Whither Site and Services?

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The slum and squatter area has been a symbol of the urban problem in developing countries for decades. Its dilapidated shanties and inadequate services reflect the inability of urban authorities to cope with city problems. The squatters and slum dwellers, being mainly migrants from the countryside, are evidence of the lack of opportunities in rural areas, which makes moving to the city most attractive. The unplanned and uncontrolled growth of slum and squatter communities also shows the paucity of technical and planning solutions to the problems created by rapid urbanization.

The popularization, in the 1970's, of site and services (that is, the supplying of a dwelling site along with roads, water, and sewage disposal), increased the hopefulness that the solution to the slum and squatter problem is at hand. This new mood perked up when the World Bank committed vast resources to site and services. Starting with an International Development Association (IDA) credit of $8.3 million to Senegal, the bank's involvement has rapidly increased to $121.3 million in nine countries (Table 1). At present, projects are being appraised in Kenya, the Philippines, Brazil, Colombia, the Ivory Coast, Morocco, Iran, and Thailand for an estimated $150 million in loans and credits.

There are numerous variations of the site and services approach, but the World Bank broadly divides projects into "site and services lots" and "squatter upgrading." The term "site and services" implies the opening up of new tracts of urbanized land that are provided with such services as potable water, sewerage, roads and drainage, electricity, and, sometimes, dwellings. Squatter upgrading, on the other hand, provides for services where the slums and squatter areas are, usually with the participation of the people themselves.

Even before the World Bank decided to go into site and services, similar projects had been started in many developing countries. In fact, a survey of site and services schemes in 1974 identified 80 proposed and completed schemes in 27 countries. This survey, however, did not include efforts that involved the illegal activities of squatters and slum dwellers themselves, who, faced with governmental apathy or opposition, decided to take matters into their own hands and invade sites and provide urban services for their communities.

Public programs for squatters and slum dwellers have been mainly reactions to popular pressures. By the mid-1960's, many governments were adopting an "if you can't lick them join them" attitude. Under the guise of such policies as self-help, aided self-help, core housing, roof loan schemes, social animation, and others, governments made it legitimate for squatters and slum dwellers to provide themselves with shelter.

Although the World Bank organized the IDA in 1960 to provide more flexible credits, including housing, no housing loans as such were given by the bank for some time because housing did not enjoy high economic priority. With pressures from developing countries, the bank started to provide housing as part of "productive" investments—for example, when workers' housing was made part of a loan for an industrial plant. The basic philosophy of the bank was to invest in basic utilities and industries that would build economies, and these economies would, in turn, generate enough growth for housing to thrive as an industry—"an order of thinking," according to the late Charles Abrams, "that would relegate housing problems to Providence and prayer . . ." (*1*). This viewpoint persisted within the bank for a long time, and still exists in some bank quarters. This bias against housing, in fact, makes the venture into site and services most dramatic. To some people, the shift in philosophy proves that "the bank has a heart." To others, it means that the bank has surrendered to political pressures. Whatever the reason or the interpretation, the venture of the World Bank into site and services has made the approach most acceptable as a solution to the housing problems of developing countries.

It has been 10 years exactly since Turner shook advocates of conventional housing with the hypothesis that "uncontrolled urban settlement is a manifestation of normal urban growth processes under historically abnormal conditions" (*2*, p. 4) and proposed that, instead of eradicating these slum and squatter areas, they can be improved "through the provisions of essential elements and services in ways that can be applied on a large scale" (*2*, p. 99). In that relatively short time, however, the idea of site and services has evolved from an exciting maverick idea to a "new orthodoxy" (*3*).

From Poetry to Policy

In many articles, books, and pictorials on slums and squatters, a number of assumptions and generalizations have been popularized. Among the most important of these are:

1) Squatters and slum dwellers have the resources, skills, and motivations to provide adequate shelter for themselves.

2) When given security of tenure and other assurances and resources, squatters and slum dwellers build their own homes and improve them as their life situation improves.

3) Squatters and slum dwellers develop their own market mechanisms to avail themselves of materials needed for shelter.

4) Squatters and slum dwellers have valid reasons for choosing locations of their communities and are, therefore, their own best planners.

Because of the above-mentioned characteristics, squatters and slum dwellers were seen as "a solution and not a problem," people living in slums of hope rather than in slums of despair, disadvantaged citizens being denied the opportunity to improve themselves by an insensitive Establishment and a crassly materialistic economic system. In the transition from the poetry of slum life to the realism of policy and action, the assumptions mentioned above have been tested. The result is the realization that, if we are to cope with the problems of shelter for the urban poor, the polar differences between squatters and slum dwellers on the one hand and the government on the other must be narrowed. Cooperation rather than conflict is necessary to improve the urban conditions. This realization lies at the root of what has happened to site and services in the past decade.

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Resources, Skills, and Motivations

Intensive studies of slum and squatter communities revealed vigorous organizational capacity along with good construction and production skills, and strong community and personal motivations that could be translated into positive developmental programs (*4*). Case studies on "invasions" (*5*) and other spontaneous slum and squatter activities showed that low income communities had leadership structures and management capabilities that enabled them to undertake complex tasks. Being recent rural-urban migrants, still living in the tradition of self-built housing, most of the squatters and slum dwellers had the necessary carpentry, masonry, and other skills for house construction and maintenance. Also related to rural origins were patterns of community cooperation and mutual help, which promised to be useful in large-scale construction efforts such as digging ditches, building community buildings, and maintaining community facilities.

From these empirical studies arose the expectation that considerable savings could be effected if community resources, skills, and motivations could be mobilized in site and services projects. Actual experience with such efforts, however, have been sobering. To begin with, community efforts are effective when focused on activities that are short-run, emotionally charged, and constitute one-time do-or-die efforts. Examples would be invasions, where there is the presence of a common "enemy" (the government), the need to work fast (build an entire community overnight), and the thrill of danger (possible combat with the police or Army). When community resources, skills, and motivations are required for long-range, routinized, and commonplace activities, however, they fall down. Unfortunately, most activities in formulating, implementing, and evaluating housing programs fall into these types of activities.

In large projects where preparation of the site, digging of ditches for sewage and water systems, and construction of core housing units are required within specific time periods, communal efforts have been found wanting. The need to follow certain objective standards of performance, when added to time constraints, has forced many project administrators to use machines or undertake the project activities by contract or by administration rather than by mutual aid or self-help.

In projects first supported by the World Bank, it was felt that economies of scale could be achieved if site preparation, construction of core houses (when part of the project), and administration of projects could be carried out by full-time professional managers and workers rather than by popular effort. Economic rationality was used as a strong argument against communal efforts, self-help, and other "soft" approaches that sometimes proved unpredictable and unreliable. Heavy initial costs were encountered by resorting to machines, high-technology approaches, and work by contract. A number of countries objected to these approaches, mainly because of pressures from local people who needed jobs, and the squatters and slum dwellers themselves, who became fearful that such approaches were alienating them from their homes and communities.

At present, planners and administrators charged with site and services projects rarely rely on community resources and skills in the early stages of construction in a project. They have found that standards of performance and time constraints make such inputs difficult. After sites are prepared and services are installed, however, a great deal of reliance is placed on popular resources and skills. Almost all site and services projects, for example, have incomplete houses, because it is hoped that homeowners would improve their houses later. In the El Salvador project, people are given six options, ranging from a "core house" with roof, posts, and sanitary facilities to an almost complete house that a family can occupy immediately.

Community resources and mutual help are difficult to fit into water supply and sewerage systems that require a certain scale for effectiveness and efficiency. Efforts to find alternative water and sewerage systems using "low or intermediate technology" have not yielded satisfactory results. This fact is most important because water usually accounts for 20 to 30 percent of total on-site infrastructure costs per plot and sewerage accounts for 40 to 50 percent of the same costs. Al-

Table 1. Site and services projects supported by the World Bank. The data are from (*6*).

Location	Type of service	Funding	Amount ($ millions)
Botswana (1974) Francistown	1,800 site and services lots; 1,000 dwellings, upgrading	IDA credit	3.3
El Salvador (1974) San Salvador, Santa Ana, San Miguel, Sonsonata, Usulutan	7,000 site and services lots	IDA credit IBRD loan	6.0 2.5
Indonesia (1974) Jakarta	18,000 site and services lots; 1,950 hectares upgrading	IBRD loan	25.0
Jamaica (1974) Kingston, Montego Bay, Spanish Town, May Pen	6,000 site and services lots; 2,750 dwellings, upgrading	IBRD loan	15.0
Korea (1974) Gwangju, Mogpo, Yeosu	2,000 site and services lots	IBRD loan	15.0
Nicaragua (1973) Managua, Masaya, Granada, Leon, Jinotepa	5,900 site and services lots	IDA credit	8.0
Senegal (1972) Dakar, Thies	15,600 site and services lots 9 hectares upgrading	IDA credit	18.0
Tanzania (1974) Dar es Salaam, Mwanza, Mbeya	10,600 site and services lots 8,800 dwellings, upgrading	IDA credit	8.5
Zambia (1974) Lusaka	12,000 site and services lots 17,000 dwellings, upgrading	IBRD loan	20.0

though there are many interesting suggestions for sewer systems (such as aqua privy, septic tank, and methane gas converters), waterborne sewer systems are still widely used for site and services projects.

Because of the heavy initial costs in providing water and sewer systems, some thought has been given to simplifying the operation, administration, and maintenance of such systems. For example, water consumption may be reduced as much as a third if standpipes for each 100 persons, rather than a single tap connection in each house, is provided. Consumption, and thereby costs, is even more dramatically reduced when standpipes rather than multiple tap connections in each house are provided. A survey of 52 projects conducted by the World Bank showed that, whereas a minimum standard of 20 liters of water per day is acceptable for standpipes, the standard for multiple tap connections can be as much as 240 liters per person per day (*6*, p. 12).

Possible savings may also be achieved if communal toilets rather than individual household types are used. However, in almost all countries, communal toilets give rise to problems. Maintenance and continuous operation become extremely difficult when reliance is placed on community efforts. Even systems that require periodic regular collection of human waste for treatment and disposal are also difficult to organize and manage. Thus, in a crucial area where community resources are needed to effect economies and efficiency, experience has shown that relatively expensive and large-scale efforts are needed. Because of the importance of sewer and water systems in both the low-income community and the total city system, considerably more research is needed to find out how alternative systems can be introduced to improve existing situations.

Housing Consolidation

One of the hypotheses about low-income housing that has repeatedly been validated is the one that says that when people are provided security of tenure and resources, they will improve their houses as their capabilities increase. This hypothesis has been the main idea behind core housing, roof loan schemes, and other approaches that provide only the minimum needed for shelter. Such approaches have decreased initial outlays in site and services projects, thereby enabling authorities to use funds for other purposes.

Table 2. Plot sizes among 80 projects in 27 countries. The data are from (*6*), page 7.

Plot size (m^2)	Plots (percent)		Percent of total
	Completed	Proposed	
<100	15	41	23
101 to 200	69	21	55
201 to 300	8	14	8
301 to 400	1	24	9
>400	7	0	5
Total	100	100	100

Rather than worry about individual housing structure, most site and services planners consider the size of the residential plot to be more important. Table 2 shows that most projects use plot sizes that range from 101 to 200 square meters. Generally, the application of minimum standards influences the preference for relatively larger plots. This is especially true in countries where land is still relatively abundant, especially in urban peripheries, which are often favored for site and services projects.

Ironically, the lowering or even abrogation of "minimum housing standards" which make possible lower investments in the housing structure has been resisted by several governments in developing countries. Public housing authorities and political officials who like to boast about their achievements in housing find it hard to accept that, after investments of millions of dollars, all that they can point to are unfinished dwellings, ramshackle shacks constructed of a variety of salvaged materials, and "just another slum area," albeit a "planned slum." Philosophical arguments about transitional development are difficult to sell to a housing minister who is running for election and has to point to something dramatic (such as a high-rise tenement or multicolored clustered homes) to fire the imagination of voters. Many governments, also, have zoning codes and municipal regulations on minimum housing standards, and lawmakers and administrators find it difficult to admit that they will be party to violation of such statutes. Squatters and slums exist but, at least, they are illegal. To legalize structures violating housing standards is something else again.

There are very few site and services projects in the world today that do not provide some type of dwelling component. In some instances, this component is a "sanitary core" connected to a water and sewerage system. Often, this component is built by a contractor, together with the beginnings of a shelter (roof, compacted floor, and a main wall). In the El Salvador project, a basic dwelling of 17 square meters is provided, together with a water closet, shower, and wash basin. The homeowner may improve his house up to 30 square meters, as plots range from 60 to 162 square meters in various projects.

In sum, although most site and services projects give some leeway for improvements that the homeowner himself may make, planners find it useful to provide some form of initial structure that lends a recognizable form to development. The size and configuration of the plot is one form of structure. It is, however, often not considered sufficient. Services such as water, sewerage, roads, electricity, and others are also provided to make the site and services area immediately livable. The elaboration and maintenance of such services may be delegated to popular efforts later, but project planners believe the basic structures must first be put in. Self-help and popular action, in effect, is still seen as mainly confined to the shelter itself.

Market Mechanisms

To enable homeowners to improve their dwellings, most site and services projects provide building materials loans. Generally, such loans are payable over long periods (25 years) at relatively low interest rates (7 percent). Although these terms seem easy enough to middle class families, they have been criticized by some as exploitative and regressive. The main argument used is that at very low levels of income, the necessity of paying for something on a regular basis, no matter how minimal, is a heavy financial and psychological burden. Most poor people resort to squatting or slum dwelling precisely because their incomes are uncertain. Long-term debts put them in a straightjacket, which curtails their ability to manage their finances flexibly and cope with the vagaries of urban living.

Critics of materials loans also argue that, while it is true that buying and selling in bulk achieves economies of scale, such economies are also reduced by high administrative costs. Administrative handling of buying, selling, storage, and distribution, as well as collection of debts, may involve higher costs in the long run because it is not directly tempered by market forces and it caters to a captive clientele of poor debtors. Furthermore, certain materials that a homeowner may need may not be available in regular market channels. For example, used galvanized iron sheets, old

oil drums that can be flattened out, discarded wood from crates, and cardboard are not provided in any materials loan schemes. These materials, however, are often used in housing, especially in the early stages of construction.

Peattie and Doebele (*3*) argue that site and services clients usually have a good knowledge of the market. They know where materials are available and are fully acquainted with small-scale sellers who can provide them with special terms more flexible and responsive than those that a large bureaucracy can offer. Small-scale trading, in fact, goes hand in hand with low cost housing. Because of the need to standardize and regulate materials, however, such trading is often excluded in site and services projects, thus denying communities of the urban poor not only a handy supply source but an economic income source as well.

Home, Jobs, and Transportation

The sorriest record of site and services projects is found in the failure to appreciate the locational factors involved in home, jobs, and transportation. Early site and services efforts stressed the opening up of new lands by extending services. Most projects, therefore, were located in urban peripheries, required relocation of inner city squatters and slum dwellers to such sites, and resulted in economic, social and personal dislocations.

These early mistakes came about because of economic reasoning that focused on the site and services project rather than on the development of the whole city or metropolitan area. Political expediency also influenced locational decisions. Often, the availability of publicly owned land was the main reason for choosing sites. The need to eradicate squatters from inner city land needed for other projects has also resulted in hasty squatter eviction and their relocation to unsuitable peripheral sites. Experience with these projects showed high rates of abandonment (as many as 80 percent of the families in a Philippine relocation site returned to metropolitan Manila barely 2 years after relocation). Sometimes, force had to be used to evict the squatters and relocate them. Already overloaded transport systems proved inadequate to provide services to peripheral urban areas. Job opportunities and service facilities that were expected to move to site and services projects after the relocation of people there have failed to materialize. As case studies of slum and squatter communities reveal, the choice of location is often dictated by such factors as proximity to jobs, entertainment, and educational opportunities for children. Uprooting squatters and slum dwellers from areas where these factors are available wreaks havoc with their already fragile existence. When such people are not able to fend for themselves, the social costs to the city increase, and urban improvement programs become ineffective and self-defeating.

Realization of the complex relationships that link homes, jobs and transportation lies behind the increase of "squatter upgrading" programs that frequently complement site and services projects at present. In the past, extension of public services to slum and squatter areas was avoided by governments because it amounted to recognition of the squatters' rights and legitimization of their tenure. At present, many governments recognize that provision of such services often produces benefits that far exceed those achieved in site and services. To begin with, existing slum and squatter communities are usually organized and can provide more "counterpart resources" than new site and services settlements. Physical inputs into such communities are also relatively smaller and less costly, often consisting primarily of extension of water, health and sanitation, and community organization facilities. The most important plus factor in squatter upgrading, however, is often the positive attitude of people themselves. Because their lives are not thrown out of whack by governmental programs, the people are generally supportive and offer help instead of resistance to the authorities.

What Have We Learned?

In the two decades or so that site and services and similar schemes have been used in developing countries, some agreement has been reached on what works and doesn't work. First of all, the original idea behind site and services, which involved extension of services to peripheral city land and relocation of people to such sites, has not worked. The "slum eradication" approach, which usually accompanies relocation, has been costly. It has resulted in the destruction of housing stock which represents personal investments of squatters and slum dwellers. Its cost has also been high in terms of good will and possibilities for cooperation between the urban poor and the government.

Second, site and services has driven home the point most convincingly that the main element in a program for providing shelter to the urban poor is not the house itself but land, and the services and amenities required by urban living. This realization cannot be overemphasized. Although most policymakers now understand it, there is, however, still a shortage of ways and means to make serviced land available to the urban poor. Governmental intervention, ranging from taxes on idle land to use of eminent domain to justify expropriation, has been slow, dragged down by complex legal maneuvers and conflicts. Ideological and moral considerations still heavily influence the process of policy-making related to providing access to land and urban services. Because land still constitutes one of the most important costs in site and services, there is a need to find options that would make it available to such schemes at reasonable costs.

Third, the "unlocking" of popular energies and resources among lower income people involved in site and services has not materialized to the extent that supporters of this approach have expected. Where such energies and resources have come out, it has not been easy to fit them into large-scale, planned, and institutionalized activities required by work programs. Despite high costs, initial outlays in massive infrastructure have been found necessary to maintain performance standards, stick to predetermined timetables, and meet high expectations of authorities and the site and services clients themselves.

Popular participation, despite its obvious ideological appeal, has also been difficult to institutionalize in site and services projects. This is especially so in developing countries where squatters and slum dwellers have been locked in battle with government forces for years. Even in the plan formulation process where technical planners need suggestions from citizens, the gaps between these two antagonistic groups have rarely been closed. In some countries, there are efforts to involve the community more closely with administrative regulation. Citizen committees, for example, are used in Manila to screen applicants for site and services plots. In San Salvador, community leaders also exert pressures on members to pay their monthly installments regularly. Where such approaches have been successful, they have often been helped by the presence of full-time community organizers and *animateurs* whose main task is to keep in close touch with the community. Such persons, of course, require salaries and

entail some costs, which have to be carried by the budgets of site and services management bodies.

Fourth, although site and services have been used to cope with shelter problems in many developing countries, experience is showing that this kind of project is not for everyone. If urban dwellers in developing countries are put in categories ranging from those with the highest to those with the lowest incomes, site and services projects would probably be inapplicable to both ends of the continuum. Projects supported by the World Bank, in fact, are meant for a target population that ranges from the 15th to 60th percentile. In Zambia for example, a minimum income of $300 per year is needed for a household to qualify for a site and services plot. Other minimum income targets are $330 for Jamaica, $375 for Indonesia, $335 for Tanzania, $350 for Kenya, and $684 for Nicaragua and Senegal. Upper limits are $1420 per year in Botswana, $1300 in Senegal, $1000 in Indonesia, $1200 in Zambia, $800 in El Salvador, $1200 in Tanzania, $1100 in Kenya, and $2900 in Korea.

Peattie and Doebele (*3*) have pointed to this characteristic of the population served by site and services as being dangerous. They contend that selection of the lower middle income groups for site and services is, in effect, a "creaming" operation that hampers the economic relationships between these abler members of the urban poor and those who are actually the poorest of the poor. The danger, according to Peattie and Doebele, is that site and services may create "a spatial and social segregation" among the working classes. This may serve to hinder the progress of the members of the underclass who often depend on lower middle income groups for their climb toward economic and social advancement.

Finally, what a site and services concept means, most of all, is the realization that providing shelter for the urban poor requires subsidy. This subsidy may be shallow or deep, but income and economic figures from country to country reveal that an adequately built and furnished house is increasingly outside the reach of large numbers of the urban population. Site and services projects have paved the way to softening the hard arguments of economists that housing investments are nonproductive. This has been done by pointing to (i) the inputs of squatters and slum dwellers in housing and community amenities, (ii) the relatively modest magnitudes needed for housing investments, (iii) the pay-offs from housing, and (iv) the absolute necessity of doing something about the housing crisis. Currently, "hard currencies," such as loans from the World Bank, are being devoted to housing. This is, possibly, the most important change brought about by site and services. While the debates on whether housing is a productive investment or a welfare and consumption expenditure are still raging, enough policy-makers in developing countries are becoming convinced that housing is important, and they are devoting resources to site and services and similar schemes to alleviate the shelter problems of the urban poor.

What Can We Expect?

After a couple of decades of experience with site and services, some trends have become apparent. To begin with, the site and services approach will most likely spread to other developing countries. The pressures for shelter in urban areas continue to mount as rural-urban migration and rapid population increases contribute to accelerated growth of cities. The World Bank's involvement in site and services will, almost certainly, increase. At present, a careful evaluation of site and services projects is being carried out by the World Bank, in collaboration with the International Development Research Centre and researchers from Senegal, Zambia, and El Salvador. This evaluation is aimed at finding out not only whether site and services in these countries is accomplishing its objectives, but whether the impact of site and services on the people and communities influenced by it is positive or negative.

It can be said that the World Bank became involved in site and services more by "political will" than by careful means-ends analysis. The first projects supported by the bank contained premises and assumptions that were based on questionable economic calculations or empirical data that could barely stand the cold test of cost-benefit analysis. Mainly the problem was that the social aspirations of site and services meant that indicators other than purely economic ones had to be used in estimating targets and impacts. The methods for gathering data on such "soft" indicators, in a variety of countries with divergent cultural and social contexts, were also grossly underdeveloped and untested. As more site and services projects are undertaken, better information on the effects and impact of such projects should become available.

Regarding the nature of site and services projects themselves, the future will most likely witness the following trends.

1) Projects will combine more options than just site and services and squatter upgrading. Such components as materials loans, semi-finished or finished housing, mixture of public with private housing, and addition of rental to owner tenure systems, may be tried in more and more projects. The history of site and services shows the wisdom of a learning strategy where past successes and mistakes are fed back into present and future programs. Already, the Pikine project in Senegal is very different from the Santa Ana project in El Salvador. Both will be different, still, from the Tondo project in Manila or the kampong improvement scheme in Jakarta. As specific political and social conditions are encountered in client countries, site and services will evolve in accordance with such changing conditions.

2) Projects will cater to varying types of populations. The choice of lower middle income people for site and services has been dictated by the conflicting goals of serving the needy while, at the same time, recouping investments. With more site and services projects, subsidies will become more and more acceptable and projects will gradually include the lowest income groups. This trend will depend, of course, on how successful site and services projects become. If they are successful, and they become viable instruments for the improvement of the life of those living in them, then the economic resources of countries will improve, and more subsidies should be forthcoming.

3) Site and services projects will most likely become smaller and less visible, consisting of interlinked projects within an urban area rather than large easily identifiable complexes. Planners of site and services projects have been criticized for setting up "planned slums" and encampments for the poor. The high visibility of such projects has made them the center of political controversy. Since making the projects work is hard enough, without the problems that controversy brings, planners are now thinking of designing site and services projects so that they are more natural and blend more with the total urban environment, that is, using the available local resources in scales more manageable than grand projects.

4) As site and services projects blend more with their environments, they will become more integrated with metropolitan or regionwide development plans. As was mentioned previously, one of the main mistakes in site and services projects in the past has been that they were

planned in isolation. The trend, at present, is to link site and services projects with other land uses and activities throughout the whole urban landscape. The linkages between home, job, entertainment, and service needs, mediated by the transport system, are proving crucial to the success or failure of site and services projects. Regionwide planning and administrative systems are beginning to be evolved in many developing countries to make for integration of urban services. Perhaps it is in this integration with the urban environment that site and services will eventually realize its potential.

5) In the same way that site and services are being fitted more effectively into metropolitan-region plans, there is also a trend to use the approach as one of the key elements in a national human settlements strategy. Most site and services projects in the past have been concentrated in large cities where the slum and squatter problem has been most acute. Lately, however, countries are requesting projects for intermediate and smaller cities. The motive behind introducing site and services among cities in a country's urban hierarchy is rooted in the hope that such schemes may help to encourage people to stay where they are, instead of moving to the largest cities. There is precious little proof that such a strategy will work, since economic rather than service considerations seem to be given more weight in migration decisions. However, here, as in other previous elements in site and services, experimentation seems to be warranted. It is in this learning-by-doing approach, after all, that the site and services concept has made its contribution to the theory and practice of urban and regional development.

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The Rush to the Cities in Latin America

Government actions have more effect than is generally recognized.

Frederick C. Turner

In Latin America, as elsewhere, rapid migration to urban centers has not simply resulted from the decisions of independent citizens or the indifference of government policy-makers. A principal cause remains the attractiveness of city life, which is enhanced by a host of decisions and programs of national and municipal governments. Considering the startlingly high projections for continuing urban growth, the problems of urban crowding and underemployment, and the feared potential for violence, the causes and effects of migration and growth require careful rethinking, particularly as they are related to a series of laws and government actions that is far larger than we commonly assume.

A central problem is that, without tight government regulation of urbanization of the sort found in the Soviet Union or China, programs designed to improve the quality of life for urban residents also induce substantial migration from rural areas, thus exacerbating the crowded conditions in the cities that the original urban programs were designed to ameliorate. Is it indeed possible to realize goals involving rapid economic development, city growth, and the expansion of social service programs, without doing away with traditional respect for individual freedom in the decision to migrate? If so, we require a detailed appreciation, not only of current demographic trends, but also of the myriad ways in which governmental actions affect migration patterns.

Rapidity of Urbanization

Important variables are the extent of the migration, who are migrating, where they are going, and what the chances are for recent patterns to continue into the future. The growth in city size has been, and will continue to be, very large indeed. By the year 2000, urban centers in Latin America are expected to contain 500 million people, with 19 metropolitan areas alone encompassing 250 million, up from just 70 million in 1975 (*1*). Cities in this region are typically growing at more than 4 percent a year, with some increasing at a considerably greater rate. Annually, Latin America's rural population rises by 1.5 million persons, while its urban areas swell by 7 million (*2*), with very little of the increase coming from international immigration (*3*).

Brazil, which now contains nearly two-fifths of the population of Latin America, reflects this trend in regional growth. As Table 1 demonstrates, migration into Brazilian metropolitan centers has been massive. From one-fifth to more than one-half of the population of the cities has come from migration. In São Paulo, almost 10 percent of the migrants and more than 5 percent of all the people in the city have lived there less than 1 year. Despite the high density of population in Rio de Janeiro and São Paulo, people continue to flock there, attracted by the appearance of high wages. Between 1970 and 2000, the percentage of Brazilians living in urban areas is expected to rise from 40 to 65.

The migration is not just a matter of rural men coming to the cities for jobs; people of both sexes and whole families seek new opportunities in the cities. Among Mexico City residents who were born elsewhere in the country, for example, the 1970 census revealed more women (1243 thousand) than men (1025

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