

# **Urban Growth in Iran: One More Problem**

**A Research Paper** 

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**A Research Paper** 

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#### Urban Growth in Iran: One More Problem

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#### Summary

Almost unnoticed in the heat of revolution during the past year has been the evolution of Iran from a rural to an urban-based society. The redistribution of population from rural to urban environments occurred within one generation, beginning after World War II and picking up momentum during the oil-financed expansion of the 1970s. Half of all Iranians now live in towns, and at the present rate of urbanization more than two-thirds will be town dwellers by the 1990s.

Urban migration in Iran is primarily a movement of the young, mostly males, in search of better employment opportunities and a share in the country's new prosperity. Migrants are attracted to two major growth regions: the plateau cities of the old Persian heartland, especially Tehran, and the cities of the Khuzestan plain and Persian Gulf coast. The most rapid growth is occurring in cities with more than 100,000 population, with attendant structural and environmental problems—not the least of which are growth limits imposed by finite local water resources.

Iran's new status as an urban-based society—a dramatic change from thousands of years as a rural society—has important implications for the new "Islamic republic." The new urbanite is young and materialistic, and politically a member of a demanding and impatient constituency. A test of the concepts of government expounded by the new regime will be the ability of its administrators to create new job opportunities in the cities and to deal with the urban environmental problems aggravated by large concentrations of population.

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#### Urban Growth in Iran: One More Problem

The transformation of Iran within a few decades from a predominantly rural to an urban-based society is one of the major social and economic changes in that country. Half of all Iranians now live in towns, and over 60 percent of the urban core lives in cities with more than 100,000 population. If urbanization continues at the present rate—and demographic projections indicate that it will—more than two-thirds of the people will be city dwellers by the 1990s. Whatever the changes in development priorities decreed by the new Islamic republic, the increasingly urban nature of Iranian society will be a significant factor in future plans.

#### **Demographic Indicators**

According to the 1976 census, the population of Iran was 33,391,875. At present, there are close to 37 million people, half of whom live in towns with more than 5,000 population. Most of the other half, classified as rural dwellers, live in some 55,000 villages; individual farmsteads are common only along the wellwatered Caspian Sea coast. Populations in these rural villages range from several thousand to fewer than 100. Approximately 1.5 million Iranians are members of nomadic tribal groups. Generally herdsmen, their numbers are declining because of permanent settlement and outmigration of the young.

Comparisons of birth and death rates, infant mortality, family size, and data on health, literacy, and income verify that demographically there are two Irans—one urban and one rural. For the Iranian with a choice, urban is better. The overall population growth rate of Iran is about 3 percent per year. Rural areas register a 3.5-percent rate of natural increase (births over deaths), but a population gain of only 1.9 percent per year, as a result of rural to urban migration. The inflow from rural areas augments the lower urban natural increase rate to produce an annual urban population growth rate of 4.8 percent.

#### Urban Migration

Internal migration in Iran has involved about 1.6 million people annually, amounting to a net urban increase of approximately 387,000 persons each year. Migration patterns are reflected in comparisons of the varying growth rates of individual cities and towns over several censal decades. Gains and losses of population based on estimated annual growth rates indicate that step-migration (rural people moving first to small towns and small-town dwellers in turn moving to large towns) must be a significant factor in shifts of urban population. Data suggest that 60 percent of the 25X1 population movement in Iran is interurban, and only 40 percent is rural to urban. 25X1

Migration in Iran is primarily a movement of the young (one-half of Iran's population is under 20 years of age), and a high proportion of the migrants are males 15 to 24 years old. In rural areas migration begins at age 10 and peaks at under 20, while urban youths begin to move in large numbers at age 15. Among female migrants the peak migration years are between the ages of 15 and 19, with a higher proportion of urban females migrating than rural. Age groups above the age of 30 and below 10 years are evenly divided between male and female, suggesting movement as families. 25X1

Some migrants are students, but most—particularly those in the high-mobility years of 20 to 24—are workers seeking better employment opportunities and a share in the country's new prosperity. One in four of the urban male youths entering the job market is illiterate or has only a minimal primary school background, one to three years; the majority, however, have at least some secondary or high school education. Many of the rural youths are illiterate, and among both rural and urban groups, the lack of marketable skills is a problem. Although an increasing minority of females, about 15 percent, are jobseekers like their 25X1

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male counterparts, marriage is their primary reason for migrating. Even during the present political crisis and economic disruption, Iranian youth may continue to migrate to the larger cities, if for no other reason than to be more directly involved in the Islamic movement.

The rural exodus and the migration from smaller urban communities will cause political and manpower problems for the new government. Complaints already have been made about rural labor shortages, particularly at harvesttime. A new concern will be the core of young, illiterate, and unskilled urban unemployed in the urban centers. Consumed by religious zeal and revolutionary fervor, this group could quickly become disenchanted with a regime that may not deal effectively with its expectations. Should this happen, the alienated youth may turn to leftist groups such as the <u>Chariks</u> (an organization derived from earlier Marxist urban guerrilla groups) for leadership

#### **Urban Distribution**

The migratory influx has been gravitating toward the larger Iranian cities, those with more than 100,000 population. Most of these cities are provincial capitals—the governmental, social, and economic centers of their respective regions. Some are of recent origin, but most are centuries old, and a few, such as Kermanshah, Mashhad, and Hamadan (Ectatana in Alexander's time) were thriving cities 2,000 years ago.

Metropolitan Tehran, now with close to 5 million inhabitants, constitutes more than a quarter of the urban population of Iran. Data, however, suggest that migration into the older built-up parts of Tehran may have slowed, beginning in 1974. In fact, during the decade 1966 to 1976 most of the urban growth in Iran took place on the fringes of the larger cities, and the rapid expansion of satellite communities has tended to further concentrate growth in high-density urban metropolitan areas. Most of the growth in Esfahan Province, for example, is in towns within a 50kilometer radius of the city of Esfahan. Thus, the dislocations and environmental constraints associated with the expansion of metropolitian Tehran are now being duplicated on a smaller scale in other urban districts.

Migrants have been lured to urban areas in two highgrowth regions, one centered on the plateau cities of the old Persian heartland and the other on the Khuzestan plain at the head of the Persian Gulf. Tehran, which dominates the plateau cities, has always been the ultimate goal of most migrants in Iran. The attraction is partly economic and partly cultural. As an expanding commercial and industrial center, the area's employment opportunities have lured large numbers of people from all levels of Iranian society. The capital city as the traditional decisionmaking center of power draws the upper and middle classes, which tend to concentrate there, and the amenities of a large international metropolis attract those who dislike the conservative life in provincial capitals. In the past, non-Muslim minorities-the Tabrizi and Esfahani Armenian Christians, the Esfahani and Shirazi Jews, and the Yazdi and Kermani Zoroastrians-have migrated to Tehran to escape the confines of segregated quarters and growing provincial intolerance. Religious intolerance has also forced Baha'i families, members of a dissenting Islamic sect, to desert provincial towns for Tehran. Many of these minorities, especially the Jews, are now frightened and apprehensive of their future under an Islamic government. Some have been bullied by local Khomeini committees, and most "foreign" churches or offices have been placed under guard and are now being investigated.

In contrast to the centuries-old plateau cities, the urban centers in Khuzestan are of recent origin, literally boomtowns that mushroomed after World War II. They owe their existence to oil and gas processing plants, to locations as transfer points for seaborne commerce, or to prominence as administrative centers for agro-industries. Strategically and economically, the Khuzestan plain, which developed rapidly in recent years, is one of the most important regions in Iran. Economic opportunities abound, but Iranians migrate there reluctantly. For them, Khuzestan is an alien land, part of the Arab cultural world, and its climate is too hot, humid, and enervating. Similar reservations surround the developing Persian Gulf ports of Bushehr and Bandar-e Abbas, which make those cities seem remote and unattractive to many Iranian workers.

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#### Iran:

#### Cities of 100,000 or More Population

City	1956 Census	1966 Census	1976 Census	Annual Growth (%) 1966-76
Tehran	1,512,082	2,719,730	4,496,159 '	4.2
Tajrish	NA	157,486	I	1
Shahr-e Rey	NA	102,828	1	1
Esfahan	254,708	424,045	671,825	4.7
Mashhad	241,989	409,616	670,180	5.1
Tabriz	289,996	403,413	598,576	3.9
Shiraz	170,659	269,865	416,408	4.4
Ahvaz	120,098	206,375	329,006	4.8
Abadan	226,083	272,962	296,081	0.8
Kermanshah	125,439	187,930	290,861	4.5
Qom	96,499	134,292	246,831	6.3
Rasht	109,491	143,557	187,203	2.7
Reza'iyeh	68,000	110,749	163,991	4.0
Hamadan	99,909	124,167	155,846	2.3
Ardebil	66,000	83,596	147,404	5.8
Khorramshahr	44,000	88,536	146,709	5.2
Kerman	62,000	85,404	140,309	5.1
Karaj	NA	44,243	138,774	12.1
Qazvin	66,000	88,106	138,527	4.6
Yazd	64,000	93,241	135,978	3.8
Arak	59,000	71,925	114,507	4.7
Dezful	52,000	84,499	110,287	2.7
Khorramabad	39,000	59,578	104,928	5.8
Borujerd	49,000	71,486	100,103	3.4

NA Data not available.

' Tajrish and Shahr-e Rey are included in the 1976 figure for Tehran.

Other urban growth areas center around Tabriz in the northwest, Mashhad in the northeast, and the southern oasis cities of Kerman and Shiraz. Of the latter two, Shiraz, in particular, is attracting more tribal people. Mashhad is the destination of many seasonal migrants from the earthquake-prone southern districts of Khorasan Province and from the desert areas of Baluchestan and Sistan. Tabriz is the focal center of the populous Azarbaijan-e, where dialect differences inhibit immigration from other Iranian regions.

As an index of the quality of life, vital statistics indicate that if urban is better than rural in Iran, the urban areas of some regions are better than others. There are significant regional variations in vital statistics for the urban population of Iran, although data for the rural population are fairly uniform throughout the country. Birth rates reflect such factors as age at marriage, education, and use of contraceptives; death rates mirror the general level of development, including sanitation, public health, and nutrition. Among urban areas, birth and death rates are lowest in the highly urbanized north-central part of tl25X1 country on the plateau and along the more naturally favored Caspian Sea coast; they are highest in eastern Iran and in the west-central mountain provinces.

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> The negative aspects of rapid urbanization were recognized by planning authorities in Iran prior to the recent revolution. Some preliminary efforts were made to curb the growth of Tehran, to decentralize educational, medical, and industrial facilities in the capital to provincial centers, to restrict the influx of expatriate workers, and to deal with deteriorating conditions in the physical environment. The new Islamic government may or may not continue these efforts.

#### **Changing Urban Structure**

Modernization has had a major impact on the physical structure of the traditional Iranian city. Foremost was the introduction of the truck in commerce as a substitute for pack animals. The twisting lanes and alleys of the bazaars and residential districts were too narrow for the truck to penetrate. Where lanes could not be widened, new broad avenues were laid out adiacent to the old city quarter, each beginning or ending with the ubiquitous traffic circle. The more aggressive, successful merchants relocated to the new sections, and the more affluent families who acquired automobiles for personal use followed them. The ultimate result of this modernization process is the combination of urban sprawl, affluence, and the car (initially a status symbol and eventually a necessity) that has created the Tehran traffic problem. Tehran is similar to automobile-dependent Los Angeles in its pollution-laden air, partly from industrial effluences but primarily from automobile emissions.

The old residential quarter of the Iranian city in which rich and poor traditionally lived side by side, differentiated only by the degree of spaciousness behind high brick walls, has now become segregated by economic class. The poor remain in the old quarter joined by burgeoning numbers of migrants, and overcrowding has produced slum conditions.

Closely spaced mud-brick buildings and narrow alleys of the old city make installation of modern sewerage lines extremely difficult, and sanitation conditions in the crowded quarters continue to worsen. In Tehran, terrain characteristics underscore a class difference in sanitation conditions. The newer, wealthier sections of the metropolis extend up the gravel-based slopes of the mountains north of the city that provide good percolation, while the bazaar and many suburbs of the lower economic class stretch out over the level, nonporous subsoil of the desert. Associated with the low levels of sanitation and their implications for health standards is the quality of the urban water supply, which is universally poor in Iran.

#### A Geographic Constraint to Urban Growth 25X1

Water is a limiting factor to concentrated urban growth in arid Iran. Urban areas derive their water supplies from rivers and from ground water. With greater densities of population, the pressure on local water resources has increased, and choices have had to be made in allocations of water for domestic, industrial, or agricultural use. In the Esfahan basin, for example, industrial and domestic requirements now consume the major share of the Zayandeh River flow, leaving less and less for irrigation of formerly productive fields. 25X1

At the next scarcity level, urban areas pirate water from neighboring districts. Tehran, for example, may eventually need to take water from sources planned for another city. Growth limits based on water supply for the metropolitan area of Tehran are estimated at a level of 6 million inhabitants-at present growth rates, less than a decade away. Presently, the Tehran water supply comes from two reservoirs on mountain streams north of the city. A third dam is under construction, the volume of water in the reservoir to be shared 25X1 among Tehran and the cities and agricultural areas on the northern slopes of the Elburz Mountains. Should 25X1 Tehran require more water, it would then have to expropriate the water of a river presently destined to be dammed to provide for expanded growth in Qazvin, a large urban center northwest of the capital.

The ecological limits to urban growth are no less acut25X1 in smaller urban areas dependent on wells and *qanats*. The Persians are believed to be the original developers of the *qanat*, a system of underground conduits devised to tap the downslope, subsoil flow of water with minimal evaporation loss. The digging and maintenance of the *qanat's* shafts and tunnels is a dangerous and highly specialized craft, one which attracts fewer and fewer Iranian workers. Deep, driven wells can replace *qanats* to some extent but are limited to areas

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where ground water is available. Moreover, the ecological water balance is delicate. The number of wells that can be drilled cannot exceed the recharging rate of the ground water reserve; lowering the ground water level would also affect the level of the water supply tapped by the *qanats*. Among rural villages, if the *qanat* system fails, the village folds and the inhabitants migrate to the local urban center

Water is critical to urban development all along the Persian Gulf coast except on the Khuzestan plain. There, the remaining untapped potential in the Karun River system is one of the factors that makes Ahvaz a city with high industrial growth potential. Elsewhere along the coast, desalinization plants may be the most feasible method of supplementing meager local water supplies.

#### **Outlook for Urban Development**

The political, economic, and social practices of the new "Islamic republic," along with the explosive atmosphere in the urban centers, could slow the rate of urban growth. Moreover, migration motivations may be dulled by the instability and the less cosmopolitan, more conservative, more religious climate now prevailing in urban areas. In any event, the existing urban problems of housing, health and sanitation, pollution. and, more important, the necessity of creating more jobs have to be dealt with. If the Islamic government can manage these urban socioeconomic problems, quickly and efficiently, it would dampen the abilities of leftist forces to foment violence. On the other hand, failure to resolve these problems could lead to further disillusionment and impatience among the new urbanites, who are young, increasingly literate, and whose appetites for change have been whetted by direct action in the streets.

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