth section was concerned with their present conditions and factors influencing their choice to live in their present accommodation. The final section was designed to obtain information about the squatters political involvement and their participation in upgrading their housing and environment.

In February 1986 the author made his second visit to Tehran to carry out the household survey. A pilot survey was conducted by the author on 20 households in each settlement. Next the author spent time assuring the residents that he was not affiliated with any government agency, and that the purpose of the survey was strictly academic, thus preventing any misunderstanding.

In order to achieve this aim, the author obtained help from a member of the neighbourhood council in each settlement and asked him to accompany the interviewer during the pilot survey. After the questionnaire had been revised (involving a number of questions being dropped) the final survey was undertaken between March and July 1986 by the author.

The interview had to be conducted in the evenings and on Fridays (Public holiday) as this was the only time that the heads of households could be found at home. Sometimes the interviewer had to call several times to make contact with the head of household. The questionnaire was used basically to structure and give direction to the interview. On several occasions, the author found it beneficial to do without the formal interview schedule and record his impression later. There were also opportunities for in-depth non-structured

conversations. The completed questionnaires were edited and checked at the end of each survey session for inconsistencies in the answers.

The definitions used in the survey are as follows:

- a) "A private household is the persons living together in one residence, sharing the same living, and eating condition" (P.B.O. Statistical Centre in Iran, 1981b).
- b) The head of household is, in order of precedence, the husband of the person, or the person who either owns the household's accommodation or is responsible for the rent.
- c) Members of a household who lived or worked away from the household or who only came home for holidays were not included.
- d) Members of a household need not be related by blood.

5.3 The Sample

In order to get as close as possible to unbiased results, a stratified random sampling technique was employed in the selection of households to be interviewed in order to try and ensure that every member of the population had an equal chance of being selected for the sample. Since there were no household lists available for the settlements, the maps of the settlements were the only source for the selection of the sample.

In Zoorabad a map of the settlement was prepared by the municipality just before the time of the author's household survey and the land use map was completed by the author (Fig. 5.4). The map showed the size of all the plots and which ones were built on. It was decided to select 8 per cent of all dwellings meaning that 94 households were to be interviewed. As the area of the plots was varied therefore

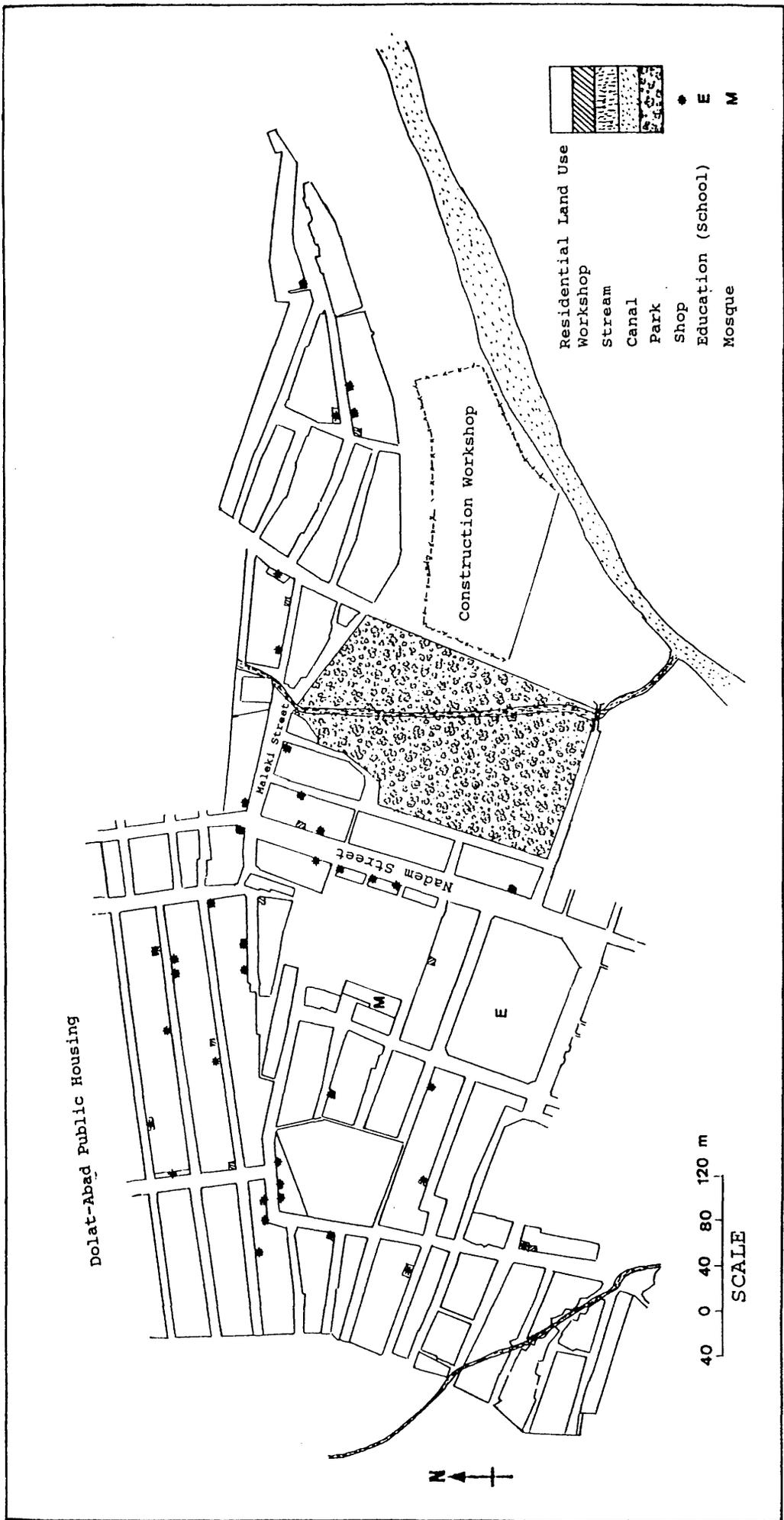
the proportional stratified sampling technique was used based on the size of plots to assure that every dwelling (household) had an equal chance of being selected in the sample. Dwellings were therefore divided into 7 strata:

- 1) 180 sq.m. +
- 2) 150 - 179 sq.m.
- 3) 130 - 149 sq.m.
- 4) 120 - 129 sq.m.
- 5) 100 - 119 sq.m.
- 6) 70 - 99 sq.m.
- 7) 69 sq.m. -

Within each stratum random numbers were used to select individual households. In Karevan there was no map, list or statistical record. Therefore a land use survey was carried out by the author and a map of the settlement was prepared (Fig. 5.2). Since it was difficult to measure every plot and dwelling unit in the settlement, the size of plots for drawing the map was estimated. For selecting the sample the type of dwelling and use of building material was noted and categorised as follows:

- A0 - One storey, mud brick, timber and tin or plastic, rammed earth (poor condition)
- A1 - One storey; fire brick and iron beam (medium condition)
- A2- One storey; fire brick, iron skeleton or reinforced concrete, stone cladding (good condition)
- B0- Two storey; fire brick, iron skeleton (medium condition)
- B1- Two storey; fire brick, iron, reinforced concrete and stone cladding (good condition)
- C0- Three storey; fire brick, iron skeleton and/or reinforced concrete, stone cladding

Fig.5.4 Land use in Zoorabad, 1986.



Source: Author's Survey, 1986

Then by using the above categories again a proportional stratified sample was used to select 8 per cent of dwellings. This meant 185 dwellings (households) were to be interviewed.

For both settlements therefore stratified random sampling methods were used employing conventional random number tables. Out of the 279 questionnaires administered for the survey, 264 were completed. Of the 15 incomplete forms, 4 declined to be interviewed and 11 were not available (2 in Zoorabad and 9 in Karevan) despite the fact that the author called many times.

5.4 Testing the Sample

The completed questionnaires were then brought back to Glasgow and were coded and data transferred into the computer at Glasgow University. The data were then used for statistical and computer analysis. Using the programs of the Statistical Package (Minitab), statistical analysis was undertaken on four topics: 1) Migration; involving variables relating to the motives for migration, social ties and employment mobility. 2) Demographic and socio-economic characteristics including age structure, marital status, education, economic activities, income, place of work and residential mobility. 3) Dwelling unit characteristics and public services, consisting of building materials and techniques, household size and overcrowding, public services such as water supply and electricity and tenure. 4) Attitudes and aspirations of heads of households.

To analyse the above items and their inter-relationships a number of statistical methods were used such as chi-square tests, T-tests, and descriptive cross tabulations.

5.5 Research Questions

In relation to the analytical aims of the study it is possible to pose some specific questions which it was hoped analysis of the data would answer. These questions included:

- 1) What are the social and economic characteristics of residents in the two squatter settlements, and do they vary significantly from one another and from other parts of Tehran?
- 2) Where in the city's housing market did residents of the squatter settlements come from and what did their move represent in terms of the dynamics of Tehran's housing market?
- 3) Is it likely that people will move again to improve their position, or will they instead try to improve their housing in situ?
- 4) What are the major constraints restricting further improvements in terms of the socio-economic and demographic characteristics of the residents?
- 5) How stable is the situation in the squatter settlements? If change is involved in the system, what is likely to be the situation in the medium term (e.g. ten years time)?
- 6) What kind of dynamic housing model could be built for Tehran's low income groups, on the basis of the survey results?

CHAPTER SIX

SQUATTER MIGRANTS AND MIGRATION PATTERNS

Different aspects of migration in developing countries were discussed in the literature review chapter. This chapter looks at the migration patterns to the two study areas (Zoorabad and Karevan) and tries to examine the hypotheses which were outlined in Chapter One. Therefore, this chapter will discuss: (i) the pattern of migration, (ii) the motives for migration, (iii) social ties, (iv) employment mobility, and finally migrants' adjustment to the city over time.

6.1 Patterns of Migration

Migrants are defined as those not born in Tehran but living there at the time of survey. According to this definition, 90.9 per cent of the total heads of households interviewed were born outside Tehran (Table 6.1).

Considering the fact that the majority of migrants in the squatter settlements originated from rural areas, it is important to investigate the spatial process by which the migrants actually moved to the capital city. It has been hypothesised that a migrant moves, through a series of steps or stages to larger cities (Ravenstein, 1885); the rationale being that migrants move by this process to a new way of life which is physically, socially and economically different.

The survey suggested that step migration was a relatively unimportant feature. In fact 97 per cent of all migrants in both settlements moved directly from their place of origin to Tehran, with only 7 (3 per cent) of heads of household moving via other towns or urban areas (Table 6.2). Table 6.2 also shows important differences between the rural and urban regions of origin. All the migrants who had moved by step migration to Tehran were from rural origins.

Table 6.1 Number of Heads of Households who migrated to Tehran (in Zoorabad and Karevan)

	Zoorabad		Karevan		Total	
	No. of H.H.	%	No. of H.H.	%	No. of H.H.	%
Migrants (Were born in other places)	81	89.0	159	91.9	240	90.9
Non-migrants (were born in Tehran)	10	11.0	14	8.1	24	9.1
Total	91	100	173	100	264	100

The survey revealed that the majority of migrants had come to Tehran at a young age (Table 6.3), with 51.3 per cent arriving at between 10 - 20 of age. Young individual migrants were therefore very common.

The variation in the spatial distribution of source areas of migrants can be explained through the social and economic development of each province and its distance from Tehran. Generally, the provinces most remote from Tehran contributed the fewest migrants. Some areas such as Sistan and Balouchestan, had no representatives in the two squatter settlements. (Fig 2.1 shows the location of the provinces). As Table 6.4 shows, the majority of migrants moved from densely populated areas in the north western, northern and western provinces and also from Tehran, central and Hamedan provinces (which are near Tehran) (93.8 and 76.2 per cent in Zoorabad and Karevan respectively). Costello (1977) has shown in his study that the northern and western provinces have had higher rates of rural to urban migration than the

Table 6.2 Migration from rural and urban localities

Localities	ZOORABAD				KAREVAN				TOTAL			
	Place of Birth		Place of last Residence		Place of Birth		Place of last Residence		Place of Birth		Place of last Residence	
	No. of H.H.	%	No. of H.H.	%	No. of H.H.	%	No. of H.H.	%	No. of H.H.	%	No. of H.H.	%
Rural	68	84	68	84	152	95.6	145	91.2	220	91.7	213	
Urban area other than Tehran	13	16	13	16	7	4.4	14	8.8	20	8.3	27	
Total	81	100	81	100	159	100	159	100	240	100	240	

Table 6.3 Age of migrants arrived in Tehran

Years	Zoorabad		Karevan		Total	
	No. of H.H.	%	No. of H.H.	%	No. of H.H.	%
Less than 10 years	3	3.8	14	8.8	17	7.1
10 - 20 years	49	60.5	74	46.5	123	51.3
21 - 30 years	17	21.0	46	29.0	63	26.2
31 - 40 years	7	8.6	14	8.8	21	8.7
41 - 50 years	4	4.9	7	4.4	11	4.6
51 years and over	1	1.2	4	2.5	5	2.1
Total	81	100	159	100	240	100

Table 6.4 Place of Last Residence of Migrants in Zoorabad and Karevan

Province	Zoorabad		Karevan		Total	
	No. of H.H.	%	No. of H.H.	%	No. of H.H.	%
East and West Azarbyjan	36	44.4	33	20.8	69	28.7
Tehran, Central and Northern Provinces (Gilan and Mazandaran)	12	14.8	47	29.5	59	24.6
North East Provinces (Khorasan and Semnan)	0	0.0	39	24.5	39	16.3
West Provinces (Lorestan, Kordestan, Bakhtaran)	16	19.8	13	8.2	29	12.1
Hamedan	12	14.8	14	8.8	26	10.8
South and Central Provinces (Kerman, Esfahan and Khozestan)	0	0.0	7	4.4	7	2.9
Other Provinces	5	6.2	5	3.2	10	4.2
Outside the Country	0	0.0	1	0.6	1	0.4
Total	81	100	159	100	240	100

southern and eastern provinces in the more arid parts of the country. The above data from the study areas (Table 6.4) confirm this point.

In the case of Karevan settlement Table 6.4 shows that a high percentage of migrants (24.5 per cent) came from the north eastern provinces (Khorasan and Semnan). This could be because the settlement is adjacent to the main Khorasan Road (Fig. 3.6), making it easier for migrants to travel to and from their place of origin (i.e. Khorasan province). However, it should be noted that migrants did not migrate directly to Karevan settlement, as will be discussed in Chapter Seven of the study.

6.2 Motives for migration to Tehran

Migrants were asked "What were your major reasons for migration?" and "What was the main reason for moving to Tehran?"

The interview was conducted without mentioning to the respondents any possible answers. This was done in order to avoid passive agreement with the most obvious reasons for migration to Tehran. Only the head of household was interviewed because his movement was considered to largely determine the movement of other household members. Each respondent was allowed to give more than one reason in reply to the first question (reasons for migration), so the number of reasons exceeded the number of respondents. Table 6.5 reveals that economic conditions were the predominant motivating forces for migration. Economic reasons covered 76.2 per cent of the responses given in both squatter settlements. These economic reasons included 45.2% who said it was because of the low-income of the family prior to moving while 23.8 per cent answered that they moved to find a better job as a result of agricultural depression. Other less important reasons are listed in Table 6.5.

Table 6.5 Reason for migration in Zoorabad and Karevan

Underlying Forces	Specific Reasons	Zoorabad No. of H.H.	%	Karevan No. of H.H.	%	Total No. of H.H.	%
Economic	Low income family at home	58	45.6	117	45.0	175	45.2
	Finding better job as a result of agricultural depression	30	23.6	62	23.8	92	23.8
	Working for the landlord with low wages	12	9.5	11	4.3	23	5.9
Personal	Unemployed (unable to find a job)	0	0.0	5	1.9	5	1.3
	Education (for children or myself)	6	4.7	8	3.1	14	3.6
	Medical and Health	0	0.0	8	3.1	8	2.1
Political	Marriage	0	0.0	2	0.8	2	0.5
	Joining military service	0	0.0	4	1.5	4	1.0
	Lack of security in the war zone	1	0.8	1	0.4	2	0.5
Administration Transferred by employer	2	1.6	4	1.5	6	1.6	
Total No. of reasons given		127	100	260	100	387	100
No. of Heads Households		81		159		240	

There is, of course, an important distinction between the factors encouraging migrants to leave their home areas, and the factors which determine where they go. Table 6.6 shows the main reasons given in the survey for choosing Tehran as a destination. Once again, economic factors are dominant (better job opportunities, 67.1 per cent). It is however interesting that economic push factors (76.2 per cent) were more frequently cited than economic pull factor (67.1 per cent). In other words, migrants left their place of origin because of adverse economic conditions and came to Tehran mainly for economic betterment by looking for a better job or higher income. This lends support to Todaro's (1977) hypothesis that migration to urban centres takes place in response to the difference in real income between rural and urban areas.

The second major reason for migration to Tehran according to the respondents was their family situation. Family reasons comprised 17.9 per cent of total responses. Typical comments given were: "I came because my brother was in Tehran", "my uncle said he could find job for me and that I could stay with him", "my parents came so I had to come with them". In fact, in most cases joining relatives is not an end in itself but rather a means of gaining employment in Tehran.

Table 6.6 Reason for Moving to Tehran

Reasons	Zoorabad		Karevan		Total	
	No. of H.H.	%	No. of H.H.	%	No. of H.H.	%
Better job opportunities	54	66.6	107	67.3	161	67.1
Relatives or parents of migrants	17	21.0	26	16.4	43	17.9
Better urban life and amenities (education, health)	7	8.7	24	15.1	31	12.9
Job situation (transferred) and others	3	3.7	2	1.2	5	2.1
Total	81	100	159	100	240	100

6.3 Social Ties

Migration for family reasons often develops into chain migration, with a tendency for people who have already migrated to Tehran to act as source of help and information to others, in particular during the initial period of adjustment. As Table 6.7 shows 82.5 per cent (198 respondents) of total migrants in Karevan and Zoorabad had received some sort of help of this kind upon arrival at Tehran.

Therefore, this shows the importance of having urban links. For example, in one case a respondent pointed out that "the people of my village came mainly to Tehran". One member of the family had chosen Tehran because of its better employment opportunities and later, other members of the family, other relatives and even fellow villagers, chose Tehran as a destination because they knew somebody there. Therefore, migrants often arrive in Tehran with little or no money and during the period of finding a job in the city, help is usually provided by, and indeed expected from people they already know in the city. This is not surprising given the strong bond that ties an individual to his extended family and even his place of origin in most parts of Iran. The most common types of help were the provision of temporary accommodation, and help in finding a job.

The level of help related to the province which the migrants came from and depended on the distance between Tehran and their place of origin. Table 6.7 shows that many of the migrants coming from Hamedan province had help (92.3 per cent) from friends and relative. Much less assistance was available to those coming to Tehran from central and northern provinces (86.5 per cent) (Fig. 2.1) which are closer to Tehran. In the case of the provinces remote from Tehran, such as Bakhtaran, Kordestan and Khozestan, journeys are both long and expensive which resulted in less contact with their place of origin. In the case of the north-eastern provinces (Khorasan and Semnan), migrants had the next highest proportion of help (84.6 per cent). It can be seen from Table 6.7 that all the migrants coming from north east provinces had settled in Karevan. This suggests migrant preferences in settling near the main road to their place of origin.

Migrant visits to their place of origin are normally arranged during the annual holidays, or other social and religious occasions, when people visit their homes. For example, marriages are usually celebrated in the home town or village and all those related to either the bride or the

Table 6.7 Province of origin and help received by migrants upon arrival in Tehran.

Provinces	Zoorabad				Karevan				Total	
	Without help		With help		Without help		With help		Without help	
	No.	%	No.	%	No.	%	No.	%	No.	%
East & West Azarbayjan	27	9	28	5	55	79.7	14	20.3	69	100
Tehran, Central and Northern	8	4	43	4	51	86.5	8	13.5	59	100
North East (Khorasan, Semnan)	0	0	33	6	33	84.6	6	15.4	39	100
West (Lorestan, Kordestan and Bakhtaran)	11	5	12	1	23	79.3	6	20.7	29	100
Hamedan	11	1	13	1	24	92.3	2	7.7	26	100
South Centre (Esfahan, Kernan & Khozestan)	0	0	5	2	5	71.4	2	28.6	7	100
Other Provinces	3	2	4	1	7	70.0	3	30.0	10	100
Outside Country	0	0	0	1	0		1	100	1	100
Total	60	21	140	19	198	82.5	42	17.5	240	100

bridegroom are expected to come for the occasion. Funerals are also a major reason for return trips to places of origin. Besides these occasions migrants make regular visits to see their parents or close relatives. Table 6.8 shows that 62.5 per cent of the total sample made regular visits to their places of origin.

Cross-tabulations of the frequency of regular visits against other variables shows two distinct relationships. Table 6.8 shows that the frequency of regular visits home declines with the longer that migrants have stayed in Tehran. The chi square test shows the significance of this association. (calculated $\chi^2 = 71.2$ critical value = 20.52 significant at 99.9 per cent, df = 5).

Fig. 6.8 The period migrants have stayed in Tehran and the frequency of their visits to their places of origin.

No. of Years Residence in Tehran	Zoorabad		Karevan		Total		
	No. of H.H. visit regularly	No. of H.H. not visit- ing regul- arly	No. of H.H. visit	No. of H.H. not visit- ing regul- arly	No. of H.H. visit	No. of H.H. not visit- ing regul- arly	
1-6	4	0	16	1	20	95.3	1
7-12	18	3	40	5	58	87.8	88
13-18	15	7	23	9	38	70.3	16
19-24	8	15	18	15	26	46.4	30
25-30	0	6	6	14	6	23.0	20
30+	0	5	2	10	2	11.8	15
Total	45	36	112	47	150	62.5	90

χ^2 (calculated) = 71.2 df=5 critical value = 20.52 at 99.9 percent

6.4 Employment Mobility

A considerable change in the occupations of migrants before migration and after their arrival at Tehran was observed. The increase in the number of "skilled" jobs as a result of migration was most marked, reflecting upward occupational mobility of migrants moving from rural areas to the city. Table 6.9 shows that a majority of migrants were working in the agricultural field before migration (59.1 per cent in both settlements). Many others were inactive or in undefined jobs (17.5 per cent in both settlements). These groups may include young migrants who migrated with their parents or relatives and were inactive prior to moving. Since they were unskilled it is not surprising that a high percentage of migrants' first occupations are in unskilled jobs. Of the total respondents 28.8 per cent were working as casual workers or day labourers and 27.1 per cent working in small scale production such as tailors, or in shoe or carpentry shops. 15.4 per cent worked on construction sites as labourers. Table 6.9 makes clear that generally over time the occupational status of migrants improves. For example, 28.8 per cent of heads of households worked initially as casual workers but only 16.7 per cent reported this as their current work. Table 6.9 shows inversely that secure employment opportunities increase with time. Therefore, this implies that after their arrival migrants are gradually able to improve their skills and to achieve better urban employment.

6.5 Adjustment to the City Over Time

The survey results reveal that the political conflicts and the 1979 revolution had a great influence on the migration pattern.

As the literature review has shown (Gilbert, 1982; Eames, 1967), rural-urban migrants move initially to the city on an individual basis. After some years working in the urban area on a temporary basis, migrants realise that they could

Table 6.9 Occupational status of Head of Household before migration, first occupation after migration and present occupation in Zoorabad and Karevan.

Employment Category	Zoorabad			Karevan			TOTAL					
	Before Migration	First after Migration	Present	Before Migration	First after Migration	Present	Before Migration	First after Migration	Present			
	No. H.H.	No. H.H.	No. H.H.	No. H.H.	No. H.H.	No. H.H.	No. H.H.	No. H.H.	No. H.H.			
Agriculture, Animal husbandry, Fishermen	43	2	0	99	0	0	142	59.1	2	0.8	0	0.0
Inactive/undefined job	13	4	4	29	1	2	42	17.5	5	2.1	6	2.5
Student	9	7	0	8	9	0	17	7.1	16	6.7	0	0.0
Working as casual workers/day labours	2	18	11	10	51	29	12	5.0	69	28.8	40	16.7
Working in small scale production	3	24	15	3	41	21	6	2.5	65	27.1	36	15.0
Construction workers	3	14	5	1	23	24	4	1.7	37	15.4	29	12.1
Working in transport equipment (driver, assistant driver or mechanic)	2	0	10	2	12	18	4	1.7	12	5.0	28	11.7
Service workers	2	0	5	2	11	21	4	1.7	11	4.6	26	10.8
Unemployed	2	0	4	2	0	4	4	1.7	0	0.0	8	3.3
Commercial & industrials and retail enterprises (local shops)	0	1	6	3	2	14	3	1.2	3	1.2	20	8.3
Working in large scale production	2	11	15	0	4	11	2	0.8	15	6.2	26	10.8
White collar (clerical work)	0	0	4	0	1	6	0	0.0	1	0.4	10	4.2
Protective workers	0	0	2	0	4	8	0	0.0	4	1.7	10	4.2
Professional	0	0	0	0	0	1	0	0.0	0	0.0	1	0.4
Total	81	81	81	159	159	159	240	100.0	240	100.0	240	100.0

live there on a more permanent footing. They may then consider bringing their family from the rural area to join them. This process accelerates due to factors such as political conflicts and wars.

As Table 6.10 shows, 65 per cent of all migrants in Zoorabad and Karevan moved to Tehran individually thus confirming the above argument. The general pattern changed significantly in the period 1979-86. In this period, 57.7 per cent of migrants migrated with their families (wife, children, father and mother), compared to 39.4 and 16.9 per cents in the periods 1950-69 and 1970-78 respectively.

Therefore, it could be argued that after the revolution the majority of migrants to Tehran brought their families with them because the situation made them consider Tehran as a city suitable to live in permanently. Also of all individual migrants, 21 (13.5 per cent) married in Tehran and did not bring any relatives with them and 135 (86.5 per cent) married in their place of origin and brought some members of their families to join them when they felt more permanently resident in Tehran. This pattern has accelerated in the period after the revolution. Table 6.11 shows that 87 per cent of those who migrated in the 1979-86 period, had their families join them within 1 - 2 years compared to the individual migrants in the period 1950-69 and 1970-78 when 74.5 and 55.4 per cents respectively brought their families after 7-13 years. This reveals that even the majority of those who migrated before 1979 brought their families after 1979. This seems to indicate that it might have taken longer if there had not been a revolution.

This demonstrates how the particular historical and geographical context of Tehran was critical in provoking and accelerating the process of temporary to permanent migration. There are of course a number of factors that influence migrants' decisions to become permanent residents of a city. Housing, economic opportunities and the social network in the urban area can help migrants to adjust

Table 6.10 Number of heads of household who migrated individually or with members of their family in different periods to Karevan and Zoorabad

Period	Zoorabad			Karevan			Karevan & Zoorabad			Total
	With some member of family			With some member of family			With some member of family			
	Individually	Individually	%	Individually	Individually	%	Individually	%	%	
1950-69	16	18	44	21	60	60.6	39	39.4	99	100
1970-78	31	5	43	10	74	83.1	15	16.9	89	100
1979-86	3	8	19	22	22	42.3	30	57.7	52	100
Total	50	31	106	53	156	65.0	84	35	240	100

Table 6.11 Lengths of time between initial migration and family joining the head of household in Karevan and Zoorabad.

Period/Years	Zoorabad						Karevan						Karevan & Zoorabad						Total of individual migrants whose family joined them after migration %
	7-13 & over			7-13 & over			7-13 & over			7-13 & over			7-13 & over						
	1-2	4-6	7-13 & over	1-2	4-6	7-13 & over	1-2	4-6	7-13 & over	1-2	4-6	7-13 & over	1-2	4-6	7-13 & over				
1950-69	3	1	8	2	6	27	5	10.6	7	14.9	35	74.5	47	100					
1970-78	4	2	22	8	15	14	12	18.5	17	26.1	36	55.4	65	100					
1979-86	2	0	0	18	3	0	20	87.0	3	13.0	0	0.0	23	100					
Total	9	3	30	28	24	41	37	27.4	27	20.0	71	52.6	135	100					

themselves to the urban environment and eventually become "urbanites" (Mabogunje, 1972). Usually rural migrants live in rented accommodation during their early years in the city and it takes some time to move to owner occupation in peripheral settlements. This process could be effected and shortened by the political structure of the city. Obtaining home ownership in a squatter settlement can reduce economic constraints and help migrants to consider themselves as more permanently resident in the city thus encouraging them to bring their families to join them (Residential mobility will be discussed in more detail in Chapter Seven).

The survey revealed that 85.9 per cent of all migrants in the settlements lived initially in rented accommodation, in parents' or relatives' homes or at their place of work. Only 5.4 per cent of the total moved directly from their place of origin (Table 6.12) to the squatter settlements. The remainder were owner occupiers at their previous address in Tehran. Of those previously living in rented and free accommodation in other parts of the city, 96.2 per cent moved to the settlements to become owner occupiers. 3.8 per cent were still in rented or free accommodation in the squatter settlements.

Table 6.12 Type of House Tenure of the migrants' previous accommodation

Tenure	Zoorabad		Karevan		Total	
	No.	%	No.	%	No.	%
Rented	63	77.7	113	71.0	176	73.4
Owner and joint owner occupiers	5	6.2	16	10.1	21	8.7
Free, in parents' and relatives' homes	8	9.8	10	6.3	18	7.5
Free, at place of work	2	2.4	10	6.3	12	5.0
Living at place of origin in inherited accommodation	3	3.7	10	6.3	13	5.4
Total	81	100	159	100	240	100

As Table 6.13 shows, it takes some time for those arriving in the city to switch tenureship from the rented to the owner occupied sector. In both settlements, for the majority of migrants (30.8 per cent), it took 6½ - 12 years, for 23.7 per cent it took only 1½ - 6 years. By contrast for 15.7 per cent it took over 18 years to become owner occupiers. A key determinant here is the availability of land plots for squatting. But the political situation and the revolution in Iran gave opportunities to migrants to obtain a piece of land and therefore accelerated the process of becoming owner occupiers. Availability of land to the urban poor varies due to specific political situations

(Gilbert & Ward, 1982). This can accelerate the movement of migrants from rented accommodation into home ownership or vice versa. It was certainly the case in Tehran that a large number of migrants, after moving to squatter settlements from other accommodation and after becoming owner occupiers invited their families to join them. This effectively symbolised their permanent adjustment to living in the city. This confirms Mabogunje's (1972) belief that the main factors encouraging or discouraging migrants to remain in the city are the availability of accommodation and work.

Table 6.13 Length of change of tenure to become homeowner in squatter settlements (Karevan, Zoorabad) after migration to Tehran.

	Zoorabad		Karevan		Total	
	No. of H.H.	%	No. of H.H.	%	No. of H.H.	%
Less than						
1 year	5	6.8	4	3.2	9	4.5
1½ - 6 years	13	17.8	34	27.2	47	23.7
6½ - 12 years	23	31.5	38	30.4	61	30.8
12½ - 18 years	19	26.0	31	24.8	50	25.3
18½ - 25 years	11	15.1	10	8.0	21	10.6
25 years and over	2	2.8	8	6.4	10	5.1
Total	73	100	125	100	198	100

Therefore, it can be seen that upward occupational mobility will often be accompanied by changes in residential location within the city. So the type of residential occupancy which a rural migrant secures in the city can be a crucial factor in determining how soon a migrant becomes committed to urban life.

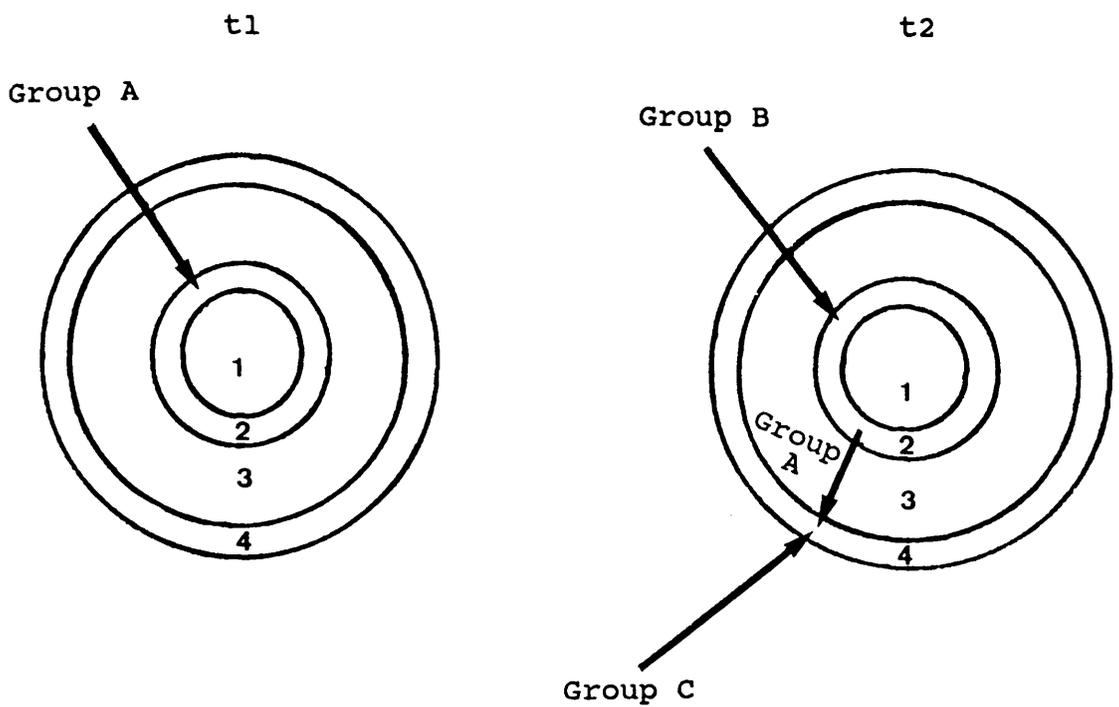
Situations like revolution also can increase diversity of residential population patterns due to forces increasing social and economic disorder. Fig. 6.1 was prepared by the researcher to model the flow of migrants and their movement in the city in different periods and the process by which they become residents in peripheral areas. As the study and data show, initially migrants move individually and live in rented accommodation in the inner ring of urban areas, mainly because of the employment opportunities and cheap accommodation in poor but legitimate residential areas. Later, when they improve their economic prospects and find an opportunity to obtain their own accommodation in the peripheral area they bring their families from their place of origin, because of the availability of private homes. Then the accommodation in the inner ring is re-occupied by the new migrants arriving in the city.

It seems a possibility that the migrants in the Tehran study areas would have taken more time after their initial migration to Tehran to settle and find their own accommodation but the political situation surrounding revolution provided opportunities for squatting and helped this process to accelerate.

Summary

It can be concluded that people moved from rural areas because of the stagnant economy and consequently limited job and income opportunities. Many people left their place of origin because of alarmingly low incomes, unemployment and lack of amenities. They chose Tehran as a destination to take advantage of job opportunities. Other factors such as

Fig 6.1 Flow Diagram of Migrants' Movements.



t1 = In the period 1950 - 1978.

t2 = In the period 1979 - 1986.

1 = CBD/Bazaar

2 = Inner city

3 = Urban legal residential area

4 = Squatter area

Group A = Individual migrant from rural area to Tehran.

Group B = Individual migrant from rural area to Tehran.

Group C = Families of Group A.

Source: Author's survey, 1986.

family reasons and urban links played an important role in influencing migration to Tehran. Migrants were aided materially and with information by their relatives in the city. They received help in confronting the problems of accommodation and adjustment and financial assistance to keep them going until acquiring employment. Once in Tehran, migrants entered the labour market very quickly and subsequently achieved upward occupational mobility.

Most of the migrants came from provinces close to Tehran (Hamedan, Tehran, Central and northern provinces). It was also noted that migration to the capital was direct rather than by step migration. This may be due to individual choice, the influence of chain migration or the absence of attractive localities between their origins and the destination.

Also the study shows that the volume of migration has been effected by the revolution and political structure of the city, which give the migrants more opportunities to adjust and to settle in the city. In fact the situation accelerated the process of urban adjustment. Usually for the migrants it takes some time to become home owners, but in the case of these two settlements it was typically about 6½ - 12 years after migration to Tehran. Therefore, the revolution of 1979 and government policy were important factors affecting migration.

The study has also shown the importance of home ownership in establishing permanent urban residence. Usually migrants move individually as temporary workers and have little intention of becoming permanent residents of Tehran, but private ownership of property in a squatter settlement permits them to bring their families and so their stay in Tehran becomes more permanent. At the same time the majority of those who came at the beginning of the revolution or later, moved with a member of their families

rather than individually. This suggests that there was a switch of intentions in favour of permanent residence in the capital.

Therefore it can be seen that events such as the revolution can affect the volume of migration and also accelerate migrants' adjustment to urban areas.

CHAPTER SEVEN

Demographic and Socio-economic characteristics of residents in Zoorabad and Karevan, 1986

7.1. Gender and household structure.

The overview of the general family characteristics of the sample population is intended as background information against which the analysis of housing conditions in the settlements can be carried out. The Zoorabad settlement with about 1200 households and 1181 dwellings and Karevan with 2324 dwellings and about 3000 households are considered in this study. As outlined in the methodology chapter, 8 per cent of dwellings in each settlement were sampled. The sample therefore included 94 households in Zoorabad and 185 households in Karevan. Of these households 91 and 173 responded in Zoorabad and Karevan respectively. The average number of persons living in each dwelling was 7.14 and 6.83 person in Zoorabad and Karevan respectively. On this basis the total population in Zoorabad would be 8432 and in Karevan 15,872. The sex ratio in both settlements is almost the same. Of 1836 people surveyed in these settlements, 878 were male (47.8%) and 958 (52.2%) were female, and in both settlements the ratio of females to males was 1.09 (Table 7:1). In Tehran as a whole, there is a recorded male dominance. According to the 1980 census, 51.75 per cent of the total population in Tehran was male and 48.24 per cent female and the ratio of males to females was 1.07 (P.B.O. statistical centre, 1981b). These differences may be for two reasons: first, rural-urban migration mainly involves young men; second, it is a feature of squatters' way of life that when they settle and find some sort of security they bring their wives and families, and their male children also get married and bring their wives from their place of origin.

Table 7.1. Number of people surveyed in the sample areas by gender

Sex	Zoorabad		Karevan		Total	
	No.	%	No.	%	No.	%
Male	303	46.7	575	48.5	878	47.8
Female	346	53.3	612	51.5	958	52.2
Total	649	100.0	1187	100.0	1836	100.0

Author's survey in 1986

In both of the settlements surveyed there was a large percentage of households defined as "extended family" (24.2 per cent). This suggests that there is strong kinship support among relatives and friends. As was shown in the previous chapter, 74 and 88 per cent of migrants to Zoorabad and Karevan respectively received at some stage, some sort of help from relatives and friends. Only 6.1 per cent of all households were one or two person households and 69.7 per cent were large nuclear households (Table 7.2). The need for land for housing developments appropriate to larger families is evident from the relative dominance of large nuclear families in the sample.

Table 7.2 Type of household structure encountered in the sample.

Type of household	Zoorabad		Karevan		Total	
	No.	%	No.	%	No.	%
Extended household	32	27.8	47	22.2	79	24.2
Large nuclear household	75	65.2	153	72.2	228	69.7
Small nuclear household	8	7.0	12	5.6	20	6.1
Total	115	100.0	212	100.0	327	100.0

Note: Definitions:

An Extended Household: consists of the father of the family, his wife or wives, his unmarried daughters and sons and his married daughters and sometimes married sons.

A Nuclear Household: consists of a man who is not united with anybody except his wife or children.

- a Large Nuclear Household is a family with more than two members (e.g. husband, wife and children).
- a Small Nuclear Household is a family when the number in the household is two or less.

7.2. Age Structure

The age structure of the residents in the survey areas is shown in Table 7.3 and figure 7.1. Half of the sampled population (including other households which were living in the sampled dwelling units) consists of people under 15 years of age, (48.7 and 50.0 per cent in Zoorabad and Karevan respectively). Comparing this to Tehran as a whole, in which 36 per cent of total population is under 15 years of age (P.B.O. 1981b, 49) reflects the high proportion of young people in squatter settlements. Considering various districts in Tehran, it can be seen that in Districts 14 to 20 and also 9, 40 to 48 per cent; in Districts 1 to 3 about 27 per cent; and in the remaining districts between 31 to 39 per cent of population are under 15 years of age. This could be due to life cycle migration or age selective migration and residential segregation of the poor. This in effect follows the patterns in population structure of other developing countries which are characterised by having a young population. Iran is not exceptional with 43.3 per cent under 15 years of age. This could be on the one hand because of the high crude birth rate (CBR) and consequently the larger number of children present. In the case of Iran according to the statistical centre of Iran the crude birth rate (CBR) in 1984 was 39.38 and in urban Iran was calculated to be as high as 43.31 (P.B.M. statistical centre 1985a: 56,63). On the other hand this can also be partially because of the higher death rates in older age in less developed countries (Findlay and Findlay, 1987: 8).

The population structures of both settlements are similar (i.e. a negligible proportion of elderly people and a fairly large number of young). Table 7.3 shows the age structure of heads of households interviewed. 43.5 per cent were between 25 and 34 years of age, reflecting once again the youthfulness of the population structure. Comparing this with heads of households in Tehran as a whole, it can be seen that squatters have a high percentage of young heads of

Table 7.3 Percentages of age groups of total sample population and of Heads of Households in Zoorabad and Karevan; and also the percentages of the age groups of total population and of H.O.H. in Tehran.

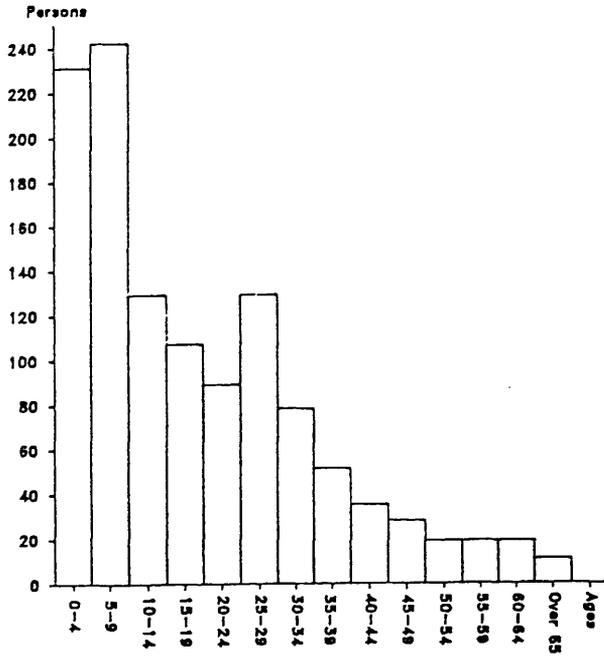
Age group (years)	Total households		Heads of households	
	Zoorabad & Karevan	Tehran	Zoorabad & Karevan	Tehran
0-4	19.1	13.7		
5-9	19.6	11.1		
10-14	11.3	11.2		
15-19	9.0	11.6		2.2
20-24	8.7	11.2	5.7	9.9
25-29	9.9	9.1	22.7	15.5
30-34	6.2	6.7	20.8	13.2
35-39	4.5	5.2	18.6	11.2
40-44	2.9	4.7	7.9	10.8
45-49	2.3	4.1	10.6	10.0
50-54	1.7	3.6	5.7	8.4
55-59	1.6	2.7	4.2	6.9
60-64	1.6	2.0	2.3	4.9
65+	1.6	3.1	1.5	7.0
TOTAL	100.0	100.0	100.0	100.0

Sources i) P.B.O. Statistical Centre (1981b:1)

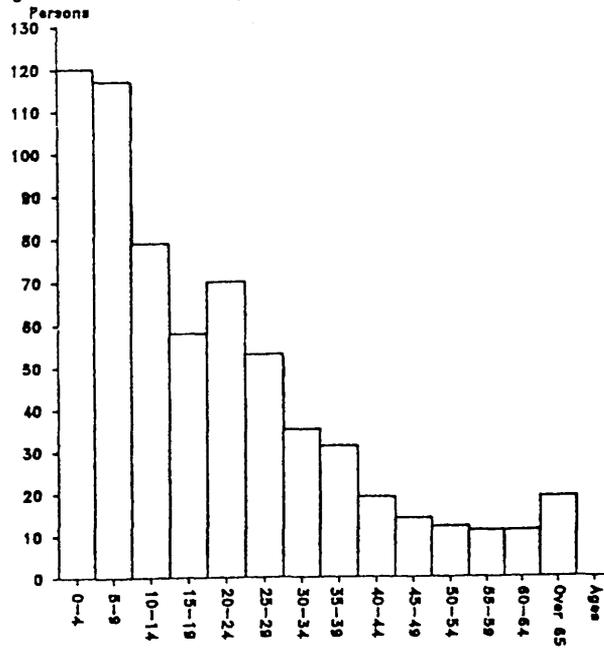
ii) Author's Survey in 1986.

Fig. 7.1 Age Structure.

Age Structure of 1187 persons in KAREVAN (May-June 1986)



Age Structure of 649 persons in ZOORABAD (March 1986)



households. This is because they are still in the process of consolidation and also due to the fact that young households have lower incomes and less savings. Consequently illegal housing is a lower risk to them than to the old.

Although the age of heads of households in the two settlements were relatively similar, in Karevan the proportion of heads of households between 45 - 49 years of age was higher than in Zoorabad. The main explanation of this difference lies in the history of land occupation: those who were older and were able to afford to buy the land did so in Karevan, rather than in Zoorabad. In Zoorabad land was invaded by settlers who did not have enough savings to be able to buy the land so they chose the land because it provided them with an opportunity to own a house at a relatively young age, albeit through illegal land invasion. This may also be the reason why there are more in the age group 20-24 years in Zoorabad than in Karevan (Fig. 7.1), and why there are more heads of households in Zoorabad in this age group (8.8 per cent) than in Karevan (4.0 per cent). Therefore the type of land occupation may be an important factor influencing the age structure of residents in a squatter settlement. As the survey shows, the settlement of Zoorabad was occupied by a younger age group owing to their inability to buy land.

7.3. Marital status

Table 7.4 shows the marital status of the population interviewed. Over 61.2 per cent of total sampled population of 10 years of age or over were married, and 34.4 per cent were single. Only 4.4 per cent were widowed or divorced at the time of the survey. In Iran, marriage for girls often happens at a young age. This is partially explained by the financial benefits to heads of poorer households from having their daughters married early, thus reducing their support cost to the household. According to the 1980 census, in Tehran 36.7 per cent of girls in the age group 15 to 19

years were married, but only 4.1 per cent of male population (P.B.O. statistical centre, 1981b:3). Often male children are encouraged to join the labour force to raise the household's income. In Tehran, 15.7 per cent of males and 1.1 per cent of females between the ages of 10 and 19 years were recorded as working by the census (P.B.O. statistical centre, 1981b: 13). These figures show how significant young men are as a means of adding to household income compared to young women and partly explains the age differential between women and men at first marriage.

Table 7.4 Marital status of people living in the sampled dwelling (10 years and over).

Marital Status	ZOORABAD		KAREVAN		TOTAL	
	No.	%	No.	%	No.	%
Married	236	57.3	455	63.4	691	61.2
Single	155	37.6	233	32.5	388	34.4
Widow	21	5.1	27	3.8	48	4.2
Divorced	0	0.0	2	0.3	2	0.2
TOTAL	412	100.0	717	100.0	1129	100.0

7.4. Educational Status

Table 7.5 shows that of the population of 6 years of age and over in both settlements, 42.2 per cent were illiterate and 42.6 per cent had only primary education. 15.0 and 0.2 per cent had secondary and higher education respectively. Therefore, the level of illiteracy was high in the squatter settlements.

Table 7.5 Education status of the population living in the sample survey (6 years and over)

Education status	Zoorabad		Karevan		Total	
	No.	%	No.	%	No.	%
Illiterate	208	41.9	379	42.4	587	42.2
Primary	210	42.2	383	42.8	593	42.6
Secondary	77	15.5	131	14.7	208	15.0
Higher	2	0.4	1	0.1	3	0.2
TOTAL	497	100.0	894	100.0	1391	100.0

According to the 1980 census, 76.8 per cent of the population of Tehran were literate and 23.2 per cent illiterate (P.B.O. statistical centre, 1981b). In comparison in the squatter settlements the illiterate proportion was much higher. A Chi square test ($\chi^2_{\text{calc.}} = 0.317$, at the 0.1 significance level) showed that there was no significant difference between the two settlements in their educational status, even though they had a different history of land occupation and as shown earlier different age structures.

This was a significant finding since some studies have shown (Flinn & Converse, 1970) that residents of settlements arising from illegal subdivision of land possess higher education status than residents of settlements established by migrant invasion. The logic to this is that the latter group might be expected to be economically worse off than the residents of settlements arising from illegal subdivision. As Breese (1966: 118) has noted the dichotomy of greater significance is between the illiteracy levels of all squatter settlements and those in other part of the same city. It is this divide which appears to be the more important one in Tehran.

7.5. Economic Activities

Table 7.6 provides information related to economic activities of the sample population. Among those of 10 years of age and over, 36.0 per cent were working and 31.7 per cent were housewives (homemakers: including females who are not married but helping with the housework). The proportion of the population recorded as job seekers or unemployed was as low as 8.9 per cent, and 22.5 per cent were students. There appears to have been very few retired persons in the settlements (Definition of employment explained in Appendix 3). The pattern of employment in the two settlements was similar.

Table 7.6 Economic activity of population of 10 years of age and over

		ZOORABAD		KAREVAN		TOTAL	
Economic Activities		No.	%	No.	%	No.	%
Economically active	Employed	149	35.4	261	36.4	407	36.0
	Unemployed/ seeking job	32	7.8	68	9.5	100	8.9
Economically inactive	Housewife (homemaker)	126	30.6	232	32.3	358	31.7
	Student	99	24.0	155	21.6	254	22.5
	Retired	9	2.2	1	0.2	10	0.9
Total		412	100.0	717	100.0	1129	100.0

Table 7.7 shows the type of employment of those in work. 38.8 per cent were working as waged or salaried employees in the private sector and 22.6 per cent in public sector. Therefore, there was a large percentage working in private

sector. Comparing this with Tehran as a whole (30.7 per cent) it can be seen that squatters have a higher proportion working in the private sector and this may be because they have less good access to public sector jobs than non-migrant populations. Detail of job types is discussed in greater detail below, but prior to turning to this it is useful to note 1) some interesting differences in employment statuses which exist between the two settlements 2) the role of location in influencing employment status and 3) the relationship between employment status and other socio-demographic variables. The main differences between the two settlements is in the percentage of self employed. In Zoorabad this rose to 30.8 per cent compared with only 17.3 per cent in Karevan.

Table 7.7. Type of employment of those in work (10 years of age and over)

Type of employment	Zoorabad		Kareven		Total		Tehran	
	No.	%	No.	%	No.	%	%	
Wage/salary private sector	53	36.3	105	40.2	158	38.8	30.7	
Wage/salary public sector	34	23.3	58	22.2	92	22.6	42.8	
Self employed	45	30.8	45	17.3	90	22.1	25.8	
Casual jobs/ others	14	9.6	53	20.3	67	16.5	0.7	
TOTAL	146	100.0	261	100.0	407	100.0	100.0	

Sources: (i) P.B.O. statistical centre of Iran, (1981b:14).
(ii) Author's survey in 1986.

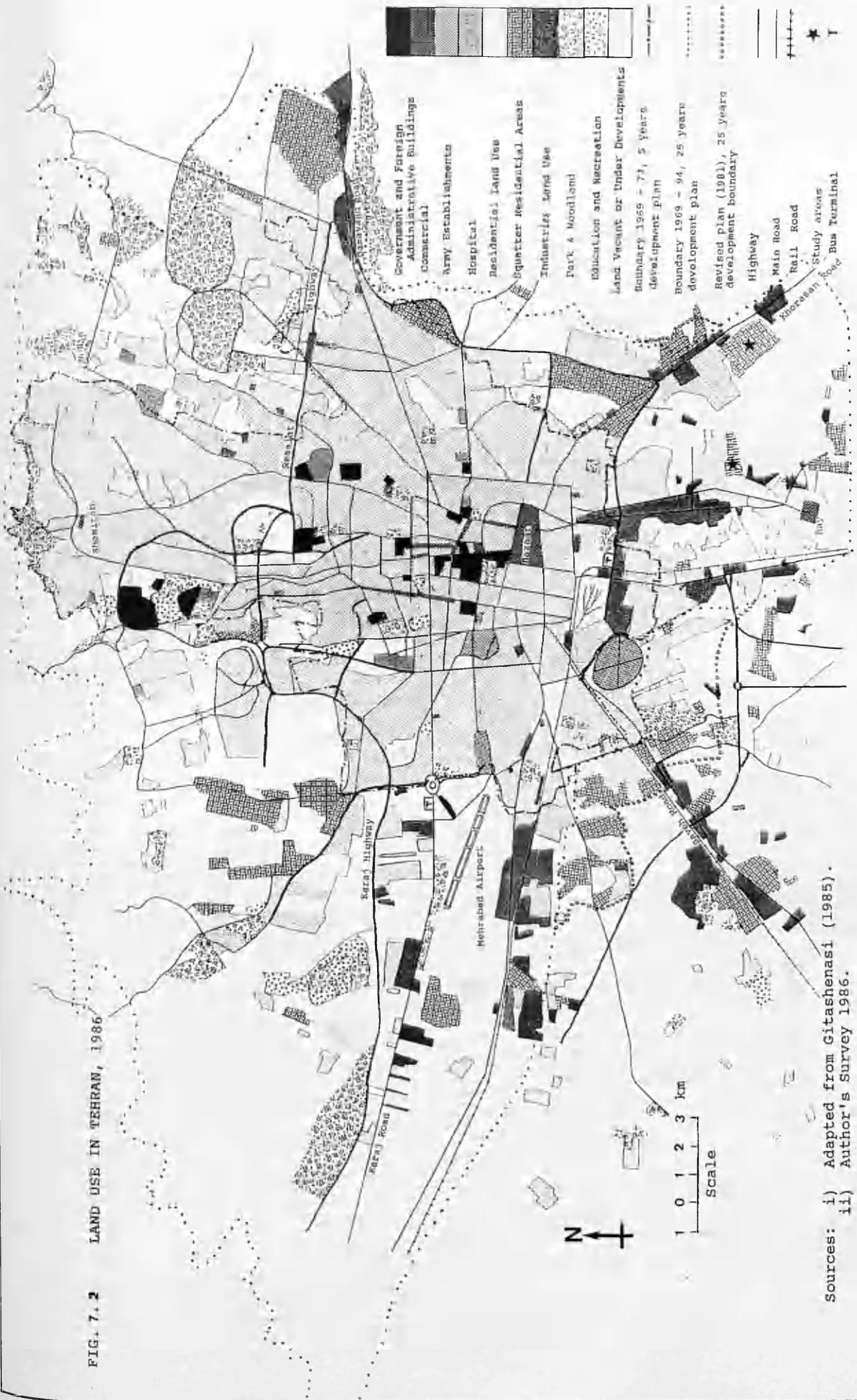
Therefore, self employment in Zoorabad appears to be higher although this may in part be a result of differences in definition since the inverse is true of the proportions describing themselves as being in casual jobs. Another reason could be the location of the settlements. Zoorabad is located in a more densely populated area of the city (Dolat Abad Estate) and in proximity to the site of some small scale industries, shops and a variety of urban amenities. It is also nearer to the city centre, while Karevan is located closer to the urban fringe and is relatively far from any other residential and commercial area (Fig. 7.2).

7.6. Place of Work

Table 7.8 and Fig. 7.3 show that a higher percentage of the heads of households of the total sample interviewed work and live in the same district of Tehran (30.8 and 30.0 per cent in Zoorabad and Karevan respectively). This reflects the importance of the availability of jobs in the immediate neighbourhood of squatter settlements. Fig. 7.2 maps general land use zones in Tehran. It shows that there are a large number of large and small scale production sites located along Khorasan and Karevan Road, from Khorasan Square to Karevan neighbourhood (e.g. Cement factory, stone cutting, blanket making, and jobs in transportation such as unregistered taxi drivers*). Other kinds of activities are also found along Fadaiban Islam Road from Shoosh square to Shahr-e Ray (Mostly textile firms and leather factories and small scale service industries such as toolmakers and shoemakers). As in most Third World cities (Findlay and Paddison, 1986), there is a strong concentration of workshops and artisanal employment in the central area.

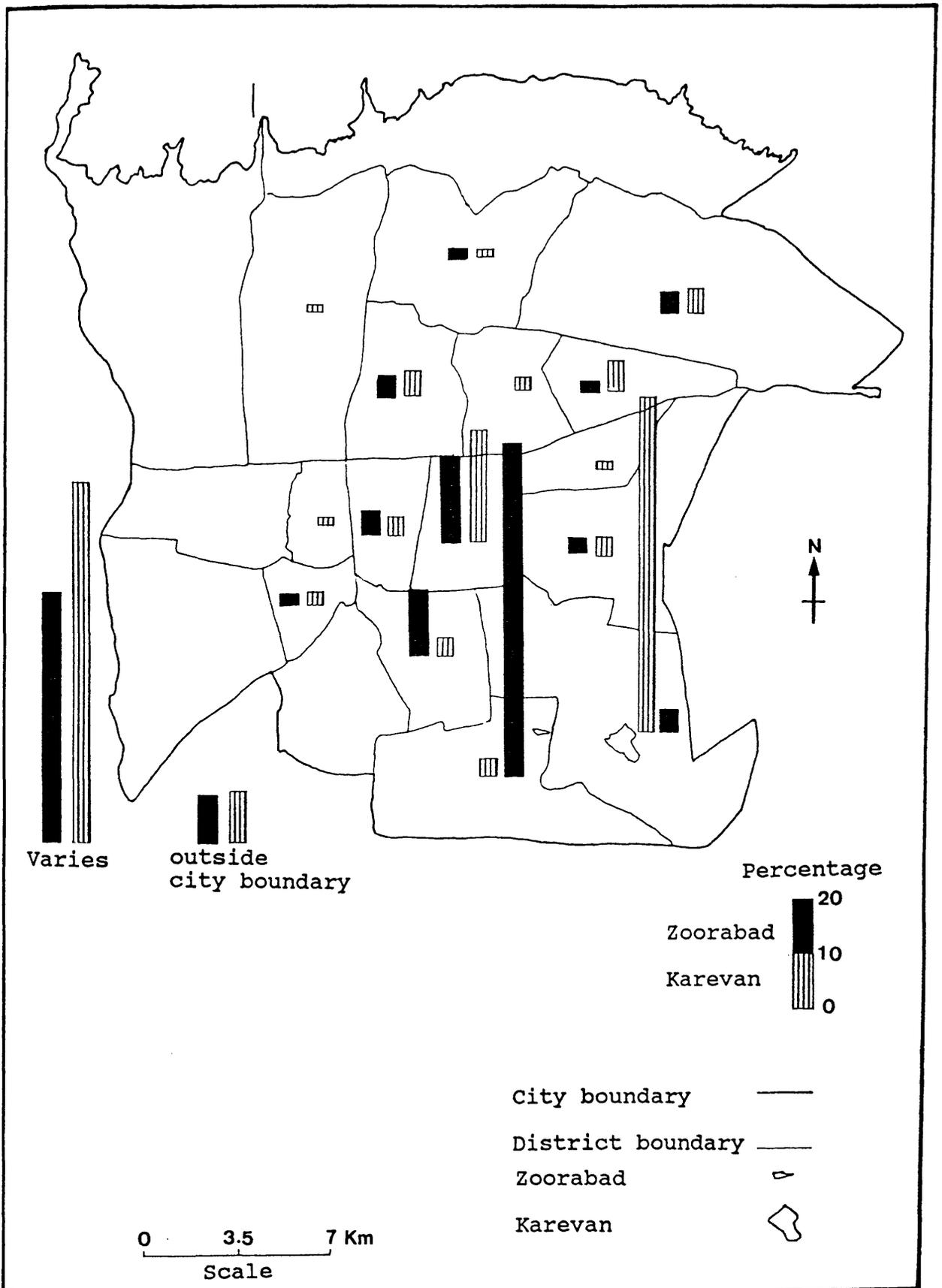
* Since during office hours only licensed means of public transport are allowed in the city centre, unofficial taxi drivers work outside the central zone during these hours.

FIG. 7.2 LAND USE IN TEHRAN, 1986



Sources: i) Adapted from Gitashenas (1985).
 ii) Author's Survey 1986.

Fig. 7.3 Location of Head of Household's Employment.



Source: Author's survey, 1986.

This concentration certainly also exists in Tehran and is the focus of employment for many new migrants on their first arrival in the city (Turner, 1967; 1968). Once established in the city many migrants appear to find work elsewhere.

The survey shows that a significant percentage of heads of households work in small scale production; 16.3 per cent, for example, as tailors and shoemakers, and 13.6 per cent reported themselves as working in the transportation sector e.g. mechanics, drivers, assistant drivers etc. (Table 7.9). A fairly large number of heads of household gave no definite place of work (23.1 per cent in Zoorabad and 32.9 per cent in Karevan). This indicates the large number of persons employed in "mobile jobs" from both settlements. Indeed this was the second most important category after employment within the settlement areas. This says much about squatter's way of life and their means of earning a living.

Table 7.8 Place of work of residents of the squatter settlements in Tehran

Place of work/Districts	Zoorabad		Karevan	
	No.	%	No.	%
Not applicable	8	8.8	6	3.5
North	3	3.3	8	4.6
East and North East	4	4.4	13	7.5
West	1	1.1	2	1.2
Central	9	9.9	22	12.8
South West	11	12.0	3	1.7
South	28	30.8	2	1.2
South East	2	2.2	52	30.0
Varies	21	23.1	57	32.9
Outside Tehran's boundary	4	4.4	8	4.6
TOTAL	91	100.0	173	100.0

Source: Author's survey, 1986

Table 7.9 Employment status by head of household

Employment Category	Zoorabad		Karevan		Total		Tehran
	No.	%	No.	%	No.	%	%
Working in large scale production industries	15	16.5	13	7.5	28	10.6	4.6
Working in small scale production industries	17	18.7	26	15.0	43	16.3	13.6
Working in transport equipment (driver, assistant driver or mechanic)	14	15.3	22	12.7	36	13.6	11.2
Working as casual workers/day labourers	12	13.2	29	16.8	41	15.6	2.2
Commercial & industrials and retail enterprises (local shops, food, clothes, etc).	8	8.8	15	8.7	23	8.7	12.9
Service workers	5	5.5	21	12.1	26	9.8	6.6
Construction workers	6	6.6	25	14.4	31	11.7	8.0
Unemployed	4	4.4	4	2.3	8	3.0	
Inactive/undefined job	4	4.4	2	1.2	6	2.3	0.1
White collar (clerical work)	4	4.4	6	3.5	10	3.8	12.9
Protective workers	2	2.2	9	5.2	11	4.2	6.8
Professional (engineers)	0	0.0	1	0.6	1	0.4	15.6
Agriculture, animal husbandry, fishermen	0	0.0	0	0.0	0	0.0	1.2
Administrative and managerial workers	0	0.0	0	0.0	0	0.0	1.4
TOTAL	91	100	173	91	264	100	100

Sources: 1) Survey by author 1986, ii) P.B.O. Statistical Centre of Iran (1981b).

"Mobile jobs" done by the respondents to the survey are classified according to the nature of the jobs, such as transport workers (27.2 per cent of the total sample) or construction workers whose place of work varies (24.7 per cent of total sample). Some "mobile jobs" are in illegal sectors: capital constraints make it impossible for some to have a legal business with a fixed location. Therefore they do illegal work without any fixed location such as street vendors, bootblacks and black marketeers (39.0 per cent of total sample) (Table 7.10). Also Table 7.9 shows just what a high percentage of casual workers there are in the squatter settlements (15.6 per cent). Compared to Tehran as a whole (2.2 per cent), it again indicates the distinctive and constrained character of squatters' employment. Small scale production industries is another important category on which a high percentage of population of squatters depend for their livelihood (16.3 per cent of total sample) (Table 7.9); 20 per cent of these squatters work in districts in which the squatter settlements are situated, and 27.9 per cent work in other districts of Tehran or outside Tehran's five and twenty five years boundary along Karaj Road in the west, Saveh Road in the south west and Varamin Road in the south (Fig. 7.2). Also most large scale production industries are located in these areas such as, sweet factories, car manufacturing industries, tyre factories, brick kilns, cooler and refrigerator factories, glass factories and so on.

It can be seen from the above that there is a high percentage of small scale production industries in both of the squatter settlement areas. Also in Tehran as a whole the percentage of workers in small scale production industries (13.6 per cent) is the next largest after professional employees (Table 7.9). This indicates the significance of the small scale production to the urban labour market in general and to the squatter settlements in particular.

Table 7.10 Employment Category and their Locations - Head of Households

Employment category	ZOORABAD				KAREVAN				TOTAL: BOTH SETTLEMENTS			
	Job in the same district as squatter settlement	Job at no fixed location	Job at another location	N/A	Job in the same district as squatter settlement	Job at no fixed location	Job at another location	N/A	Job in the same district as squatter settlement	Job at no fixed location	Job at another location	N/A
Working in large scale production	5	0	10	3	2	8	0	8	2	18		
Working in small scale production	8	0	9	8	1	17	0	16	1	26		
Transport equipment workers (drivers, mechanics etc.)	2	7	5	4	14	4	0	6	21	9		
Casual workers/day labourers	1	8	3	4	22	3	0	5	30	6		
Proprietors of industrial, commercial and retail enterprises (local food, clothes, shops)	7	0	1	14	0	11	0	21	0	2		
Service workers	4	0	1	10	0	11		14	0	12		
Construction workers	0	5	1	5	14	6	0	5	19	7		
White collar (clerical work)	1	0	3	1	0	5	0	2	0	8		
Protective work	0	1	1	3	2	4	0	3	3	5		
Professionals (engineers)	0	0	0	0	1	0	0	0	1	0		
Unemployed/inactive/unidentified	8	0	6	6	0	0	14	0	0	0		
	8	28	21	34	6	52	14	80	77	93		

* Not applicable: Since they are unemployed or inactive or unidentified. There is no location.

The concentration of shopkeepers and retailers (e.g. the owners of hair dressers, tailors, repair services, carpentry and metal workshops, groceries, bakeries, etc.) turned out to be relatively significant in the settlements. Some squatters have converted parts of their dwellings to a shop or workshop and work in their homes. 8.8 per cent and 5.8 per cent in Zoorabad and Karevan respectively have some form of commercial or service activity in their houses or use part of their dwelling as a workplace (See Table 7.9).

Although local shopkeepers serve an important function by providing families in these areas with many essential services and daily consumer goods, commercial activities are an inadequate economic base for the squatter settlement. More employment in the settlements is needed and in particular there could be great benefits in introducing light industries in these neighbourhoods from the point of view the resident job seekers. Regrettably there are many squatter settlements in other parts of Tehran which this might equally apply. Most squatters have a short journey to work; the travel time to work is less than 30 minutes for 31.8 per cent of heads of household in Zoorabad and 30.7 per cent in Karevan. The modal journey time of 30-44 minutes reflects the travel time to the city centre from Zoorabad and 45-59 minutes from Karevan (Table 7.11).

The public bus/minibus was the main mode of transport used in the settlements (25.3 and 51.4 per cent in Zoorabad and Karevan respectively). A large number went to work on foot (20.9 per cent in Zoorabad and 18.5 per cent in Karevan) (Table 7.12). The most significant difference between the two settlements in terms of mode of travel to work was in the level of car/motorbike ownership. In Zoorabad it was higher than in Karevan inspite of the fact that the average household's income in Zoorabad was slightly less than in Karevan (Table 7.13). Therefore it may be the nature of their jobs which requires them to have a higher level of car/motorbike ownership (e.g. licenced and unlicenced taxi drivers).

Table 7.11 Journey to work times of those interviewed

Journey to work	Zoorabad		Karevan		Total	
	No.	%	No.	%	No.	%
N/A	5	5.5	3	1.7	8	3.0
Less than 15 min.	18	19.8	31	17.9	49	18.6
15-29 minutes	11	12.0	22	12.8	33	12.5
30-44 minutes	17	18.7	16	9.2	33	12.5
45-59 minutes	8	8.8	29	16.8	37	14.0
60-74 minutes	5	5.5	7	4.1	12	4.5
75-79 minutes	4	4.4	3	1.7	7	2.7
Nox Fixed place	23	25.3	62	35.8	85	32.2
TOTAL	91	100	173	100.0	264	100.0

Table 7.12 Facilities used to travel to work

Type of transport	Zoorabad		Karevan		Total
	No.	%	No.	%	No.
N/A	5	5.5	3	1.7	8
Walk	19	20.9	32	18.5	51
Bicycle	2	2.2	0	0.0	2
Motorbike	13	14.3	10	5.8	23
Public bus or minibus	23	25.3	89	51.4	112
Private car	12	13.2	17	9.8	29
Taxi and public mini-buses	3	3.3	5	3.0	8
Company/factory's transport	14	15.3	17	9.8	31
TOTAL	91	100.0	173	100.0	264

7.7. Income

Table 7.13 and Fig. 7.4 show that a fairly large proportion of households had an income between 45,000 - 54,990 Rials (\$562.5 - \$687.0) per month (26.3 per cent of the total sample). The average monthly income of the interviewed households was 52567 Rials (\$657.0 at 1986 prices). The residents in Karevan tended to have a slightly higher average monthly income than in Zoorabad (\$617.0 and \$678.0 in Zoorabad and Karevan respectively). In terms of income the two settlements are highly similar as shown by a "T-Test". This indicated that there was no significant difference in the average income levels (calculated $t = 0.166$: at 95 per cent level $t_{tab} = 1.96$). By comparison the average household income per month in all urban areas of Iran according to Iran's statistical centre was 86,180.0 Rials (\$1077.0) and in Tehran province 107,735 Rials. This shows that the average total household income in the settlements studied was 51 per cent below the average household monthly income in Tehran province as a whole. Again a "T-Test" was carried for difference of sample means. It showed that the two settlements were significantly different from the population of Tehran as a whole, at the 99 per cent confidence level, in terms of their average household incomes (Karevan sample: $\bar{X} = \$678.0$; Zoorabad sample: $\bar{X} = \$617.0$). According to the Iran statistical centre (P.B.M, 1985b) the average total household expenditure in Tehran province was 135750 Rials (\$1696.87) per month, out of which 33 per cent was devoted to food expenditure and 67 per cent to non food expenditure. As can be seen, total expenditure is more than the average household income in Tehran. This may be due to the fact that people spend more than their earnings, but it is more probably because of the significant proportion of income earned from "informal activities". This as a result leads to an under estimation of income levels. The average income of only 52567 Rials (\$657.0) per month in the two

Table 7.13 The average monthly household income of the squatter settlements and of Tehran (U.S.\$ = 80 Rials at 1986 Prices)

Total household's income per month	ZOORABAD		KAREVAN		TOTAL	
	No. of households	%	No. households	%	No. of households	%
No answer	0	0	3	1.7	3	1.1
5000-14990 Rials	1	1.1	0	0.0	1	0.4
15000-24990 Rials	4	4.4	3	1.7	7	2.7
25000-34990 Rials	10	11.0	16	9.3	26	9.8
35000-44990 Rials	23	25.3	35	20.2	58	22.0
45000-54990 Rials	24	26.3	46	26.7	70	26.5
55000-64990 Rials	13	14.3	36	20.8	49	18.6
65000-74990 Rials	9	9.9	10	5.8	19	7.2
75000-84990 Rials	6	6.6	10	5.8	16	6.0
85000-94990 Rials	1	1.1	7	4.0	8	3.0
95000 and over Rial	0	0.0	7	4.0	7	2.7
TOTAL	91	100.0	173	100.0	264	100.0

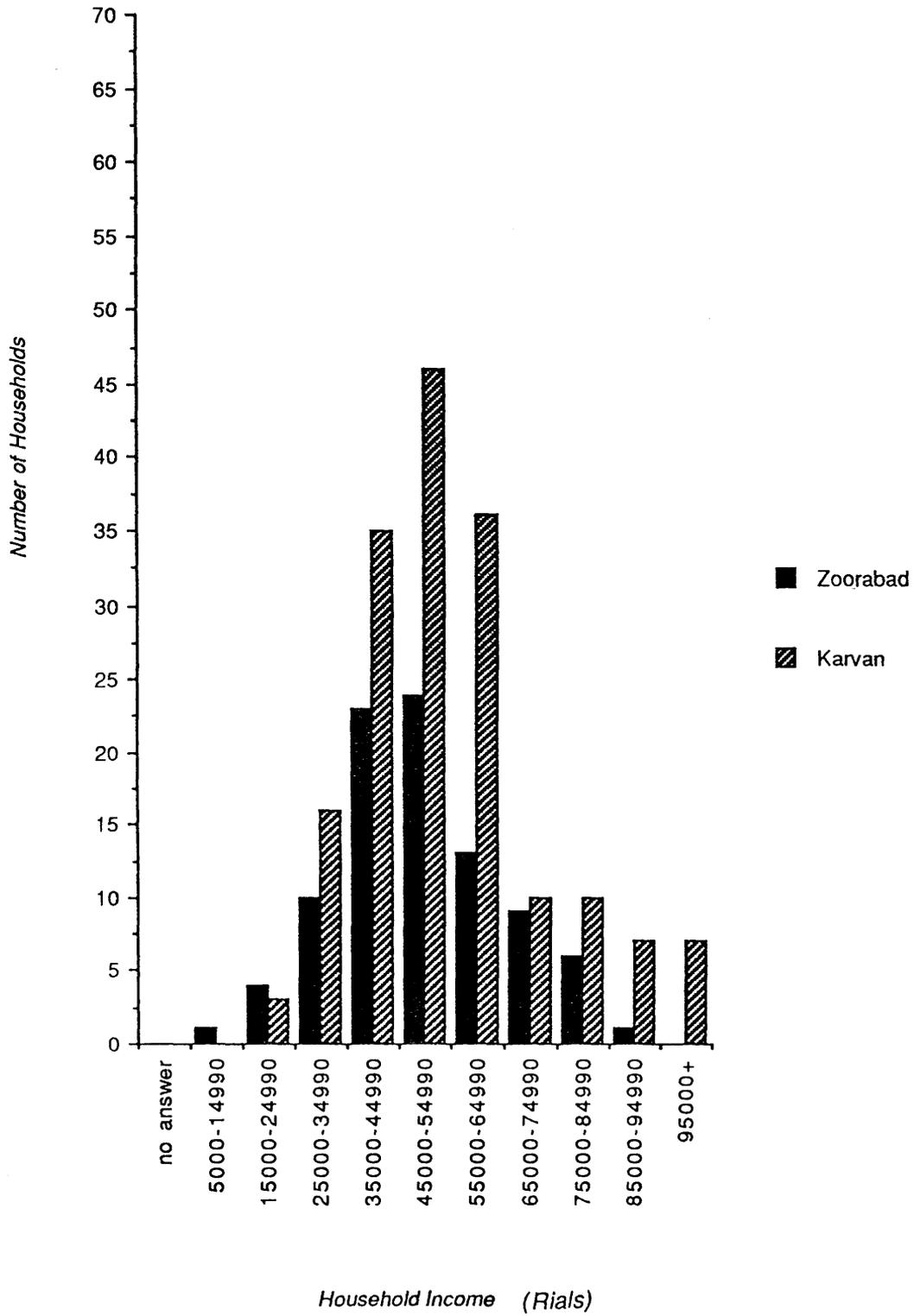
Average total household's income per month. 49,340 Rials (\$617.00) 54,294 Rials (\$6780) 52,567 Rials (\$657.00)

Calculated t = 0.166 at 95%
Critical value = 1.96

- No significant difference in income levels between the two settlements.

Fig. 7.4 The Total Household Income Per Month :

(sum in Rials) 1\$US=80R. 1986



settlements under study suggests that the squatters are living under considerable financial constraints with scarcely enough income to cover basic food costs.

Also from Table 7.14 it can be seen that the chief determinant of income levels in the two settlements is the number of "earning members" rather than job type. When the number of earning members of a household exceeds one this had the most marked influence in increasing the household's income. Therefore the variation in income between households reflects mainly household size, rather than income differences between individual employees.

To summarise, the profile analysis of the populations of the two squatter settlements indicates that in demographic, social and economic terms the residents of the two squatter settlements are very poor by comparison with most people in Tehran.

While it is possible from the data presented above to conclude that the residents of the squatter settlements are significantly disadvantaged relative to others in the city, it is less easy to determine whether the processes which have brought about this inequality are likely to heighten the contrasts through time or whether the squatters have adopted strategies for self-promotion in the housing and labour markets which could improve their future positions. Indeed it is worth asking whether their residence in the squatter settlements is part of their "self improvement" strategy or whether it is in itself evidence of an allocation procedure in the urban housing system which will reinforce inequalities in the future. To tackle these issues and those set out at the end of Chapter Five it becomes necessary to introduce on the one hand a time dimension to the analysis, and on the other hand to investigate how the residents of the squatter settlements perceived their own positions in the urban housing and labour markets of Tehran.

Table 7.14 Total household's income x number of persons working (US.\$ = 80 Rials at 1986 Prices)

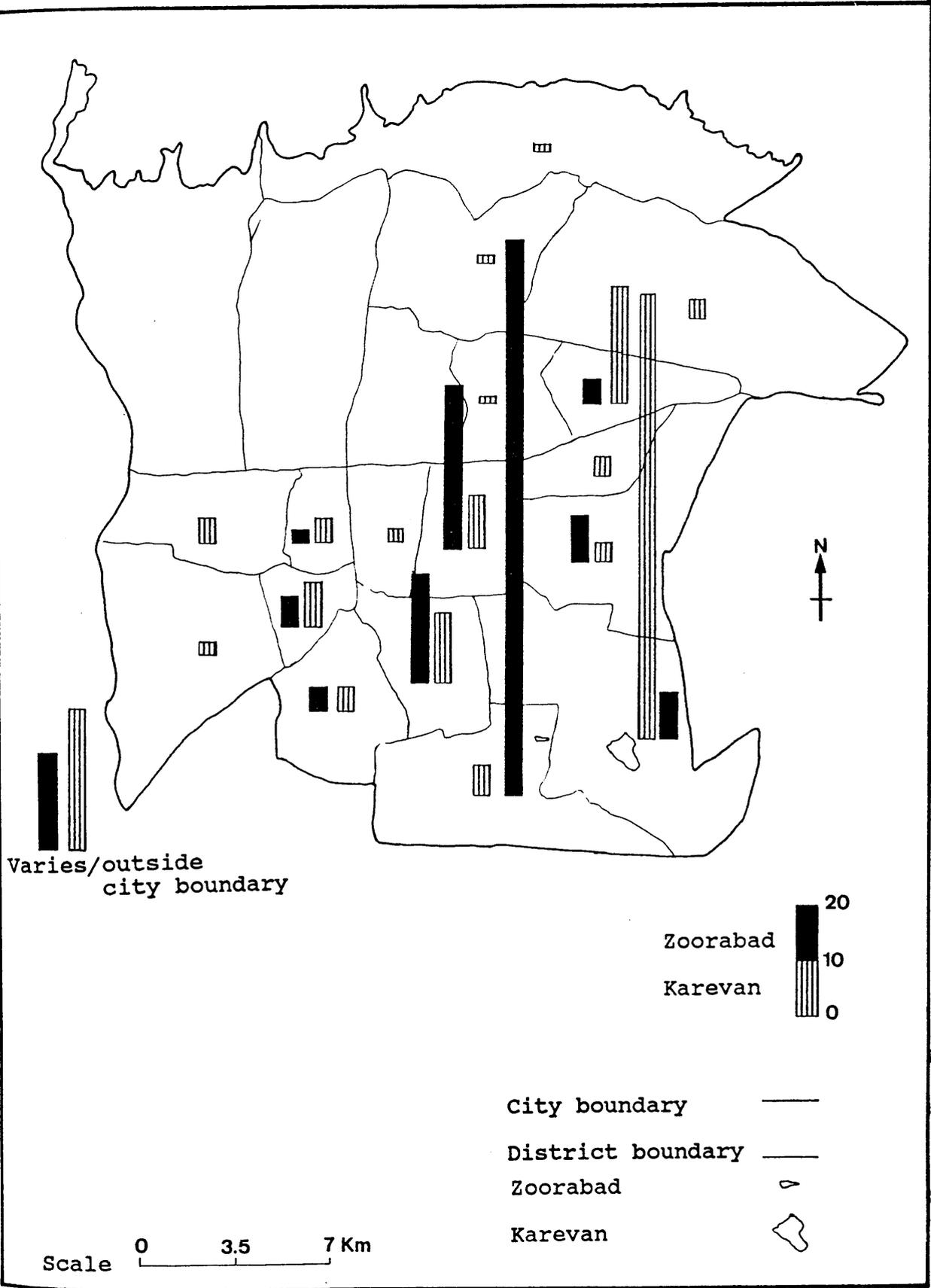
Total income per month (Rials)	Zoorabad			Karevan		
	One person H.H.	Two persons %	Three persons %	One person %	Two persons %	Three persons %
5000-14990 Rials	0	0	0	0	0	0
15000-24990	0	1	4.5	0	2.2	0
25000-34990	3	4.5	4.5	0	11.7	0
35000-44990	8	12.1	4.5	0	24.0	2
45000-54990	20	30.3	13.7	1	30.0	5
55000-64990	19	28.8	18.2	1	20.4	7
65000-74990	9	13.6	18.2	1	2.9	5
75000-84990	5	7.7	13.7	0	4.4	4
85000-94990	2	3.0	18.2	0	2.2	1
95000 and over	0	0.0	4.5	0	0.0	3
No answer	0	0	0	0	2.2	0
	66	100.0	100.0	3	100.0	27
Average total household's income per month	51,660 Rials £646	66,360 Rials \$830	65,000 Rials \$812	49,400 Rials \$617	67,030 Rials \$838	88,888 Rials \$1111

7.8. Residential mobility

Having examined the socio-demographic characteristics of the survey population, it now becomes appropriate to look at the movements within the Tehran housing market, which resulted in people moving to Karevan and Zoorabad. This should make it possible to ask whether these squatter settlements are providing accommodation for a mobile and transient population or for long-term residents. In the survey the head of the household was asked the location of his previous accommodation. Of the total sample in Zoorabad 49.5 per cent had moved from houses in the same district and 15.3 per cent from the central district of Tehran. In Karevan 39.9 per cent have moved from other parts of the same district of the city in which the settlement is located, and 15.6 per cent had come from districts nearby to the East/North East of the city (Fig. 7.5). These areas of Tehran are typified by a high degree of overcrowding as shown on Figure 3.7 in chapter 3. Of those who had moved to these settlements almost all had previously lived in Tehran. This was true for 91.2 per cent of those surveyed in Zoorabad and 87.3 per cent of those in Karevan.

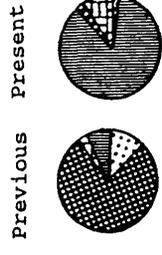
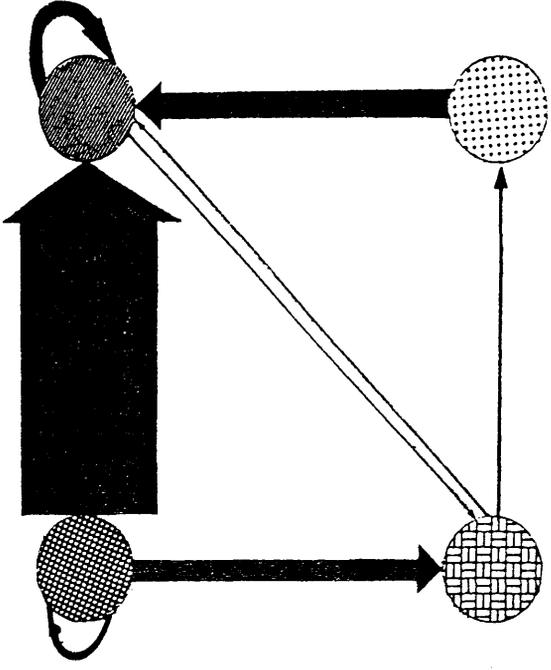
Fig. 7.6 shows the pattern of change of tenureship. These diagrams show that the squatter settlements have provided for most residents of Zoorabad and Karevan, the opportunity to switch from the rented to the owner occupied sector of the Tehran housing market. 79.1 and 69.9 per cent of the total sample in Zoorabad and Karevan respectively had previously been living in rented accommodation and a small number had owned or shared their accommodation (9.9 and 15.1 per cent in Zoorabad and Karevan respectively). Almost all of those who had previously owned or shared their accommodation had done so within the legal housing stock of the city. From a total of 9 households in Zoorabad only 1 of them had previously occupied land illegally and in Karevan from a total of 31 households only 2 had been illegal occupants before. There was no pressure from the municipality on them to move from their previous illegal

Fig. 7.5 Location of Respondents' Previous Accommodation.



Source: Author's survey in 1986.

Zoorabad



Pattern of Tenure

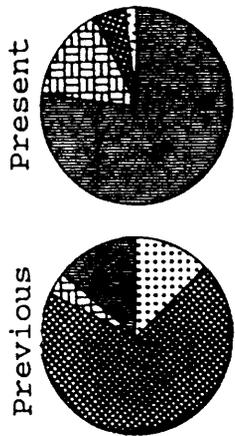
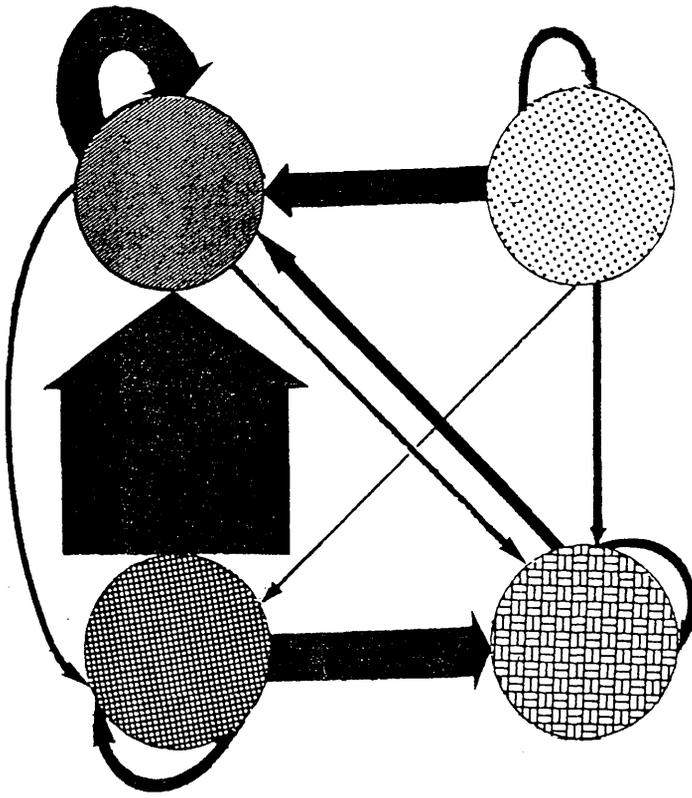


Rented
Owners
Shared owners
Free

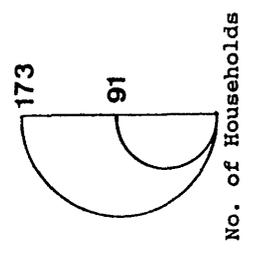
No. of Households



Karevan



Pattern of Tenure



No. of Households

Fig. 7.6 Change of Tenure involved in Moving to Squatter Settlements.

accommodation. Taken together with the evidence presented below concerning the motives for relocation, it becomes evident that the residential movements captured by the household surveys represent choices made by the residents of the squatter settlements in response to the severe economic and family constraints imposed on them by their previous accommodation, rather than because of any "forced" relocation or directed movement resulting from government housing policies.

The analysis of reasons given by squatters moving from their previous accommodation is presented in Table 7.15. It shows that nearly half of the households claimed that they moved because of the high rent or because of harrassment from their landlord (41.7 per cent from total sample). The second most important reason was shortage of space (34.5 per cent). No less than 43.6 per cent of the total sample had previously lived in one room rented accommodation with an average of 5.6 persons per household. The availability of the free land for erecting owner occupied dwelling units was therefore a very attractive option and was given as the main reason for choosing to move to Zoorabad (65.9 per cent). Some 17.6 per cent claimed their move occurred because of the availability of cheaper land or because of better housing. In Karevan the main reason given was the availability of the cheap land (58.4 per cent). Only 14.4 per cent of the total sample claimed that their move was because of the desire to be close to relatives or friends (Table 7.16). The concept of "choice" and residential preference is of course a limited one, given the circumstances of the Tehran housing market which have been described above. It should be pointed out that many "choices" were not open to squatters, such as moving to more desirable established residential areas. The weight of evidence presented in Tables 7.15 and 7.16 is that economic constraints are the dominant force driving this aspect of the housing market. Theories of lifecycle movements and moves in relation to perceived residential desirability clearly have little relevance in the context of the severe

Table 7.15 Most Important reasons for leaving previous accommodation

Reasons	ZOORABAD		KAREVAN		TOTAL	
	No. of households	%	No. of households	%	No. of households	%
High cost of living	7	7.7	23	13.3	30	11.4
Shortage of space	26	28.6	65	37.5	91	34.5
Harrassed by the landlord (high rent payment)	43	47.2	67	38.7	110	41.7
Municipality's Act	5	5.5	2	1.2	7	2.7
Religious leader's advice to get a piece of land	6	6.6	0	0.0	6	2.3
House demolished by natural causes	1	1.1	1	0.6	2	0.7
Job situation	2	2.2	7	4.0	9	3.4
Undesirable physical environment	1	1.1	6	3.5	7	2.6
Distance from city centre	0	0.0	2	1.2	2	0.7
Total	91	100.0	173	100.0	264	100.0

Table 7.16 Most important reason for choosing the present accommodation

	ZOORABAD		KAREVAN		TOTAL	
	No. of households	%	No. of households	%	No. of households	%
Near to work	0	0.0	2	1.2	2	0.7
Private ownership and escape from landlord pressure	8	8.8	12	7.0	20	7.6
Better neighbourhood	0	0.0	0	0.0	0	0.0
Relatives and friends	7	7.7	31	17.9	38	14.4
To get free land for cheaper housing	60	65.9	3	1.7	63	23.9
To buy cheaper land/house for better housing	16	17.6	101	58.4	117	44.3
Marriage	0	0.0	7	4.0	7	2.7
Decrease in the family income	0	0.0	17	9.8	17	6.4
TOTAL	91	100.0	173	100.0	264	100.0

constraints placed on the squatters by their low and insecure incomes and the high rents demanded by landlords in the private rented sector. What is surprising in Table 7.15 and 7.16 is that many households gave non-economic explanations of their moves such as marriage or to be close to relative or friends.

Table 7.17 shows that those who had previously rented their accommodation had spent an average 8740 Rials (US\$109) on rent. Since most of them had moved over seven years prior to the survey it is hard to gauge the importance of this rental figure relative to their incomes. It is however pertinent to repeat that the squatter settlements under study are home to the very poor, with average income levels of less than half that of Tehran as a whole. Consequently, the people in the survey, both in their previous and current accommodation, are living under severe economic constraints, forcing them to evaluate carefully strategies for minimizing their expenditure on accommodation in order to have sufficient for food and clothing.

An obvious issue raised by this analysis of intra-urban movement is what forces determined the squatters' initial entry to the rented accommodation sector. If they found this to be so expensive and overcrowded, then what guided them to this form of housing. The most obvious answers would appear to be on the one hand their inability to organise themselves to construct their own housing and occupy land at the time of their initial arrival in the city, and on the other hand their need to find some form of accommodation to permit themselves to become established in the urban system. The survey respondents indicated that an important influence on their choice of previous accommodation was proximity to friends or relatives. Table 7.18 shows clearly that a strong association existed between place of previous residence and place of residence of the majority of the household's relatives and friends. This is indicated by the large number of entries on the

Table 7.17 Rent per month at the previous accommodation
(Applicable respondents). US\$ = 80 Rials in 1986

Rent per month (Rials)	ZOORABAD		KAREVAN		TOTAL	
	No. of H.	%	No. of H.	%	No. of H.	%
Less than 2000	2	3.0	1	0.9	3	1.6
2000-4990	18	25.0	27	24.0	45	24.6
5000-7990	30	42.0	23	20.8	53	29.0
8000-10990	9	12.0	21	19.0	30	16.4
11000-13990	5	7.0	13	11.8	18	9.8
14000-16990	5	7.0	16	14.5	21	11.5
17000-19900	1	1.0	5	4.5	6	3.3
20000 & over	2	3.0	5	4.5	7	3.8
TOTAL	72	100.0	111	100.0	183	100.0
Average rent per month	7580 Rials (\$94.0)		9500 Rials (\$118.0)		8740 Rials (\$109.0)	

diagonal of the matrix and the relatively small number of entries on the rest of the table. Clearly proximity to friends or relatives is a key support to new migrants to the city, in helping them to find accommodation and employment.

Subsequent movement to Karevan and Zoorabad from rented accommodation in other parts of the city was therefore for many (but not all) squatters a movement away from the location of residence of friends and relatives who had first helped them become established in the city. This was particularly marked in the case of Karevan squatters. The increased average distance to the homes of friends and relatives reflects on the one hand the greater commitment of the residents of the squatter settlements to live permanently in Tehran based on their own abilities to be self supporting and on the other hand indicates the need for the squatters to be able to provide for themselves adequate

Table 7.18 Location of Previous Accommodation and Location of Relatives' and Friends' Accommodation

Location of Previous Accommodation in Tehran	ZOOBABAD										KAREVAN									
	North Districts	West Districts	East Districts	West Districts	Central Districts	South Districts	South Districts	S.E. Tehran	Various Parts of Tehran	Don't have relatives in Tehran	North Districts	West Districts	East Districts	West Districts	Central Districts	South Districts	South Districts	S.E. Various	Total	
Rural/Area outside Tehran's Boundary	1	1	2	0	0	1	3	0	0	8	11	1	0	0	0	1	6	1	22	
North N/W Districts	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	3	
East/N East District	0	0	3	0	0	0	3	0	0	6	3	0	19	1	0	0	4	0	27	
East Districts	0	0	0	2	0	0	1	0	0	3	0	0	0	9	0	0	3	1	13	
Central	1	0	1	0	2	3	5	2	0	14	1	0	0	0	8	2	2	0	14	
South Districts	0	1	1	0	0	5	4	0	0	11	1	1	1	0	0	11	0	1	15	
South Districts	4	1	2	1	3	7	24	1	2	45	0	0	0	0	0	7	2	2	10	
South East District	0	0	1	0	0	2	0	1	0	4	9	2	4	0	0	2	0	51	69	
Total	6	3	10	3	5	18	40	4	2	91	25	5	25	10	8	17	9	69	173	

Source: Author's Survey, 1986.

shelter for their families in a situation of reduced kinship support. This latter issue underscores the importance of there being mechanisms within the urban economy of Tehran to permit squatters to upgrade and improve their accommodation.

Having shown in Table 7.18 that relatives and friends were a most important influence on the location of previous residence of squatters (in the case of the residents in Karevan 62 per cent of those surveyed had previously lived in the same part of the city as their relatives), it should not be thought that this influence is totally absent in the squatter settlements. In line with established theory, it was likely that once established in a particular geographical sector of the city, subsequent relocation would be to an outer part of the same sector, rather than in another part of the city (Adams, 1969). This in itself should have ensured that once residence was established in a sector close to relatives and friends, that same continuity of association was sustained. This is indeed the case, with 44 per cent of residents in Zoorabad still claiming to be living in the same part of the city as most of their relatives and friends. In Karevan the proportion was 40 per cent.

A striking feature of the survey was the higher level of expenditure by households on their current housing, despite their low average incomes. Within the squatter settlements owner occupiers claimed to spend 56 and 68 per cent of their earnings respectively in Zoorabad and Karevan on maintaining or extending their dwellings. Predictably amongst those renting or sharing their homes with other families expenditure on housing was lower (Table 7.19). The overall picture which emerges, is however, one of heavy investment in housing by the residents of these settlements, and this despite their lower incomes. While not particularly accurate, it was interesting to find that most residents believed their houses to be very valuable should they choose to sell them. The average house price quoted was over 4 million Rials (\$52,500) reflecting both level of inflation

Table 7.19 The average household income and its percentage spent for the accommodation per month US\$ = 80 Rials at 1986 prices

Type of tenure	ZOORABAD				KAREVAN			
	No. of Households	The average household income per month	% of household income spent on the accommodation	Average years living in the settlement	No. of household holds	The average household income per month	% of household income spent on the accommodation	Average years living in the settlement
Owners	78	39740 Rials (\$4970.0)	56%	6.8 years	134	52270 Rials (\$653.0)	68.0	4.9 years
Sharers	9	46670 Rials (\$583.0)	30%	5.5 years	27	55760 Rials (\$697.0)	27.0	5.8 years
Renters	3	50000 Rials (\$625.0)	35%	5.5 years	9	57770 Rials (\$722.0)	30.0	3.1 years
Free	1	0	0	0.0	3	0.0	0.0	0.0

Source: Author Survey, 1986

in real estate prices in Tehran and also the significant investments achieved by the residents of Zoorabad and Karevan over the six or seven years since their arrival in these settlements. It should be noted however, that most residents (70 per cent) did not know or would not put a figure on the value of their property. Of those that did few quoted a figure of less than 1 million Rials (\$13,100). These figures do however seem to be borne out by the total level of investment which the residents claimed to have made in their accommodation since their arrival in Karevan and Zoorabad (Table 7.20).

According to an interview with a local estate agency, the actual price of a house in the Dolatabad neighbourhood (near to Zoorabad settlement) which consists of legal housing units, was between 6,000,000 Rials (\$75,000) and 14,000,000 Rials (\$175,000), and for apartments the price was between 4,500,000 Rials (\$56,250) and 6,500,000 Rials (\$81,250). Therefore compared with the desired selling price of houses in the squatter settlements, prices elsewhere are higher even for dwellings with fewer rooms.

It has thus been shown that the squatter settlements under study occupy a very specific position within the Tehran housing market, and the intra-urban movements involved in persons settling in Zoorabad and Karevan reflected changes of tenure and increased commitment to settle permanently in the city. It is important now to ask whether these movements were part of a strategy by the squatters to gradually improve their residential lot, possibly involving later moves to other parts of the city. When questioned on their future residential aspirations a high percentage of the residents in both settlement claimed that they did not intend to move again in spite of the total lack of services in the squatter settlements and long distance from the centre of Tehran. From the analysis of the data it was found that 77.3 per cent of the sample had no intention of moving and would prefer to improve their housing conditions in the neighbourhood. Only 22.7 per cent had any intention

Table 7.20 The cost of the household's present accommodation (U.S.\$=80 Rials at 1986 Prices)

Amount spent on the accommodation Rials	ZOORABAD		KAREVAN		TOTAL	
	No. of households	%	No. of households	%	No. households	%
N/A	4	4.4	12	6.9	16	6.0
Can't remember/no answer	22	24.2	47	27.2	69	26.1
Less than 500,000	2	2.2	0	0.0	2	0.7
500,000 - 1,000,000	9	9.9	16	9.2	25	9.5
1,010,000 - 1,500,000	15	16.4	21	12.1	36	13.7
1,510,000 - 2,000,000	16	17.6	29	16.8	45	17.0
2,010,000 - 2,500,000	10	11.0	11	6.4	21	8.0
2,510,000 - 3,000,000	5	5.5	20	11.6	25	9.5
3,010,000 - 3,500,000	6	6.6	4	2.3	10	3.8
3,510,000 - 4,000,000	2	2.2	9	5.2	11	4.2
4,010,000 - 4,500,000	0	0.0	1	0.6	1	0.4
4,510,000 Rials & over	0	0.0	3	1.7	3	1.1
TOTAL	91	100.0	173	100.0	264	100.0
The average cost of the present accommodation (Rials)	1,810,000 (\$22,625)		2,085,590 (\$26,069)		1,96,080 (\$24,563)	

of moving at some point and this was mainly because of the unsatisfactory sanitation and service provision (Table 7.21). There was no significant economic difference between those who wanted to stay and those aspiring to move. Household income was not therefore the prime factor promoting or inhibiting movement. As the Chi square test shows that ($\chi^2 = 0.589$) there was no significant difference between the income levels of those desired to stay and those who intended to move (df=2, critical value = 5.99 at 0.05 level of significance). The main reason for wanting to move was dissatisfaction with the services in the neighbourhood. This was the reason given by 63.3 per cent of those who had considered moving. The second most important reason related to those who had only rented their accommodation and intended to move to a position of home ownership. Many of these people did not mind if they bought a house in the same settlement (13.4 per cent). A third group (10.0 per cent) wanted to move because they found that living in Tehran was too expensive and expressed a wish to return to their place of origin.

Therefore from the survey it has become possible to establish some information about the role of the squatter settlements within the Tehran housing market. It can be concluded from this chapter that the majority of squatters came from rented conventional houses in the same or nearby districts in order to become house owners. This suggested the operation of a consolidation process of the type described elsewhere by Turner (1968), Conway and Brown (1980) and Gilbert and Ward (1982). Those in rented accommodation had been forced to move to the periphery of the city because they could not afford home ownership in conventional legal housing areas. They therefore looked for the security of house ownership in squatter settlements. The Tehran data confirms that direct movement of rural migrants to the squatter settlements was not significant (Flinn and Converse 1970 and Gilbert and Ward 1982). The residents of the settlements studied had mainly come neither from inner city slums nor other squatter settlements, but

from nearby consolidated low income rented accommodation. This process might take some time as Gilbert (1983) has shown in his study. In the case of the two Tehran settlements, the majority of squatters clearly moved to the settlement during the 1979 Revolution (Table 7.19). It can be argued that the timing of this move from rented accommodation to home ownership on the periphery of Tehran was dependent on the very specific historical and political structure of the city. The specific political circumstances of the early 1980s accelerated the movement of migrants from rented accommodation into home ownership, but this process has subsequently slowed again for a variety of reasons. It is not easy to establish from the survey whether the process of consolidation is on going, although a general perspective on the situation in Tehran would suggest that this is not the case. The squatter settlements under study have not proved to be stepping stones to further intra-urban movements. Instead most squatters have sought to improve their housing and environment in situ.

Investigation in the survey of the desires of residents with regard to the housing market was useful, since it indicated that most would seek further improvement of the existing squatter settlement rather than move to another area. This finding is important and underscores the urgency of improving the provision of the water system, sewage, street paving, clinics, shops, schools and introducing amenities such as park.

In terms of the fifth question set out at the end of Chapter Five it is therefore possible to conclude that the squatter settlements have become more stable residential environments in the sense of there being a low turnover of residents. In other senses the future stability of these settlements is less clear. The ability of the squatters to achieve improvements of their residential environment remains highly constrained both by their low income levels and by the administrative difficulties facing the municipal authorities of Tehran in finding adequate resources to service all such

settlements. The ability to go some way towards meeting the aspirations of the residents of these settlements will to some extent affect the future political stability of the city as a whole, and of the squatter settlements in particular.

Table 7.21 Squatter attitudes to moving from their present accommodation

	ZOORABAD	KAREVAN	TOTAL
Reason given for considering moving	No. of h.	No. of h.	No. of h.
No move considered	78	126	204
To be near relatives and friends	1	2	3
To be in better area with better services	7	31	38
Better and bigger accommodation	0	1	1
Near to the work	1	3	4
Tehran is too expensive to live in: would move back to place of origin	3	3	6
To have my own home	1	7	8
Total	91	173	264

CHAPTER EIGHT

DWELLING UNITS' CHARACTERISTICS AND PUBLIC SERVICES

8.1 Tenure

Tenure is the most important issue in squatter settlement development. Indeed it is tenure factors which effectively differentiate squatter housing from other parts of the urban housing stock. For example, in Third World countries Johnstone (1979) defines squatter housing as one type of unconventional housing - that part illegally built on land for which the residents have no title deeds. McAuslan (1987) has defined the squatter as a person who has taken over land, a house or building and occupies it without lawful authority. Also other writers (e.g. Turner, 1968; Abrams 1964) consider the squatters as illegal occupants of land or housing.

This study has investigated squatters who do not own the land on which their housing is built and have occupied the land illegally through invasion or have bought it illegally through sub-division. In spite of the fact that squatters in both settlements under study had no legal title for their land or housing, rather different types of tenures have emerged.

Table 8.1 and Figure 8.1 shows that in terms of house tenure, most residents were owner occupiers or "share-owners". These categories accounted for 95.6 per cent and 93.1 per cent in Zoorabad and Karevan respectively. These statistics implied house construction by the owners occupying the buildings, but did not make the settlements legal since construction had occurred under illegal circumstances as shown in Table 8.2. In Zoorabad 61.5 per cent had invaded the land or had not paid for the land where their houses were built. Only 34.1 per cent claimed that they had paid for the land and were legal owners of the land

since they had bought it, but even these residents were insecure since they had purchased the land from previous illegal occupiers.

Table 8.1 Type of house tenure of the present accommodation

Type of tenure	ZOORABAD		KAREVAN		TOTAL	
	No. of Household	%	No. Households	%	No.	%
Owner Occupiers	78	85.7	134	77.5	212	80.3
Shared owners	9	9.9	27	15.6	36	13.6
Rented	3	3.3	9	5.2	12	4.6
Free*	1	1.1	3	1.7	4	1.5
Total	91	100.0	173	100.0	264	100.0

* Free = Those who live in a dwelling without paying rent or any money for the land or the house.

In the case of Karevan, squatters claimed that they had bought the land from the legal land owner and that they were proper owners of both the land and building: 63.5 per cent of residents had bought the land from the legal land owners but remained illegal in the sense that they held no deeds, and had built on the land without getting permission from the municipality; 19.6 per cent had bought the land and house illegally from the previous illegal occupiers; only 9.9 per cent had bought the land legally with title deeds, and the rest (7 per cent) lived in rented or free accommodation which was given to them by their friends or relatives (Table 8.2 and Fig. 8.2).

Fig. 8.1 Relationship Between Type of Housing Ownership and Land Ownership.

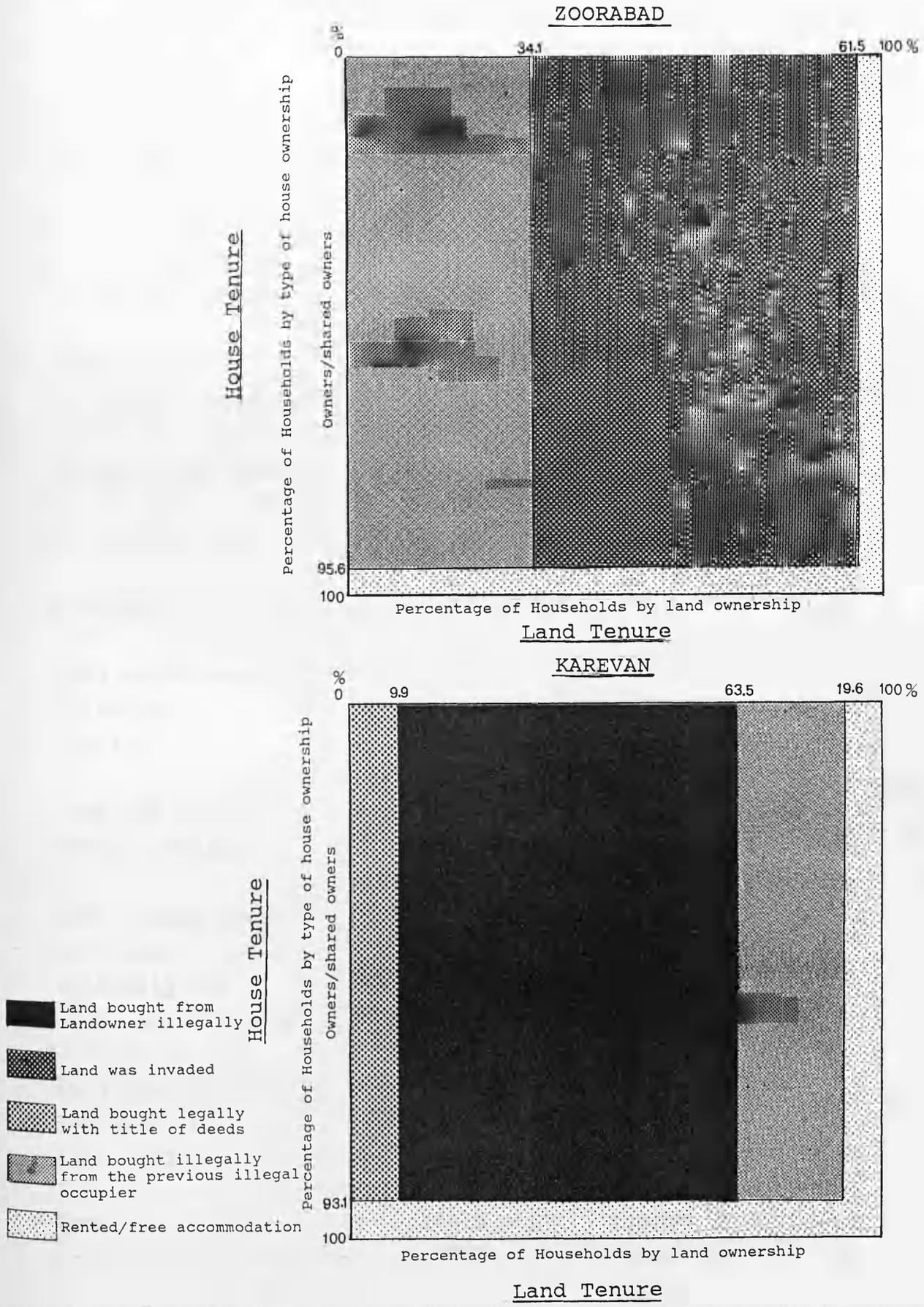
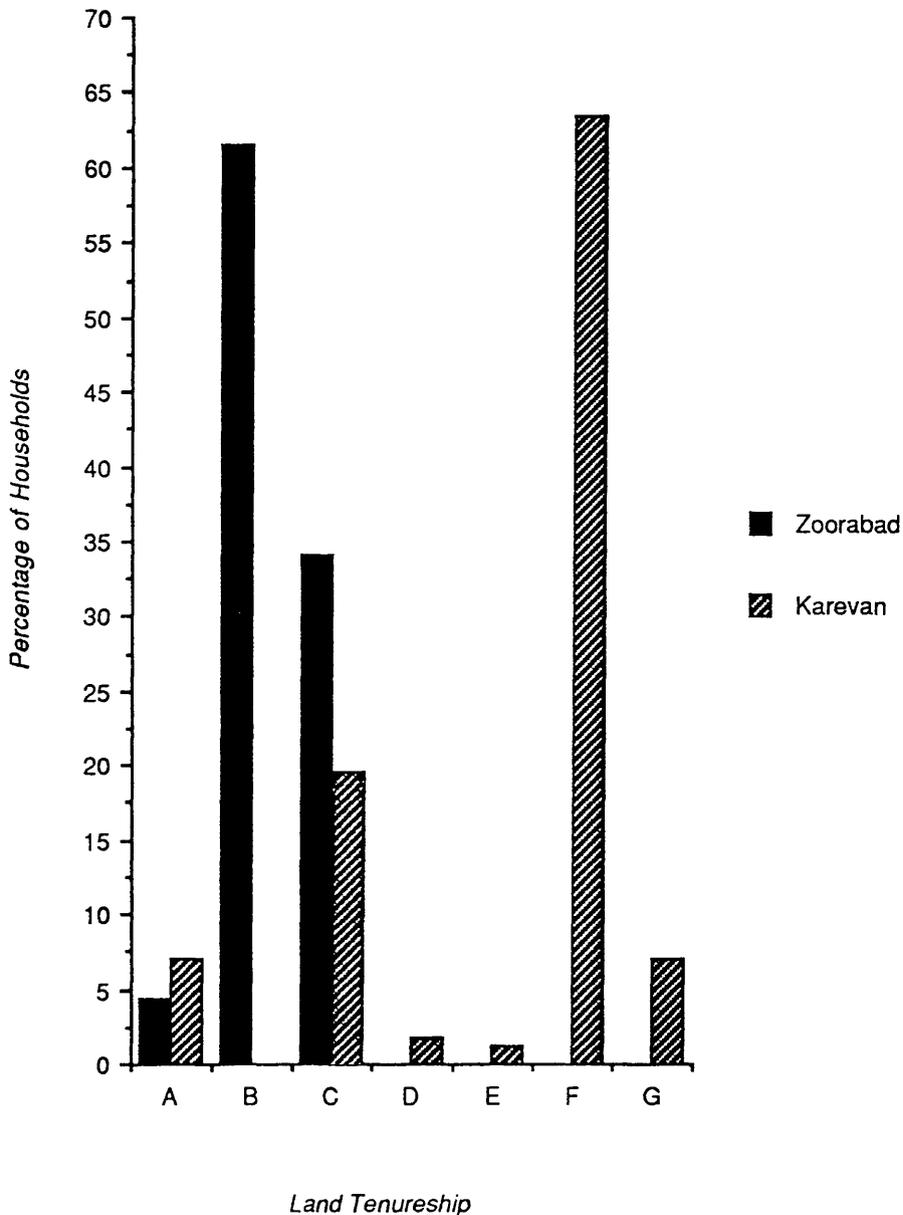


Table 8.2 Land Tenures of the present accommodation

	ZOORABAD		KAREVAN		TOTAL	
	No.	%	No.	%	No.	%
Rented/Free	4	4.4	12	7.0	16	6.1
Land occupied and built on illegally	56	61.5	0	0.0	56	21.2
Land bought illegally from the previous illegal occupier and built on illegally (if it had not been built on already)	31	34.1	34	19.6	65	24.6
Land bought and built on legally	0	0.0	3	1.7	3	1.1
Land and house bought legally	0	0.0	2	1.2	2	0.7
Land bought from landowner illegally and built on illegally	0	0.0	110	63.5	110	41.7
Land bought legally and built on illegally	0	0.0	12	7.0	12	4.6
Total	91	100.0	173	100.0	264	100.0

Fig. 8.2 Land Tenureship of the Present Accommodation



- A - Rented/Free
- B - Land occupied and built on illegally (invaded)
- C - Land bought illegally from the previous illegal occupier and built on illegally (if it had not been built on already)
- D - Land bought and built on legally
- E - Land and house bought legally
- F - Land bought from landowner illegally and built on illegally
- G - Land bought legally and built on illegally

Therefore in both settlements the majority of the respondents were actually squatters. But since the residents in Karevan had bought their land following subdivision of the land, they could claim greater security than the land invaders in Zoorabad. In fact the squatters were aware of the implications of their illegal occupation of urban land. The fear of forceful ejection made them erect temporary structures that could be easily dismantled. The lack of land security encouraged the residents to use any available materials rather than investing in more robust construction equipment (Eyre, 1972). As a result a range of problems emerged which are discussed later in chapter nine: Similarly the illegal nature of the settlement has respectedly affected the qualities and character of service provision. Problems like water supply, sanitation and health, stem directly or indirectly from the insecurity of land tenure. Turner (1969a; 1969b; 1968) stresses the need of residents in squatter settlements for greater security of tenure as a pre-requisite to all other improvements in housing conditions and in urban environment. Mangin (1967) has also supported Turner's view that land title plays a very major role in investment in housing. In those settlements where the likelihood of permanent residence is greatest, construction is more elaborate and robust than elsewhere. As will be shown in the "public service" section, the residents of Tehran's squatter settlements are willing to improve their settlements themselves. As time has passed, services have been added to the settlement. This is a sign that the authorities have recognised the squatters' right to reside in the settlement.

The tenure issue in squatter settlement is so important, that it calls for much more attention. If the improvement of a settlement is going to be successful, it is indeed a pre-requisite that land and housing tenure be secure in the eyes of the residents. To achieve this in Tehran, it would be necessary to set up a policy and to transfer ownership to most of the squatters who have moved to these settlements to become home owners.

Such a policy would need to be conceived within the financial constraints operating on the residents of the settlements, but even if it involved heavy subsidies it would in the long run be of value since it would clear the way to achieving sustained improvements in housing and environmental conditions and in service provision.

8.2 Dwelling Unit Characteristics

Squatter settlement characteristics are determined not only by the insecurity of tenure shared by all the residents, but also by the common processes affecting the construction and maintenance of the dwellings in the settlement. Most are designed and built by the occupants themselves or with the help of relatives and friends stemming from this are therefore many general characteristics and similarities between squatter settlements in different parts of the Third World. Some of these have been listed by Turner (1969a), Abrams (1964), Gilbert and Ward (1985), Drakakis-Smith and Fisher (1975) and Payne (1977).

In the author's Tehran survey the majority of squatters moved to the settlements after the revolution in 1979, (Table 8.3). Some (33.7 per cent) of them had lived in their present accommodation for about 7 - 8 years and only 3 per cent of them had lived there for more than 9 years. No one in the Zoorabad neighbourhood had been there for more than 8 years (Fig. 8.3). At the beginning of their occupation of their current housing units, squatters had commenced building using any kind of material available to construct shelter for their families. They had purchased some materials from the black market or had obtained help from friends and relatives to acquire local building materials. Since the time of establishment of the settlements building materials had gradually become increasingly scarce due to the revolution which caused a decrease in the import of building materials. Domestic production had also been hampered in Iran due to a drop in technical expertise. The shortage of materials encouraged

Table 8.3 Length of residence in the Settlement

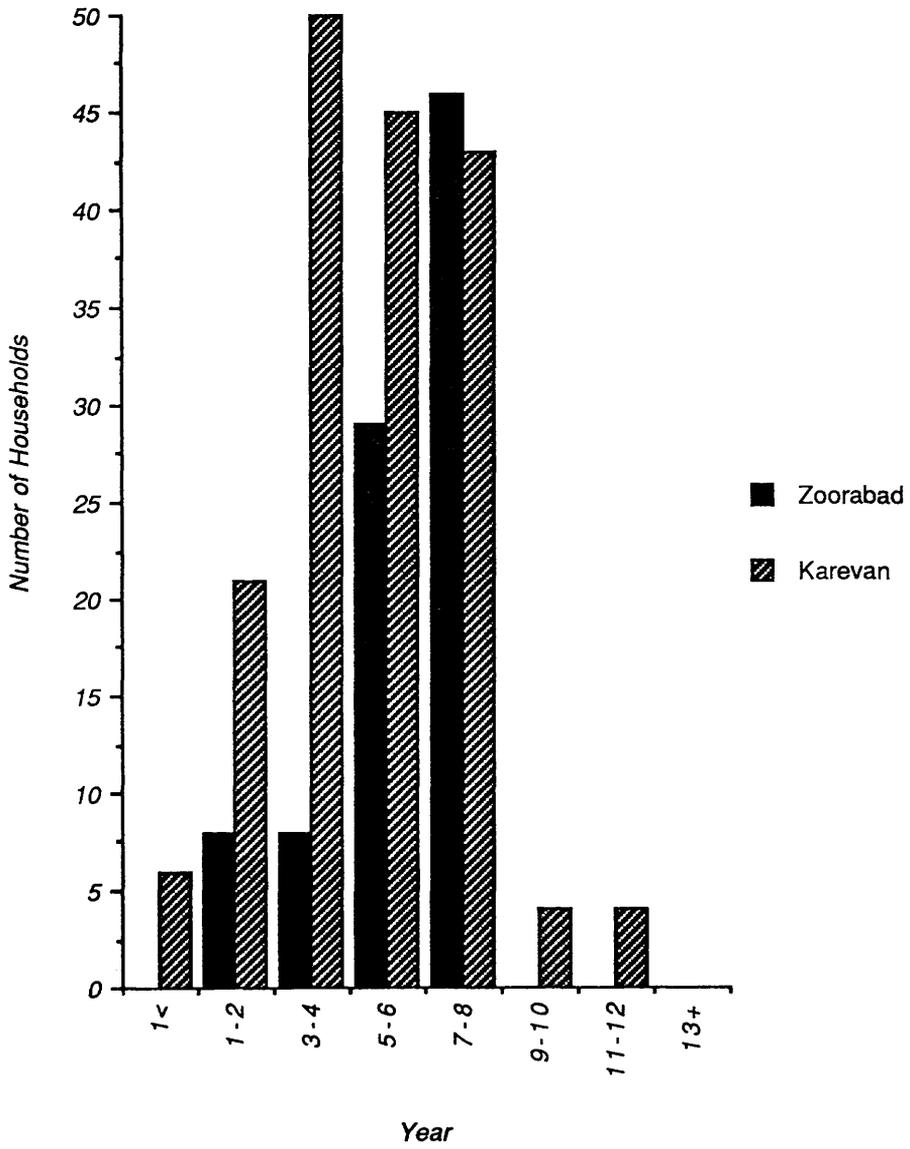
Length of residence	ZOORABAD		KAREVAN		TOTAL	
	No. of households	%	No. of households	%	No. of households	%
Less than 1 year	0	0	6	3.5	6	2.3
1-2 years	8	8.8	21	12.1	29	11.0
3-4 years	8	8.8	50	28.9	58	22.0
5-6 years	29	31.9	45	26.0	74	28.0
7-8 years	46	50.5	43	24.9	89	33.7
9-10 years	0	0	4	2.3	4	1.5
11-12 years	0	0	4	2.3	4	1.5
13 years and over	0	0	0	0.0	0	0.0
Total	91	100.0	173	100.0	264	100.0
Average length of residence	5.9 years		4.6 years			

Table 8.4 The price of construction materials in Tehran, June 1986, (In 1986 1US\$ = 78.80 Rials).

	Unit	Official market (Rials)	Blackmarket (Rials)
Bag of cement	50 kg	230	1300
Iron	kg	685	300-342
Brick	1000	4700	11,000
Russian Wood	m3	40,000	200,000

Source: Author's survey 1986.

Fig. 8.3 Length of Residence in Both Settlements



the growth of a black market. As Table 8.4 shows, the price of construction materials in Tehran in June 1986 rose intensified the difficulty of construction for low income groups. Of those concerned, 26.3 per cent had got construction materials from black market sources by paying the highest prices (Plate 8.1) and 35.9 per cent of this group had been supplied by both the black market and official market (Table 8.5).

Table 8.5 Provision of building materials

Provision of materials	ZOORABAD		KAREVAN		TOTAL		APPLICABLE
	No.	%	No.	%	No.	%	%
N/A*	14	15.4	41	23.7	55	20.8	-
Local materials	1	1.1	1	0.6	2	0.8	0.9
Black market	16	17.6	39	22.5	55	20.8	26.3
Friends and relatives	10	11.0	15	8.7	25	9.5	12.0
Official market	15	16.5	37	21.4	52	19.7	24.9
Black and official market	35	38.4	40	23.1	75	28.4	35.9
Total	91	100.0	173	100.0	264	100.0	100.0

N/A* = Those in rented accommodation or staying free with relatives or friends.

The majority of residents claimed that they built their houses gradually from the money they had saved or borrowed from friends and relatives or by selling rugs and jewellery which they had been given as wedding presents. According to the needs of the family and the rate of income generation, most residents started with one room and then added more rooms and indoor facilities within 3 - 4 years (28.4 per cent) and 1 - 2 years (30.3 per cent) of occupation of the land (Table 8.6). At the initial stage of occupation the feeling of insecurity was high, and consequently most homes were simple in case all their efforts and savings would be bulldozed away. As other families move in, the sense, or illusion, of security increased and at this stage investment began to be made in housing (Eyre, 1972). Therefore, gradual construction was very common in both of the settlements studied, as has been found in other Third World countries. In Mexico City squatter settlements have been upgraded gradually over a period of fifteen to twenty years as a result of the improvement of individual dwellings and the installation of services and it has been in accordance with their income level (Ward, 1978). But in the case of these two settlements, as Table 8.7 shows, those who built their houses in a relatively short period were not necessarily those with a higher income. Rapid construction was associated firstly with help from relatives or friends (labour force or financial) rather than income, and secondly with the political situation and having an opportunity in the chaotic situation at the beginning of the revolution of 1979 to establish a foothold. Table 8.8 shows that the majority of the squatters (47 per cent) had some sort of help from their friends and relatives, and 21.6 per cent used local builders. Only 5.3 per cent had built their houses entirely by themselves. A key element in housing construction therefore appears to have been the extent of the help given by family and relatives. This influence is inevitably important given the financial constraints on squatters outlined in the previous chapter with squatters trying to build houses as cheaply as possible by not paying for external labour.



Plate 8.1 Black Market for Bricks near Karevan.

Table 8.6 Length of construction of the present accommodation.

Length of construction	ZOORABAD		KAREVAN		TOTAL	
	No. of households	%	No. of households	%	No.	%
N/A (Renters/Free), No answer	14	15.4	42	24	56	21.2
Less than 1 year	18	19.8	21	12	39	14.8
1-2 years	26	28.5	54	31	80	30.3
3-4 years	23	25.3	52	30	75	28.4
5-6 years	7	7.7	4	3	11	4.2
7-8 years	3	3.3	0	0	3	1.1
Total	91	100.0	173	100.0	264	100.0

Table 8.7 Length of construction of the present accommodation at the average household's income per month (Applicable households) US\$ = 80 Rials.

Length of construction	ZOORABAD			KAREVAN		
	No.	%	Total household income	No.	%	Total household income
Less than 1 year	18	23	40000 Rials (\$500)	21	16	54750 Rials (\$684)
1-2 years	26	34	48460 Rials (\$605)	54	41	61480 Rials (\$768)
3-4 years	23	30	46950 Rials (\$586)	52	40	48460 Rials (\$605)
5-5 years	7	9	45710 Rials (\$571)	4	3	50000 Rials (\$625)
7-8 years	3	4	46660 Rials	0	0	-
Total	77	100	-	131	100	-

Consequently economic constraints influenced the migration process and this process may in this case reflect geographical variations in the strength of rural-urban linkages (those who had come from nearer provinces had stronger linkages, as has been shown in the migration chapter). It may be suggested that such linkages made further rural-migration progressively easier. As studies by other writers have shown, choosing the migrant's destination is dependent upon personal contacts with relatives and friends to obtain information and help (Lee, 1970). Wolpert (1970) considered that the choice of destination is largely influenced by the presence of relatives and friends already in cities or towns. These relatives and friends play a great role at the timing of migration when the new migrants receive some form of assistance from them, such as assistance in securing employment or accommodation. (Flinn and Converse, 1970; Browning and Feindt, 1971; Vaughan & Feindt, 1973). In the case of the settlements studied (Zoorabad and Karevan), as was shown in the migration chapter, 74 per cent of migrants in Zoorabad and 88 per cent in Karevan had some sort of help from relatives and friends at the time of the initial move to Tehran and many still had strong links with their place of origin. This linkage as well as having friends and relatives in the city is an important mechanism in bringing about improvement of squatter dwellings.

Table 8.8 Who built the present accommodation?

Who built the present accommodation?	ZOORABAD		KAREVAN		TOTAL	
	No.	%	No.	%	No.	%
N/A	4	4.4	12	6.9	16	6.0
Myself	7	7.7	7	4.0	14	5.3
With the help of friends and relatives	57	62.6	67	38.8	124	47.0
Local builder	9	9.9	48	27.7	57	21.6
Built by the previous occupier	10	11.0	29	16.8	39	14.8
Some part of it was built by the previous occupier and completed by myself	4	4.4	10	5.8	14	5.3
Total	91	100.0	173	100.0	264	100.0

8.2.1 Building Materials and Techniques

The structure of dwellings was analysed by the type of material. Table 8.9 shows that most of the dwellings were constructed of cement and kiln dried bricks and iron beams (57.2 per cent) by the traditional method with the ends of iron beams being set in the facing walls, and with the beams being about 50 cm apart from each other. This structure was then in-filled by kiln dried bricks in the shape of a curved vault. Under compression this is very strong and able to carry considerable loads. Finally the structure is plastered. 22.4 per cent of dwellings were constructed with cement and kiln dried bricks based as a partial iron skeleton. In general these materials were durable (as above). Only 2.7 per cent used mud and sun-dried brick and

wood, 11.7 per cent mud, cement and kiln dried brick and wood. Therefore the most common type of material was an iron beam structure with kiln dried brick and cement mortar. Table 8.17 and Fig. 8.4 shows that a considerable proportion of dwellings in Tehran are constructed with these materials. The majority of the dwellings are of one storey (Plate 8.2) and only a few have two storeys. Most of those who had permission for construction from the municipality (who had bought the land legally) (Plate 8.3), which gave them security of tenure, had later improved their dwellings.

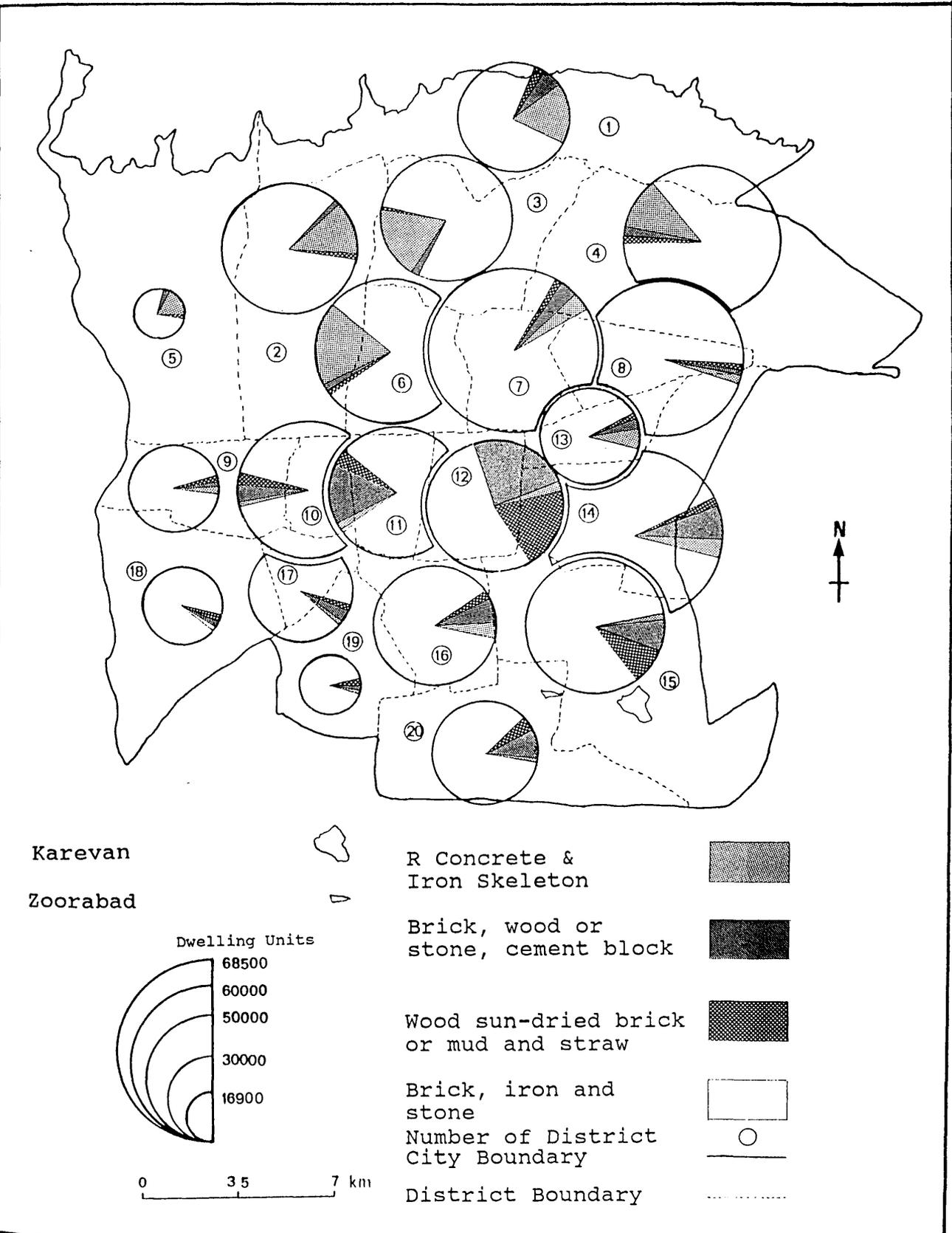
In both settlements there are some dwellings built underground in order to prevent attracting the attention of the municipality's inspection officer during the construction procedure (Plate 8.4). Plate 8.5 shows a view of the inside of an underground dwelling. These were usually cold and damp. Also Plates 8.6, 8.7 8.8 and 8.9 show different types of dwellings built with the materials described above in Zoorabad and Karevan. The residents have designed and built their houses in relation to their needs and cultural traditions. None of the buildings had been tested for structural stability or safety. The traditional houses in both settlements were built on a plot of land about 115 to 120 sq.m. in size. The total average built up area of 51.3 sq.m. (Tables 8.10, 8.11) is only just above one third of the average built up area found in residential dwellings in Tehran (140 sq.m.) (P.B.M. 1982). If one considers the average interviewed household size of 6.2 persons in squatter settlements by comparison with 4.13 persons in Tehran (P.B.O. 1981b) as a whole, the high degree of overcrowding in the squatter settlements can be seen.

The traditional houses, which are normally more than one storey, are constructed with a courtyard and enclosed wall and flat roof. They also often have a balcony (Plate 8.3). The courtyard itself is not only perceived as a private space, but is also used as an environmentally protected outdoor living space, as the need for privacy is manifested in all aspects of the built environment. The courtyard in

Table 8.9 Housing construction material in terms of the type accommodation

Material used for the structure accommodation type	ZOORABAN		KAREVAN		TOTAL	
	No. of dwelling	%	No. of dwelling	%	No.	%
Mud, sun-dried brick and wood	2	2.2	5	2.9	7	2.7
Mud, mixed cement, kiln-dried brick and wood	6	6.6	3	1.7	9	3.4
Mortar mixed cement, kiln-dried brick, iron beam and partial wood	3	3.3	19	11.0	22	8.3
Mixed cement, kiln dried brick and iron beam	45	49.4	106	61.3	151	57.2
Mixed cement, kiln dried brick and iron beam skeleton	1	1.1	10	5.8	11	4.2
Mixed cement block and R.C. beam	2	2.2	0	0.0	2	0.7
Mixed cement, kiln dried brick, iron beam and partly iron skeleton (Column)	32	35.2	27	15.6	59	22.4
Mixed cement, kiln dried brick and R.C. beam	0	0.0	3	1.7	3	1.1
Total	91	100.0	173	100.0	264	100.0

Fig. 8.4 Construction Materials (Housing Characteristics of Tehran, 1980)



Source: Statistical Centre of Iran (P.B.O. 1981b).

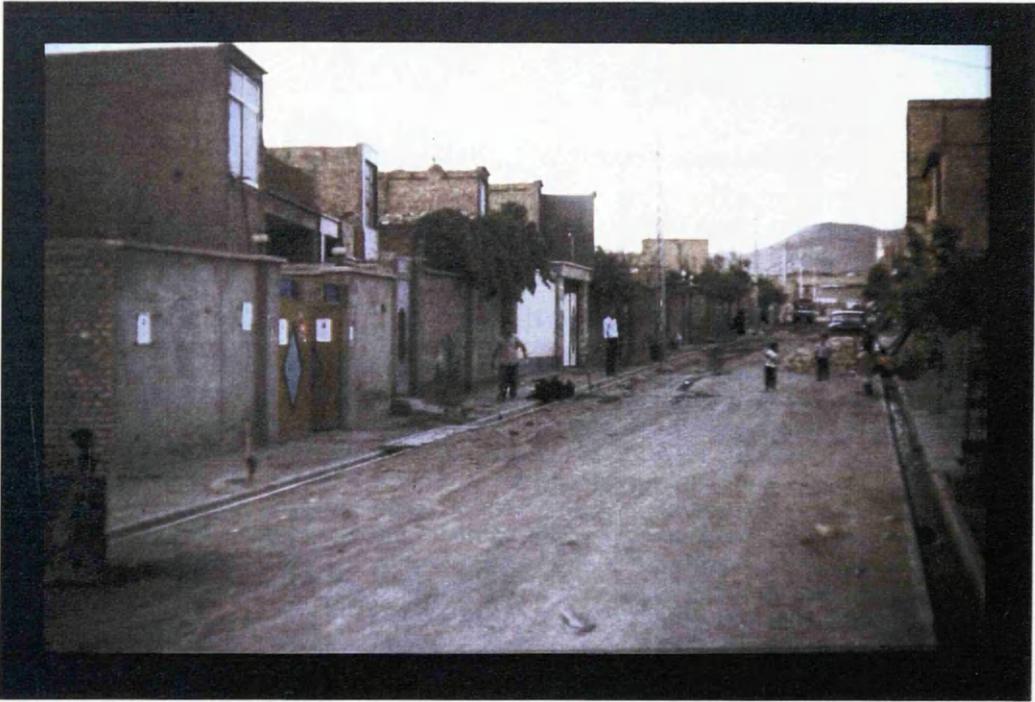


Plate 8.2 Row of one-storey buildings in one of the roads in Karevan, built with iron beams and kiln dried bricks.

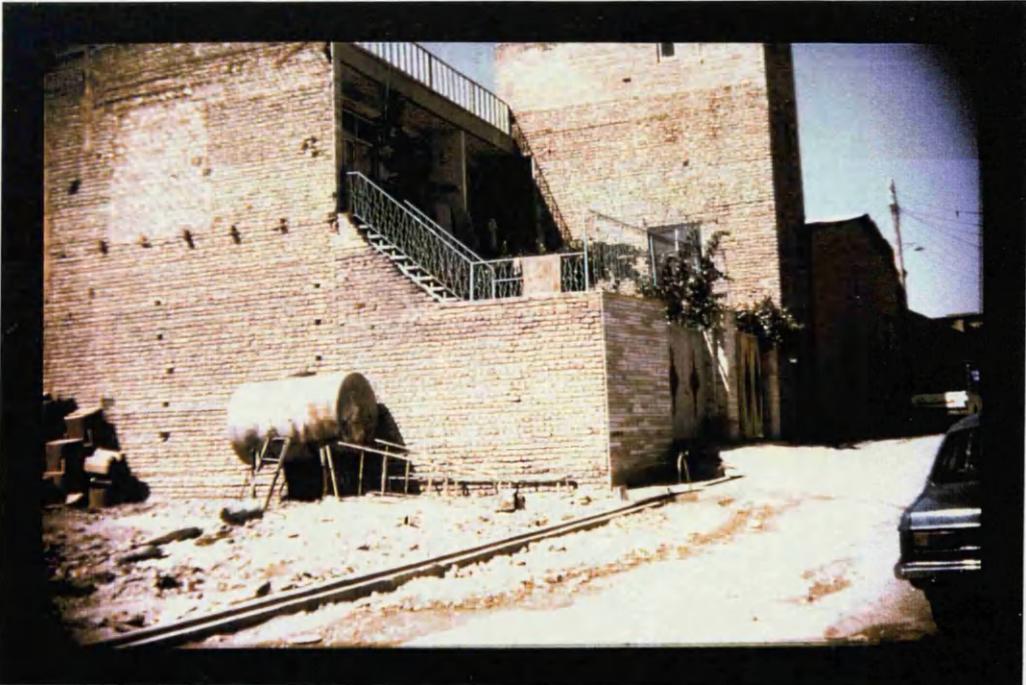


Plate 8.3 Two-storey building in Karevan which has been legally built with an iron beam skeleton and kiln dried bricks.

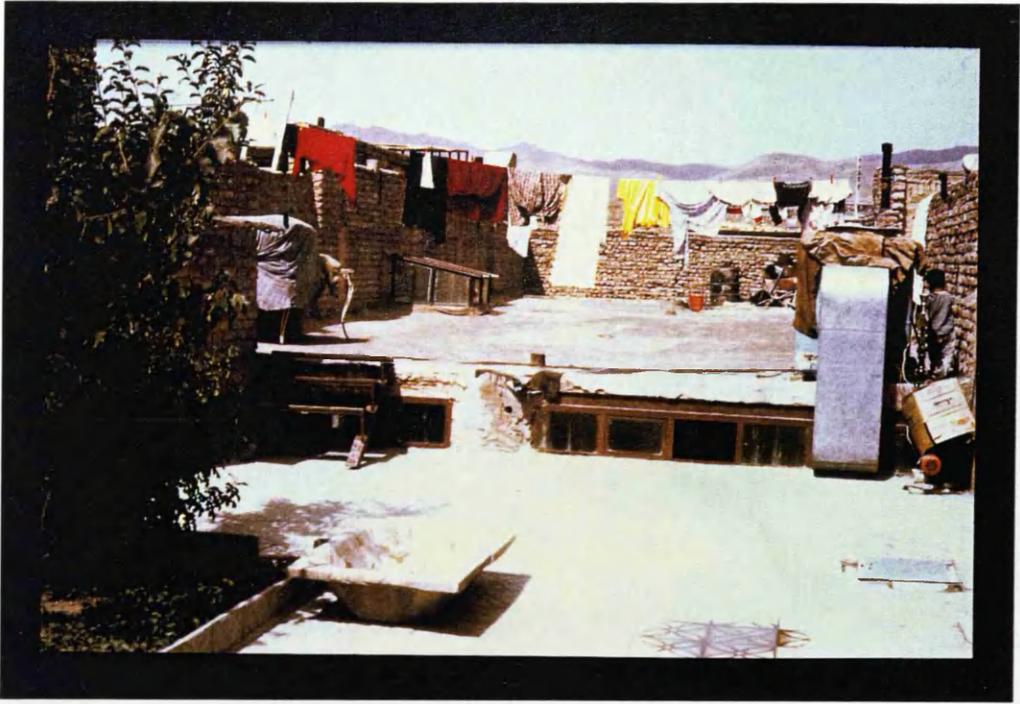


Plate 8.4 A view of an under ground dwelling with about two meters of wall around it in Karevan.



Plate 8.5 View of the inside of an under ground dwelling showing dampness on the wall, in Karevan.

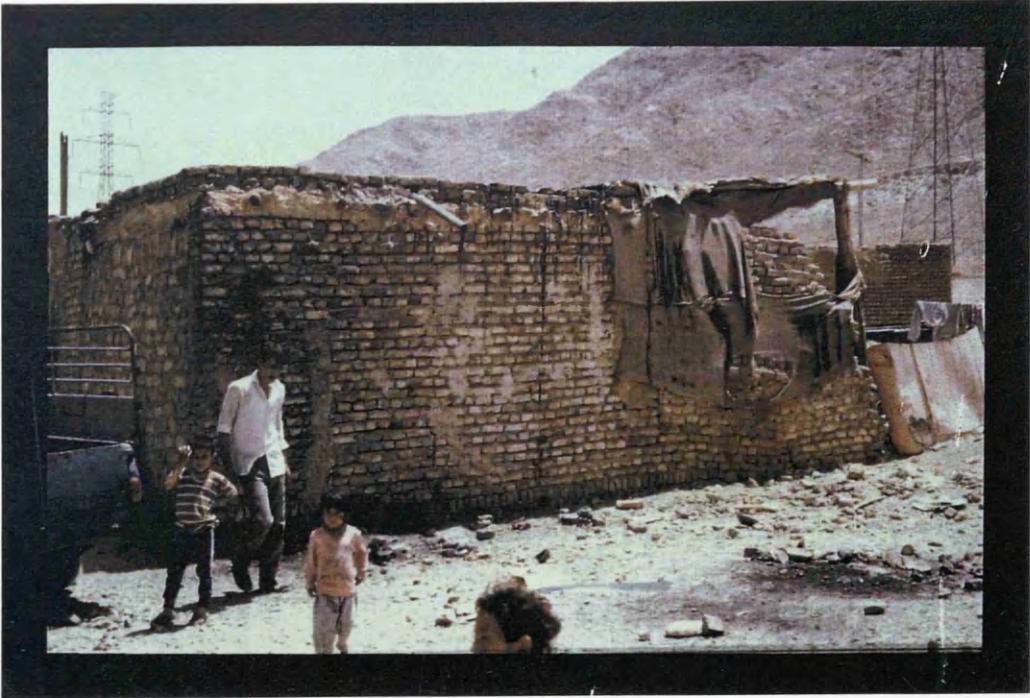


Plate 8.6 Use of different primitive materials (wood, plastic, mud bricks) in Karevan.

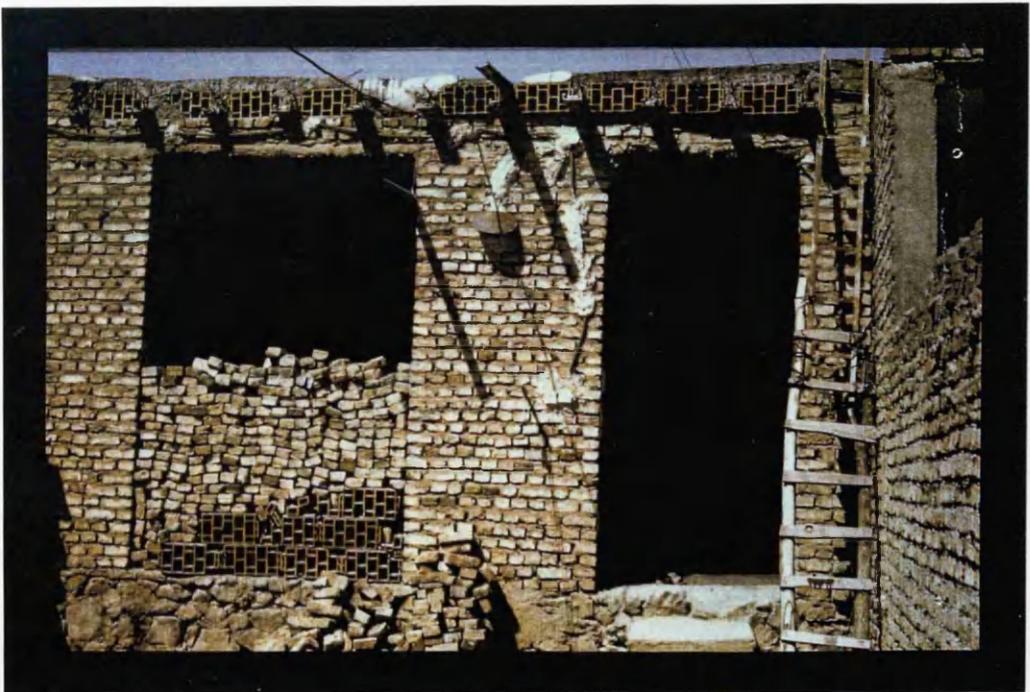


Plate 8.7 Incomplete building, using in situ concrete beams, fire bricks and kiln dried bricks in Karevan.



Plate 8.8 A single room house in the process of improvement (Karevan).



Plate 8.9 Using any kind of materials to mark the boundary of the land, thus maintaining privacy (Karevan).

Table 8.10 The size of the lot for the dwelling

Size of lot (sq.m.)	ZOORABAD		KAREVAN		TOTAL	
	No. of dwellings	%	No. of dwellings	%	No. of. dwellings	%
31 - 50 sq.m.	2	2.2	2	1.2	4	1.5
51 - 70 sq.m.	11	12.1	8	4.6	19	7.2
71 - 90 sq.m.	8	8.8	18	10.4	26	9.8
91 - 110 sq.m.	7	7.7	24	13.9	31	11.8
111 - 130 sq.m.	41	45.0	90	52.0	131	49.6
131 - 150 sq.m.	12	13.2	13	7.5	25	9.5
151 - 170 sq.m.	4	4.4	10	5.8	14	5.3
171 - 190 sq.m.	3	3.3	0	0.0	3	1.1
191 - 210 sq.m.	0	0.0	2	1.1	2	0.8
211 - 230 sq.m.	3	3.3	1	0.6	4	1.5
231 and over sq.m.	0	0.0	5	2.9	5	1.9
Total	91	100.0	173	100.0	264	100.0
The average of the lot for the dwelling (sq.m.)	115.8 sq.m.		119.0 sq.m.			
(lot density) the average lot per person (sq.m.)	18.5 sq.m.		20.1 sq.m.			

Table 8.11 Size of the built up area (sq.m.)

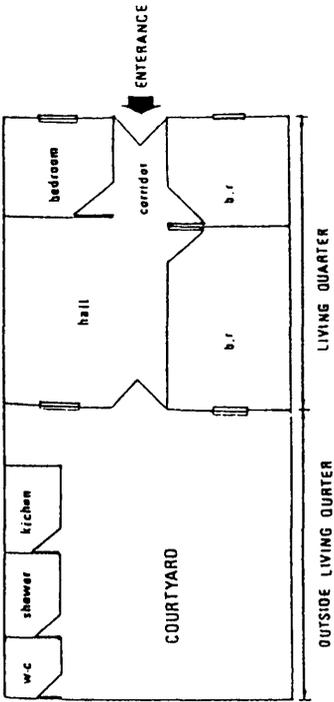
Built up area (sq.m.)	ZOORABAD		KAREVAN		TOTAL	
	No. of dwellings	%	No. of dwellings	%	No. of. dwellings	%
Less than 10 sq.m.	0	0.0	0	0.0	0	
10 - 20 sq.m.	8	8.8	3	1.7	11	4.2
21 - 30 sq.m.	17	18.7	27	15.6	44	16.7
31 - 40 sq.m.	15	16.5	18	10.4	33	12.5
41 - 50 sq.m.	14	15.3	28	16.2	42	15.9
51 - 60 sq.m.	17	18.7	29	16.8	45	17.4
61 - 70 sq.m.	9	9.9	32	18.5	41	15.6
71 - 80 sq.m.	4	4.4	19	11.0	23	8.7
81 - 90 sq.m.	1	1.1	9	5.2	10	3.8
91 - 100 sq.m.	4	4.4	3	1.7	7	2.7
101 - 110 sq.m.	1	1.1	1	0.6	2	0.7
111 - 120 sq.m.	1	1.1	2	1.1	3	1.1
121 - 130 sq.m.	0	0.0	2	1.1	2	0.7
Total	91	100.0	173	100.0	264	100.0
The average built up area (sq.m.) in a dwelling		46.8sq.m.		54.4sq.m.		51.3sq.m.
The average built up area per household		40.8sq.m.		47.3sq.m.		44.05sq.m

the Middle East and other Islamic countries serves as an additional room, a well ventilated and well-lighted work space, open space and play area, and often all at the same time (Baker, 1986). The courtyard serves many functions. During holidays and feast days it is an extension of the lounge or sitting room. Guests can gather here to sing, dance and eat. In the past the principal source of water for the house is often found in the courtyard, but with the introduction of modern plumbing and running water (Baker, 1986) this water source has become more decorative than utilitarian.

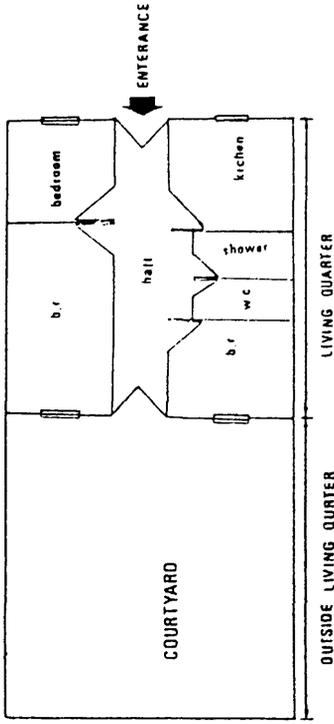
In Islam devoted Muslim women cover themselves from the view of strange men and even distant relatives. In consideration of the fact that women spend time visiting and working in the courtyard, this space should be maintained in the household wherever possible to allow women modesty and comfort. Baker (1986:150) has suggested that "when there are geographic, climatic, religious or social conditions which influence people, it is not at all unusual that these conditions will produce the same or similar results". Significantly, the courtyard arrangement conforms with the traditional Iranian emphasis on the family unit and, importantly, the maintenance of privacy. The courtyard, therefore, provides a private and secluded family meeting place, and also during summer nights it is the coolest sleeping place. Also traditionally the toilet facilities are situated far away from the cooking and living areas. In most traditional houses the latrines is in the stable adjacent to the entrance door to the house (Plans 8.3) except in houses in which the entrance door opens on to the living quarters (Plans 8.1, 8.2) which are still situated in the corner of the courtyard (Fig 8.5). As Table 8.12 shows, 92.3 and 93.1 per cent in Zoorabad and Karevan respectively have their toilets in a corner of the courtyard. This arrangement, in addition to religious doctrine, is for the practical reason that the toilet should be separated from the living quarters. Plans 8.1 and 8.2 shows possible

sites for the toilet in the dwelling (Plate 8.10 shows the location of a toilet at the corner of the courtyard) (Fig 8.5).

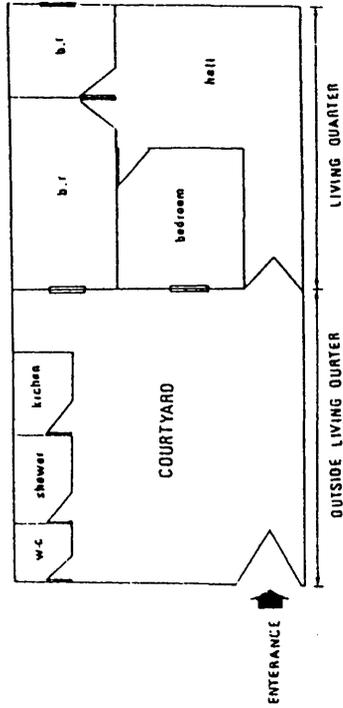
In both settlements kitchen facilities were usually located within the living quarters (Plans 8.1, 8.2, 8.3, 8.4). In 51.8 per cent of cases the kitchen was within the living quarters (Plans 8.1 and 8.4). Only 23.9 per cent had kitchens in the courtyard. In the rest, (24.3 per cent) cooking was carried out in the living room, bedroom, hall or corridor and courtyard. Therefore, it seems the squatters prefer to have their kitchen facilities in their living quarters (Table 8.13). The most common cooking fuel in the settlements was bottled gas. Table 8.14 shows 91.3 per cent of the total sample used bottled gas, which the gas company delivers to the house. Once again this item is rationed and those who do not have a ration card have to use small bottled gas units designed only for camping and picnics (6.4 per cent). These are bought from the shop at a higher price. Only 2.3 per cent of households used kerosene oil or parafin. But for heating systems kerosene oil or parafin were most common in the squatter settlements (99.6 per cent). A mere 0.4 per cent used the korsī (a frame of wood which is covered all round with a quilt or blanket, and under which a fire is placed for heating the legs in winter). These are very common in villages (Table 8.15).



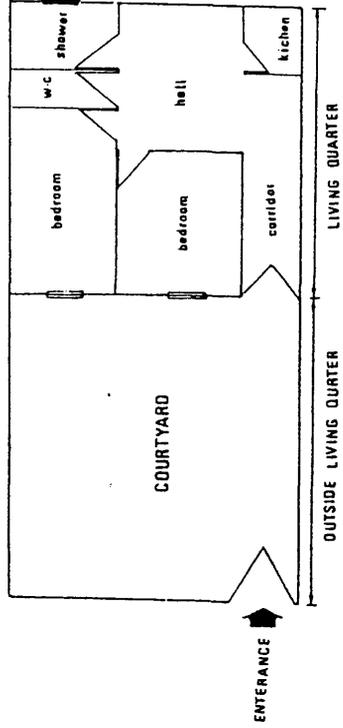
PLAN 8.2



PLAN 8.1



PLAN 8.3



PLAN 8.4

Fig. 8.5 Plans of Typical Dwellings in Karevan and Zoorbad



Plate 8.10 Typical one-storey dwellings with flat roof and toilet at the corner of courtyard (Zoorabad).

Table 8.12 Toilet and bath facilities

	ZOORABAD				KAREVAN			
	Toilet		Bath		Toilet		Bath	
	No.	%	No.	%	No.	%	No.	%
Private inside the living quarters	6	6.6	19	20.8	9	5.2	34	19.7
Private outside the living quarters	68	74.7	17	18.7	132	76.3	9	5.2
Shared inside the living quarters	1	1.1	1	1.1	3	1.7	12	6.9
Shared outside the living quarters	16	17.6	7	7.7	29	16.8	1	0.6
Public in the neigh- bourhood	0	0.0	0	0.0	0	0	85	49.1
Public outside the neighbour- hood	0	0.0	47	51.7	0	0	32	18.5
Total	91	100.0	91	100.0	173	100.0	173	100.0

Table 8.13 Location and Nature of Kitchen Facilities

	ZOORABAD		KAREVAN		TOTAL	
	No. of dwelling	%	No. of dwelling	%	No.	%
Private, inside the living quarter	35	38.5	76	43.9	111	42.0
Private, outside the living quarter	27	29.7	23	13.3	50	19.0
Shared inside the living quarter	3	3.3	23	13.3	26	9.8
Shared outside the living quarter	11	12.0	2	1.2	13	4.9
Living/bedroom arrangement	10	11.0	17	9.8	27	10.2
Hall/corridor	4	4.4	22	12.7	26	9.9
Open space (courtyard)	1	1.1	10	5.8	11	4.2
Total	91	100.0	173	100.0	264	100.0

Table 8.14 Cooking Fuel

Cooking fuel	ZOORABAD		KAREVAN		TOTAL	
	No.	%	No.	%	No.	%
Bottled gas	79	86.8	162	93.6	241	91.3
Kerosene oil/parafin	5	5.5	1	0.6	6	2.3
Picnic bottled gas	7	7.7	10	5.8	17	6.4
Total	91	100.0	173	100.0	264	100.0

Table 8.15 Type of Heating System

Heating System	ZOORABAD		KAREVAN		TOTAL	
	No.	%	No.	%	No.	%
Oil/Kerosene/ parafin stove	90	99	173	100	263	99.6
Korsi* and parafin stove	1	1	0	0	1	0.4
Electric fires	0	0	0	0	0	0
TOTAL	91	100	173	100	264	100

* Korsi = A frame of wood which is covered all around with quilts and blankets and under which a fire is placed for heating the legs in winter.

The bath or shower was an important issue for the residents who had complained about the lack of this facility in their neighbourhood. They emphasised that the main reason was the water supply shortage (this included even those residents who had a bath or shower in their dwellings). The majority of dwellings had no bath or shower and used the local public bath. Table 8.12 shows that 51.7 per cent in Zoorabad and 67.6 per cent in Karevan used public baths either inside or outside their neighbourhood. Although residents prefer to have their own private shower or bath in their dwellings, they are content to use public baths and they suggested that there was a need for more and better public bath facilities in their neighbourhood.

In Iran the public bath remains a popular public institution like in some other Islamic countries. For example, in Morocco people still make use of public baths located throughout the medina: the old part of the Arab city (Baker,

1986). Tehran is in no way exceptional to this pattern. Public baths are used mostly by low income residents. They are used for socialising as well as for hygiene in Iranian culture. During the last 50 years or more, due to urban development and the provision of better water supply, some people have started building bathrooms in their own houses.

8.2.2 Household size and overcrowding

The majority of dwelling units contain two (38.6 per cent) or three (42.0 per cent) rooms (Table 8.16). The average number of rooms per dwelling was 2.5. This is typical in both districts 20 and 15 of Tehran as Table 8.17 shows: 64.2 and 57.4 per cent respectively have dwellings with between 2 and 3 rooms. But in northern districts i.e. 1, 2, 3 and 6, between 20.8 to 30.9 per cent of dwellings have got 2 to 3 rooms and 13.5 to 29.8 per cent have 6 or more rooms. But in districts 15 and 20, only 4.3 and 4.7 per cent respectively, have 6 or more rooms in their dwellings. Generally, the south of Tehran is more disadvantaged than the north from an urban housing and amenities point of view. In the south there is usually a lack of tall modern apartment buildings and houses are mostly in the form of one or two storey houses and the majority are constructed of bricks and iron; for example in districts 15 and 20 (Table 8.16 and Fig. 8.4) only 0.1 and 0.6 per cent of houses are built using reinforced concrete and a iron skeleton, in contrast with districts 1, 2, 3 and 6 in the north (17.1, 13, 18.9 and 19 per cent respectively). But it should be borne in mind that in districts 11 and 12 a large percentage of buildings have used brick, wood and mud brick (Table 8.16) as these are the oldest parts of the city, which originally was built by wealthy merchants around the bazaar. The majority of them are now occupied by low income families with a high density of 200 - 400 persons per hectare (See Fig. 3.7). Most of the merchants have moved to the north of the city for better houses. (More detail on Tehran's residential structure was included in chapter three). In both squatter settlements 21.6 per cent of households shared

Table 8.16 Number of rooms and number of households in the dwelling

ZOORABAD								
Number of rooms in each dwelling	1 h/hold		2 h/holds		3 h/holds		Total	
	No.	%	No.	%	No.	%	No.	%
One room	6	8	1	6	0	0	7	7.7
Two rooms	33	47	6	33	0	0	39	42.8
Three rooms	27	39	6	33	1	33	34	37.4
Four rooms	4	6	5	28	2	67	11	12.1
Five rooms	0	0	0	0	0	0	0	0
Six rooms	0	0	0	0	0	0	0	0
Seven rooms	0	0	0	0	0	0	0	0
Eight rooms	0	0	0	0	0	0	0	0
Nine rooms	0	0	0	0	0	0	0	0
Total	70	100	18	100	3	100	91	100

KAREVAN

Number of rooms in each dwelling	1 h/hold		2 h/holds		3 H/holds		Total		Cumul.	
	No.	%	No.	%	No.	%	No.	%	No.	%
One room	13	9	0	0	0	0	13	7.5	20	7.6
Two rooms	54	39	9	27	0	0	63	36.4	102	38.6
Three rooms	59	43	16	49	2	67	77	44.5	111	42.0
Four rooms	10	8	7	21	1	33	18	10.4	29	11.0
Five rooms	0	0	0	0	0	0	0	0.0	0	0
Six rooms	1	1	0	0	0	0	1	0.6	1	0.4
Seven rooms	0	0	0	0	0	0	0	0	0	0
Eight rooms	0	0	0	0	0	0	0	0	0	0
Nine rooms	0	0	1	3	0	0	1	0.6	1	0.4
Total	137	100	33	100	3	100	173	100	264	100

Average number of rooms in a dwelling

(both settlements) = 2.53

Average number of persons in one room

(in Zoorabad) = 3.37

Average number of persons in one room

(in Karevan) = 2.84

Table 8.17 Housing Characteristics for Districts of Tehran, 1980

Dis- trict	Rooms per household						Number of Rooms in the dwelling			Housing construction material					With Piped Water		With elec- tric- city	elec- tric- city	
	1 & Less	2-3	4-5	6+	1	2-3	4.5	6+	R.Con- crete, steel & skele- ton	Brick & Wood stone cement block	Wood & sun- dried brick, mud	Others (e.g. straw, Tents	Inside Build- ing	Outside Build- ing	With- out piped water	elec- tric- city			
1	41227	14.4	35.5	35.4	14.7	7.2	30.9	41.8	20.1	17.1	75.5	5.4	1.7	0.3	93.7	3.1	3.2	99.6	0.4
2	51916	9.0	32.1	46.3	12.6	4.4	30.4	50.0	15.2	13.0	85.9	0.6	0.4	0.4	96.6	1.6	1.8	98.0	2.0
3	51493	10.6	26.5	39.2	23.7	4.0	20.8	45.4	29.8	18.9	79.9	0.9	0.21	0.09	98.5	0.4	0.1	99.0	1.0
4	63222	24.4	41.3	27.3	7.0	11.3	42.6	35.4	10.7	10.8	87.5	0.6	0.2	0.9	91.2	7.5	1.3	91.0	9.0
5	16993	18.4	43.3	24.7	13.6	5.5	39.7	39.9	20.9	17.7	77.7	2.2	1.7	0.7	75.5	11.0	13.5	90.0	10.0
6	61061	8.8	32.8	46.7	11.7	6.8	30.5	49.2	13.5	19.0	79.5	1.0	0.3	0.2	99.0	0.8	0.2	99.0	1.0
7	66576	13.7	42.2	35.4	8.7	4.2	29.1	49.3	17.4	3.6	92.6	3.0	0.7	0.1	99.6	0.3	0.1	99.0	1.0
8	61588	17.8	59.6	21.3	1.3	2.2	43.7	44.0	10.0	1.0	97.8	0.3	0.7	0.2	99.0	1.0	0.0	99.8	0.2
9	32672	26.4	56.8	15.2	1.6	4.7	46.3	42.0	7.0	2.1	95.8	1.0	0.5	0.6	98.6	1.0	0.4	99.4	0.6
10	53767	19.3	54.9	22.8	3.0	2.7	28.2	52.8	16.3	0.7	93.3	3.9	1.9	0.2	99.5	0.3	0.2	99.9	0.1
11	53120	20.7	46.4	27.5	5.4	5.6	29.4	48.4	16.6	3.1	69.9	15.7	11.0	0.3	99.6	0.3	0.1	99.9	0.1
12	49855	36.6	45.6	15.3	2.5	6.3	29.3	41.4	23.0	1.0	54.3	23.8	20.8	0.1	96.5	3.3	0.2	99.7	0.3
13	39979	15.0	44.4	35.9	4.7	1.5	32.2	53.3	13.0	5.3	91.3	2.8	0.3	0.3	99.5	0.4	0.1	99.9	0.1
14	68505	19.2	54.3	24.6	1.9	2.5	38.7	49.6	9.2	2.9	89.9	5.8	1.3	0.1	93.9	4.5	1.6	99.8	0.2
15	58996	29.0	60.2	10.5	0.3	2.9	57.4	35.4	4.3	0.1	84.3	7.4	2.5	5.7	92.0	3.5	4.5	98.4	1.6
16	48565	39.9	51.3	8.4	0.4	4.7	51.1	36.7	7.5	2.9	85.0	6.0	5.7	0.4	92.7	7.2	0.1	99.6	0.4
17	41710	39.4	53.7	6.5	0.4	3.3	45.1	42.4	9.2	0.3	94.0	3.2	2.4	0.1	96.06	3.86	0.08	99.6	0.4
18	31208	41.5	53.8	4.4	0.3	6.9	70.5	19.6	3.0	0.3	97.2	1.2	1.3	0.0	95.6	2.9	1.5	90.0	10.0
19	22168	40.0	54.1	5.6	0.3	11.0	71.6	15.4	2.0	1.0	96.65	1.2	1.1	0.05	90.1	3.2	6.7	80.6	19.4
20	39684	34.9	56.8	7.8	0.5	5.7	64.2	25.4	4.7	0.6	87.1	8.1	3.7	0.5	70.3	24.4	5.3	97.6	2.4

Source: P.B.O. Statistical Centre of Iran (1980), The Result of Survey in Tehran 1359, Districts 1 to 20, Tehran, Iran.

their dwelling unit with at least one other household, i.e. 19.3 per cent shared their dwelling units with one and 2.3 per cent with two households (Table 8.18).

Table 8.18 Number of households (Family) in each dwelling unit

	ZOORABAD		KAREVAN		TOTAL	
Number of households living in a dwelling	No. of Dwellings	%	No. of Dwellings	%	No.	%
One household	70	77	137	79	207	78.4
Two households	18	20	33	19	51	19.3
Three households	3	3	3	2	6	2.3
TOTAL	91	100	173	100	264	100.0
Average number of households (family) living in a dwelling unit	1.26		1.22		1.23	

Considering the size of these dwelling units, these proportions imply extreme overcrowding of the settlements. The density of households per dwelling unit in the two cases under study almost followed the same pattern with an average of 1.2 households per dwelling unit, compared to Tehran as a whole which had 1.4. But the extent of crowding in these settlements can be shown by considering the average density in a dwelling unit in Zoorabad and Karevan (7.1 and 6.8 persons) and the number of persons per room (3.3 and 2.8 respectively) and comparing them with Tehran as a whole where the average density in a dwelling is 5.6 persons (P.B.M. 1982) and the number of persons in a room is only 1.52 persons. It appears that in these settlements the majority of dwellings are occupied by one large household.

Table 8.18 shows that only 21.6 per cent of households shared their dwelling unit with another household and Table 8.19 provides some information in respect of the number of persons per household. On average number there were 6.2 persons in the households surveyed compared to 4.13 in Tehran as a whole (P.B.O. statistical centre, 1981b). Therefore, it can be seen how much larger families are in the squatter settlements. If the number of persons per room can be taken as an index of overcrowding [the United Nations (1976a) defines two or more persons per room as crowded] then the average densities of 3.3 and 2.8 persons per room in Zoorabad and Karevan respectively, the two settlements studied would be considered as having a very high degree of overcrowding. This feature is common to most squatter settlements and has been reported in other squatter settlement studies. For example, in Plong Toey (Bangkok) five or six people live in every dwelling and an average of 3.5 persons per room (Drakakis-Smith, 1981) and in Manila (Phillippines) overcrowding and residential densities of four or more persons per room are not unusual (Jackson, 1974). While Tehran's squatter settlements are not unusual compared with those in other countries, their densities are much higher than elsewhere in the city. For example, the Plan and Budget Ministry of Iran (1982), report the average number of persons per room in urban areas of Iran is 1.79 persons. In Tehran it is 1.52 persons per room (P.B.O. 1981b) which is only half of the density found in the study areas.

8.3 Public Services

This section will look at the infrastructure of the settlements and the problems facing the residents in their attempts to improve their settlement. It also considers the role of government institutions (i.e. municipality, water authority and electricity board) in provision of services. This has not surprisingly been influenced by political considerations.

Table 8.19 Number of persons in each household living in a dwelling

Number of persons	ZOORABAD				KAREVAN				TOTAL					
	1st h/hold in the dwelling	2nd h/holds in the dwelling	3rd h/hold in the dwelling	1st h/hold in the dwelling	2nd h/hold in the dwelling	3rd h/hold in the dwelling	3rd/hold in the dwelling	Total						
	No.	%	No.	%	No.	%	No.	%	No.	%				
1 - 2 persons	1	1	6	29	1	33	8	5	6	18	0	0	22	6.8
3 - 4 persons	21	23	11	52	2	67	30	17	15	41	2	67	81	24.8
5 - 6 persons	32	35	0	0	0	0	75	43	15	41	1	33	123	37.6
7 - 8 persons	23	25	4	19	0	0	41	24	0	0	0	0	68	20.8
9 - 10 persons	10	11	0	0	0	0	15	8	0	0	0	0	25	7.5
11 - 12 persons	4	5	0	0	0	0	3	2	0	0	0	0	7	2.2
13 and over	0	0	0	0	0	0	1	1	0	0	0	0	1	0.3
Total	91	100	21	100	3	100	173	100	36	100	3	100.0	327	100.0
Average number of persons per household (family)	6.2		3.8		2.6		5.9		3.9		3.5			5.6
Average number of persons living in each dwelling unit			7.14						6.83					6.93

To understand the process of public service provision it is necessary to recap briefly on the historical context of Tehran's growth. In the reign of Reza Shah (the father of the late Shah) the city was physically transformed. Reza Shah was very much in favour of urban development and he concentrated on the construction of a modern city to the north of Tehran's old quarters. Large government buildings, wide paved streets, with modern amenities such as electricity and water supply were extended to the older quarters of the city, as the most wealthy population began moving to the north to the new quarters in order to enjoy a better climate and less congestion. The older quarters gradually deteriorated (Kazemi, 1980). After the Second World War northward movement by wealthier people, i.e. politicians, intellectuals, etc. continued in Tehran at a more rapid pace and because of their financial and political influence the provision of infrastructure for them was the first priority for the authorities. At the same time the population of the older quarters also increased as migration from provincial areas to the southern part of Tehran increased. An important consequence of Tehran's rapid and unplanned growth, especially to the south, was the fact that it was not possible to provide adequate services for the entire population (Kazemi, 1980; Bahrambygui, 1972). Owing to rapid migration and the growth of unplanned settlements in the south (firstly because of the authority's technical problems) this area remained totally undeveloped and became more disadvantaged from an infrastructure point of view compared with the northern area.

As Karevan and Zoorabad settlements were built illegally and unplanned, the municipality initially refused to provide any services in case this encouraged more squatters to come to the settlements. At the same time, these settlements fell within the twenty five years development boundaries of the city which had been extended after the Revolution. Consequently it became in a real sense the municipalities' responsibility to provide services to the neighbourhoods living within the limits of the city. But, because of the

residents' lack of proper ownership documents and their failure to follow the municipal laws regarding construction standards, the municipality refused to provide services to these settlements.

The tension in responsibilities is well illustrated by comparing the responses of the water and electricity authorities. In an interview with the head of the water authority in region 20 the author discovered that the municipality had not given any permission to residents to lay water pipes in the area. But in the case of the Electricity Board, as Mr. Madavini the Chief of 7th Tir Region Electricity Board pointed out in an interview with the author, the Board decided independently to supply electricity to squatter settlements. The reason for this was that most squatters had connected their dwellings to the national grid illegally, thus causing damage to the grid. It was therefore more economical and safer for the Board to supply electricity. However, as a result the municipality criticised the Electricity Board for encouraging more illegal settlements by their actions.

8.3.1. Water Supply

Water supply is ^{the} most crucial service required in all urban residential developments and was the main problem facing the residents of the squatter settlements studied by the author. No dwellings in the survey area were connected by tap to the main system. Water for cooking purposes had to be obtained largely from a shared tap in the neighbourhood provided by the water board which was financed and installed by the squatters themselves.

At the beginning of the occupation, because of their need for water, most squatters dug wells inside their courtyards for drinking and washing purposes, but water obtained from them was not entirely safe and caused some health problems and disease in the neighbourhood. As a result they stopped using this kind of water for drinking and started to

purchase water from itinerant water sellers. More people used their own wells in Zoorabad than in Karevan. Then, around August 1985, as a result of pressure by the local neighbourhood council and by religious leaders on the Water Board and on the municipality, water was supplied to the neighbourhood and shared taps were installed at about 50m intervals. But this provision did not cover all parts of the settlement. Some parts were outside the area of the comprehensive plan of Tehran and the municipality refused to give permission for water provision. Also there were some technical problems from the Water Board' point of view in providing adequate water supplies. Therefore in Zoorabad only 48.3 per cent of households were within 100 metres of the shared taps (Plate 8.11). Nearly all dwellings got some of their water from tank on the roof or in front of the building (Plate 8.12). At night when water consumption was low, the occupants reported that they used hoses to fill up their water tanks. Those who have got a water well usually use a pump to fill their water storage tank for washing purposes. Table 8.20 shows that in Zoorabad 40.7 per cent of the residents use the wells within their courtyard, and some use streams outside the building to access water for washing while still seeking drinking water from a tap source (Plate 8.13 and 8.14). Most residents complained about the poor water pressure and irregular stoppages in the water supply.

In Karevan the situation was a little bit different, as the settlement was bigger and drier. At the beginning all the residents had to purchase water from itinerant water tanks for drinking and washing purposes. Around August 1985 water was supplied to some parts of the settlement owing to residents' pressure and political intervention on their behalf (especially by the local religious leader, Haj Ahmadi, Imam of the mosque). The Karevan settlement has since then had more influence with government institutions, i.e. Water Board and municipality. The settlement was provided with a hastily installed system of public standpipes, and with water tanks which were provided by the



Plate 8.11 Common tap in Zoorabad shows the use of hose to fill up the water tank storage on the roof.



Plate 8.12 Type of water tank storage on the roof (Zoorabad)

Table 8.20 Water Services

	ZOORABAD		KAREVAN	
	No. of Household	%	No. Households	%
Shared tap at a distance of 100m or less for drinking and washing purposes	44	48.3	57	32.9
Shared tap at a distance of more than 100m for drinking and washing purposes	1	1.1	1	0.6
Water well inside the building for washing and shared tap at a distance of 100m or less for drinking	37	40.7	5	2.9
Water well inside the building for washing and shared tap at a distance more than 100m for drinking	4	4.4	0	0.0
Water well or stream outside the building for washing and shared tap for drinking purposes	5	5.5	0	0.0
Buy water for washing and shared tap at a distance of 100m or less for drinking	0	0.0	20	11.6
Buy water for washing and shared tap at a distance of more than 100m for drinking	0	0.0	60	34.7
Buy water for washing and drinking water is distributed freely by water board tankers	0	0.0	30	17.3
Total	91	100.0	173	100.0

The average spent to purchase water is 2400 Rials (\$60.00) per month. χ^2 (Based on a compressed contingency table) Calculated $\chi^2 = 99.5$ df = 2, $\alpha = 0.01$, critical value = 13.8



Plate 8.13 Residents using the stream outside the neighbourhood for washing purposes (Zoorabad).



Plate 8.14 Using the stream inside the neighbourhood for washing purposes (Zoorabad).

municipality, and drinking water was distributed freely three times a week for those parts which the service had not yet reached. Table 8.20 shows that an even higher proportion of houses in Karevan do not have access to a standpipe than in Zoorabad, and no less than 34.7 per cent purchase water from itinerant water tankers and store it in the water tank storage in the building (Plate 8.15) or are forced to use a shared tap at a distance of more than 100m for drinking (Plate 8.16 and 8.17).

Water provision in the settlement was clearly insufficient. At the same time for the Water Authority much water was wasted because of poor usage of the standpipes. The inability to guarantee the quality of domestic water and the cost of water purchase from itinerant water tanks also restricts its use, with all the negative consequences that this holds for personal hygiene and sanitation. It is important to mention that the provision of the water in the settlement was financed by the residents with each dwelling contributing 10,000 Rials (US\$125.0).

Because the water authority encountered some technical problems they had to postpone the initial supply of water to the settlement. This brought some confusion within the community which had expected that those who had secured the installation of water supplies would have had more political influence because there were two religious leaders from the community (as I explain later in political section of chapter nine). Therefore, some of the residents complained that they had paid yet were still waiting for the water supply, (Plate 8.18 shows the process of installing the pipes by residents).

The residents who still purchase the water, spend on average 4800 Rials (\$60.0) per month on it. As their average income is 52960 Rials (\$662.0), this is a large percentage of their total income.

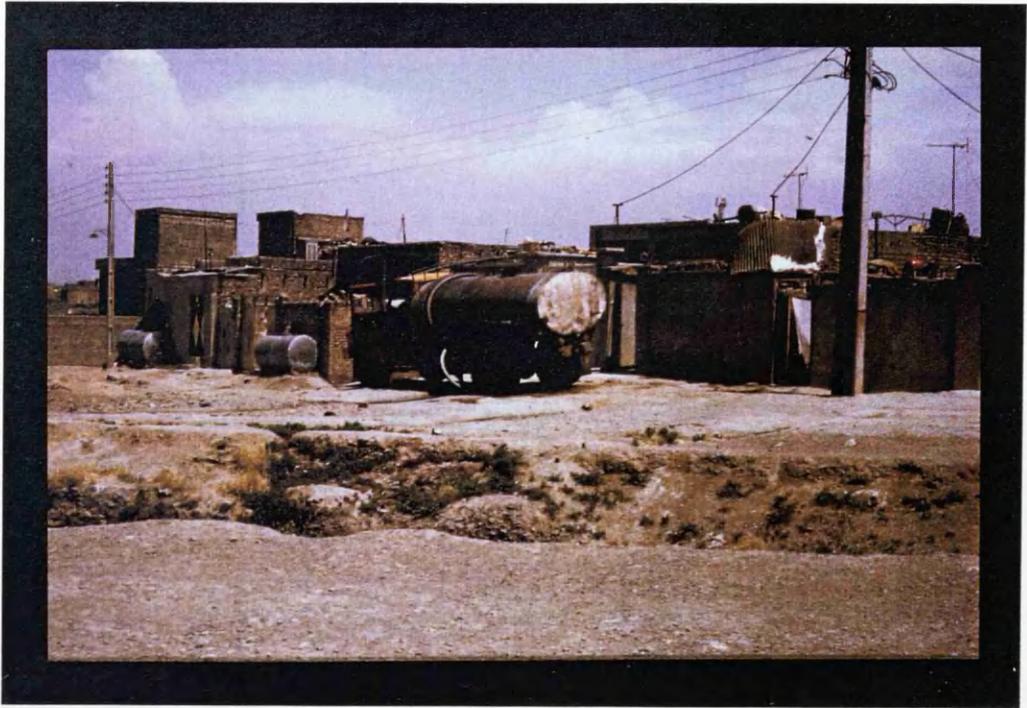


Plate 8.15 Private tanker selling water (Karevan).



Plate 8.16 Common Tap in Karevan.



Plate 8.17 Carrying drinking water from common tap at a distance of more than 100 meters (Karevan).



Plate 8.18 In the process of introducing the drinking water supply (Karevan).

The chi square test ($\chi^2 = 99.5$ calculated, $df = 2$, critical value = 9.21 at 0.01 level of significance) confirmed that there was a significant difference in the water service situation in the two settlements. This may have been caused by the geographical position of the settlements relative to the city, as Karevan is much larger and located in a more arid area while Zoorabad is located near another residential public housing area which already had the facilities installed.

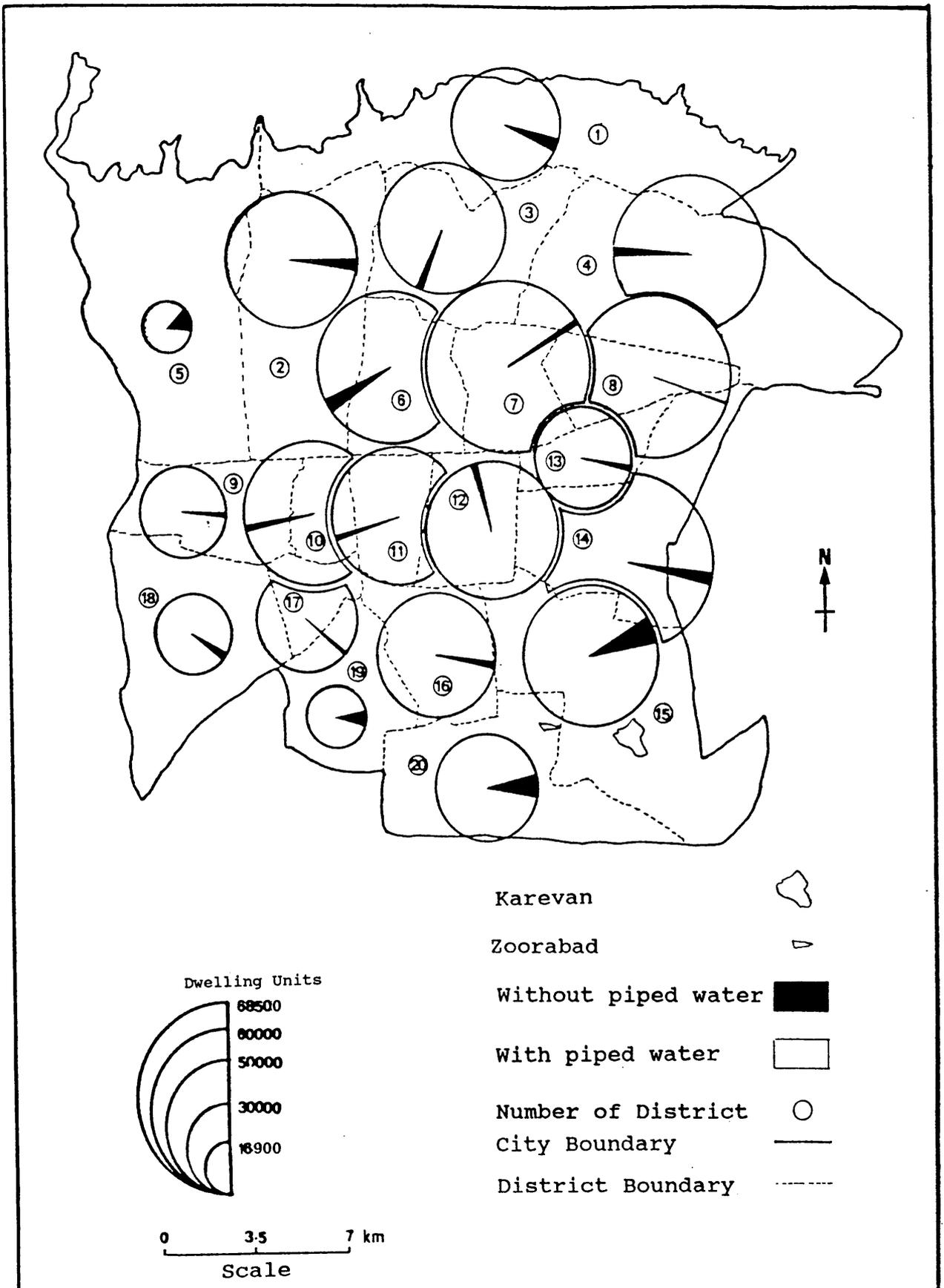
According to Tehran's census of 1980 (Table 8.17 and Fig. 8.6), Districts 20 and 15 had amongst the highest percentages of houses without piped water: 4.5 and 5.3 per cent respectively. District 20 had the highest percentage having piped water available only outside the buildings. These two are therefore more deprived in terms of piped water provision than other districts of Tehran. For example, in districts 2, 3 and 6 in the north of the city only 1.8, 0.1 and 0.2 per cent of houses were without piped water.

This analysis leads to the following conclusions. The residents' most serious problems concerning their water supply has been aggravated by the poverty of their situation. This has made it difficult for them to buy water from itinerant water tankers. Also there has been a lack of co-operation between the municipality and the water authorities. However, the residents in the survey were ready to tackle their problems by offering financial and labour contributions. This should be encouraged since it is necessary to involve the residents in the development of their environment.

8.3.2. Waste Water and Rubbish Disposal and Drainage System

In Iran there is a general lack of modern equipment and methods of waste disposal. Cities in Iran have no modern sewerage system and Tehran is no exception. Instead, septic tanks or cesspools, in the form of deep wells, are used to

Fig. 8.6 Water Supply (Housing Characteristics of Tehran, 1980).



Source: Statistical Centre of Iran (P.B.O. 1981b).

drain and store waste water. The mostarah (toilet) is usually equipped with a cold water plumbing facility to be used for personal hygiene as prescribed by Islamic doctrine.

Other wastes, like washing water, rain water, vegetable waste and inorganic wastes (tin, plastic bags etc.) are commonly disposed of by tipping them into the street (Plate 8.19) and some of the dwellings have got a deep well only for water wastes. The main reason is that they want to use the cesspool only for the toilet; other wastes must be separated from human waste because of their religious belief. It is prohibited by Sharia to combine human waste with food particles.

Table 8.21 shows the arrangement of the sewerage system in both settlements. In 54.5 per cent of the total sample the toilet was connected to the cesspool, and kitchen and bath were connected to the well inside the building. Other water waste was tipped into the street or alley and in 39.8 per cent of houses the toilet was connected to the cesspool, while kitchen, bath and other water wastes were connected to the street or alley. Lack of facilities inevitably has an adverse effect on health with cesspools and street sewerage systems becoming breeding grounds for various insects and bacteria. (Plates 8.20)

Most soapy water is left to find its own way out of the settlements, although some of the houses have constructed short open drains (Jouy) to take domestic sewerage into open street drains. In the absence of street drains, domestic sewerage is allowed to seep into wasteland. For each alley way a representative is appointed by the Council (See Fig. 9.1). He collects a certain amount of money from each dwelling to cover costs of maintaining the streets open drains or else organises residents into a rota to maintain the drainage system.

Table 8.21 Type of Sewage System

Sewage system	ZOORABAD		KAREVAN		TOTAL	
	No. of dwellings	%	No. of dwellings	%	No. dwelling	%
Toilet, kitchen and surface water all connected to the cesspool	0	0.0	6	3.5	6	2.3
Toilet connected to the cesspool and kitchen, bath and surface water connected to open street drainage	35	38.5	70	40.5	105	39.8
Toilet connected to the cesspool and kitchen and bath all connected to the well inside the building and surface water connected to the open street drainage	50	54.9	94	54.3	144	54.5
Toilet and bath connected to the cesspool and kitchen and surface water connected to the open street drainage	6	6.6	3	1.7	9	3.4
Total	91	100.0	173	100	264	100.0

Calculated $\chi^2 = 0.26$
df = 2

Critical value of $\chi^2 = 5.99$ at 0.05 level of significance.



Plate 8.19 Different kinds of wastes are disposed of by tipping them into the street. The state of one main road in Zoorabad.



Plate 8.20 Open sewers and inadequate sanitation are major problems (Zoorabad).

In some cases the level of the buildings is lower than street level. This makes it difficult to move waste and rain water into the street. As a result some residents dig a well or pool in the courtyard to store the waste and rain water. They then use a pump to clean their sewerage into the street (Plate 8.21). The problem of disposal of waste water is in most cases increased by rainfall run-off. This produces vast quantities of water at particular times of year, increasing the muddiness of the street surface and making vehicular access very difficult. Deep street gullies are common in many parts of the settlements, making streets unusable, and passable only by bridges. Some gullies are already undermining the foundations of the houses, and erosion and floods have become a major threat to the settlements (Plates 8.22, 8.23 and 8.24).

It is therefore normal for squatter settlements in Iran as in most countries to have an unhealthy and poor sewerage systems. The chi square test confirmed ($\chi^2 = 0.26$, $df = 2$ and critical value = 5.99 at the 0.05 level) that there was no significant difference between the two settlements with regard to the problems they faced in sewage disposal.

Rubbish Disposal

From the rubbish disposal point of view the increasingly unhealthy environment prompted the people themselves to do something since the municipality had refused to supply any rubbish-collection trucks. They hired a truck for the collection of rubbish and in Zoorabad 53 percent used a private rubbish collector at the per capita cost of 500 Rials (\$60) a month. Meanwhile another 47 per cent of them got a member of the household to take their refuse to the nearest rubbish heap. In Karevan all the squatters paid a private rubbish collector to service the settlement at the same cost as squatters in Zoorabad. Plate 8.25 shows the private rubbish collector in Karevan.



Plate 8.21 Waste water being pumped from a cesspool to the street (Zoorabad).

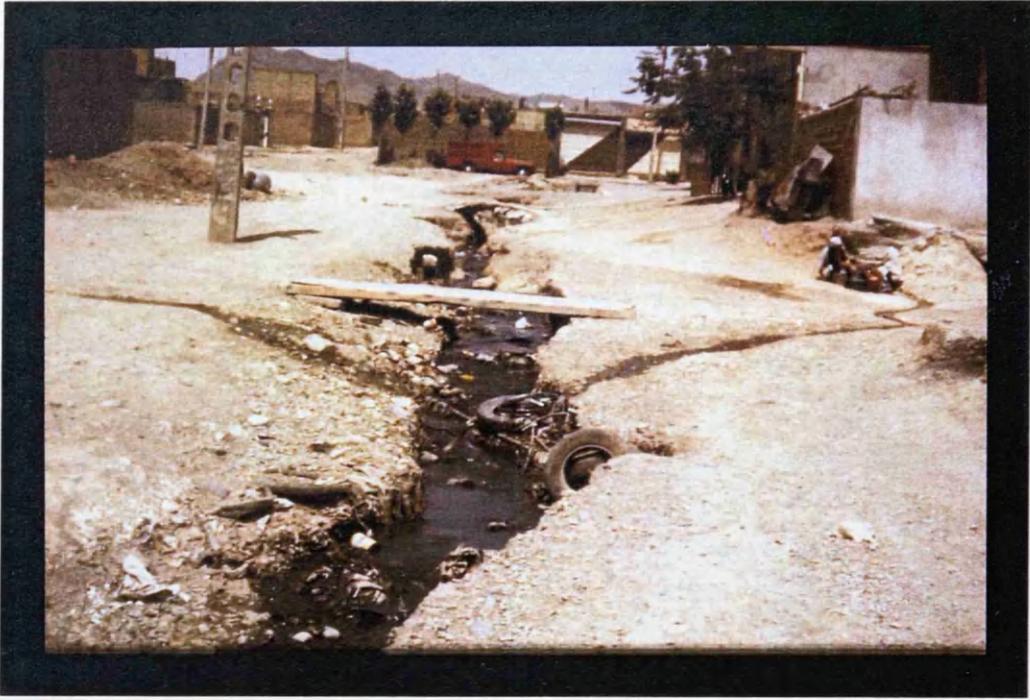


Plate 8.22 Deep Gully carrying unhygienic waste water (Karevan).



Plate 8.23 The mixture of different kinds of waste in the gullies have created a very unhealthy environment (Karevan).

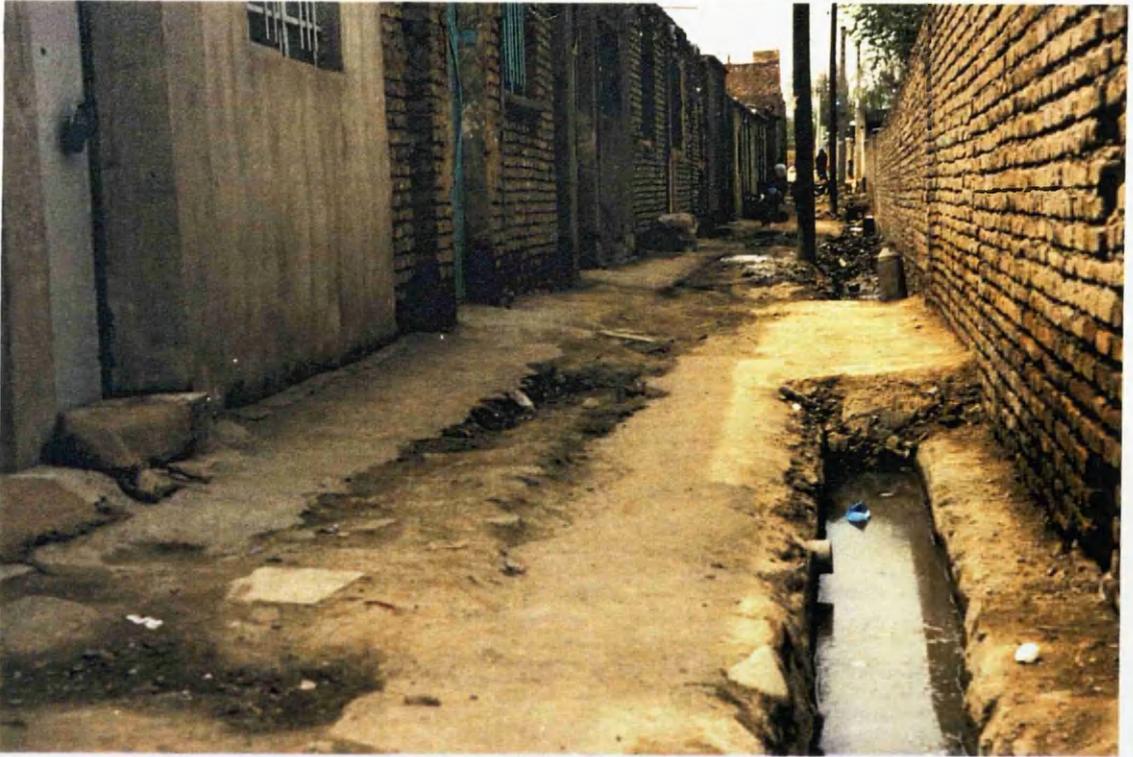


Plate 8.24 Stagnant water beside walls damages foundations as well as being unhygienic (Zoorabad).



Plate 8.25 Private rubbish collector, hired by the residents (Karevan).

Roads within the settlements

There are no surfaced roads in most parts of the settlements. The interesting point is that when surfaced roads have been built they have been financed by the residents themselves except for the major arteries such as Sajjad Street in Karevan. The residents, who live alongside unsurfaced roads were willing to finance the improvement work, but requested the equipment to carry out the work from the municipality. As a result they would indirectly get the municipality's confirmation of the legitimacy of their actions and this helped them to feel more secure.

Therefore residents tried to involve the municipality or other authorities (Electricity and Water Boards) in one way or another in order to improve the standing of their settlement and to reduce the risk of any future eviction.

8.3.3. Electricity

If public services are lacking in relation to waste disposal they are virtually absent in many other respects. There is no street lighting or legal electricity supply in some parts of the settlements. Table 8.22 shows that only 72.7 per cent of the total sample in both settlements had been legally connected with electricity and 27.3 per cent were connected illegally to the nearest electricity post or wherever they were able to make a connection. This implies that every household had electricity. Plates 8.26 and 8.27 show that the way squatters get electricity illegally can be very dangerous. Many have connected themselves to the electric grid on the advice of others in the neighbourhood. At the beginning of the formation of the settlement all the residents used electricity illegally. But after some pressure on the Electricity Board by the residents and local neighbourhood council (Showra-ye Mahal) and following some damage to a transformer and equipment as a result of overloading of the system by illegal connections, the

Electricity Board decided to supply electricity on demand. In Zoorabad it was around June 1985 when they started to get legal electricity and in Karevan around October 1980.

Table 8.22 Supply of Electricity Services

Electricity Connection	ZOORABAD		KAREVAN		TOTAL	
	No. of dwellings	%	No. of dwellings	%	No. of dwellings	%
Legally	67	73.6	125	72.3	192	72.7
Illegally	24	26.4	48	27.7	72	27.3
Total	91	100.0	173	100.0	26.4	100.0

This example would seem to show that "illegal connections" can lead to "legal connections". This change in situation brought some security to the settlements and encouraged more illegal electricity connections. The Electricity Board charged the squatters by estimating their consumption up to the point when they connected legally. Since the Electricity Board could not prevent illegal connections their ultimate objective was to prevent free consumption of electricity. At the same time the municipality was demolishing and trying to prevent new construction taking place in the settlement. There were therefore apparently contradictory actions taking place when the municipality and the Electricity Board's attitudes towards squatter settlements are compared in the mid to late 1970s.

The author interviewed Mr Mahdoui, Director of the Electricity Board of the 7th Tir Region in Tehran in July 1986, regarding the Board's responsibility toward squatter settlements. The director stated that "Because of the political situation we have been told (by influential politicians) to help these people as far as possible". He added: "We supply electricity to any kind of dwelling,

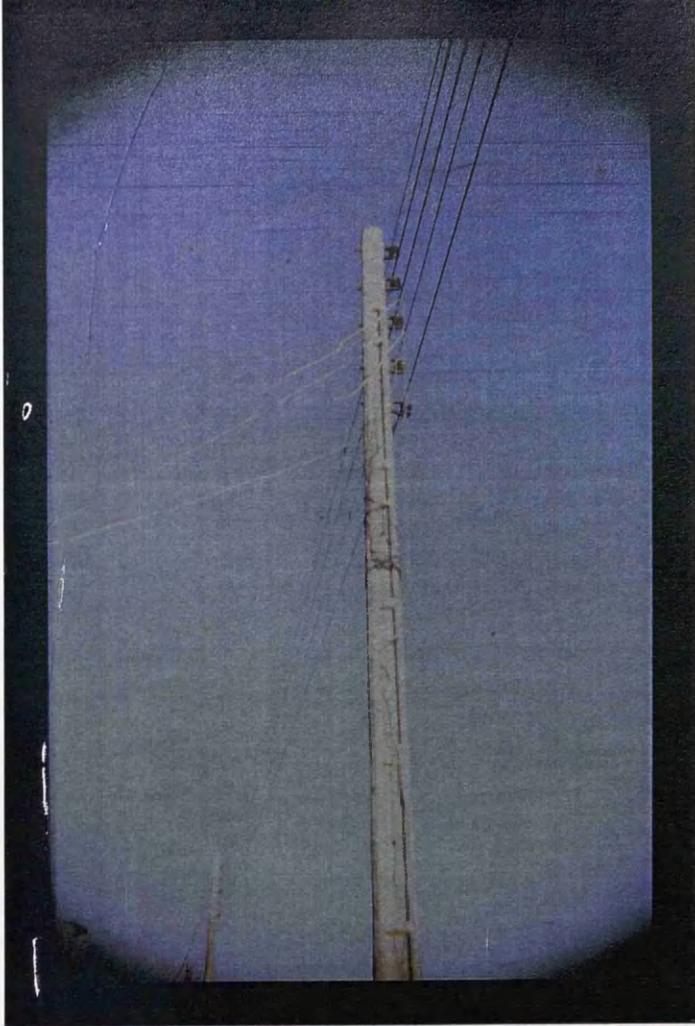


Plate 8.26 The way residents connected their dwelling to the electricity (Karevan).

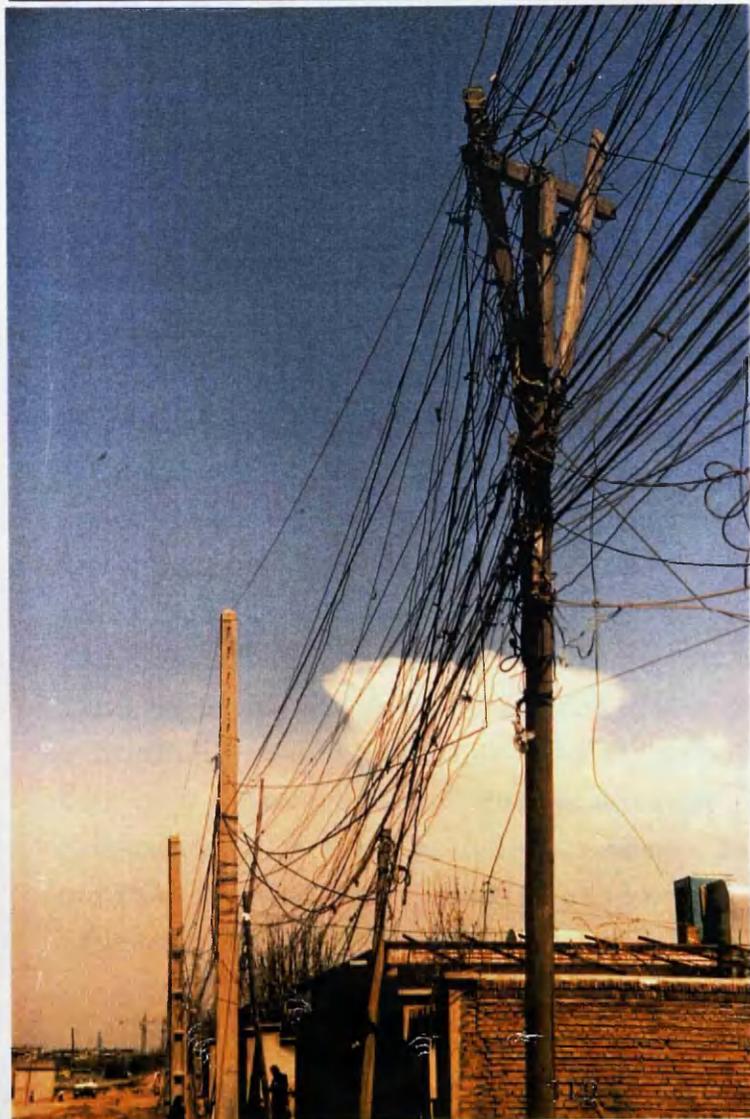


Plate 8.27 The electricity post made by squatters to take electricity from the main post to their dwellings (Zoorabad).

whether it is legally or illegally occupied, provided that it is technically possible that is to say, there must be a cable line or transformer near to the dwelling. The way the land is occupied is not a condition for supply of electricity by us. It is the municipality's responsibility to deal with the issue of occupation. As long as we have proof that the family living in the dwelling has paid their fees which is 41500 Rials (\$518) for the meter, we will supply electricity without consulting the municipality. If the municipality decide to demolish the building we just disconnect it without any problem. When we supply electricity it doesn't mean that residents own the land or property. We do it just because of benefits to us and to prevent any damage to our system from illegal connections which have caused so many technical problems. At the same time we are able to charge residents and have some control over their consumption".

According to law the provision of public services, e.g. street lighting, road pavings and environmental sanitation is the responsibility of the municipality. After the municipality gives permission to the Electricity Board that an area is to be considered as part of the municipality's responsibility, then the Electricity Board are supposed within the constraints on the system to provide services to the area.

In Karevan a number of dwellings are located under high voltage cables (63 kV and 23 kV) (Plate 8.28) The residents complained about the health risk to the municipality's urban development division, but the municipality refused to interfere and suggested that it was the Ministry of Power's responsibility to relocate them or to provide a piece of land in some other part of the city for the residents. This example shows that there is a great lack of co-operation between Government organisations with each working independently in a piece meal fashion. This causes confusion amongst the residents and slows down the development of the settlements.



Plate 8.28 A pylon inside the courtyard of a dwelling (Karevan).

8.3.4 Public Transportation

The availability of public transportation in the two settlements is rather different. Owing to its location, which is near to Dolatabad Housing Estate, Zoorabad has more opportunity to use public transport than Karevan. The government has provided public buses with cheap fares which are highly subsidised by the government. Also there are private minibuses and taxis, controlled by the authority. Private taxis are too expensive for the residents' income. Plates 8.29, 8.30 and 8.31 show the different modes of public transportation available in Dolatabad, from which Zoorabad's residents benefit. In Karaven, there is no cheap means of public transport. Most private minibuses and taxis operate illegally. The legal mini-bus services are monitored and fares and routes are controlled by the authority.

The residents in Karevan complained generally about the lack of subsidised public transportation. Private minibuses and taxis are more expensive than the authority's public transportation. Therefore they found themselves under some economic pressure. Plate 8.32 shows a number of minibuses in Karevan.

In conclusion, this part of the study has shown a picture of squatters struggling for security, ownership, better services, etc. against a reluctant, rather oppressive and incompetent set of public authorities which at the same time provide subsidised services for richer people in more prosperous, "legal" neighbourhoods. There is a lot of truth in that picture of injustice and incompetence, but there is also another story which has some truth in it too. Poor people who want to own their house and create a safe healthy well-serviced neighbourhood cannot possibly afford to pay for that kind of house. So they move illegally into squatter settlements where the price of land and housing is lower because these settlements are squalid, insecure, poorly served by water, transport, etc. Even then - and



Plate 8.29 Government subsidised public transport in DOLATABAD housing estate near Zoorabad neighbourhood.



Plate 8.30 Privately-owned public transport controlled by the government in DOLATABAD housing estate near Zoorabad neighbourhood.



Plate 8.31 Different privately owned cars used as taxis (DOLATABAD housing estate near Zoorabad neighbourhood).



Plate 8.32 Privately owned minibuses used for the public controlled by the Government (Karevan).

even though they assemble a lot of earners in each household to meet their housing costs, the cost of their illegal housing is very high in relation to their incomes. However, by a combination of political pressure and manoeuvring, illegal action (e.g. illicit connection to power supply), and private investment in building and improving their houses and the drains and other services required to provide tolerable conditions, they end up - after 10 to 15 years; - with tolerable housing and environment, and a big capital asset.

If this story is also true it suggests that although security of tenure and better public services are badly needed, they must be provided on terms which help the poor people now squatting in illicit settlements. Just to provide secure tenure, good drains and water, electricity, etc., will put the price of these houses up (through powerful market forces) to a level which will exclude the poor who will then have to go and start illegal squatter settlements somewhere else: perhaps somewhere more remote, and worse than before.

Thus to break out of the exclusions imposed by market mechanisms, and still help the poor, we must create fair and efficient administrative and political "markets" which will service poor people better. Can countries like Iran do this? Do they have the administrative resources to do so? If not, would they do better to leave things as they are, with a few cautious improvements?

This dilemma will be discussed later in the conclusion and recommendations chapter.

CHAPTER NINE

ATTITUDES AND ASPIRATION'S OF HEADS OF HOUSEHOLD, COMMUNITY PARTICIPATION AND POLITICAL INVOLVEMENT

9.1 Attitudes of Heads of Household and their aspirations for the residential environment

There is often little agreement between the view of planners and the residents of squatter settlements on the issues of environmental quality and living conditions in residential area. The differences arise from, among other things, the expectations, constraints and level of knowledge and information within which the two groups perceive environmental quality. The view of many planners, particularly of architects, has been influenced by aspects of building design and the architectural environment, whereas the aspirations of squatters is primarily influenced by their social context (Pocock and Hudson, 1978; Ramachandran, 1985). It was decided to investigate in greater depth how squatters in Tehran perceive their environment and living conditions and to establish what are their aspirations for their living environment in terms of their needs, economic constraints and cultural point of view. The study will test the following hypotheses regarding the above questions:

(1) Because of economic constraints which prevent them from moving to other housing stock, the most urgent requirement for squatters is security of land tenure, which would encourage them to extend their existing dwelling.

(2) Squatters prefer to stay and live in their settlement and improve their environment rather than move to public housing.

Regarding the residents' aspirations for their housing, the heads of household were asked what plans they had to improve their houses. The majority of them responded that they

wanted to improve them but could not afford to (36.0 per cent of the total sample). They viewed the possibility of constructing one or two storeys for renting as their desirable move which would help them to improve their economic situation. It would serve as an immediate source of income, and in the long term provide accommodation for a son or daughter when they got married (22.7 per cent). Some suggested expanding the dwelling by adding one or two rooms for more space (17.4 per cent) while others wanted to improve the stability of the building (8.4 per cent) (Table 9.1). This pattern was the same in the two settlements as chi square tests confirmed.

The heads of household were asked what their expectations were of government intervention (Table 9.2). The majority responded that they wished the government would recognise them as legal urban residents and accept the settlement entirely within the city boundaries by giving them official ownership documents and providing security of land ownership. (These responses were given by 93.4 per cent and 79.8 per cent in Zoorabad and Karevan respectively). Security of tenure would make it easier for squatters themselves to improve their settlement. Many were ready to pay for the land which they had occupied, albeit by instalments. In Zoorabad 53.8 per cent of the households would like to have secured land ownership even if it involved paying the fine for illegal occupation. 35.2 per cent were ready to pay in any way that the government decided since they felt a certain trust in the revolutionary government. Only 6.6 per cent did not want to pay under any circumstances (Table 9.2).

The type of land tenure is different in Karevan, because in Zoorabad land was invaded and in Karevan the residents had bought the land from land owners, albeit illegally. They had got the owner's document but it was not in their name and they would have liked to transfer it to their name so that they would have the right to sell or improve the land. Table 9.2 shows that 33 per cent of them expected the

Table 9.1 Plan for improvement of the dwelling

Plan of improvement	ZOORABAD		KAREVAN		TOTAL	
	No.	%	No.	%	No.	%
N//A	4	4.4	12	6.9	15	5.7
Extend one/two rooms	17	18.7	28	16.2	46	17.4
Building a bathroom (Hammam)/kitchen	7	7.7	10	5.8	17	6.4
Extend the building vertically (one more storey)	22	24.2	38	22.0	60	22.7
To improve the stability of the building	9	9.9	13	7.5	22	8.4
No improvement/cannot afford it (but would like to improve it)	32	35.1	63	36.4	95	36.0
Open a shop	0	0.0	3	1.7	3	1.1
Want to sell the houses (no improvement)	0	0.0	6	3.5	6	2.3
Total	91	100.0	173	100.0	264	100.0

Calculated $\chi^2 = 2.98$ (based on a compressed contingency table: 5 X 2)

X = 0.05
critical value = 9.49
df = 4

Table 9.2 Ways the respondents expect the Government to help them in relation to the housing and land problems of their present accommodation

Ways they expect the government to help	ZOORABAD		KAREVAN	
	No. of Household	%	No. Households	%
N/A no answer	3	3.3	21	12.1
To recognise us as legal owners and give us ownership document without asking any sort of payment for the land	4	4.4	32	18.5
To recognise us and to give us land ownership document by charging a reasonable price for the land and we are ready to pay it anyway if the government decides	32	35.2	0	0.0
To recognise us and give us land ownership document by charging a reasonable price for the land and the penalty for illegal occupation but in instalments	49	53.8	3	1.7
Already living here and it doesn't make any difference to be recognised or having the ownership document	2	2.2	11	6.4
To recognise us and <u>transfer</u> the land ownership document from the land owner to our name <u>legally</u> without asking any sort of payment	0	0	57	33.0
To recognise us and <u>transfer</u> the land ownership document from the land owner to <u>our</u> name <u>legally</u> and we are ready to pay the penalty for illegal occupation <u>but in instalments</u>	0	0	46	26.6
Whatever the government decides to do we will accept it	1	1.1	3	1.7
Total	91	100.0	173	100.0

government to transfer the land ownership documents from the former landowners to their own name without any payment, while 26.6 per cent were ready to pay a fine by instalments for illegal construction. Lack of land security was therefore perceived as the most important problem by the residents in both settlements. The uncertainty existing over land tenure in both settlements imposed some constraints on the improvement of housing conditions. It was perceived as a political issue whether the settler should receive an ownership document. From the residents' perspective the key issue was that the government should recognise the settlement. This was seen as a prerequisite to improving the area, building more accommodation, upgrading houses and providing sufficient services for the neighbourhood.

At the time of the survey the government did not seem to have taken strong responsibility for the provision of services or housing improvements simply because the settlements were illegal. Table 9.3 indicates the residents' attitude towards government public housing. They were asked if the government provided cheap public housing for rent or sale in another part of the city would they be willing to move. 57.2 per cent of the total sample responded "yes, but only on condition of providing houses located near our work and with good services and sanitation and with enough space". 40.5 per cent answered they would not like to move because they imagined that public housing would mean living in an unpleasant apartment, while others claimed that they had got used to the neighbourhood, and did not want to be uprooted, and a small proportion claimed that they could not afford to live in government housing (Table 9.3).

In relation to the hypotheses listed above, the survey results would therefore suggest that the squatters were potentially rather immobile. Only 22 per cent had the intention of moving as Table 7.21 shows, although the

Table 9.3 Move to cheap peripheral public housing

	ZOORABAD		KAREVAN		TOTAL	
	No. of households	%	No. of households	%	No.	%
Yes	50	54.9	101	58.4	151	57.2
No	41	45.1	66	38.1	107	40.5
No answer	0	0	6	3.5	6	2.3
Total	91	100.0	173	100.0	264	100.0

If No -

Reason given	ZOORABAD		KAREVAN		TOTAL	
	No. of households	%	No. households	%	No.	%
Cannot afford to buy it	5	12	10	15	15	14.0
Want to be near relatives and friends	0	0	1	2	1	0.9
Use to this neighbourhood	13	32	8	12	21	19.6
Job situation	2	5	4	6	6	5.6
Don't like apartment (if it is apartment)	19	46	40	61	59	55.2
Built this house myself and don't like to change with anything	2	5	3	4	5	4.7
Total	41	100	66	100	107	100.0

Calculated $\chi^2 = 6.16$
df = 2
critical value = 9.21
x = 0.01

majority were willing to move to cheap public housing if it was accompanied by good services and employment opportunities (57.2 per cent).

This attitude was similar in both settlements as shown by the chi square test ($\chi^2 = 6.16$, $df = 2$, critical value = 9.21 at 0.01 level of significance). This confirmed that there was no significant difference in the attitude toward government public houses in the two settlements. It can be concluded that most squatters would not like to move anywhere else because they cannot afford better housing conditions unless provided by government. Instead they would prefer to improve their present housing conditions to anything else.

9.2 Community Organisation and Squatters' Participation

Community Organisation

The thesis now turns to examining the structure of the community organisations that have emerged to develop and defend the settlements' interests. What is the extent of squatter participation and how far does this participation affect the development of the settlements? What are the major constraints imposed on improvement in both settlements?

Residents of squatter settlements usually try to organise themselves by setting up a council (Showra-ye mahal) which consists of 6-8 trusted and influential local residents, such as the Imam of the mosque or local businessmen. This council is usually based in the local mosque, and most decisions are taken in the mosque. The council members seek to represent the settlement's problems to other urban agencies such as the municipality and water and electricity boards and to use their influence to gain favours from politicians who assist in meeting their demands. The members of the council are usually elected by the residents or appointed by the Imam of the mosque who himself is

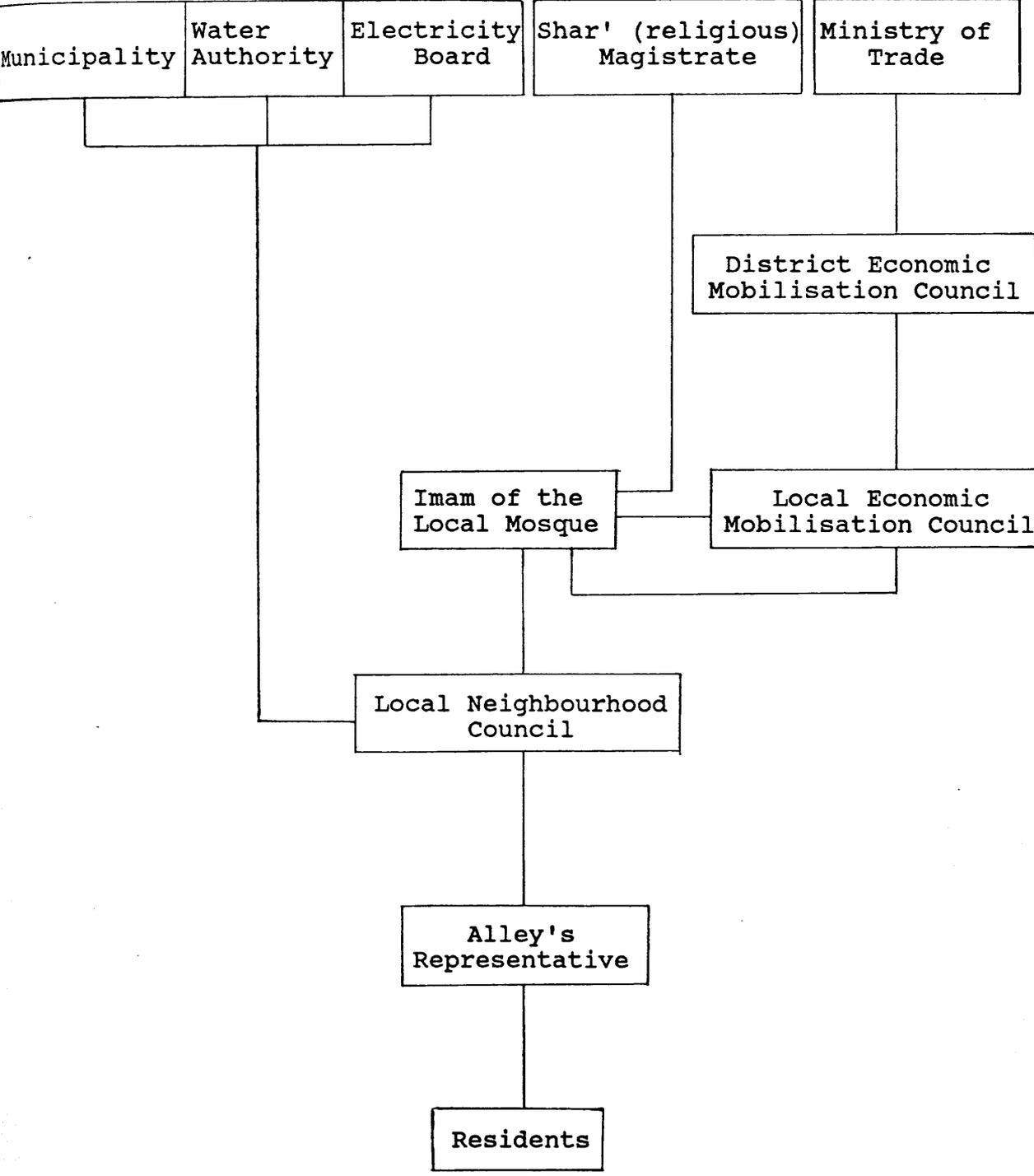
appointed by the Shar (Religious Magistrate). Usually every alley or road has one representative to inform the residents of the council's activities and in some cases to make a money collection for specific development projects.

There is also Local Economic Mobilisation Council for distribution of rationed goods. With the start of the war in 1980, to prevent speculation in basic goods and to give everyone access to the minimum of these goods in the official market, the ration system was introduced and was implemented by the Economic Mobilisation Centre (SETAD Basij Eghtesadi) under the Ministry of Commerce in September 1980. Therefore each neighbourhood had to have a council for distribution of the goods to local shops. At the same time if it was necessary to purchase any other type of goods (e.g. furniture, cooler, heater, carpet, fridge and construction materials etc.) from the legal market households had to obtain a letter of authorisation from the council. The members of this council were appointed by the District Economic Mobilisation Council, who in turn were appointed by the Ministry of Trade. The Local Economic Mobilisation Council had direct contact with the mosque and residents but sometimes it was necessary for the residents to get the mosque's (ie. the Imam's confirmation) support for obtaining specific items, such as fridges or coolers (Fig. 9.1).

Zoorabad

In Zoorabad squatters claimed that the land belonged originally to the Shah's relatives. Religious leaders advised them these lands belong to God, and that therefore they had the right to occupy them. At the time of the occupation the distribution of plots was controlled by the revolutionary guards and local religious leaders to prevent anybody occupying more than others. The author was told by the residents that during the occupation and construction the Prime Minister, Rajaie, had gone to the neighbourhood and had given a speech about the settlements and also some

Fig. 9.1 Local political organisation and its relation to other institutions



advice to the people about how they should build their houses in order to facilitate service provision. They were for example advised to "make sure that the roads and alleys were wide enough to make it possible for fire fighters to have access in the case of fire". Therefore, it is evident that the squatters were encouraged even at an early stage by politicians and religious leaders.

Shortly after the occupation, neighbourhood councils were established (1979). Most council members were self-employed businessmen. Any policies that these councils wanted to implement had to be approved by the local mosque. The council helped the community by providing contacts with the public service authorities and municipal organisations. For example, as reported in the previous chapter after five years the council was able to provide standpipe water and electricity in some parts of the settlement. This was achieved by establishing a system for the collection of funds from the squatters to pay for basic infrastructural developments, even although the original land occupation was still not legally recognised. The interviews with the community leaders showed that the degree to which residents had participated in the struggle to achieve provision of services was high. The community had worked together to lay water pipes and introduce electricity posts and in some alleys to maintain an open drainage system for surface water disposal. Also because of the refusal of the municipality to provide trucks for the collection of rubbish, the squatters themselves hired a private collector and paid 500 Rials (US\$7.0) a month. In general, the government encouraged the community to provide these services by relying upon community funds because of the shortage of central finance during the war.

The neighbourhood council played an important role in the provision of services but their activities were not always smooth and without problems or difficulties. During the survey a number of members of the council were changed due to power struggles and political interference by those who

had more religious influence such as Revolutionary Guards or members of the Oppressed Mobilisation Organisation (irregular arm of the Revolutionary Guards Corps), who endeavoured to obtain power themselves. However, having political power and religious influence was no criterion for attracting the residents' trust and support. The main criterion by which council members were appreciated within the community and remained in power was their activities in the settlement for the development of the settlement. Some of the council members were very successful in performing such a role in the settlement. Usually the council membership did not change unless members wished to resign, or dishonesty was proved by residents, or the local religious leader (Imam of the mosque) wished to get rid of someone. In the case of a religious leader's decision to sack a member, the residents' support for the latter did not carry any weight. But if a number of influential residents (such as Revolutionary Guards or members of Oppressed Mobilisation) complained to the religious leader about a council member, the leader considered their complaint a reason for the member's dismissal. In Zoorabad a number of such influential residents accused a council member of misusing the council's funds, and they made him resign. But residents were not happy about this accusation and they had the impression that a number of members of the Oppressed Mobilisation in the neighbourhood were trying to dominate the council; and the residents continued to appreciate the accused member's efforts for the improvement of the neighbourhood. Regarding the above case a member of the council stated that:

"We wrote a letter signed by all members of the council to seek support for street paving in ^{the} neighbourhood to the municipality. It had to go through the mosque, but the mosque did not approve the letter because a number of members of the Oppressed Mobilisation from the neighbourhood reported that some of the members of the council were dishonest and misused the money which they received from residents. Also, we were accused of not

distributing the goods (construction materials....) properly to the people. Therefore our effort was wasted, despite useful contacts being made, and since then all the development has stopped because of this conflict".

Conflict within the local community was therefore a major obstruction to improving the neighbourhood. It has created lack of trust between officials and residents towards the council and as a result the residents have reduced their participation in developments especially in terms of financial help.

Chi square tests showed that there were significant differences between the two settlements in their experience and knowledge of local council activities. Table 9.4 shows squatters' knowledge about Zoorabad's community council and its activities. When asked if the settlement had any council, 53.8 per cent of them responded that there was only a Local Economic Mobilisation Council and 38.5 per cent answered that it had two councils, the Economic Mobilisation Council and the Local Neighbourhood Council. Therefore it is clear that the Economic Mobilisation Council is well known because it deals with goods and rations, and as a result they have automatically been in touch with most households. But because of the conflict which had hampered development, respondents were not sure whether there was a Local Neighbourhood Council. Only 39.6 per cent thought there was a Local Neighbourhood Council. This shows that a majority of the squatters thought the council had been cancelled altogether. The questionnaire also asked if people knew any member of council: 68.1 per cent did not and 18.7 per cent knew only some people on one of the councils. Only 3.3 per cent knew a member of the neighbourhood council (Table 9.5). They were asked what they thought of the council's role in helping them on housing and environmental issues in the neighbourhood. Only half felt that they had a good local neighbourhood council as far as development issues were concerned and felt that it was unfortunate that the council had been cancelled due to the interference of

Table 9.4 Knowledge of head of household of the existence of any council in the neighbourhood

Type of Council	ZOORABAD		KAREVAN	
	No.	%	No.	%
Local Economic mobilisation council	49	53.8	40	23.1
Local neighbourhood council	1	1.1	1	0.6
Local Economic mobilisation council and local neighbourhood council	35	38.5	130	75.1
Don't know/not responded	6	6.6	2	1.2
Total	91	100.0	173	100.0

Calculated $\chi^2 = 35.13$ (based on a compressed contingency table:
3X2) $\alpha = 0.01$

Critical value = 9.21
df = 2

Table 9.5 Knowledge of head of household about member of Council

	ZOORABAD		KAREVAN	
	No.	%	No.	%
Don't know any member of the councils	62	68.1	59	34.1
Know some member of both councils	17	18.7	35	20.2
Only know the member of local economic mobilisation council	5	5.5	1	0.6
Only know the member of local neighbourhood council	3	3.3	78	45.1
Not responded	4	4.4	0	0.0
Total	91	100.0	173	100.0

Calculated $\chi^2 = 41.27$ (based on a compressed contingency table: 3X2)

df = 2
 $\alpha = 0.01$
Critical Value = 9.21

members of the Oppressed Mobilisation Organisation (irregular arm of the Revolutionary Guard Corps). Meanwhile 29.7 per cent responded that there was only a Local Economic Mobilisation Council which did not help with obtaining rationed goods. They claimed that Council members looked after their own friends and relatives and did not do anything for development of the neighbourhood (Table 9.6).

Therefore it can be seen that residents were willing to participate in the development of the neighbourhood but the success of their participation was dependent on local leaders' action and whether they could be trusted. In this case the previous council was more active and better known by the people since they were elected by the squatters. They had played a major role in the improvement of the neighbourhood with the active participation of the residents.

Karevan

As has been noted elsewhere Karevan neighbourhood is much larger than Zoorabad. It was formed by illegal purchase of the land from estate agencies acting as a middleman between big land owners and the people. The land owners had given the authority to more than twenty agencies in Tehran to sell the land in the area at cheap prices in case nationalisation of the urban land was one of the outcomes of the revolution. Usually the land was divided into plots of around 120m² and sold to the in-migrants. Therefore in Karevan, unlike Zoorabad, the majority of the households had bought the land illegally and had documents for the land even although it was registered under their name. They bought it only under a preliminary agreement (written promise).

It was during the Amouzegar's Government (the last Prime Minister of the Shah's regime) that part of Karevan came within Tehran's municipal boundary. This encouraged illegal construction on the urban fringe. In the process of the expansion of the settlement by squatters it was decided to

build a mosque. This was not completed at the time of the survey but it was used by the community. The Imam of the mosque was appointed by the Shar' (religious) magistrate. He automatically became the community leader and mobilized the neighbourhood council by appointing members from different parts of the neighbourhood. It was not a proper election in the settlement by the residents. The leader had the power and personal relationship with the politicians or administrators who controlled the resources which were required by the community. For example, in a number of cases the residents explained that:

"we could not have built a house, since the municipality would demolish it unless we had the help of the Imam of the Mosque (Haj Ahmadi). We went to the mosque and got a letter from him saying we had nowhere to live and indicating that the household's income was too low. Then the municipality stopped bothering us".

The council helped the community by providing contacts with government agencies, and by keeping up pressure on them for servicing the settlement. The council also advised the residents how they might participate in development projects. Usually for any discussion about the neighbourhood the mosque loudspeaker was used, requesting people to gather in the mosque for discussion about neighbourhood improvements.

The government's agencies tried to provide facilities but relied upon the community to collect money to pay for them. Hence the councils were concerned with the difficult task of collecting money from every household to contribute to the cost of installing water and electricity systems. In this sense, the community council was a pre-requisite to the provision of services in Karevan. Therefore most parts of the settlement were equipped with standpipes and proper electricity, and every household had paid 10,000 Rials (\$125) for the water and about 60,000 Rials (\$750.0) for the electricity meter connection. Also the squatters themselves

participated in installing the pipes and electricity posts. Some parts of the settlement were still without water and electricity. Residents complained that they had paid money for the services but were still waiting for them. Delay occurred for two reasons; One technical and the one political. As in Zoorabad internal conflict had arisen. In this case it arose between two mullahs (clergymen) in the settlement were involved in a power struggle and brought development to a stand still. Again as in Zoorabad the municipality had refused to provide trucks for the collection of rubbish disposal, and the squatters themselves had hired a private collector with every household paying 500 Rials (\$6.0) per month. This demonstrated that the people could organise themselves to overcome their neighbourhood's problems when absolutely necessary. In fact it might be argued that the total absence of services had actively encouraged participation.

As in Zoorabad, residents were asked if the neighbourhood had any local council (Table 9.4 and 9.5). Nearly everyone knew about the Economic Mobilisation Council because it had dealt with their basic daily life goods. Examination of the tables shows that in Karevan the squatters were more aware of their council's activities. The chi square test confirm (calculated $\chi^2 = 35.13$, $df = 2$ critical value = 9.21 at the 0.01 level of significance) that there is a significant difference in heads of household's knowledge of the existence of the local council and of its members (calculated $\chi^2 = 41.27$ $df = 2$, critical value = 9.21 at the 0.01 level). This might have been because the council's activities in Karevan were more noticeable since the settlement was located in a more arid area than Zoorabad. Equally it is possible that the influence of religious leaders was greater in Karevan.

A minority of respondents in Karevan (32.4 per cent) expressed great satisfaction with the council because of their hard work in improving services. Conversely, 24.8 per cent were dissatisfied and complained in particular of the

obstinacy of the two clergymen in the neighbourhood. The 22.0 per cent who knew only about the Economic Mobilisation Council complained that the council did not help properly with rationing goods and furniture (e.g. carpets, coolers, construction materials, etc). As in Zoorabad they were accused of only looking after their own friends and relatives. Meanwhile 11.6 per cent complained that the local neighbourhood council had not done anything for the improvement of the neighbourhood and were very inactive and corrupt as well (Table 9.6).

Therefore, in both settlements there was a conflict within the council which has prevented progress. Nevertheless people were willing to co-operate to a certain extent with them and to participate in bringing about any sort of upgrading as long as the council could provide suitable leadership.

Community participation was considered important because, while problems clearly existed with most upgrading projects, it was recognised as necessary to make a united attempt to solve the settlements problems through the active involvement of the community. As Turner has noted with regard to the internal organisation of squatter settlements, "Internal organisation is necessary though not often sufficient to enable self-improvement to happen" (1969a: 516-17).

It has been shown in other developing countries that most upgrading projects involving residents in the development process were successful (Danielson and Keles, 1985; Antony, 1979). This process could be made more effective by giving squatters land title rights. Nevertheless, proper community organisation with good leadership is important in assisting community development to co-ordinate with government agencies, and in keeping the government in touch with the aspirations of the residents.

Table 9.6 Head of Household's attitude towards council in the settlement

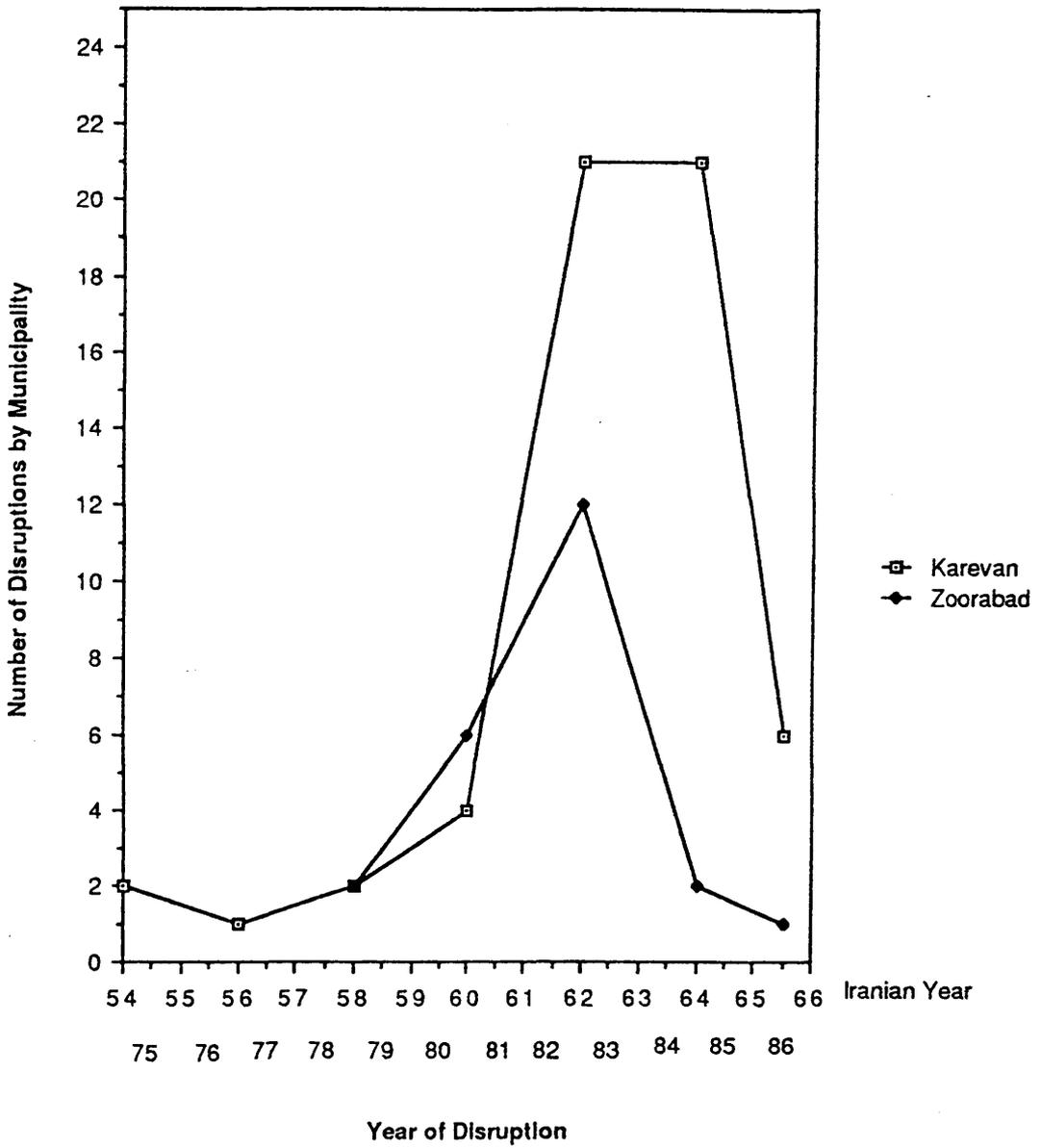
	ZOORABAD		KAREVAN	
	No.	%	No.	%
The local neighbourhood council hasn't done anything for the improvement of the neighbourhood and its members are corrupt.	3	3.3	20	11.6
The previous local neighbourhood council was very satisfactory and active, they provided water, electricity, but it was cancelled due to interference by members of the oppressed Mobilisation in the neighbourhood and now the local neighbourhood council is not active and do not know them.	44	48.3	0	0.0
The local economic mobilisation council in the neighbourhood hasn't been helpful in regard to rationing of goods, and they only look after their own friends and relatives.	27	29.7	38	22.0
The neighbourhood doesn't work well for the development because of the obstinacy of two religious leaders (clergymen) in order to get the power. Improvement has been stopped, because of conflict within the members of the council.	0	0.0	43	24.8
The neighbourhood council is very active and reliable, they help for the provision of piped water, electricity, street paving, collecting rubbish disposal.	6	6.6	56	32.4
There is only economic mobilisation council, which is satisfactory in distribution of goods and has been helpful.	6	6.6	4	2.3
Neither local neighbourhood council or economic mobilisation council has done anything for the neighbourhood at all and their members are corrupt.	0		9	5.2
No answer	5	5.5	3	1.7
Total	91	100.0	173	100.0

9.3 Political involvement

The people living in these settlements are in turn crucial to the government. The Islamic Republic of Iran claims to be representative of the Mostazafin (the oppressed) and their support is very important in legitimising the regime's position. Occupation of land was clearly supported by the Revolutionary government. Figure 9.2 shows that during 1978-79 there was no control by the municipality and due to the chaotic revolutionary situation and their lack of power and at the same time the transfer of power to religious leaders, people could build their houses on the invaded or illegally purchased land easily. Such action by people was aided by the revolutionary organisations (e.g. Revolutionary Guards Corps and revolutionary Komitehs*). In fact some of the residents were revolutionary guards or member of Komiteh themselves. From both settlements 70.8 per cent responded that the guards did not become involved^{at} the time of their land invasion. (Table 9.7). As the new regime needed their support and manpower to provide stability for the regime they could not or did not want to put pressure on squatters. As a result the number of squatters increased. Then gradually as the regime became more powerful it started to take steps to prevent any more illegal building construction in the settlements. As can be seen in Figure 9.2, the rate of disruptions by the municipality reached a peak in 1982/83, and this led to a decline in building construction in the settlements. This was because pressure from the municipality made the settlers frightened.

* Revolutionary Komitehs: At the beginning of 1978, Ayatolla Khomeini called on the Ulema (religious leaders) to form Komitehs (derivative of Committee) in mosques to guide the faithful struggling against the oppressor Shah.

Fig.9.2 Municipality Disruption



Source: Author's survey in 1986.

Table 9.7 Revolutionary committees' reaction during the occupation and construction at the beginning of the revolution.

	ZOORABAD		KAREVAN		TOTAL	
	No.	%	No.	%	No.	%
No answer or not applicable	6	6.6	21	12.2	27	10.2
They opposed and demolished the house by helping the municipality	2	2.2	16	9.2	18	6.8
They helped throughout the occupation	15	16.4	17	9.8	32	12.2
They were not involved	68	75.7	119	68.8	187	70.8
Total	91	100.0	173	100.0	264	100.0

Source: Author's survey in 1986

The municipality had the power to demolish their houses or part of them. As the housing represented a very high proportion of these people's total assets, they preferred to live in an incomplete state of housing until the situation of 'their' land became clearer. They therefore decided initially not to take any more risks in case they lost their savings or the money they had borrowed from friends or relatives for the construction of their accommodation in these settlements.

Table 9.8 shows that most of the residents in the settlements did not suffer from disruptions caused by the municipality, because they built their houses or part of them in the period prior to the increase in municipality pressure - i.e. before 1982-83 (Table 9.9).

Table 9.8 Disruption by the municipality

	ZOORABAD		KAREVAN		TOTAL	
	No. of households	%	No. of households	%	No. of Households	%
Disrupted by municipality	23	25	57	33	80	30
Not disrupted	68	75	116	67	184	70
Total	91	100	173	100	264	100

Source: Author's survey, 1986

However, the significant increase in the number of disturbances is indicative of the increased municipality pressure on illegal housing built after the revolutionary government became more established.

Table 9.9 Timing of disruption by the municipality

	ZOORABAD		KAREVAN		TOTAL	
	No. of households	%	No. of households	%	No. of Households	%
1974-75	0	0	2	3.5	2	2.5
1976-77	0	0	1	1.8	1	1.2
1978-79	2	9	2	3.5	4	5.0
1980-81	6	26	4	7.1	10	12.5
1982-83	12	52	21	36.8	33	41.3
1984-85	2	9	21	36.8	23	28.8
1986	1	4	6	10.5	7	8.7
Total	23	100	57	100.0	80	100.0

Source: Author's survey, 1986

In general, it would be fair to say that the state was afraid that the situation of these people would give an opportunity to opposition organisations to mount an anti-government campaign. Therefore "control" and support of these settlements and their people was very important to the

revolutionary state. During the survey the author was stopped and asked several times by the authorities (Revolutionary Guards) to check his documents and letter of authorisation. This was because there was a rumour in the settlements that he was a member of an opposition organisation (Mojahedin-e Khalq) and was trying to gather information about the way people lived in such bad conditions for propaganda purposes against the regime. This demonstrates the government's sensitivity about the settlements conditions and their awareness of the potential of mobilisation of opinion against the state.

Squatter's participation

Political participation through demonstrations, protests, collective violence, is not a common feature of squatters' behaviour except where it directly involves their living conditions. Most research suggests that squatters' fundamental concerns are centred on efforts to obtain housing and better employment for themselves and their family members, rather than having wider political objectives. Strenuous daily struggles in pursuit of basic needs does not leave much room for political activity. In the questionnaire survey in Tehran's squatter settlements, people were asked what they did on Fridays. This is an important day for Muslims since it is every Muslim's duty to attend Friday Prayers at the mosque if he or she can. These prayers conclude with a speech by a religious leader about current political events. Taking both settlements together 57.6 per cent responded that they stayed at home on Fridays with the family and 20 per cent responded that they usually worked. The reason for the high percentage working on Friday in Karevan is the nature of their jobs. (i.e. there are more casual workers in Karevan than in Zoorabad). Only 6 per cent of respondents went to Friday prayers in the mosque. This indicated that they were not interested in this sort of religious or political involvement or demonstration (Table 9.10). The chi square test (calculate

$\chi^2 = 9.92$, $df = 3$, critical value = 11.34 at 0.01 level) confirmed that there is no significant difference between the two settlements in this respect.

Table 9.10 Head of household's usual activities on Fridays

Friday's activities	Zoorabad		Karevan		Total	
	No.	%	No.	%	No.	%
Going to Friday prayers	5	5.5	11	6.4	16	6.0
Staying at home with the family	62	68.1	90	52.0	152	57.6
Visiting friends and relatives	14	15.4	27	15.6	41	15.6
Working	9	9.9	44	25.4	53	20.0
Going on pilgrimage	1	1.1	1	0.6	2	0.8
Total	91	100.0	173	100.0	264	100.0

Source: Author's survey, 1986

Calculated $\chi^2 = 9.92$ (based on a compressed contingency table: 4 X 2)

$df = 3$ At 0.01 level, critical value = 11.34

People were asked if any member of their family had been in the war, and if so, how they were drafted. From the total sample, 25 per cent had some member of their family in the war. Only 11 per cent of them were volunteers in the Oppressed Mobilisation while 77 per cent had been drafted to the Armed Forces. The other 12 per cent were permanent Armed Forces servicemen (Tables 9.11 and 9.12).

Table 9.11 Members of family in the war

	ZOORABAD		KAREVAN		TOTAL	
	No.	%	No.	%	No.	%
Yes	23	25	42	24	65	25
No	68	75	131	76	199	75
Total	91	100	173	100	264	100

Table 9.12 Nature of initial mobilisation

Ways of participation	ZOORABAD		KAREVAN		TOTAL	
	No.	%	No.	%	No.	%
As a member of Mobilisation (voluntary)	2	9	5	12	7	11
As a drafted military serviceman	20	87	30	71	50	77
As a regular member of the Armed Forces	1	4	7	17	8	12
Total	23	100	42	100	65	100

Source: Author's survey, 1986

Hence, it can be seen, contrary to expectations, that the number of volunteers for joining the war was very low among the groups surveyed. People were more concerned about supporting their family in the urban economies than any other activity.

The most important factor which encouraged the squatters to become involved with politics was their immediate domestic needs. Security of tenure was the single most important need expressed by the squatters. It was also an important issue for the Government, since the Government realised that if it recognised them as legal residents, they could expect more squatter settlements to emerge in the neighbourhood. Since the country was at war at the time of the survey priority in the allocation of resources were directed to war even though economic pressure was high and the Government

was afraid of being unable to provide sufficient services to the squatter settlements. As a result, the government's actions had to be interpreted as a reflection of conflicting demands on very limited resources. Action to secure the satisfaction of the squatters was tempered by an unwillingness to recognise them legally by giving them land security, simply because of a fear of exacerbation of the problem in the future.

Nevertheless it would be fair to suggest that the squatters benefitted temporarily from the disorder of the Iranian state and the political power struggles which took place during the revolution. This action was supported by some politicians after the success of the Revolution in order to sustain the stability of the new regime. Some politicians came to advise the squatters on the ways of building as mentioned earlier.

As Koth, Silva and Dietz have stated in another context:

"Probably most importantly, political agitators in urban slum areas find fertile ground for spreading doctrines of conflict and social disorder, and efforts to improve housing may decrease conflict" (quoted by Mangin, 1967:82)

From the data analysed in this and the previous two chapters, it can be concluded that a substantial proportion of squatters had lived in Tehran for a time before coming to the squatter settlements. Movements from overcrowded low income areas of the city (South) to squatter settlements were of great significance. Most of the squatters had moved to the settlements from rented conventional houses in consolidated areas nearby. This conforms to patterns described elsewhere by Turner (1968), Conway and Brown (1980) and Gilbert and Ward (1982). They did not come from classic city centre locations or slum dwellings. They therefore had some previous experience of urban life.

Their main reason for their move was to have a house of their own. Since they could not afford to own accommodation in the conventional housing market because of their low incomes (the average household's income was 51.2 per cent less than the average household's income in Tehran as a whole), they were forced to enter the illegal sector by occupying land and building their own houses on it.

It can be seen that in Iran, squatters had been waiting for an opportunity to have their own home and that the Revolution of 1979, with the ensuing political situation, gave them a chance to move to available vacant land near their previous residence.

So it can be said that political events can affect low income groups' decisions and can accelerate the processes by which they seek to integrate themselves in the urban environment. It has been shown that squatters are politically conservative in their behaviour. They are more concerned about their immediate living and employment conditions and in looking after their families rather than involving themselves with any political activities unless they related directly to the protection of their homes and families. This has been confirmed by many other studies (Turner, 1969a; Mangin, 1967; Cornelius, 1975; Kazemi, 1980).

Also, the study has shown that squatters built their dwellings themselves or with help from friends and relatives. This indicates the importance of the connection with their place of origin and the mechanisms sustaining encouraging rural-urban migration.

They had built their houses in styles compatible with their culture and traditions (i.e. courtyard houses). They had used any material they could lay their hands on but mainly built with iron beams and kiln-dried bricks. It usually

took them some time to build their accommodation and it was gradually extended as their financial situation permitted. Overall there was a high degree of overcrowding.

Both settlements suffered from poor standards of basic services, such as running water, sewerage, electricity, transport and sanitation and social services. Although the situation was very bad, it seemed that the residents were not likely to move again because of financial difficulties, since they could not afford to buy similar housing in better areas of the city. Therefore where ever possible they preferred to improve their houses and living environment. But there were some political and economic constraints which prevented certain improvement in the settlements.

The most important issue for the residents was land security. They were ready to pay any price for the land which the government might set as long as payment could be in instalments. The government was afraid however of giving security of tenure in case it increased pressure on the provision of services or encouraged further squatter settlements. If the government gave security of tenure, the development of the settlement would accelerate both quantitatively and qualitatively. The squatters would have been willing to help financially as well as by providing the labour force to improve their residential environment and housing stock.

There was great lack of proper community organisation. This caused the slowing of the development, and arose because of power struggles at the local level. Lack of co-operation between government institutions had also caused great confusion and prevented the upgrading of services and the residential environment.

Squatters have therefore the capability of improving their homes and surroundings through their own efforts, in spite of enormous obstacles and constraints. When they obtain minimal security of employment and a measure of security in

their tenure of the land they occupy such improvements are to much greater effect. It is the potential and actual will of the people living in these settlements to improve their economic, social and physical circumstances that hold out the greatest hope of long term improvements. But this force must be recognised, encouraged and helped by institutional forces.

From the above, it can be suggested that upgrading services in the squatter settlements is very urgent and is important in terms of the self-perceptions of the residents of their situation. It seems to be a practicable short-term policy, but in the absence of the more fundamental policy of securing tenure, will have only limited effects.

The Security of Land Tenure:

It has been shown that assuring squatters of the safety of their property by granting them legal rights (tenure security) to the use of the occupied land is essential to the long term development of the settlement, but is at the same time a policy fought with political and economic difficulties (Payne, 1984). Nevertheless security of tenure remains critical to the establishment of long term confidence amongst residents of the squatter settlements in their position within the urban economy; it is thus basic to any policies seeking to achieve sustained improvements in the housing stock and urban environments of Karevan and Zoorabad.

Community Participation

The involvement of residents directly in every stage of the settlements development is also essential for successful upgrading.

According to Turner

".... if the participation process is not taken seriously ... the community may be antagonised to the extent that they will refuse to co-operate and may even sabotage the project". (1980, 255).

Setting up proper co-ordination between government institutions related to squatter settlements for provision of services is another important issue to be considered.

CHAPTER TEN

CONCLUSIONS AND RECOMMENDATIONS

This thesis has sought to examine the condition of squatters in two areas in Southern Tehran. To do this has involved researching many inter-related issues. Two forms of migration have been studied in relation to Tehran's squatters. The first included rural-urban migration to Tehran and the second, intra-urban migration within the city. Analysis involved brief examination of the factors responsible for the initiation and development of these movements. It was also necessary to understand what the needs of low-income migrants were in relation to housing and how they might be satisfied .

Furthermore it proved important to seek to understand how political and economic events such as the Revolution in 1979 affected population movements in general and the housing situation in Tehran in particular. The chaotic situation of the Revolution in 1979 and the "Abolition of Vacant (Mavat) Land Ownership" Bill brought about a great increase in the number of squatter settlements. The study also highlights the importance of home-ownership to migrants in their adjustment to the process of becoming permanent urban residents.

10.1 THE MAIN FINDINGS

10.1.1 Rural-urban migration

The first impression gained from the study is that the squatters are mainly rural migrants who had moved to Tehran in the period of 1950-86. As the migration chapter has shown, the main motives for migration were economic. Migrants moved from rural areas to Tehran because of limited job and income opportunities which they had experienced. Most people left their places of origins, because of alarmingly low-income, under-employment and unemployment. It

was also noted that migration to Tehran was direct, i.e. no step-migration was involved. This may have been due to individual choice, the influence of chain migration or the absence of attractive alternative locations between their places of origin and Tehran. Migrants left their homes because of lack of work and chose Tehran as a destination to take advantage of job opportunities. Apparently these motivations tend to be of the "push" type in their place of origin and "pull" ones at their destination. In fact migrants were aware of the comparatively unfavourable living conditions in the rural area.

Other factors such as family reasons and urban links played an important role in influencing migration to Tehran. Kinship networks were also considerably involved in the migration process. Migrants were aided materially and with information by their relatives and friends in the city. They received help in confronting the problems of accommodation and adjustment as well as financial assistance until they established themselves in urban life. Such help is important in reducing the cost of migration. The choice of the location of previous accommodation of residents of both settlements in the study areas suggests the importance of their relatives' and friends' proximity in the city.

Migrants in the two settlements had many links with their places of origin. Contact maintained through visits served as channels of cultural diffusion and may have also enhanced further migration to Tehran. The frequency of visits depended on the economic circumstances of the migrant and the period of their residency in Tehran, the longer the residency in Tehran the less frequent the visits would be and also on accessibility to his home town, so that the longer the distance from Tehran, the lower the frequency of interaction. Thus migrants from Hamedan, Tehran, Central and Northern provinces had stronger links with their families in the town compared to those from provinces further away. This finding suggests that the rate of

migration from provinces near to Tehran was higher due to more contact with urban life by transferring information to rural areas.

Also the study has shown that the volume of migration increased in relation to certain key historical and political events affecting the economic and social structure of the regions of origin and destination. Data have shown that before the Revolution in 1979 most heads of household moved to Tehran individually and brought their families after the Revolution. Also because of the availability of opportunities in Tehran, most new migrants moved with their families. This suggests that there has been more intention of permanent residency and urban adjustment during and after the Revolution. Thus, it is evident that at this time due to the political situation there was more opportunity e.g. for home-ownership, especially during the chaotic situation of the Revolution. The occupation of vacant land illegally was the main means by which temporary migrants became permanent urban residents.

10.1.2 Intra-urban Mobility

From the investigation it is evident that the majority of squatters came from rented conventional houses in the same or nearby districts in order to become home owners. This suggests the operation of a consolidation process of the type described in earlier Chapters, originally described by Turner (1968), Conway and Brown (1980) and Gilbert & Ward (1982). The migrants in rented accommodation have been forced to move to the periphery of the city, because of the severe economic and family constraints imposed on them, rather than any forced relocation or directed movement resulted from governments housing policies. As the data show, the reason given by squatters for moving from their previous accommodation was the high rent and/or harrassment from their landlord. The second most important reason was shortage of space.

The analysis of intra-urban mobility suggests that the squatters' initial entry was to the rental accommodation sector. They obviously had a need to find some form of accommodation to permit themselves to become established in the urban system. The data indicated that an important influence on their choice of previous accommodation was close proximity to friends or relatives. Thus it clearly shows that proximity to friends or relatives is a key support to new migrants to the city, in helping them to find accommodation and employment. Tehran's survey carried out by the author confirms that direct migration to squatter settlements was not significant (Flinn & Converse, 1970 and Gilbert & Ward, 1982). Residents of the squatter settlements had come neither from inner city slums nor other squatter settlements, but from nearby consolidated low income rented accommodation. This process occurred over a period of time (Gilbert, 1983), as in the case of this study it took the majority between 6½ - 12 years. In the case of squatter settlements in Tehran the majority of squatters moved to the settlements during the 1979 Revolution. The availability of free land for erection of owner occupied dwelling units was therefore a very attractive option and was given as the main reason for choosing to move to the settlements. Therefore it can be argued that the timing of this move from rented accommodation to home ownership on the city margin was dependent on the very specific historical and political structure of the city at this time. These circumstances in Tehran accelerated the movement of migrants from rented accommodation to home ownership in early 1980s, but this process subsequently slowed again for a variety of reasons, e.g. pressure from the government to prevent more squatting by demolishing illegal construction. Also investigation proved that squatters would not make further intra-urban movements. Instead most squatters have sought to improve their housing and environment condition.

10.1.3 Residents' Aspirations

Investigation indicated that most squatters would seek further improvement of the existing squatter settlement rather than move to another area. This finding is important and underscores the urgency of improving the provision of the services. Therefore it is possible to conclude that squatter settlements have become stable residential environments in the sense of there being a low turnover of residents. The ability of the squatters to achieve improvements of their environment remains highly constrained both by their low-income levels and by administrative difficulties facing the municipal authorities and government institution of Tehran in finding adequate resources to service all such settlements.

From data it is evident that the residents of the squatter settlements are significantly disadvantaged relative to others in Tehran. In fact both settlements are suffering from poor standards of basic services. There is high degree of overcrowding because of a large size of household with limited space and facilities in their dwellings and mostly living in two to three rooms. The housing units are built according to their culture and traditions and have facilities according to their needs and preference. The majority have built their units with materials of temporary nature. Usually dwelling units suffered from lack of sanitation, inadequate water supply and absence of legal electricity.

Evidence examined here indicated that most squatters were not satisfied with their dwelling units. Adequacy of the dwelling was determined by its internal space, number of rooms, the structural quality and other utilities within the house. Nevertheless it was also evident that squatters improve their housing conditions through time in so far as their political and economic situation permits.

The most important element which was preventing their action toward improvement was the security of land. Squatters were ready to pay any price for the land which government sets on it, but in instalments, until they are able to have the security of land tenure for improving their homes and surroundings by their own efforts. Also the study shows that the residents have the potential of being involved in the development process themselves. But there is a great lack of proper community organisation which has slowed development. Lack of co-operation with government institutions has also impeded progress. It is the determination and commitment of the people living in these settlements to improve their economic, social and physical circumstances that holds out the greatest hope for the future. But this determination must be recognised, encouraged and supported if it is to result in real improvements in the squatter settlements.

10.1.4 POLICY IMPLICATIONS

A number of the urban policies which were undertaken by the government of Iran before and after the Revolution in 1979 have been viewed earlier in the thesis. Before the Revolution the policy on squatter settlements was intended to remove the squatters from expensive occupied land and clear these areas in order to provide space for modern urban improvements and to relocate those families affected by the land clearance programme to one of the new government housing developments or to one of the temporary camps on the outskirts of the city, while housing was being built for them. But demolition and relocation programmes failed in Iran as Khavidi (1978) has shown in his study. These kinds of projects were too expensive for squatter families. The social fabric of the community was weak and he concluded that dissatisfaction regarding housing in these neighbourhood was the result of a lack of understanding by planners and administrators in respect of the importance of maintaining the values and aspirations of the families who were going to live there. Also many studies (Payne, 1977;

Drakakis-Smith, 1981; Poethig, 1971; Aiken, 1981) in Third World Countries have proved that, this policy has seldom been successful.

From the data it is evident that squatters prefer to improve their existing condition rather than move to government built houses in other parts of the city.

After the revolution a new land policy was introduced in the form of the "Abolition of Urban Vacant Land" Bill. This was a major step forward in reducing land speculation and in tackling the housing shortage. In spite of growth of squatter settlements after the revolution, there was not really any legislation that specifically served the interests of the squatters, since no particular reference was made to squatter households. In effect, all income groups were going to be treated in the same manner regardless of their potentials and needs. Even though this act is merely concerned with the provision of land, its policy measures lean towards the objectives of enabling low-income populations to achieve an improved standard of housing at a cost they can afford.

In practice the housing problem cannot be solved through the allocation of cheap plots of land alone. Besides the land, the policy should consider costs of construction and services and provisions. It has been established that people fail to achieve their housing needs due to low-incomes and increasing inflation. The absence of any financial assistance to provide credit for the purchase of land, and for the construction of dwelling units, has in fact excluded the squatter families altogether from conventional housing. According to Article 65 of Implementation Direction of the Urban Land Law which was approved in May 1982, in respect to the allocation of plots, those households who can prove that they have the financial sources to meet the construction cost would be given priority in allocation of the plots. Also, no co-ordinated measures were introduced for the provision of services. The

law was merely concerned with the provision of plots. The provision of water supplies, refuse disposal, road drainage, street lighting and communal services were assumed to be provided by the relevant municipal organisations. The "Urban Land Law" was also critical in encouraging the blackmarket and resulting in increases in house prices, e.g. Article 67 of this law which has been reproduced in Chapter Four (Housing Policy After the Revolution). Although government made some effort to tackle squatter problems by giving them the right of land ownership, there still remained a lack of measures to ensure the proper implementation of this legislation.

10.2 RECOMMENDATIONS

10.2.1 Rural-urban Migration

Firstly, it is important to make some recommendations concerning rural-urban migration. As the study has revealed the main motive of migration is economic. Therefore it is necessary to increase employment opportunities and reduce income inequality in rural areas and small towns in order to discourage migration to larger urban centres. To do so the government with the co-operation and mass participation of underprivileged groups (e.g. small landlords; landless groups; unemployed rural migrants as in the cities) should implement the following programmes:

- a) Large investment in non-farm industries which are either directly or indirectly geared to the agricultural economy, or to nearby villages or towns.
- b) Modernisation and reconstruction of small scale household industries in villages and small towns e.g. carpet making, or any other handicraft, etc.

- c) Protect farmers from unwarranted bankruptcy due to natural disaster, such as earthquake, flood or drought, by introducing insurance systems to village workers and farmers.
- d) Extension of irrigation systems which would extend the agricultural land and discourage out-migration from farming lands (Findlay, 1982).
- e) Road construction in remote villages and small towns in order to facilitate the smooth flow of social services and easy transfer of rural produce to other parts for sale.
- f) Provision of financial support for those students who would like to specialise in health and agriculture related subjects and encouragement to new graduates to work in rural areas in a training capacity.

Finally, it is important to provide proper facilities for more research in rural areas in terms of agricultural problems and social facilities in order to be able to draw up a constructive policy towards reducing the out-migration rate and directing rural-urban migration to new destinations rather than to the larger urban centres and to the capital.

Therefore, having investment in small towns would be useful because it would provide an attractive destination to which people might move in order to secure the benefits of urban life without having to move so far from their rural base (Lacey, 1985).

10.2.2 HOUSING

Site and Services

Public authorities at all levels should recognise that measures aimed at totally removing squatter areas will not succeed, and that developing economies cannot afford to

build conventional public housing for these people, particularly in the case of Iran with its constrained economic situation after ten years of war. Therefore the existence and needs of the area concerned should be recognised and their basic problems dealt with. Legislation and administrative machinery should be developed which recognises the right of these settlements to continue their existence and the need for improvement of squatter settlements. A national policy for urban development should provide a framework within which questions of land use, employment, and provision of services can be dealt with at the local level. Government aid programmes could be concentrated on improving the environmental context within which a squatter settlement is built. This means provision of a water supply and sewage disposal systems, electricity and community facilities and services; those elements which people cannot provide themselves.

One measure which can be effective and is worthy of wider application is a Site and Services Scheme under which the authorities acquire urban land in advance of need, plan for it, connect it to the existing urban infrastructure and make it available to low-income families as building sites equipped with the minimal services for sustaining good health. The circumstances were not found in the study area. Usually provision of infrastructure took place after construction on given plots.

The provision of areas for residential development on suitable urban land with basic supporting services has many advantages although not all squatters have the ability to pay. Such a "site and service" approach can provide:

1. A restraint to the growth of other unplanned squatter settlement in the city. (It should be borne in mind that the above development should be accompanied by rural development programmes to discourage further migration.) As the data have shown the majority of squatters moved from conventional rented accommodation. Therefore,

provision of land with suitable infrastructure for this group must be first priority. To prevent further rural-urban migration there need to be careful controls on the scheme to ensure that recipients have lived in Tehran for at least ten years as a family. Otherwise it might stimulate further migration. The number of years the head of household has lived in Tehran should not be considered.

2. Much better physical living conditions than are available in unplanned squatter settlements with greater opportunities for subsequent upgrading.
3. Security of tenure and the basis for community development.
4. Employment opportunities and training in proximate areas of the city.
5. Increased scope for self-help construction.
6. A better location in relation to employment areas.
7. The financial implications of this policy must also be considered. The methods by which it might be achieved will be discussed later in this chapter.

Self-help housing in "site and services" areas have been tried in other countries. A World Bank report (Bamberger, 1982) reviews a number of case studies and evaluates the success of these types of projects.

There are three physical components of "site and services" developments: building plots, public utilities and community facilities. The dimensions of the residential building plots is determined by desired residential density of the project area and its location in relation to employment zones and other urban services. Public utilities should include both primary and secondary utilities, namely

water supply, sanitation, electricity, public lighting, sidewalks, paved roads, and at least some public telephones. The areas should also include Community facilities such as small businesses, schools, a market, shops, public fire protection systems, religious and cultural centres and clinics.

The "site and service" approach to urban residential development should only be carried out within the framework of the following general policy objectives:

- a) Site and services should seek to improve the welfare of low income people by increasing their access to urban services,
- b) Site and services should be a method for guiding and controlling urban growth by regulating land use and land speculation,
- c) Site and services should orient government housing agencies towards becoming more self-sustaining,
- d) Projects should be planned to minimise subsidies,
- e) A site and services project should generate investment by the residents themselves in household dwellings,
- f) Project administration should enlist the cooperation of the community organisation,
- g) Projects should assist the economic development of the occupant population by providing jobs in the area.

The above policy is relevant if further new squatter settlements are not to emerge in Tehran. This does not however deal with the problem of existing squatters. A separate policy is needed to upgrade existing squatter settlements.

Upgrading squatter settlements

Upgrading should be seen as the major step towards the provision of enough housing for low income earners in Tehran. As the study has shown this method of self help is the most rational approach and could be relatively easily accepted by squatters. It involves the provision of those infrastructure improvements sought by residents in the form of paved roads and paths, piped water, sewerage, electricity and drainage and the means to achieve self motivated upgrading projects of squatters' dwellings. As the study shows there are two most important elements towards upgrading policy:

Security of tenure

It is recommended that the first step towards upgrading is to give security of land tenure. The lots should be divided into appropriate long term leases sold to the existing residents. The lease price should be determined by the cost of infrastructure improvements and the cost of land.

The concept of property right prevailing in developing countries, has had a major role in the development of squatter settlements. These conditions are partly due to the residents' lack of interest in improving the dwelling units because of the insecurity of their land tenure situation and the expectation that they will as a result have to leave the accommodation eventually. In cases where tenure has been obtained, the input of material and human resources to improve housing conditions has been considerable. Therefore land ownership is a key prerequisite to the mobilisation of other essential resources for upgrading low-income housing (Turner and Goetz, 1967).

The implementation of the "Abolition of Urban Vacant (Mavat) land Ownership" Bill has served to facilitate access to land ownership for low income groups in Iran. The Urban Land

Organisation primarily allocated the land to those who have proof of financial ability to ensure that they complete the building construction (Vatani, 1985) (see chapter 4). This measure is justifiable for higher income groups but is less helpful to low-income households, who generally build their houses incrementally, and who would find that it might take a very long time.

As there is no specific policy concerning the land squatting problem, a first attempt to solve it would be for the government to legalise all land which currently is illegally occupied. The government should recognise the right of occupancy, but this does not suggest that the necessary costs to be paid for the proper use of the land be evaded. The government in an attempt to contribute to improvement of the area should offer illegally occupied plots for sale to owner occupiers, at an amount markedly below the "market value". This arrangement, however, should only apply where occupants could prove that they had resided there for a minimum of five years. This might prevent further illegal land occupation.

To make an adequate attempt at legalising plots, it would be necessary that the representatives of the Urban Land Organisation visit the site of each house, inspecting the suitability of the plot size for a moderate house before finalising the acquisition agreement. The following criteria need to be satisfied before a plot could be agreed to be sold (Shankland Cox partnership, 1977):

- 1) The land is not needed for other public purposes,
- 2) There is no environmental risk, e.g. flooding,
- 3) The site is appropriate for residential use and
- 4) The land value is low

Provision should be made for payment to be spread over a considerable time. The government should not make it compulsory for the residents to pay instantly for their plots. Because of their low disposable income, payment for

the plots could commence when improvement to dwellings was completed. The money collected from the sale of plots should be kept separately by the government, to be re-invested later in the area for the provision of utilities. After having security of tenure the following actions are also desirable to upgrade the squatter settlements.

Technical Assistance

In the process of the implementation of these policies residents need to be advised, for instance, that corrugated iron sheets can be used for roofing but not the main construction. This advice should be given by trained officials from the municipality in order to improve the construction standards. Assistance should be given in drawing up housing plans which would maintain a proper relation between the living space and other facilities.

Since a high proportion of squatters' dwellings were built by the squatters themselves or with the help of friends and relatives, financial assistance could be provided to help acquire construction skills on a firmer footing and to help with future building schemes. Specialised knowledge will also be required on occasions.

It is necessary to recommend that the dwelling units should be built with local materials and techniques. Technical advice should be given on how to combine local materials and techniques with new industrialised building systems. Also the community must be informed and given advice on the adverse effects of dumping refuse in open drains. The inhabitants should realise the importance of living in a good environment and be prepared more than before to invest their earnings in the improvement of their dwellings and surroundings.

Provision of Services

Such services include water supplies, roads and sewage, etc. As the squatters are economically under pressure, the cost of laying the water and sewage pipes cannot readily be borne by the residents, but they will have to take the lead. The municipalities could provide the materials and technical advice while the residents could dig the trenches. It was evident in some parts of the study areas that residents would help by providing manual labour for laying water pipes and electricity posts.

Using such methods is much quicker and less costly. Also, these methods are an effective source, not only of income, but also of training.

It is evident that the unplanned layout of the houses built by squatters, will pose difficulties for upgrading schemes by municipality engineers, in for example, establishing the width of roads, footpaths and the location of electricity posts etc. The government agencies or engineers must make efforts to use the available space rather than demolish houses to create room for service provision. However, it cannot be expected that no demolitions will occur. Demolitions should however be limited to essential cases. The compensation to be paid to the affected people should be according to the existing practice of paying more than the "market value". The government agency should provide alternative accommodation and occupiers should be offered a new piece of land at a place of their choice.

In order to cut down on improvement costs, the municipality should supply the necessary building materials. The municipality should set up a department for the distribution of all scarce materials, including cement, iron, baths, sink, glass etc. This will help to cut down the cost of repairs. The requirements of each house should be supplied to the depot; each time acquisition is made on behalf of a house, it should be double checked by the representative

from the municipality rather than the local council to avoid any corruption and make sure that the materials are really needed and that they are subsequently used in the house, so that the materials do not find their way back to the market.

The improvement of economic environment

Upgrading of squatter settlements cannot be based solely on physical environmental action; to salvage an area convincingly, industrial and commercial activities in the area will have to be developed to a fuller capacity. The survey revealed that the majority of residents are skilled artisans, plumbers, mechanics, tailors, joiners etc; they all operate individually on a very small scale. It is possible that with the assistance of the government, people engaged in similar work or trades can come together to form a co-operative society. Becoming a co-operative body will give access to financial markets, making loans possible to improve machinery and to allow greater operational efficiency.

Involvement of the private sector

The involvement of the private sector in financing housing upgrading projects would mean the incorporation of the various interest groups concerned. This will include business entrepreneurs, social and religious organisations, the individuals and the community.

The business entrepreneurs should be made to finance projects such as road construction, refuse depot construction, and in return, they should be allocated plots of land within the project area for the development of small scale industry. This will take advantage of cheap labour within the community and at the same time provide employment opportunities.

The religious and social groups are not profit oriented. They are generally humanitarian organisations. Hence, this group should finance the construction of facilities such as health centres and schools which should be named after them. The individual in the community should also be mobilised to contribute either in cash or kind. However, the involvement of the private sector in financing the upgrading squatter settlements is very important. The forms of squatter settlement policy and the implementation mechanisms which have been discussed in this final chapter could be applied to squatters settlements in many different developing countries, subject to the policies and mechanisms being adapted to the specific socio-cultural circumstances of the countries themselves. This is also the case for Tehran, where the recommendations which have been made above, would need to be seen to be acceptable to the communities involved (see discussion below). Consequently in Tehran a critical element would be adequate communication and proper co-ordination between the residents of the squatter settlements and the interests and objectives of the private sector and of government.

Community Participation

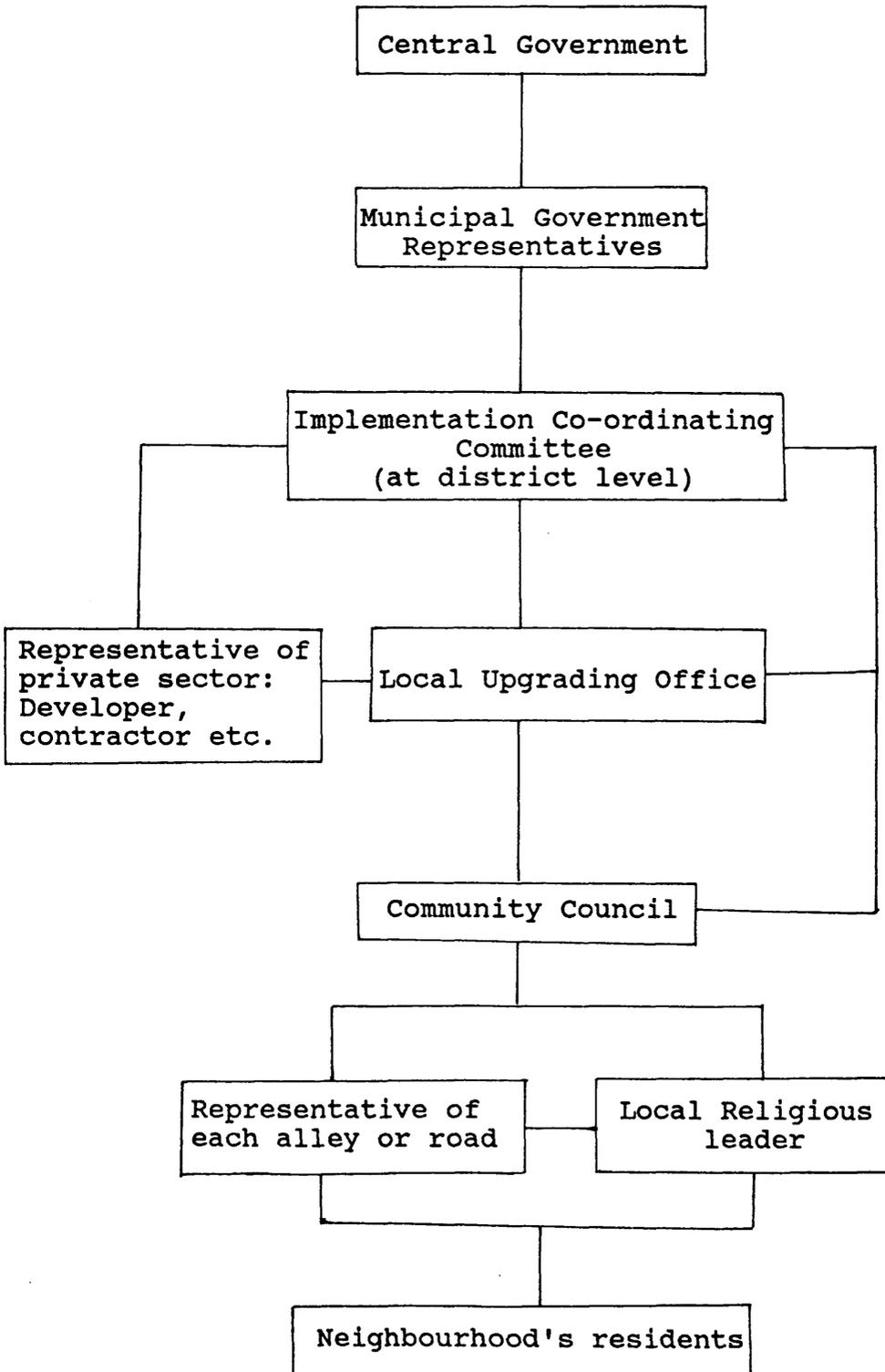
To achieve the above guidelines for upgrading any squatter settlements, community participation is a most important element. The aim of community participation is to promote cooperation between the residents and the authorities in order to achieve successful upgrading.

As the author's survey revealed lack of co-ordination within the government and the community limited participation of this kind, and was a great problem for implementation of self help schemes for upgrading the settlements. Nevertheless, to make government agencies more effective by giving priority to the implementation of projects for upgrading the settlement, the following steps should be taken.

First of all a community committee must be formed and should comprise a representative of each alley or road, as well as community elders, businessmen and religious persons. At the same time the Implementation Coordinating Committee should be established with sufficient authority to assemble relevant data, convene meetings, monitor project progress and discipline any non-performing agency. The power stratum of the Implementation Coordinating Committee should consist of senior representatives of the various central government and municipal agencies with the head of the Urban Renewal Section of the municipality as the chairperson. This Committee should be at the district level to decentralise the decision making. These officials should form a powerful high-level coordinating committee that will ensure active participation by all sitting members. There should also be a Upgrading Office. This should be set up at each settlement by the municipality. It would comprise mainly trained staff. The office should be in a position to inform, educate, involve and mobilise the community on upgrading activities and this office could liaise between the residents through their Community Committee or Council and the Implementation Coordinating Committee. They could hold consultative meeting with the Community Council to identify the needs of the community, and with the I.C.C. to secure official, political support for action to meet those needs. This structure would directly involve the committees of residents in the upgrading of squatter settlements (Fig 10.1).

Therefore, community participation is an indispensable element in any upgrading project. This study has shown that the residents are willing to do many things to improve their personal dwellings and their wider residential environment. But to do this effectively they need proper advice and cooperation from government and its urban agencies.

Fig. 10.1 Proposed Administration Structure for Upgrading Projects.



NOTES

1. Ostan: The largest administrative division of Iran, corresponding to a Province.
2. Sharestan: An administrative subdivision of an Ostan.
3. Bakhsh: An administrative subdivision of a Sharestan. Each Bakhsh is composed of two or more Dehestans.
4. Shahr: According to the 1986 census of Iran, it has been defined as places where there is a municipality, regardless of size, with government administration headed by a mayor. But in 1976 census it was defined as one which contains 5000 or more inhabitants.
5. Dehestan: An administrative unit composed of a group of villages or hamlets, usually with natural boundary.
6. Shi'ism is a sect of Islam that traces its heritage back to Ali, the cousin and son-in-law of the Prophet Mohammad, through to his descendants who are a chain of charismatic leaders (Imams) who are considered by practicing believers to be the viceregents of God. These Shi'a Imams are considered infallible, impeccable, and immaculate and are believed to have ruled in the name of God himself. In the Iranian version of Shiism, the twelfth and last Imam has gone into hiding but is meanwhile represented by 'mujtahids', those scholar-law-givers who have the capacity to interpret all social, political, and religious events until the return of the Mahdi or Hidden Imam (Bill 1982:22).
7. A Council of Guardians formed by 12 members, six of them appointed by leader and they are religious persons (just Faquihs) who are knowledgeable of the requirement at the

times and the daily problems, and six muslim jurists, specialising in different branches of law, who are introduced to Majlis by the Chief of the Judiciary power, and voted on by the Majlis (Kayan, 1989a:6).

APPENDIX ONE

Article 39 of the Implementation Directions of the Urban Land Law approved in May 1982 and amended in January 1985.

Article 39

Regarding the plots of land which have been subjects of transactions up to 58/4/5 (25.6.79) using ordinary documents and the required ruling regarding the authenticity of the transaction has been made according to the Law and in accordance with these Directions, if the land is wasteland (Bayer), considering the ruling by the urban land organisation, permission to divide the land or transfer it from the seller to the purchaser will be granted and benefitting from it moderately is allowed. If on the basis of the definite ruling made by the Assessment Commission the land is considered derelict (Mavat), the former registration will be cancelled and a certified ownership document (Sanad-e Male-kiyat) will be issued in the name of the government or the representative of the urban land organisation and then to the extent of the area of the land under transaction up to an amount specified by regulations, the same land is offered for sale to the eligible purchaser. The period for the development of plots of the above mentioned derelict land is three years from the date of allocating.

Note: Regarding the plots of derelict land which are covered by this Article, if according to the court verdict part of the land price is not paid to the seller, the part of the price paid for the allocate plot of land is deducted from the price of the plot which is assessed in accordance with these Implementation Directions and the remainder will be collected by the Urban Land Organisation (Vatani, 1985; 668).

"The Registration of Documents and Property" Law

Paragraph A of Article 1 (Amended Article 147):

In order to determine the registration situation for the following buildings and plots of land a board or boards consisting of two Judges appointed by the Supreme Judicial Council and also a committed registration official, known for honesty, selected by the state organisation for documents and property registration for documents and property registration. The boards will meet in local registration offices. With the agreement of the two sides, the board will deal with the case and after confirming the transaction will report the case to the local registration office for the issue of certified ownership document. The registration office will issue the document for the property according to regulations. The buildings and plots of land covered by this paragraph are:

The building which up to the approval of this Law have been built on the land for which issuing Certified Ownership Document has not been possible due to legal obstacles. Also plot of agricultural land and orchards whether urban or not and the plots of land outside city boundaries and borders which are being abused by occupiers and which have been bought by individuals through ordinary documents up to the date of the approval of this Law and for which issuing Certified Ownership Documents is not possible due to legal obstacles.

Note 1: If the agreement of the owners of collectively owned (Musha) land regarding the occupation of the partitioned land is not approved by the Council, the ownership document (Sanad-e mae-Kiyat) will be issued according to Paragraph A and the other Registration Regulations for the collectively owned land (Musha).

Note 2: In the case when the occupier is unable to produce his ordinary ownership document, the board, taking into account every aspect of the case, will deal with the case. If the occupier is the sole claimant, or if the board can obtain the agreement of the two sides, the case will be reported to the local registration office for the issue of the Certified Document; otherwise the case will be referred to court.

Note 3: In the case when the occupier applies for a Certified Document on Production of his ordinary document and the owner (or owners) for any reason is not present, the board will deal with the case and after holding the ownership right of the applicant, will report the case to the registration office. The registration office will advise the case in an appropriate manner twice within 15 days. If within two months from the date of the first advertisement any protest is received from the owner or owners the case will be referred to the appropriate court. If no protest is received, the registration office will issue a Certified Ownership Document in accordance with the regulations. The issue of the new Certified Ownership Document will not prevent the loser from going to court.

Note 2 of Article 2 (Amended Article 148):

From the date of the passing of this Law the government is duty bound to prevent any illegal occupation of the land belonging to the government and municipalities. Regarding the building built on such plots of land, if the occupier confesses his aggression (act of illegal occupying) or if his aggression is commonly known and cannot be denied, he must eliminate traces of his aggression or must destroy the building. If he refuses to do so, the government itself must act to eliminate the traces of occupation and to destroy as the occasion arises. If the occupier denies his aggression, the case must be referred to the appropriate court.

Sources: Kayhan, Daily Newspaper, 21, June 1986 and 28 May 1986 (1365/4/30; 1365/3/7 in Persian Calendar), Tehran, Iran.

SECTION II

MIGRATION

Date :

Name of Settlement :

Number of Sample :

1. How long have you been living in Tehran?

- | | |
|---------------------|-------------------|
| 1) less than 1 year | 7) 16 - 18 years |
| 2) 1 - 3 years | 8) 19 - 21 years |
| 3) 4 - 6 years | 9) 22 - 24 years |
| 4) 7 - 9 years | 10) 25 - 27 years |
| 5) 10 - 12 years | 11) 28 - 30 years |
| 6) 13 - 15 years | 12) 31 and over |

2. Did you move to Tehran directly from your origin (place of birth) or by way of other cities?

- 1) Directly
- 2) Via other places (towns, cities)

3. Where was your last place of residence?

Province	City	Village
-----	-----	-----

4. Where is your place of birth?

Province	City	Village
-----	-----	-----

5. What was your major reason or motive for migration?

- 1) Finding a job as a result of agricultural depression
- 2) Working for the landlord with the low wages
- 3) Joining military service
- 4) Marriage
- 5) Medical and health reasons
- 6) Education (for children or myself)
- 7) Left with parents and relative at childhood
- 8) Unemployed (unable to find a job)
- 9) Not having proper housing
- 10) Low family income at home
- 11) Transferred through company or organisation to Tehran (employee)
- 12) Lack of security in the war zone

6. What was the main reason for moving to Tehran?

- 1) Better job opportunity
- 2) Relatives or parents
- 3) Better urban life (different sort of opportunities, better education, health and amenities)
- 4) Better housing
- 5) Job situation (transferred)

7. Was the move made by yourself (H.O.H.) individually or with any other member of your present household or any other of your families or relatives?

- 1) Individually
- 2) With my wife/husband and children if any at that time.
- 3) With my parents (father, mother or either of them)
- 4) With my relatives (brother, sister, uncle etc.)

If you came individually, how long after your move the rest of household joined you?

- 1) 1 - 3 years
- 2) 4 - 6 years
- 3) 7 - 9 years
- 4) 10 - 12 years
- 5) 13 years and over
- 6) I got married in Tehran and children were born in Tehran.

8. Who helped you during this initial move to Tehran?

- | | |
|-----------------------------|-----------------|
| 1) Family (parents) | 4) Organisation |
| 2) Relatives | 5) Nobody |
| 3) Fellow townsman, friends | |

9. Do you think your life is better than what you had back home?

- 1) Better
- 2) No difference
- 3) Worse
- 4) I can't remember the situation at home (I was a child)

If it is worse, why?

- 1) Unemployment with high cost of living
- 2) Low wages with high cost of living
- 3) Not having suitable housing
- 4) Others

10. Do your relatives usually come to visit you from home (village or town of origin)?

- 1) Yes
- 2) No

If yes, how often?

- 1) 1 - 3 times a year
- 2) 4 - 6 times a year
- 3) 7 - 9 times a year
- 4) 10 - 12 times a year
- 5) 13 and over times a year

11. Do you usually visit home (town or village of origin)?

- 1) Yes
- 2) No

If yes, what is the purpose of visit?

- 1) Just to see the relatives
- 2) To check the properties
- 3) To help parents on lands (agricultural work)
- 4) Only for funeral and wedding

SECTION III

PREVIOUS HOUSING CONDITION

Date :.....
Name of settlement :.....
Number of sample :.....

1. Where was your previous house (accommodation) located before you moved to this house?
 - 1 - 20) Tehran's district
 - 21) Outside the boundary of Tehran
 - 22) Elsewhere

2. What type of housing did you live in before moving to the present accommodation?
 - 1) Private house built with mud sundried brick and wood
 - 2) Private house built with kilndried brick and iron beam
 - 3) Private house built with kilndried brick and iron skeleton
 - 4) Private modern house built with reinforced concrete and iron beam and skeleton
 - 5) Private modern apartment built with reinforced concrete and iron beam skeleton
 - 6) Private modern apartment cement blocks and reinforced concrete beam skeleton
 - 7) Private house sundried brick/wood (in squatter settlements)
 - 8) Private house sundried brick, wood and iron beam (in squatter settlement)
 - 9) Zageh (subterranean housing not employing any construction materials)
 - 10) Abandoned building
 - 11) Rural dwelling
 - 12) Place of work (shop or workshop)
 - 13) Others

3. What kind of housing tenureship did you have before moving to the present accommodation?
 - 1) Private ownership
 - 2) Joint ownership
 - 3) Rented the house with all services
 - 4) Rented a room without kitchen, bath and sharing toilet
 - 5) Rented a room sharing kitchen, bath and toilet
 - 6) Rented a room only sharing the kitchen and toilet
 - 7) Rented a room with private kitchen and sharing the toilet
 - 8) Rented two rooms without kitchen, bath and sharing toilet

- 9) Rented two rooms without kitchen, bath and toilet
 - 10) Rented two rooms only sharing the kitchen and toilet
 - 11) Rented two rooms with private kitchen and sharing toilet
 - 12) Free at the place of work
 - 13) Free with parents or relatives
 - 14) Others
4. If it was rented accommodation, how much rent were you paying per month?
- | | |
|----------------------|---|
| 0) Not applicable | 5) 14000-16990 Rials |
| 1) 2000-4990 Rials | 6) 17000-19990 Rials |
| 2) 5000-7990 Rials | 7) 20000 Rials and over |
| 3) 8000-10990 Rials | 8) Hypotec |
| 4) 11000-13990 Rials | 9) Very little
(because of relative) |
5. If the previous house was privately or jointly owned, what kind of land tenureship did you have?
- 0) Not applicable
 - 1) Land occupied (invaded) and built on illegally
 - 2) Land bought illegally and built on illegally (overnight)
 - 3) Land bought and built on legally
 - 4) Land and house bought legally
 - 5) Land and house bought illegally
 - 6) I inherited legally
 - 7) Others
6. If it was privately or jointly owned, how much did you sell it for?
- 0) Not applicable
 - 1) It wasn't much/can't remember
 - 2) Less than 300,000 Rials
 - 3) 300,000 - 500,000 Rials
 - 4) 510,000 - 1,000,000 Rials
 - 5) 1,010,000 - 1,500,000 Rials
 - 6) 1,510,000 - 2,000,000 Rials
 - 7) 2,010,000 - 2,500,000 Rials
 - 8) 2,510,000 - 3,000,000 Rials
 - 9) 3,010,000 Rials and over
7. Which one of the following was the most important reason for leaving the previous accommodation?
- 1) High cost of living
 - 2) Space shortage
 - 3) To be a tenant with high rent payment
 - 4) Municipality's Act (to demolish the house for development or replacement)
 - 5) Religious leader's advice that any tenant has the right to get a piece of land for their own housing
 - 6) Distance from the city and commercial establishment
 - 7) House demolished by natural causes

- 8) Job situation and distance
 - 9) Undesirable physical environment of previous house
8. Which one of the following was the most important reason for choosing the present accommodation?
- 1) Near to work
 - 2) Increase in the family's income
 - 3) Decrease in the family's income
 - 4) Private ownership and escape from the tenancy and landlord's harrassment
 - 5) Better neighbourhood
 - 6) Marriage
 - 7) Relatives and friends
 - 8) To get the free land for cheaper housing (because I couldn't afford to buy a piece of land anywhere else)
 - 9) To get the cheaper land/house for cheaper housing

SECTION IV

PRESENT HOUSING CONDITION

Date :.....
Name of settlement :.....
Number of sample :.....

1. How long have you been living in this accommodation?

- | | |
|---------------------|----------------------|
| 1) Less than 1 year | 5) 7 - 8 years |
| 2) 1 - 2 years | 6) 9 - 10 years |
| 3) 3 - 4 years | 7) 11 - 12 years |
| 4) 5 - 6 years | 8) 13 years and over |

2. What kind of housing tenureship do you have in this house?

- 1) Private ownership
- 2) Joint ownership
- 3) Rented the house with all services
- 4) Rented a room without kitchen, bath and sharing toilet
- 5) Rented a room sharing kitchen, bath and toilet
- 6) Rented a room only sharing the kitchen and toilet
- 7) Rented a room with private kitchen and sharing the toilet
- 8) Rented two rooms without kitchen, bath and sharing toilet
- 9) Rented two rooms without kitchen, bath and toilet
- 10) Rented two rooms only sharing the kitchen and toilet
- 11) Rented two rooms with private kitchen and sharing toilet
- 12) Free at the place of work
- 13) Free with parents or relatives
- 14) Others

3. If it is rented how much rent do you pay per month?

- | | |
|-------------------------|--------------------------|
| 0) Not applicable | 7) 20000-22990 Rials |
| 1) Less than 5000 Rials | 8) 23000-25990 Rials |
| 2) 5000-7990 Rials | 9) 26000-28990 Rials |
| 3) 8000-10990 Rials | 10) 29000-31990 Rials |
| 4) 11000-13990 Rials | 11) 32000-35990 Rials |
| 5) 14000-16990 Rials | 12) 36000 and Rials over |
| 6) 17000-19990 Rials | |

4. If the present house is privately or jointly owned, what kind of land tenureship do you have?

- 0) Not applicable (rented/free)
- 1) Land occupied (invaded) and built on illegally
- 2) Land bought illegally from the previous illegal occupier and built on (if it had been built on

- already)
- 3) Land bought and built on legally
 - 4) Land and house bought legally
 - 5) Land bought from the land owner illegally and built on illegally
 - 6) Land bought legally and built on illegally.
5. Who has built this accommodation?
- 0) Not applicable
 - 1) Myself
 - 2) With the help of friends and relatives
 - 3) Local builder
 - 4) Contractor
 - 5) Any organisation
 - 6) Had been built by the previous occupier
 - 7) Some part of it was built by previous occupier and has been completed by myself
 - 8) Others
6. If you have built/repaired the house yourself or with the help of friends or relative, where did you get the materials from?
- 0) Not applicable
 - 1) Free from local materials
 - 2) Bought from blackmarket
 - 3) Provided by friends and relatives
 - 4) Bought from the official market
 - 5) With the help of government
 - 6) Bought in both black and official markets
 - 7) Others
7. How long did it take to build this house? (to the present state)
- | | |
|---------------------|------------------|
| o) Not applicable | 5) 7 - 8 years |
| 1) Less than 1 year | 6) 9 - 10 years |
| 2) 1 - 2 years | 7) 11 - 12 years |
| 3) 3 - 4 years | 8) Over 12 years |
| 4) 5 - 6 years | |
8. What toilet facilities do you have?
- 1) Private toilet inside the living quarters
 - 2) Private toilet outside the living quarters
 - 3) Shared toilet inside the living quarters
 - 4) Shared toilet outside the living quarters
 - 5) Public toilet outside the building
 - 6) Dry bucket
 - 7) Others
9. Where do you and your family take bath?
- 1) Private bath inside the living quarter
 - 2) Private bath outside the living quarter
 - 3) Shared bath inside the living quarter
 - 4) Shared bath outside the living quarter

- 5) Public bath in the neighbourhood
- 6) Public bath outside the neighbourhood

10. Where does your household cook?

- 1) Private kitchen inside the living quarter
- 2) Private kitchen outside the living quarter
- 3) Shared kitchen inside the living quarter
- 4) Shared kitchen outside the living quarter
- 5) In the living room
- 6) In the living/bedroom arrangement
- 7) Hall
- 8) Courtyard (open area)
- 9) Others

11. What kind of fuel do you normally use for cooking?

- 1) Electricity
- 2) Piped gas
- 3) Bottled gas
- 4) Kerosene/oil/paraffin
- 5) Woods
- 6) Picnic bottled gas
- 7) Others

12. What type of heating do you have?

- 1) Electric fires
- 2) Oil/kerosene/paraffin stove
- 3) Gas heater (mobile)
- 4) Korsi (like frame of wood which is covered all around with quilts and blankets, and under which a fire is placed for heating the legs in winter) and paraffin stove.
- 5) Wood
- 6) Others

13. How do you dispose your rubbish?

- 1) Private dustbin
- 2) Shared dustbin
- 3) Rubbish heap
- 4) Anywhere convenient
- 5) Others

14. If rubbish disposed in bins, who collects them?

- 1) Municipality
- 2) Private contractor
- 3) Collected by member of the household to the rubbish heap or any wastelands around the settlement

15. Where do you get your water from?

- 1) Legally piped inside the house from the main for washing and drinking purposes
- 2) illegally piped inside the house from the main for washing and drinking purposes

- 3) Shared tap in the distance of 100m or less, for washing and drinking purposes
- 4) Shared tap in the distance of more than 100m for washing and drinking purposes
- 5) From the water well inside the building (courtyard) for washing and drinking purposes
- 6) From the water well inside the building (courtyard) for the washing and shared tap in the distance of 100m or less for drinking
- 7) From the water well inside the building (courtyard) for the washing and shared tap in the distance of more than 100m for drinking
- 8) From the water well/stream outside the building for the washing and shared tap in the distance of more than 100m for drinking purposes
- 9) From the water well/stream outside the building for the washing and shared tap in the distance of 100m or less for drinking purposes
- 10) Buy water for only washing purposes and using shared tap in the distance of 100m or less for drinking
- 11) Buy water for only washing purposes and using shared tap in the distance of more than 100m for drinking
- 12) Buy water for the washing and drinking
- 13) Buy water for the washing purpose and drinking water is provided by Municipality in the mobile tankers
- 14) Others

16. Do you have electricity?

- 1) Yes
- 2) No

If yes, is it?

- 1) Legally connected
- 2) Illegally connected

If legally connected, how long has it been connected?

- 1) Less than 1 month
- 2) 1 - 4 months
- 3) 5 - 8 months
- 4) 9 - 12 months
- 5) 13 - 16 months
- 6) 17 - 20 months
- 7) 20 months and over

17. How does your house connect to the sewage system?

- 1) Toilet, kitchen, bath, waste and water surface all are connected to the cesspool
- 2) Toilet is connected to the cesspool and kitchen/bath/water surface are connected to the open drainage outside the building (in the alley or street)
- 3) Toilet is connected to the cesspool and kitchen, bath and water surface are connected to the well inside the building (courtyard)
- 4) Toilet and bath are connected to the cesspool and

kitchen and water surface are connected to the open drainage outside the building (in the alley or street)

- 5) Toilet is connected to the cesspool and surface water with other waste connected to open drainage in alley or street
- 6) Toilet connected to the cesspool and kitchen, bath and surface water are connected to the well inside the house (courtyard)
- 7) Others

18. Do you have any plans for improvement of your present house in order to make it more suitable for your family?

- 0) Not applicable 1) Yes 2) No

If yes,

- 1) Extend one or two rooms
- 2) Build a bathroom (Hammam)
- 3) Build a kitchen
- 4) Extend the building vertically (make it two storey)
- 5) To improve the stability of the building and complete the building (e.g. plastering, painting etc.)
- 6) To extend one or two rooms plus bathroom

If no,

- 7) Have not got enough money
- 8) Others (please specify)

19. How much do you think this house is worth now?

- 0) Not applicable
- 1) Under 1,000,000 Rials
- 2) 100,000 - 2,000,000 Rials
- 3) 201,000 - 3,000,000 Rials
- 4) 301,000 - 4,000,000 Rials
- 5) 401,000 - 5,000,000 Rials
- 6) 501,000 - 6,000,000 Rials
- 7) 6,010,000 Rials and over
- 8) Don't know

20. How much this house has cost you so far?

- 0) Not applicable
- 1) Can't remember
- 2) Less than 500,000 Rials
- 3) 500,000 - 1,000,000 Rials
- 4) 1,010,000 - 1,500,000 Rials
- 5) 1,510,000 - 2,000,000 Rials
- 6) 2,010,000 - 2,500,000 Rials
- 7) 2,510,000 - 3,000,000 Rials
- 8) 3,010,000 - 3,500,000 Rials
- 9) 3,510,000 - 4,000,000 Rials
- 10) 4,010,000 - 4,500,000 Rials
- 11) 4,510,000 - 5,000,000 Rials

12) 5,010,000 Rials and over

21. In what way would you like to see the government help you through the housing and land problem of this settlement?

- 0) Not applicable
- 1) Give the ownership documents without charging anything for the land and allow us to improve the building
- 2) Give the ownership documents by charging the reasonable price for the land, then to be able to improve the building
- 3) Give the ownership documents, by charging for the land and the penalty of illegal occupation but in instalment
- 4) Already living here comfortably and it does not make any difference to have ownership documents
- 5) Don't know
- 6) Whatever government decide I have to accept

22. Have you ever been disturbed in this house by the Municipality?

- 1) Yes
- 2) No

If yes, when?

- 1) Less than 1 year ago
- 2) 1 - 2 years ago
- 3) 3 - 4 years ago
- 4) 5 - 6 years ago
- 5) 7 - 8 years ago
- 6) 9 - 10 years ago
- 7) 11 - 12 years ago

Why?

- 1) Extending a kitchen/bath/room without permission
- 2) Improving the stability of building
- 3) Building this house without permission on the land which I had bought
- 4) Building this house on the occupied land illegally

23. Have you ever thought of moving from this neighbourhood?

- 1) Yes
- 2) No
- 3) No answer

If yes, what is your most important reason?

- 1) To be near the relatives
- 2) To be in a better area (with better services)
- 3) To have bigger house
- 4) To be near my work
- 5) Tehran is too expensive to live in, I wish to go back home (place of origin)
- 6) To obtain my own house

24. If the government builds cheap new public housing for rent or sale, will you move there?

- 1) Yes 2) No 3) No answer

If no, what is the main reason?

- 1) Couldn't afford to buy
- 2) Want to be near my relatives and friends
- 3) Used to this neighbourhood
- 4) Job situation
- 5) Don't like the apartment
- 6) I built this house myself and would not like to change it.
- 7) Others

Social Activities

25. How do you spend your spare time?

- 1) Cinema
- 2) Visit friends and relatives
- 3) Stay at home with the family
- 4) Go on pilgrimage
- 5) Don't have spare time, always working
- 6) Join the queue to buy the ration food
- 7) Others

26. Where do your children (up to 18 years old) usually play?

- 0) Not applicable
- 1) In the courtyard
- 2) Street/pavement
- 3) Park/ recreation ground
- 4) Playground
- 5) Ruined places in the area or wasteland
- 6) Always working
- 7) Others

27. Do you have any close relatives or friends living in other parts of Tehran?

- 1) Yes 2) No

If yes, where do they live?

- 1-20) In a Tehran district
- 21) Distributed in Tehran

28. How do you usually see your relatives and friends in Tehran?

- 0) Not applicable
- 1) In religious gatherings (Heyat)
- 2) Only in wedding and mourning ceremonies
- 3) Often visit each other in our homes
- 4) Don't see each other

34. How long does it take to travel to work each day?

- | | |
|------------------------------|------------------------|
| 0) Not applicable/unemployed | 5) 60-74 minutes |
| 1) Less than 15 minutes | 6) 75-89 minutes |
| 2) 15 - 29 minutes | 7) 90 minutes and over |
| 3) 30 - 44 minutes | 8) Varies |
| 4) 45 - 59 minutes | |

35. How do you usually travel to work?

- | | |
|---|----------------------|
| 0) Not applicable/unemployed | 6) Private car |
| 1) Walk | 7) Taxi |
| 2) Bicycle | 8) Company transport |
| 3) Motorbike | 9) Other means |
| 4) Public bus/minibus | |
| 5) Private bus/minibus (Financed privately) | |

36. How many households live in this house?

- | | |
|--------|----------|
| 1) One | 3) Three |
| 2) Two | 4) Four |

37. What is the number of each household's members?

- Number of first household's members (interviewed)
- Number of second household's members
- Number of third household's members

Note: Questions 41-46 to be completed by the interviewer only.

38. In what type of building does the respondent live?

- 1) Only residential
- 2) Residential with shop or workshop
- 3) Residential building in the process of construction
- 4) Others

39. If it is residential with shop/workshop, what kind of shop is it?

- | | |
|-----------------------|-----------------|
| 0) Not applicable | 5) Hairdressing |
| 1) Grocery Shop | 6) Bakery |
| 2) Garage (mechanic) | 7) Closed shop |
| 3) Carpentry workshop | 8) Shoe shop |
| 4) Steel workshop | 9) Cloths shop |

40. What type of materials are used for the structure of building?

- 1) Mud, sundried brick, wood and tin
- 2) Mortar, kiln dried brick and wood
- 3) Mortar, kiln dried brick, iron beam and wood
- 4) Mortar, kiln dried brick, and iron beam
- 5) Mortar, kiln dried brick and iron beam skeleton
- 6) Mortar, kiln dried brick and reinforced concrete beam
- 7) Mortar, cement block and reinforced concrete beam
- 8) Mortar, kiln dried, iron beam and partly iron column

41. What is the size of the living area?

- | | |
|-----------------------|------------------------|
| 0) Less than 40 sq.m. | 12) 150 - 159 sq.m. |
| 1) 40 - 49 sq.m. | 13) 160 - 169 sq.m. |
| 2) 50 - 59 sq.m. | 14) 170 - 179 sq.m. |
| 3) 60 - 69 sq.m. | 15) 180 - 189 sq.m. |
| 4) 70 - 79 sq.m. | 16) 190 - 199 sq.m. |
| 5) 80 - 89 sq.m. | 17) 200 - 209 sq.m. |
| 6) 90 - 99 sq.m. | 18) 210 - 219 sq.m. |
| 7) 100 - 109 sq.m. | 19) 220 - 229 sq.m. |
| 8) 110 - 119 sq.m. | 20) 230 - 239 sq.m. |
| 9) 120 - 129 sq.m. | 21) 240 - 249 sq.m. |
| 10) 130 - 139 sq.m. | 22) 250 sq.m. and over |
| 11) 140 - 149 sq.m. | |

42. Number of the rooms inside the building (Hall is counted as a room):

.....
.....
.....

43. Built up area of the dwelling in sq. m.:

.....
.....

44. Number of storeys:

- | | |
|-----------------|-----------------------------|
| 1) One-storey | 4) Only basement |
| 2) Two-storey | 5) One-storey with basement |
| 3) Three-storey | |

SECTION V

POLITICAL INVOLVEMENT AND LOCAL PARTICIPATION

Date :

Name of settlement :

Number of Sample :

1. Where do you usually gather to discuss your neighbourhood's problems?
 - 0) No response
 - 1) Neighbour's house
 - 2) Local community centre
 - 3) Mosque
 - 4) Neighbour's house in turn when we have the local Khoran recitation
 - 5) In the alley of the neighbour
 - 6) No time to go to these gatherings
 - 7) We don't go anywhere at all.

2. Does this settlement have any local council?
 - 1) Yes
 - 2) No
 - 3) Had a council but it was dissolved
 - 4) Don't know

3. What kind of council does the neighbourhood have?
 - 0) No response
 - 1) The local council for economic mobilisation (deal with rationed goods)
 - 2) The local neighbourhood council (only deals with the development of housing condition and neighbourhood)
 - 3) Has got both type of councils
 - 4) Don't know

4. Do you know any member of the Councils?
 - 1) Yes
 - 2) No
 - 3) I only know the member of economic mobilisation council
 - 4) I only know the member of neighbourhood council and don't know economic mobilisation council

5. What do you think about the council's helping you or neighbourhood; how active are they?

6. Do you have any mobilisation or Islamic Revolutionary Komiteh office in the neighbourhood (settlement)?
 - 1) Yes
 - 2) No
 - 3) Don't know

If yes, did the Komiteh help or oppose at the beginning of the occupation construction for improvement or your building?

- 0) Not applicable
 - 1) They helped me and people in the neighbourhood
 - 2) They opposed and demolished my house by helping the Municipality
 - 3) They weren't involved at all
 - 4) Don't know
7. Has any member of your family been fighting in the war zone against Iraq since the revolution?

- 1) Yes
- 2) No

If yes, what was the nature of the mobilisation?

- 1) As a member of mobilisation (voluntarily)
- 2) As a drafted military serviceman
- 3) As a regular member of the armed forces

8. What do you usually do on Fridays (public holiday)?

- 1) Going to Friday prayers
- 2) Staying at home with the family
- 3) Visiting friends and relatives
- 4) Working
- 5) Going on pilgrimage

APPENDIX THREE

Economically active: All persons ten years of age and over who were employed, seasonally unemployed or unemployed but seeking work were considered economically active.

Employed: All persons who were working or had been employed during the seven days preceding the interview, even if they were on leave or sick leave or were laid off because of strikes or natural calamities. All part-time workers who had worked a minimum of eight hours during the week and those serving in the army as soldiers were included in this category.

Unemployed and seeking work: All persons who had been employed or unemployed previously or were seeking work during the seven days preceding the interview.

Economically inactive: All persons ten years of age and over who were not employed and were not seeking work during the seven days preceding the interview. The economically inactive population was classified into the following categories:

- Housewives (Homemakers): All women ten years of age and over who stated their principal activity as homemaking during the seven days preceding the interview.

- Students: All persons ten years of age and over who stated their principal activity as students although they may also have had an occupation at which they worked less than eight hours during the seven days preceding the interview.

- Retired: All persons of ten years of age and over who were economically inactive during seven days preceding the interview, but receiving income such as pensions, recipients of gratuitous funds from relatives or friends or other investment, etc.

Type of employment:

Wage or Salary earner in the private sector:

All persons in the private sectors who worked for a wage or salary. Private sector apprentices were included.

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 and owned all or part of an establishment but worked alone or were employed, paid or unpaid family workers, and others.

Casual workers: All persons ten years of age and over who work on a casual basis legally (day labourer) or illegally (e.g. street vendors, bootblacks); self-employed people were not included in this category.

The classification of occupations:

1. Professional with qualifications (e.g. engineers, architects, scientists, doctors, nurses, social workers, teachers, clergy, etc.)
2. Administrative and managerial workers (e.g. government administrators, production managers).
3. White collar workers (clerical workers) (e.g. typists, cashiers, clerks, government officer, etc.)

4. Proprietors of industrial, commercial and retail enterprises, sales workers (e.g. shop assistants and related workers).
- 4.1 Industrial enterprises (e.g. garages, metal and carpentry workshop etc.)
- 4.2 Commercial and retail enterprises (e.g. local corner shops such as food and groceries, clothes and shoe shops, etc.)
5. Agriculture, animal husbandry, fishermen.
6. Blue collar:
 - 6.1 Service workers (e.g. catering and lodging services, domestic servant, waiters, building caretakers, charworkers, cleaners, street sweepers, dry cleaners, pressers, etc.)
 - 6.2 Large scale production workers (e.g. miners, quarrymen, large factory workers, metal processors (steel workers), cloth making factories, leather factory, building material factories (cement, stone cutting) etc.
 - 6.3 Small scale production workers (e.g. tailors, tool makers, small scale building material producers (kiln-dried brick, cement blocks), handmade carpet makers, dressmakers, shoemakers, bakers, etc).
 - 6.4 Construction workers (e.g. painters, electrical workers, carpenters, bricklayers, builders, construction labourers, etc.)
 - 6.5 Transport equipment workers (e.g. mechanics, drivers, assistant drivers, public transport workers, etc.)

7. Casual worker (e.g. bootblacks, street vendors, casual or temporary shopkeepers, day labourers (one-day construction workers, or removal men who expect to be picked up by someone for any sort of unskilled job).
8. Protective service workers (e.g firemen, policemen, revolutionary guards, etc.)

Note:

The above definitions have been taken mainly from the Iran's Statistical Centre (Plan and Budget Organisation, 1976; 1981b).

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