Chapter 6: Urbanization: Patterns and Policies

Key Features of Urbanization in Developing Countries

Urbanization has been a worldwide phenomenon during much of this century.[1] Between 1920 and 1970, the proportion of the world population living in towns and cities increased from 19 to 37 percent, and by the year 2000 over half the world's population is likely to be living in urban areas. This shift in the balance between rural and urban sectors is closely linked to industrialization and changing patterns of employment, and to rapid changes in cultural, social and political conditions throughout the world.

The features of contemporary urbanization in developing countries differ markedly from those of historical experience. Whereas urbanization in the industrialized countries took many decades, permitting a gradual emergence of economic, social and political institutions to deal with the problems of transformation, the process in developing countries is occurring far more rapidly, against a background of higher population growth, lower incomes, and fewer opportunities for international migration. The transformation involves enormous numbers of people: between 1950 and 1975, the urban areas of developing countries absorbed some 400 million people; between 1975 and 2000, the increase will be close to one billion people (Figure 10). The rate of urban population growth in these countries is likely to decline after 1975, but it is expected to remain three to four times as high as the urban growth rates of the industrialized countries in this period (Table 31).

The number of very large cities in the developing world is expanding rapidly: in 1950, only one city in these countries (Greater Buenos Aires) had a population over 5 million, while five cities in the industrialized countries had reached or exceeded that size. By the year 2000, the developing world will have about 40 cities of or above this size, compared with only 12 in the industrialized countries. Eighteen cities in developing countries are expected to have more than 10 million inhabitants, and one at least—Mexico City—may well have triple this number. The net additions to city populations are even more striking. For example, in each year of the mid-1970s, Mexico City and Sao Paulo each grew by over half a million people, while such cities as Jakarta and Seoul grew by over a quarter of a million people.

31. Urbanization Rates and Urban Population Growth, 1950-2000

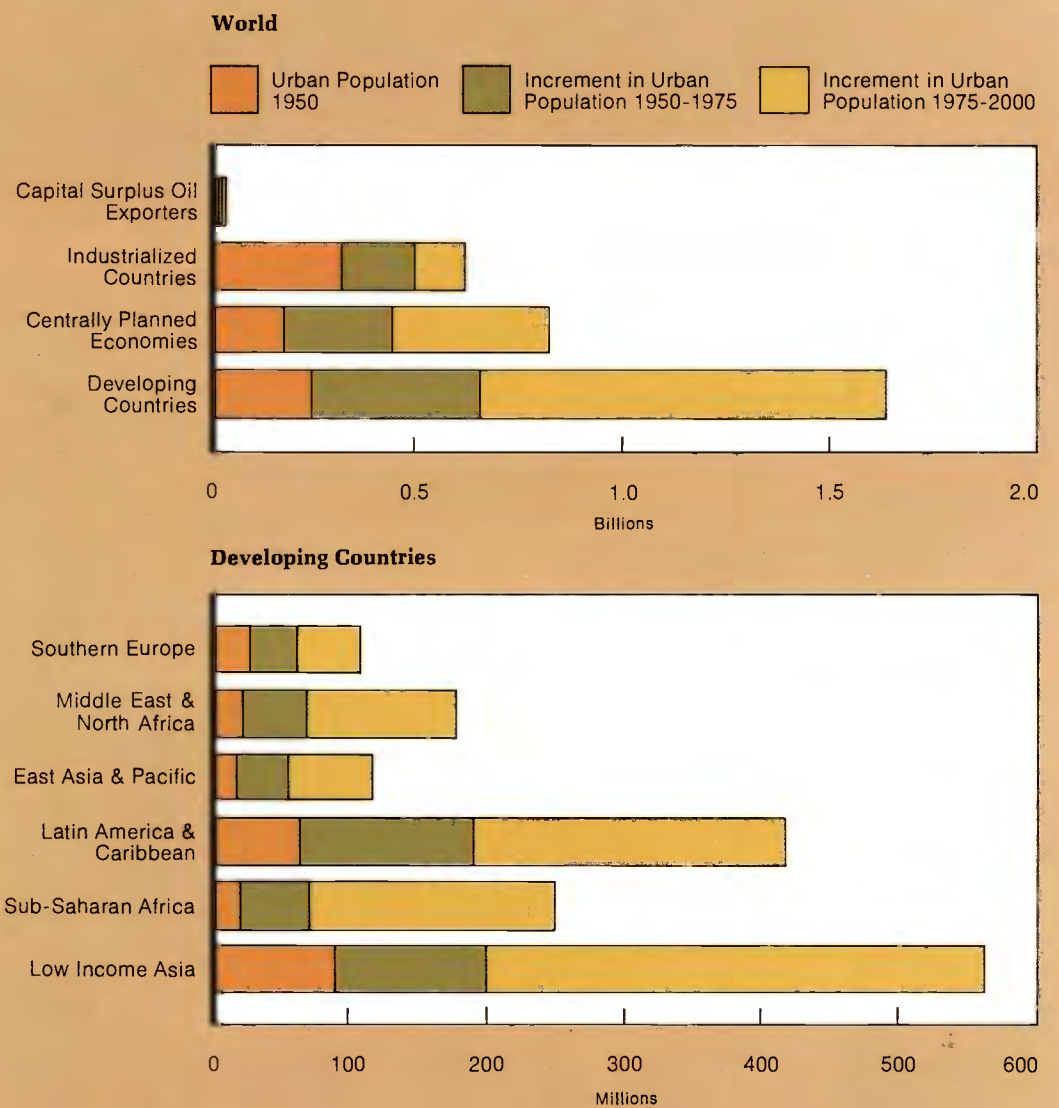
	Urban Population as Percentage of Total Population			Average Annual Percentage Growth of Urban Population		
	1950	1975	2000	1950-60	1970-80	1990-2000
Developing Countries	20.6	31.1	45.8	4.0	4.0	3.5
Industrialized Countries	62.4	74.4	83.6	2.0	1.2	0.8
Capital Surplus Oil Exporters	16.9	55.5	77.9	7.9	7.1	3.1
Centrally Planned Economies	20.7	34.4	49.2	5.2	2.7	2.4
World	29.0	39.3	51.5	3.5	2.8	2.6

The differences in the characteristics of urbanization among developing countries can be exemplified by some broad regional groups (Figure 11). The first of these groups comprises the highly urbanized Middle Income countries of Latin America. In this group, more than half the population already lived in urban areas in 1975, and three-fourths are expected to do so by the year 2000. Although the rate of rural-urban migration is likely to slow down considerably as this high degree of urbanization is reached, cities will continue to grow rapidly as

[1]The level of urbanization is defined as the percentage of the total population of a country living in urban areas. This report relies mainly on UN estimates of urbanization levels. Since different countries use different definitions of "urban," cross-country comparisons of these estimates should be interpreted cautiously.

Figure 10

Urban Population Estimates and Projections, 1950-2000



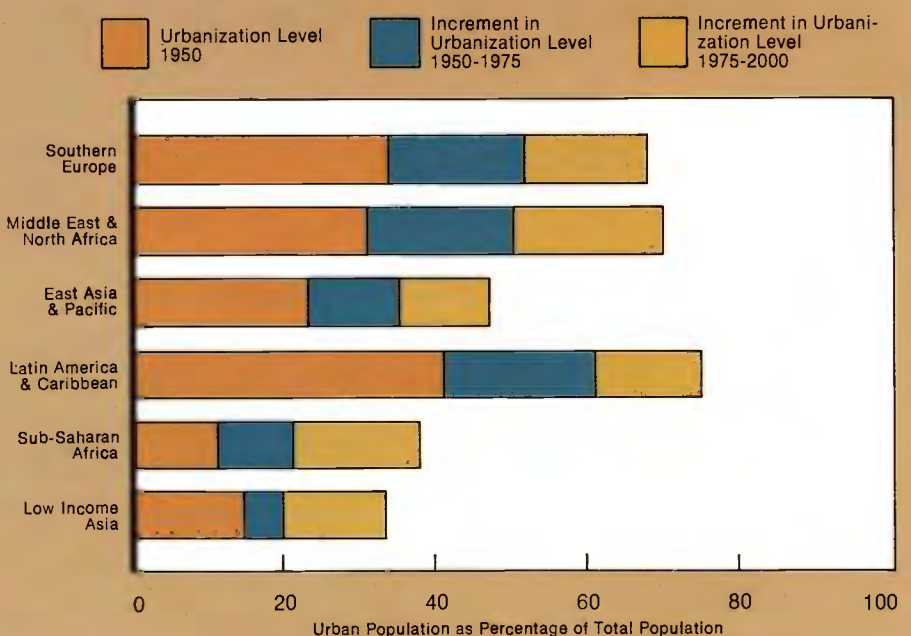
long as natural population growth is not curtailed. The pattern of urbanization in these countries is characterized by a heavy concentration of economic activities and wealth in a few very large urban centers, providing a stark contrast to the economic stagnation and much lower average incomes in many of the peripheral regions. Although average urban incomes are relatively high, poverty remains a serious problem in many cities.

In the second group are the predominantly rural countries of Sub-Saharan Africa, where urban growth is a relatively recent phenomenon but is now very rapid, because of high natural population growth and massive rural-urban migration. In these countries the proportion of people living in urban areas will remain small through the remainder of this century in comparison with those in the first country group, and most of the cities are of moderate size by

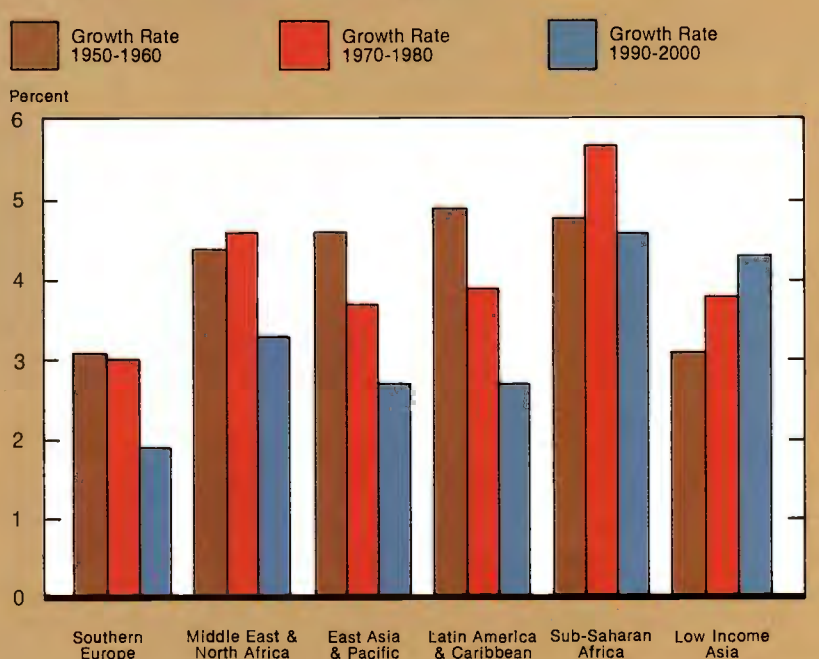
Figure 11

Urbanization Estimates and Projections for Developing Countries, 1950-2000

Urbanization Levels



Average Annual Growth of Urban Population



international standards. Urban poverty is a relatively minor problem when compared with these countries' rural poverty. Since this group of countries is still in the early stages of a very rapid urbanization process, the policies for guiding the transformation take on special importance.

The third pattern of urbanization is encountered in Low Income Asia. Though they have some of the world's largest cities, the countries in this group are predominantly rural, and despite intense population pressures on agricultural land, the level and rate of urbanization are expected to remain low. This is mainly because cities generally do not offer more attractive working and living conditions than do rural areas; indeed, the incidence of poverty is as severe in urban as in rural areas. Nevertheless, the absolute size of the urban population in this region is already very large; in 1975 the urban population of India, for example, exceeded the combined urban population of Argentina, Brazil and Mexico.

The urbanization patterns of countries of Southern Europe, East Asia, the Middle East and North Africa lie somewhere between the trends noted in Latin America and those observed in Sub-Saharan Africa and Low Income Asia. The countries of Southern Europe, the Middle East and North Africa approach levels of urbanization similar to those in Latin America, while East Asia is as yet much less urbanized. The rates of urban (and total) population growth in Southern Europe are substantially lower than in any other group of developing countries, and urban population growth is slowing down in the Middle East and North Africa, and especially in East Asia. Most of the countries of these three regions will be predominantly urban by the turn of the century, with rural-urban migration continuing to play a major role in the transformation process. Compared with Latin American nations, these countries are less troubled by regional disparities in economic activity and income, though important pockets of urban poverty and regional stagnation exist in some nations such as the Philippines and Turkey.

Though urbanization patterns differ, policy makers concerned with urban growth in developing countries usually have two concerns in common. First, they believe that urbanization is excessively rapid, concentrated and costly, and they take as evidence the large numbers of rural-urban migrants, the concentration of economic activity and wealth in a few regions of the country, and the high capital cost of urban infrastructure. Related to this set of problems, but often seen separately, is the concern with poverty and inefficiency within cities. Lack of remunerative employment, housing and public services for a large number of urban dwellers, as well as congestion and pollution, are the main manifestations of this second set of problems. These are real problems which need to be confronted. Urbanization, however, also presents important opportunities for increases in productivity and incomes, and for a reduction in the incidence of poverty. The present chapter considers these problems and opportunities associated with urbanization, discussing first the policy issues relating to the spatial distribution of economic development at the national level, and then those relating to the growth of a specific city. It is important to bear in mind, however, that these two sets of issues are highly interrelated aspects of one and the same transformation process.

National Spatial Development: Determinants and Policies

Determinants of Urbanization and Spatial Concentration

On the surface, the main determinant of the pace and pattern of urbanization in developing countries appears to be rural-urban migration. The flow of migrants is often blamed for causing rural stagnation and excessive urban growth, as well as urban unemployment and poverty. However, this is at best a partial and at worst a misleading view. First, natural population growth, rather than migration, is the major source of urban population increases in many developing countries, particularly in Latin America. Second, the view that cities are burdened with a flood of uneducated, unskilled and unmotivated migrants is incorrect. Studies show that migrants from rural areas are well educated and motivated relative to those who stay behind, and that within cities they are not represented disproportionately among the poor or the unemployed. Third, although the inflow of migrants usually imposes additional financial burdens on public services, these burdens could be alleviated if the services were more appropriately priced and distributed. They are not an inevitable consequence of migration as such, since the costs per person of providing essential services are not necessarily higher in urban than in rural areas. Fourth, migrants move mainly in response to

better employment and educational opportunities, rather than in reaction to the proverbial bright lights of the city or other amenities of urban life. The true determinants of urbanization and spatial concentration in developing countries are therefore found in the forces that determine the location of employment opportunities: the nature and pattern of industrialization, the pace of agricultural development, and the growth of transportation and communications networks.

The pace and pattern of industrial development is the most important of these determinants of urbanization and spatial concentration. Industries locate themselves in urban areas, especially in larger cities, because there they can benefit from ready access to capital and labor, as well as to specialized needs such as financial, legal and technical support services. Cities offer markets for industrial products, and provide convenient access to other domestic and international markets through the established transportation systems. The spatial concentration of economic activity and the emergence of large cities is therefore a necessary adjunct of a development process which relies predominantly on the growth of modern industry rather than on agriculture. However, public policies commonly bias this basic spatial development pattern toward more rapid urbanization and more extreme spatial concentration.

Foreign exchange policies, tariffs and industrial incentives often support activities of the type located in the major urban centers more than those located in economically less progressive regions, as has happened, for example, in Brazil and Nigeria. Governmental regulation of transport tariffs and energy prices often favors large cities, as do public investment and subsidies for urban services that influence the incentives for the location of industries. The importance of face-to-face contacts with central government authorities dispensing trade licenses, credits, and regulations further provides a strong pull for industry toward the capital city. The effects of these policies on industrial location are difficult to quantify, but there is little doubt that the attraction of large cities is significantly enhanced by them.

Urbanization is also influenced by the pace of rural development. The ability of the agricultural sector to absorb a growing rural labor force depends on such factors as the climate, the availability and distribution of land, the choice of agricultural technology, the demand for agricultural products, and the availability of credit, fertilizers and technical assistance. Climate and the availability of land are usually immutable constraints. The Sahel region of Africa, where recurrent droughts in recent years have spurred migration and urbanization, provides an extreme example of the effects of climate. In some developing countries, particularly in Latin America and Africa, new land can still be brought into agricultural use, but in most there is little scope for increased agricultural employment and earnings based on newly cultivated land. The other factors impeding the expansion of agricultural employment can more readily be influenced by policy. Highly unequal distribution of land ownership, especially in Latin America, slow growth and premature mechanization of agricultural production, and market barriers in industrialized nations, have made it difficult for the sector to absorb the growing rural labor force, and increased the rate of rural-urban migration. Policies that protect domestic industries from foreign competition, and give more favorable incentives to industry than to agriculture, agricultural credit that is biased toward machinery instead of labor, and neglect of rural extension and training services, all tend to hamper rural development and employment, pushing the rural population into urban areas, and to favor the growth of cities over that of small towns.

The different experiences of the Republic of China and the Republic of Korea help to illustrate the influence of the pace and pattern of rural development on the concentration of economic activities and population. In the Republic of Korea, agriculture is not naturally well endowed. Lacking special support from government policies it did not share commensurately in the growth of the Korean economy during the 1950s and 1960s. Since basic infrastructure was inadequate everywhere but in the larger cities, industrial growth was concentrated around these cities and attracted large flows of migrants. By the late 1960s, the government introduced measures that improved the agricultural terms of trade and enhanced rural welfare, reducing rural-urban migration. The fact that land had been very evenly distributed since the land reform of 1949 contributed to the success of the policy switch. The Republic of China, by contrast, is more richly endowed with agricultural resources, and agro-industries were the founda-

tion of its economic development. When rapid industrialization began, the rural infrastructure was more developed and more evenly distributed than that in the Republic of Korea, and greatly encouraged the dispersion of industrial activities across the island.

Finally, transportation and communications networks are important determinants of the spatial pattern of development, since they influence the movement of people, commodities and information between regions. Public investment, taxation, pricing and regulation of a country's transport and communications system can easily bias spatial development in favor of certain locations. If domestic transport systems are left at a rudimentary stage of development, industries will be encouraged to locate in cities, usually the large ports or capital cities, that have relatively good links to international and domestic markets. But if unaccompanied by other measures, improvements in domestic transportation and communications may in fact accentuate the concentration of economic activity in the largest cities, since they lower the natural protection of industries located in smaller provincial centers, and reduce the barriers to migration. If the development of transport and communications is to play a major role in reducing spatial concentration and developing backward regions, it must be planned as part of a broader strategy to achieve those goals.

Appropriate Policies for Spatial Development

Rapid urbanization and the concentration of economic activity in a few locations are likely to be the inevitable outcome of industrial development, but, as the preceding paragraphs have indicated, various policy biases have tended to reinforce the prevailing trends and patterns in many developing countries. Unfortunately it is extremely difficult, if not impossible, to determine the optimal rate of urbanization and the best spatial distribution of economic activity in any given country. Information on the relative costs and benefits of urban versus rural development, and of the growth of large versus small cities, is woefully inadequate. As a result it is difficult to judge whether the high capital costs of providing urban infrastructure, and the increasing congestion and pollution in large cities, are being offset by the benefits of continued city growth: lower costs and higher productivity in industry, easier provision of social services such as education and health, and the social and cultural amenities of urban life. In any event, economic efficiency is not the only aspect of urbanization with which governments are concerned. In most developing countries, particularly those with distinct regional or ethnic political interests, it is extremely important to maintain balance between regions and between rural and urban development; hence some attempt to slow down the urbanization process and to spread economic development more evenly across regions may be politically necessary, even if its economic desirability is not obvious.

The policies required to improve the allocation of resources among regions and cities and to achieve a more balanced spatial development pattern differ across countries, but some general principles apply. One such principle is the importance of bringing down birth rates in order to slow down population growth in general, and urban growth in particular. In Sub-Saharan Africa and Low Income Asia, family planning efforts in rural areas are important to reduce migration to urban areas. In Latin America, slowing down the natural growth rate of the urban population holds the most direct hope for reducing the explosive growth of cities.

These efforts need to be complemented by the removal of national policies that bias the spatial pattern of development toward large cities. Sound agricultural policies are most important at low levels of urbanization, where the farm sector provides a large share of national production and employment. Excessive urban concentration is difficult to correct once it has occurred. In the more highly industrialized and urbanized countries, particular attention should be given to the removal of policy biases resulting in industrial development that is overly concentrated in the largest cities. The elimination of subsidies in the provision of urban services, and the control of congestion and pollution in large cities are important; so is the reduction of biases in credit allocation and public sector investment, in public administrative and hiring practices, and in the allocation of fiscal resources to state and local authorities. Many of these policy biases are not generally recognized to have implications for the spatial pattern of development, but their effects on urbanization and regional concentration are likely to be much more important than those of the policies used explicitly to influence the location of development.

Even if these implicit policy biases are corrected, urbanization and spatial concentration will continue, though at a more moderate pace. Explicit policies to balance regional and urban development may therefore be necessary in the interests of interregional equity, political cohesion and national security. The range of effective policy instruments available for this purpose is, however, quite limited. Direct controls on migration have rarely been found effective in reducing, let alone stopping, the flow of migrants to large cities, except where extreme forms of coercion were applied. Experience in Jakarta has shown that residence registration requirements are difficult to enforce, while the bodily removal of slum dwellers and their shacks from cities has imposed hardships, but has not prevented their overnight return. As long as cities offer favorable job prospects, migrants will keep coming. The creation of job opportunities through increased private and public investment in locations other than the largest cities is therefore the main expedient for influencing the location of development.

To counterbalance the growth of the largest cities effectively, it is necessary to support the development of a few existing cities that show potential for expansion. These are most likely to be cities of intermediate size with ready access to major transportation corridors. The construction of new towns, other than satellite towns close to large cities, has virtually always resulted in failure, because of their high cost and their small scale relative to the large cities. In deciding to promote the development of specific sectors, such as different branches of manufacturing, or agriculture, tourism, or natural resources, the sectoral development potential of particular cities and regions should be carefully evaluated. To encourage private investment at selected locations, it may be necessary to upgrade infrastructure and institutional support, including making local authorities more efficient, and providing access to credit, technical assistance and training. All these facilities are usually rudimentary outside the largest cities. Favorable tax treatment and subsidized interest rates, by themselves, have usually had little influence on private location decisions; sometimes, indeed, they have given incentives to use unduly capital-intensive technologies in investments that would have been made anyway.

In considering these explicit policies for spatial decentralization a few points need to be borne in mind. First, to be effective, decentralization policies must be applied consistently over extended periods. A stop-go approach provides private investors with ambiguous signals and reduces their willingness to move from the largest cities. Second, unless carefully designed, decentralization policies may increase the concentration of income within the favored region, since the wealthier groups may be in the best position to reap the benefits of special support measures. Third, the costs of alternative decentralization schemes, such as subsidies or public investment in infrastructure, must be assessed and compared, in order to achieve the desired balance in spatial development with the least possible loss of production and growth in the economy as a whole. Finally, national policies to improve balance in spatial development cannot substitute for better internal management of city growth. For example, urban congestion or public service shortages in large cities cannot be remedied by fostering the development of small or intermediate-size cities or of backward regions. Policies need to be brought to bear directly on these problems within each city to increase the efficiency and equity of its growth.

Policies for Efficient and Equitable Growth of Cities

Urban Policy Problems

The cities in developing countries will continue to grow, even if national policy biases favoring urbanization are corrected and vigorous decentralization measures are deployed. Metropolitan areas such as Bombay, Buenos Aires, Jakarta, Mexico City, Sao Paulo and Seoul already have populations comparable to those of medium-sized developing countries. In terms of income and production, these large cities are even more important. Consequently, the degree of efficiency with which cities allocate their resources will increasingly determine the overall economic performance of the developing countries. Moreover, while the incidence of poverty in developing countries tends to be higher in rural than in urban areas, the absolute numbers of poor people living in cities and towns are very large. In Manila, for example, 1.5 million people were judged to be living in absolute poverty in the early 1970s; in Brazil some 600,000 currently live below the poverty threshold in Rio de Janeiro and Sao Paulo, and some 1.7 million live in absolute poverty in other urban

areas. A policy to reduce poverty must therefore come to grips with the poverty problem in urban areas, where it is particularly visible and politically troublesome due to its high concentration.

Despite the obvious manifestations of urban poverty, urban policies are often designed to make cities serve more effectively the preferences of the better-off, who tend to view the growing slums as an infringement on the beauty of their city; who regard street vendors, pedestrians and overcrowded buses as nuisances impeding the mobility of private automobiles; and who perceive educational and health care needs in terms of unmet requirements for higher education and curative medicine. The policies that follow from this diagnosis of the urban problem include the bulldozing of slums; the construction of high-cost public housing, limited access highways and subways; the banning of street vendors and traditional transport modes from public places and major streets; and the expansion of subsidized universities and modern city hospitals.

If, instead, increased efficiency and the alleviation of poverty were adopted as the goals of urban policy, the diagnosis would focus on the insufficiency of remunerative employment opportunities for the rapidly growing numbers of unskilled workers, and on the inadequacy of basic urban services, especially transportation, housing, and education and health services, in meeting the needs of large segments of the urban population. Policies would therefore be designed to raise the demand for unskilled urban workers, improve the functioning of the urban labor market, and curb the growth of the urban labor supply through family planning programs and accelerated rural development. These employment policies must largely be pursued at the national rather than at the city level, and were discussed in Chapter 4 above. The remaining sections of the present chapter are concerned with the question of how the supplies of urban transport, housing and social services can be rationed efficiently and equitably at the city level, while extending the delivery of these services more rapidly, especially to the urban poor who are most disadvantaged in their access to available supplies of urban amenities.

Two general arguments are of recurring importance in the discussion that follows. First, many urban policies can be designed to improve both the efficiency and the equity of the development of cities, without a conflict between these goals. Second, accessible and well serviced land for industrial, commercial and residential use is essential to the efficient and equitable growth of urban areas. The management of urban land in its manifold dimensions —land transfer and tenure regulation, public investment decisions, taxes and user charges, to name but a few—is therefore an important element of an effective urban policy package.

Urban Transportation

Urban transportation plays a central role in the development of cities as the essential link between residence and employment, and between producers and users of goods and services. As cities grow over time, the combination of increased city area, lower population density and greater use of motorized transport typically requires substantial increases in transport facilities, including road space and mass transit. It is therefore not surprising that urban transport places a considerable financial burden on urban authorities. In Bombay and Calcutta, for example, public investments programmed for the transport sectors for 1972-78 respectively accounted for 26 and 48 percent of these cities' total planned investment. Traffic congestion inevitably occurs as cities grow: transport facilities cannot be expanded enough to maintain mobility, partly because of resource constraints and partly because urban transport demand is not curtailed by pricing or regulation. The private automobile takes roughly nine times more road space per passenger than does a bus. The explosive increase in automobiles in the cities of developing countries, at rates two to five times those of city populations, therefore exerts tremendous demands on the existing urban road space, and is a major cause of severe congestion and pollution problems, especially in the cities of the Middle Income countries.

The urban poor suffer disproportionately if urban transport services are inadequate, since they tend to be pushed to locations to which access is most difficult, costly and time-consuming. For the very poor, such costs may become so high that in order to secure and keep employment, they must accept minimal standards of shelter (or no shelter, as in the case of street dwellers) in central locations. Whether a neighborhood is accessible by road also determines to a considerable extent whether other urban services, such as water, electricity, sewerage and

drainage, solid waste collection, police and fire protection are made available, and whether schools and health care are within reach of the inhabitants. Better roads for poor neighborhoods therefore often have far-reaching effects on the welfare of the residents. Finally, urban transport provides employment for a significant proportion of urban dwellers, including the poor, particularly where traditional non-motorized vehicles—like the cycle-taxis in many Asian countries—are still in use, or where labor-intensive motorized mass transport has been allowed to develop, such as the "jeepneys"—jeeps converted for urban passenger transport—in Manila.

Prevailing policies in the cities of developing countries have generally done little to make their transport systems operate efficiently and meet the needs of the poor. Urban transport investments have served mainly to increase the road capacity for automobiles, often at the expense of travel modes used by the poor. In the larger cities of Southeast Asia, for example, cycle-taxis have progressively been banned to make way for automobiles. A few large cities—Buenos Aires, Mexico City, Sao Paulo and Seoul—have attempted to solve their transportation problems by constructing subways, but the capital and operating costs of these systems have been so high that the poor cannot afford to use them unless they are highly subsidized. Such subsidies in turn place severe burdens on public budgets. Moreover, it is becoming increasingly evident that a bus system can achieve roughly the same objectives as a subway, and much more cheaply.

In some encouraging instances transport investment policies have been adapted to the real needs of cities in developing countries. The Brazilian authorities have begun to favor improvements in urban bus systems over the further construction of subways. Many recent urban transport projects supported by the World Bank, for example in Abidjan, Bombay, Kuala Lumpur, Tunis and a number of Brazilian cities, have upgraded the conventional bus systems, through improvements to the bus fleets and in the layout of routes, reserving street lanes for buses, and giving preferential treatment to buses at intersections. This approach is usually complemented by support for bicycle and pedestrian traffic and the construction of low-cost access routes for buses and service vehicles in poorer neighborhoods. One medium-sized Indonesian city has successfully experimented with separating slow moving non-motorized traffic, including cycle-taxis, from motorized traffic in different lanes, thus reducing congestion without banning non-motorized traffic. In many other Asian cities, more supportive policies toward unconventional modes of mass transit, such as the mini-buses in Kuala Lumpur, are gaining ground.

Improvements in transport investment policies need to be complemented by improvements in transport pricing practices. Road users, especially automobiles, are generally not made to bear the costs which they impose on society by adding to urban traffic congestion. As a result, roads and urban land are used inefficiently. Subsidies on public transport impose severe fiscal burdens on the government, often lead to poor public service, and generally have not induced car riders to use public transport. The investment costs of urban transport facilities are usually borne by taxpayers at large, rather than by the beneficiaries, thus adding to the fiscal problems of national and local authorities. Examples of effective urban transport pricing schemes are, however, to be found in some cities, and can serve as useful lessons elsewhere. Singapore in 1975 successfully introduced a congestion pricing system, consisting of time- and area-specific license charges for automobiles, and central city parking fees. Unsubsidized private and public bus companies provide good service in many cities without constituting a drain on public budgets. In some countries, taxes are levied on landowners who benefit from urban transport investments, providing an equitable and effective means of financing such investments. In Colombia, for example, such charges have facilitated the rapid expansion of urban infrastructure, especially roads, even in poor neighborhoods.

These and other examples indicate that there is considerable scope for revising conventional practices of urban transport investment, pricing and regulation, which would not only make urban transport more efficient, but would also help to conserve energy, foreign exchange and public resources, increase employment, and improve services for the urban poor. Such changes are certain to be opposed vigorously by the beneficiaries of traditional urban transport policies, particularly car owners, bus users, and property owners. Thus the success of any major change in urban transport policy will depend to

a large extent on how it is implemented: for example, increased bus fares should be matched by improved services, where bus subsidies are eliminated; improved public transport should be provided where the use of automobiles is restricted through congestion charges; and extensive publicity campaigns should make the public aware of the broad benefits from improved urban transport policies.

Urban Housing

Housing is essential for welfare and economic development, particularly when the concept of housing is broadly defined to cover not only buildings, but also the land on which the buildings stand and the services provided for their residents. Together with food and clothing, housing is one of the most important items in household spending throughout the world; new residential construction accounts on average for some 20 percent of the fixed capital investment in developing countries. Housing is a major outlet for private household savings and generates employment at low foreign exchange costs. It can provide substantial private and social benefits in offering shelter from the elements, space for work and leisure, and, depending on its location, access to sanitation, education and health services, and to employment opportunities.

Housing is of special concern in urban areas: rapid urban population growth puts great stress on the existing stock of shelter and service infrastructure, and frequently has deleterious effects on health and environmental conditions. In many cities of developing countries, more than half of the population lives in slums and squatter settlements; between one-fourth and one-third of the urban population in these countries has no access to safe water supply and no facilities for the disposal of human waste. The high concentration and visibility of deficiencies in urban housing make this one of the most urgent problems facing developing countries in their transition from rural to urban societies.

Assessments of the urban housing problem in developing countries frequently begin by defining standards of adequacy in terms of space, structure and services, usually at levels comparable to those of middle income housing, but beyond the ability and willingness of the poor to pay. Estimates of housing needs based on such standards inevitably imply huge investment requirements, which cannot possibly be met either from private or public resources. Implementation of public housing projects based on such standards readily confirms the impression of urban housing needs as a bottomless pit, since the investments in high-cost, subsidized public housing do not satisfy even a small part of the needs that are identified. In fact, these investments have often aggravated the housing deficiencies of the majority of the poorer urban households, since they tie up scarce resources in a small number of housing units, usually for the benefit of the better-off. Moreover, they have frequently involved the bulldozing of slums, and thus the destruction of housing stock.

A different and more appropriate view of the urban housing problem in developing countries has recently been gaining ground. Housing shortages, overcrowding, poor infrastructure services and steeply climbing housing prices are seen to result from the failure of the supply of land, services and shelter to expand in step with the rapid increases in housing demand. The poor are particularly adversely affected, since they do not have the resources or influence to bid for scarce housing supplies. Furthermore, the poor tend to suffer from higher rents rather than to benefit from increased housing values, to the extent that they do not own houses. The supply of land, services and finance is crucially influenced by public policy.

Frequently, more unused urban land could be made available for residential use if it were not for institutional constraints: the subdivision of urban land, the assembly of small central-city plots, and the conversion of land for different uses are impeded by restrictive zoning regulations, cumbersome land registration requirements, high land transfer taxes, and disputed land titles. The poor are least able to overcome these institutional barriers. If they are not willing to accept overcrowded living conditions, they must engage in various forms of illegal land deals, such as invasion or illegal purchase and development. If they do so, they suffer from insecure tenure, and this in turn limits their ability and willingness to improve their shelter. Examples such as a slum upgrading project in Manila have shown that the poor are able and willing to pay for urban land and secure tenure, and that they make dramatic improvements to their housing once their tenure is secured. Public ownership of urban land, as in Tanzania and Zambia, by itself does not mean that the urban poor will have access to land.

Administrative costs and political constraints place severe limits on the ability of governments to manage large urban landholdings for residential development. Indeed, public land banking or nationalization of urban land will not generally make more land available for housing unless it is accompanied by a judicious relaxation of land regulations and controls, improvements in the legal and registration systems, and public efforts to clarify land titles and provide secure tenure.

Urban land used for housing should provide access to essential services such as water and energy supply, human waste disposal, and transportation. Low income households, in particular, value improvements in these services very highly—more highly in fact than improvements in the quality of the buildings in which they live. In most cities in developing countries, these services are publicly provided, to take advantage of economies of scale, and also because they yield benefits to society over and above the private benefits reaped by the individual consumer, particularly as regards environmental and health conditions. Even without subsidies, the cost savings from access to public services can be significant for a poor household. For example, the price of a gallon of water from a vendor is often ten times that of water from a public tap or a private house connection.

Since the benefits from public services are substantial and private initiative cannot easily substitute where the public sector fails to act, it is particularly troublesome that public agencies have not been able to meet the service needs of the rapidly growing urban population. Past investment and pricing policies have often compounded the difficulties of a task already of major dimensions. Investment in public services has tended to emphasize high-cost technologies borrowed from the industrialized countries, such as costly water connections to houses, water-borne sewerage systems, and mechanized solid waste disposal techniques. Conventional house connections for water supply, for example, can be eight times more expensive to install per household than standpipes, although some low-cost distribution systems have been designed which significantly reduce this cost differential. Water-borne sewerage systems are five to eight times more expensive than upgraded pit latrines suitable for urban areas, even once operating and maintenance costs are allowed for. The cost of improving a traditional labor-intensive mode of solid waste collection and disposal in Cairo and Alexandria is only about one-fourth that of establishing a mechanized collection and composting system. The practicability of low-cost technologies varies, and cities in Middle Income countries can afford higher average standards than can those in Low Income nations. Nevertheless, the propagation of low-cost technologies is crucial if essential services are to be provided to all urban dwellers.

Extensive subsidization and the resulting financial drain have further confounded efforts to expand urban services. In Jakarta, for example, failure to collect charges to cover its costs put the municipal water company in a dire financial situation, preventing it from providing a safe and reliable service to its customers, let alone expanding the service to new ones. Since customers were less willing to pay for such poor service, a vicious circle developed, as happens frequently where urban services are highly subsidized. In contrast there are cases, for example in Colombia and the Republic of Korea, where beneficiary charges have been quite effective in recovering urban service costs, and where as a result it has been possible to expand services rapidly throughout urban areas.

Extensive reforms of service charges, especially where public service subsidies are large and widespread, have to be introduced gradually to permit the development of institutions to implement the charging systems, and to gain public acceptance. Moreover, selective subsidies may need to be retained where costs of metering and fee collection are high, or where the poorest are clearly the beneficiaries, as is the case with water standpipes.

Where land and services are available, lack of finance probably is the primary reason for the difficulties poor households encounter in their efforts to build or improve shelter structures. Financial markets are underdeveloped, particularly for housing finance, and are hampered by government regulations limiting interest rates and the conditions under which funds may be lent. The poor are the first to be excluded from such a capital market, especially where disputed land titles make it impossible to use land as collateral in borrowing. Capital markets could be improved in most developing countries by permitting interest rates commensurate with the cost of capital, by clarifying land tenure and improving its security, and by strengthening financial institutions. Even if such changes are

successful, however, for most of the poor the construction of houses will remain a gradual process of improvement and upgrading depending on their intermittent ability to buy materials or to pay contractors.

Private initiatives for building houses can be further supported by the elimination of rent control, a reduction in the impediments resulting from zoning regulations and building codes, and an emphasis on public and private upgrading, rather than demolition, of slum housing. Investment in housing structures, however, is rarely an efficient use of public resources, especially when compared with such activities as the provision of public services, measures to provide security of tenure, and capital market improvements. The success of large-scale public housing schemes in Singapore and Hong Kong is due to a number of exceptional factors, including the high average incomes in these two cities, the unusually well developed managerial and administrative capacity of the executing agencies, the acute scarcity of land, and the cultural and social acceptability of high-rise, high-density housing. Virtually everywhere else, most notably in Brazil, similar approaches have failed to make any substantial improvement in the urban housing problem.

An appropriate urban housing strategy in developing countries would thus focus on how public policy can stimulate the private sector to improve the housing supply: by eliminating impediments to private initiative and by providing those elements of housing supply which the private sector is least able to supply by itself. The elements of such a strategy—sites and services schemes, slum upgrading, provision of secure tenure and construction loans—have been introduced into some of the recent urban housing policies and projects in developing countries with considerable success. In projects with these elements, the investment costs per household have been as much as 80 percent lower than those of conventional urban housing projects, while many of the essential benefits of improved housing are preserved. As a result, the benefits from public intervention have reached large numbers of the urban poor, where previously only a few of the better-off had gained. In Jakarta, for example, almost two-thirds of all slum areas have been upgraded through low-cost infrastructure investments over the last ten years. More widespread availability of services and reduced overcrowding are the most notable results. Since such improvements can often be afforded by the poorest urban residents, investment and operating costs can be recovered from the beneficiaries to finance similar programs in the future. Difficulties remain, especially because the institutional capacity to handle large-scale urban development programs is often limited. But the basic strategy holds out hope for an eventual alleviation of the urban housing problems in developing countries.

Education and Health

On average, urban households are more educated, healthier, and better served by public and private education and health facilities than their rural counterparts. The urban poor, however, are considerably worse off than the average statistics suggest. Schools are scarce in squatter and slum areas, attendance rates are low and drop-out rates are high. For example, in Greater Cairo primary school places are available to only 20 percent of the school age population in the low income fringe areas, though the city-wide average is 75 percent. In Manila, the primary school drop-out rate is 20 percent in the non-squatter areas, but 35 percent in squatter areas. Again in Manila, the incidence of infant mortality, tuberculosis, gastroenteritis, malnutrition and anemia is two to eight times as high in squatter areas as in non-squatter areas. Within Calcutta and Madras there are similar differences in health and nutrition conditions. In Kingston, the incidence of tuberculosis has increased in recent years; in Sao Paulo, infant mortality is rising, there is a resurgence of malaria and bubonic plague, and in 1974, meningitis reached epidemic proportions.

The urban poor usually only have limited access to private or public health care, due to the high costs of medical attention and drugs, lack of information, and the physical as well as cultural inaccessibility of modern curative care. Infant malnutrition and mortality in urban slums are aggravated by the fact that mothers increasingly switch from breast feeding to commercial baby foods, frequently diluted with unsafe water.

The urban poor, as much as their rural counterparts, are therefore trapped in a vicious circle in which low incomes ensure poor education, nutrition, and health, which in turn lead to low productivity and incomes. A comprehensive reform of education and health policies is required, involving a movement away from the

common emphasis on subsidized higher education and modern curative health care. Education can often be made more efficient, and brought to a larger number of people, by a greater emphasis on basic education, functional training, and special efforts to reduce the out-of-pocket expenses education involves for the poor. Improved sanitation and housing, nutrition programs for pregnant women, lactating mothers, and infants, as well as health education and preventive health care, are essential for better health and nutrition and are much more cost-effective than curative medicine in reducing the incidence of ill health and malnutrition among the poor. The framework of the basic health care system in Jamaica provides a good example of an attempt to develop a community-based health system. It relies primarily on out-patient treatment in small health centers; it emphasizes preventive health care and education, improved sanitation, maternal and infant care, immunization, family planning, and nutrition programs; and it is supported by a relatively inexpensive but effective paramedical staff.

While the major responsibility for providing and financing social services generally rests with national rather than local authorities, the latter frequently play an important role in the delivery of social services in urban areas. Initiative at the local level and integration with other urban service programs are therefore important elements in an overall strategy to provide urban social services.

Urban Government: Administration and Finances

Urban government presents very difficult tasks under the best of circumstances; in the cities of developing countries the problems faced by urban authorities are monumental, while the resources to deal with them are exceedingly scarce. But since the public sector has a pervasive role in managing urban growth, the benefits from making urban governments more effective will be substantial. Even the best urban development strategy comes to naught unless there are institutions that can implement it. Improvements in the institutional framework are therefore a prerequisite for more efficient and equitable urban growth.

The high density of urban settlements inevitably requires the public provision of physical and social infrastructure and some regulation of human interactions. Many of the governmental activities in urban areas are highly interrelated —for example, the planning and regulation of land use, and the extension of the road and public utilities networks—and hence concerted planning and implementation throughout a metropolitan area are very important. Such coordination is frequently hampered because responsibility is scattered among numerous public agencies. Geographic fragmentation of local authorities is not, as yet, an overriding problem in most cities of the developing countries, although some, most notably Calcutta and Manila, have suffered from a proliferation of municipal jurisdictions within their metropolitan areas, and others have begun to spill over their traditional boundaries. To avoid future problems, national governments should be quick to respond to city growth by extending municipal boundaries through annexation or amalgamation of local jurisdictions.

Of much greater concern is the widely prevalent fragmentation of public responsibility along hierarchical and functional lines: responsibility for providing and regulating urban services is typically shared by national, state and local governments, and at each level of government there commonly exist numerous autonomous public agencies with overlapping servicing, taxing or regulatory functions. In Bogota, for example, some 15 independent local public agencies, as well as various national government ministries and agencies, are involved directly or indirectly in transportation, housing, education and health. In such circumstances, the objectives and priorities of individual agencies rarely match, and at times conflict with each other, often resulting in poor coordination, delays, or contradictory actions. The anecdotes about streets repeatedly excavated, to lay first one utility line, and then the next, and then a third, are not without foundation. In such an environment of fragmented responsibility, urban development programs with a comprehensive approach to a city's needs for services and infrastructure have to be preceded by extensive lobbying of numerous public agencies at all levels of government, with hard-won agreements always threatened by subsequent breaches by one or the other agency.

The problems of urban public administration are frequently compounded by the fact that local governments' responsibility for expenditures exceeds their power to raise revenues. In most cities, with the exception of a few special capital districts such as Bogota, Mexico City and Seoul, local governments have been left

with revenue sources that fail to grow with population, economic development and inflation, even where they are properly administered. Financial transfers from higher level governments are generally unpredictable; they are the first to be cut under general fiscal pressures and the last to be restored. At the same time, the expenditure needs of local governments in urban areas have grown rapidly as urban populations have multiplied and demands for better and more costly urban services have expanded. Few attempts are made by higher level authorities to help local governments in urban areas to develop their capacity to deal with the important and growing tasks of urban service delivery, planning and regulation. Management, budgeting and accounting practices are generally very poor; structures of taxes and fees tend to be antiquated, and their local administration and collection badly neglected, partly for lack of political will, and partly because of the inadequacy of trained personnel, technical assistance, or incentives from higher government levels. All too often, the national ministries in charge of local governments develop adverse relationships with their local counterparts, and confine themselves to supervision and control, rather than developing a spirit of cooperation, support and assistance.

The choice of a strategy to improve urban public administration and finances necessarily depends on the objectives of those in charge of reform. Those who believe in strong central control by a unified national executive will want to reduce local government autonomy in favor of direct administration by the national government. In contrast, those who believe that local governments have an important role to play in articulating people's demands for public action in a pluralistic society will favor strong and independent local authorities. But in either case, good urban government has a number of basic ingredients. First, it is important that a unifying element be created at the city level to assist in coordinating the many governmental functions within a metropolitan area. Usually this will involve either a strong metropolitan government, as in Bombay, Jakarta, Seoul or Singapore, or, at a minimum, a planning agency with well defined statutory functions and its own resource base, permitting it to collect and disseminate information throughout the metropolis, to develop plans for action and financing, and to enforce inter-agency agreements. The metropolitan authorities recently created in Calcutta, Manila and Tunis indicate that such reforms are feasible and help to improve urban administration and management.

Second, whether local authorities carry out a large or a small range of functions, they must be encouraged to raise their own financial resources to meet their tasks. Charges related to the costs and benefits of urban services are particularly important revenue instruments, since they not only raise revenues but can also improve the efficiency and equity of service provision, and avoid the danger of budgetary biases in favor of urban against rural areas, or in favor of large cities against small towns. However, most cities will still need to rely on general local taxes and on transfers from national budgets, particularly for the financing of social services. These revenue instruments should be designed so as to avoid biases in favor of urban areas and to ensure the efficient use of funds by local authorities.

Third, technical assistance for financial and personnel management, land use planning, infrastructure investment and operation has been found useful. Manpower training and more competitive local government salaries are further ingredients of local government reform. One successful model for this type of assistance has been the Venezuelan Municipal Development Agency (FUNDACOMUN), an autonomous public agency that has provided technical assistance and training for improvements in accounting and budgeting, in the cadastral and property tax system, and in local regulatory and planning procedures. Finally, there is an urgent need to increase coordination and cooperation between municipal and national authorities for finance, planning and other functions germane to urban resource management. The scope and dimensions of the growing tasks of urban management require commensurate policy attention from the highest decision making bodies in developing countries.