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Programming of land use is essential to accomplish local and regional development goals and to avoid the chaos that often accompanies rapid growth. This publication can serve as a useful guide for the Office of Urban Development of A.I.D. in furthering its development of field demonstrations of land-use programming approaches for cities experiencing rapid growth. Cities examined in detail in the study are Antalya, Turkey; Goiania, Brazil; Penang, Malaysia; and Merida, Venezuela; each city ranges in population from 100,000 to 500,000. They are significant industrial or processing centers, and are targets for rural migration, thereby offering a serious challenge to each nation's capacity for allocating resources. Their environments strain the capacity of national resource management and require adaptation among politicians, planners, and governmental agencies at the national, regional, and local levels. This report examines the development context in which the intermediate city has evolved, reviews land-use planning and control techniques that could be made applicable to other cities, and recommends approaches to international assistance.

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**Land Use and the
Intermediate-Size
City in Developing
Countries**

Malcolm D. Rivkin

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**Land Use and the
Intermediate-Size
City in Developing
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With Case Studies
of Turkey, Brazil,
and Malaysia

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FOREWORD

William R. Miner
Eric Chetwynd, Jr.

Programing of land use is essential to accomplishing local and regional development goals and to avoiding the chaos that so often accompanies rapid urban growth. Many formerly small and quiet cities have been growing so rapidly in recent years that local institutions are severely strained in trying to guide and accommodate this growth for the best interests of the community. This rapid urbanization, which has had also a significant role in the development of their rural hinterlands, is both a serious problem and a great opportunity for development.

Recognizing this fact, the Office of Urban Development of the U.S. Agency for International Development engaged the services of Rivkin/Carson Inc. (now Rivkin Associates, Inc.) to prepare a study on practical approaches for land-use programing for intermediate-size cities in developing countries. This report is the product of that research, and we are grateful to the author for moving us forward in this important field.

The study has been a useful baseline and guide for the agency in furthering its development of field demonstrations of land-use programing approaches for intermediate-size cities. We hope the reader will find the report equally as useful in his or her own developmental interests.

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Literally dozens of people gave generously of their time and comments during the preparation of this study. They included public officials, faculty members, and private practitioners in the several countries visited, as well as officials of the World Bank, the Organization of American States, the United Nations, the Ford Foundation, the Agency for International Development itself, and individual U.S. Embassies.

Special thanks for insights in developing the conceptual approach go to Dr. John Friedmann of the University of California, Los Angeles, and Mr. Charles Boyce and Mr. Evner Ergun, both of the United Nations.

Dr. William Miner and Mr. Eric Chetwynd of AID's Office of Urban Development provided counsel throughout the project and expedited numerous arrangements.

Responsibility for the conclusions and recommendations is totally that of Rivkin/Carson, Inc. Dr. Malcolm D. Rivkin was project director. Goldie W. Rivkin participated in the Brazil field study and reviewed and critiqued the entire report. Jeffrey Kay prepared demographic material.

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PART

I

ISSUES AND
BACKGROUND

Antalya, Turkey; Goiania, Brazil; Penang, Malaysia; Merida, Venezuela: None of these is exactly a prominent entry in the lexicon of world urbanization. Certainly none conjures up the images—both positive and negative—of cities in developing countries that come to mind with the names of Istanbul, Rio de Janeiro, Calcutta, Jakarta, and other primate metropolises. Yet each is today a major industrial or processing center and a target for rural migration. High-rise office buildings and apartments are proliferating. The four all have local universities. All have traffic jams and housing problems and problems of water supply and distribution. Each lacks adequate sewage disposal and public open space and sufficient health and educational services. Competition for land is fierce, and land speculation is on the rise.

Each represents a phenomenon that is a “two-edged sword” for the nation involved: on the one hand, a tangible means for fostering economic integration of hinterland regions and for deflecting rural-urban migration away from the main primate centers and on the other, a serious challenge to the nation’s capacity for allocating resources and for effective public administration. This phenomenon can be termed “emergence of the contemporary intermediate-size city.”

The intermediate cities may range in population from 100,000 to 500,000; although, depending on the particular country, some may be found below and above these levels. The complexity of their economic and social relationships is more significant than the number of people. While they may function as regional markets or as provincial capitals, they have passed beyond these relatively simplistic functions to become producers of goods and services for their region and for export to other regions and abroad. Some of the intermediate cities are the “growth poles” or prospective “growth centers” whose encouragement was fostered in the national development plans and the planning literature of the 1960s—those promising locations away from the metro-

politan regions where productive investment could aid in diversifying a national economy. No longer are many of these places "prospective" growth centers, however. The ones cited, and dozens of others throughout the developing world, are today generators of population growth and economic development. (Brazil's Goiania is a manufacturing and mining center as well as a provincial capital of 400,000 people. It has been growing at the rate of 16 percent a year since 1960. Antalya in Turkey is a tourism and agricultural processing complex. It was 55,000 in 1960 and is pushing 125,000 today.) These communities are proof that contemporary economic diversification, improved income distribution, and urban attractions for rural emigrants can exist outside the traditional main metropolitan centers. From an administrative and land-use control standpoint, they are still small and self-contained enough to be a good deal more manageable than the major metropolises whose expansion has been the principal focus of attention for developing countries and international agencies alike. At the same time their rapid growth lays claims for support with infrastructure, housing, and services—claims that put the intermediate cities in direct competition with the major metropolises for limited public funds and skilled administrative manpower. It is this situation that strains the capacity of national resource management and requires adaptation among politicians, planners, and governmental agencies at the national, regional, and local level. Land-use control has emerged as a necessity within many intermediate cities and appears to be one of the problems for which solutions are dangerously slow in coming.

This study represents a first attempt at examining the issues involved and the potential role for international assistance agencies in improving developing-country capacity to deal with land-use problems in intermediate cities. It was begun as a modest effort to identify the array of land-use planning and control techniques suitable for application in medium and smaller-size cities in developing countries. However, both the literature review and the field investigations revealed that "techniques" were but the tip of an iceberg. Indeed, for any technique to be applicable, four favorable conditions must exist: (1) institutional mechanisms expressly geared to dealing with the land-use and infrastructure problems of cities outside the main metropolitan regions; (2) some measure of national government priority to provide a flow of planning and infrastructure funds to rapidly expanding communities outside the main metropolitan regions; (3) technical capacity (for example, manpower) to plan and administer for these communities, located physically in the communities themselves; and (4) local political receptivity to growth management and control.

Thus the identification and application of techniques must be conducted with an understanding of a much broader institutional frame-

work. It is in the creation of that framework that LDCs* face the most immediate challenge with, in our opinion, a limited though promising role for international assistance.

This study report is organized as follows:

Chapter 2 examines the development context in which the intermediate city has evolved to claim attention; in Chapter 3, there is a review of those land-use planning and control techniques that could be made applicable to intermediate-city situations; Chapters 4 through 6 are reports of field investigations that expand on the interrelationships between institutional structure and land-use control techniques; and in Chapter 7 are recommendations for approaches to international assistance, with specific proposals for program activity in this field.

* Throughout this book, the terms "developing country" and "less developed country (LDC)" are used interchangeably.

CHAPTER

2

**URBANIZATION AND
DEVELOPMENT**

THE CONTEXT

At this writing, it is safe to say that national governments, international assistance agencies, and scholars in the development professions are all aware of significant relationships between urbanization and the development process. To a great degree the awareness is recent. During the 1950s and 1960s, the prevailing view of development (by decision-makers and scholars alike) was in terms of investment sectors—for example, transportation, agriculture, industry, education, and so on. Although many regional planning and development projects were launched to open up new resource areas or provide counterweights to concentrated investment and migration at primate centers, only a few urban professionals espoused direct linkages between a nation's settlement pattern and its economic and social development. Now, concern for city development enjoys a legitimacy that did not earlier prevail, although priority varies among nations and agencies.

Massive rural-urban migration and the sheer extent of city building have been the most important factors to demand a shift of attention. As Robert S. McNamara described the issue in calling for an "urban priority" by the World Bank:

The scale of the problem is immense. During the decade of the 1950's, the urban population of the developing world expanded by about 50 percent. Today, the major cities are doubling in size every decade. By the year 2000, their total will be some 500 percent higher than today. That means that from 1.2 to 1.6 billion more people will be living—if "living" is the appropriate term—in these sprawling centers of urban decay.¹

The Bank, the United Nations, the Ford Foundation, and the U.S. Agency for International Development (AID) itself have all recently conducted global reviews of urban development that agree that the population growth in cities—at rates and magnitudes exceeding the presently developed West at comparable periods of economic transition—present most LDCs with formidable challenges.

Yet apprehension about population now comes in the context of understanding that the physical city is an essential ingredient in economic growth. John Friedmann once commented, “Economic growth tends to occur in the matrix of urban regions. It is through this matrix that the evolving space economy is organized.”²

By way of example, in just the spring of 1974, that theoretical position was echoed by the Brazilian Government’s decree creating an urban policy body at the cabinet level: “It is certain that the high indices of economic growth which we have achieved in the past several years are due, in great measure, to the expansion of productive activities in the major cities, notably industrialization.”³

AID’s study concludes that the positive aspects of urbanization go far beyond quantitative measures of gross national product (GNP) and other economic indicators.

The urban environment is a vehicle for the rapid diffusion of knowledge, social standards, new life styles; learning and innovation characterize the urban scene. Nor does the diffusion stop at the borders of the urban center; the products of modernization are distributed also to its hinterlands. As the urban center acts as a vehicle for the diffusion of the products of modernization, so also it may facilitate the national integration of the often diverse tribal and other groupings, especially in newly independent countries. Finally, while the pace and scale of growth may appear to be the most tangibly frightening attributes to urbanization, these characteristics may point also to opportunities for economies of scale, the capability of supporting larger operations at lower cost per unit.⁴

If a single statement could express the current state of world awareness, concern, and groping over “urban” issues in developing countries, it would be the following comment from the Ford Foundation:

The widespread recognition that the growth of cities appears to be an inevitable aspect of world population increase is but one element of the current concern with urbanization.

Equally apparent and troubling to the international agencies are the problems of traffic congestion and transportation inadequacies; of growing unemployment and underemployment; of the severe and constantly widening gap between the need for housing and the effective demand of the urban poor; of the relentless deterioration in urban water supply, sewerage, and drainage systems; of the deficits across the full range of social services.

At the same time both the processes and products of national development planning are being scrutinized more closely by the agencies and by the countries themselves, with an increased interest in regional development, often centered on urban growth poles, emerging as one result.

There is a growing awareness that the phenomenon of urbanization presents a complexity of problems which past experience suggests cannot be effectively addressed through the traditional and more usual sectoral lines of assistance alone. The "urban crisis" is all the more distressing in light of the generally held view that urban centers are important arenas for the process of social development and change within the less developed regions of the world.⁵

As the above comment indicates, once the physical city becomes the focus of attention, a whole host of resource allocation, administrative, and social issues are revealed—issues that should theoretically be susceptible to public intervention. Land-use planning and control represents one such category of urban issues.

THE CONTROL OF URBAN LAND

Our study is based on the following premise: Urban land control becomes a serious issue only in conditions of rapid urban growth. Land-use planning as a discipline can be effective at various levels of activity. At a national level, it may come into play when selecting the regions and centers where development will be emphasized and establishing the communications links among them. Much regional planning involves considerations of land use—for example, setting boundaries between agricultural, resource exploitation, and urban zones; laying out industrial and residential concentrations; and setting the basic road network and service allocation for the pattern of settlement within the region. Small, stable, or declining communities have basically simple land-use requirements that can be readily assessed within a regional planning exercise.

It is when new investment and/or rapid migration jolt a stable or uncomplicated pattern that special efforts at guiding the internal

physical growth of a city become important, and regional planning alone is insufficient. Such guidance should be brought to bear in the following situations: when successive rounds of investment, reinvestment, and migration require complex contemporary infrastructure and services, infrastructure and services to sustain both development momentum and the growing aspirations of the populace; when increasing densities present health hazards; when equally desirable activities compete for the same space; and when an environmental ambience that compensates for lower standards of living as measured by capital goods is under danger of destruction.

Thus a large agricultural service center of adobe huts with a central market, outlying distribution facilities, and rudimentary sanitation may not be a candidate for land-use planning if its functions persist and if population remains relatively stable. Insert a steel mill and a superhighway, and the picture changes. Add a growing middle class, low-income workers to be housed, needs for schools, health centers and recreation areas, and widespread automobile ownership, and land-use control is a must if chaos is not to ensue.

Our approach thus considers urban land-use control in a developing country to be a "contingent" priority, contingent upon the presence of certain circumstances rather than a universal necessity.* It is a pragmatic, rather than a purist, conception. The full significance of this position will become clear in the discussion of intermediate cities below. For it is our contention that, until relatively recently, many countries possessed only one or a handful of urban centers whose dynamics warranted national priority to land-use control. These were the major metropolitan regions that functioned as concentrated centers of modernization. Today, many of these same countries evidence numerous intermediate cities that are undergoing rounds of development and immigration. Several claimants for priority attention exist, and this very escalation of the numerical loci of development places demands for adaptation on a nation's institutional base and manpower comparable with accelerated urbanization itself.

For those nations, especially in Africa, that have not yet seen a dispersion of urbanizing influences, the situation may represent a harbinger of things to come.

Processes of land-use control have been variously defined. We prefer a formulation that relates the use and availability of urban land in space and over time. Essentially, land-use control is a publicly administered process that is (1) based on an array of goals and standards—either explicit or implicit—as to the locations, linkages,

*Considering the scarcity of trained manpower, any concept of a wider application would be a positive luxury.

densities, and character of uses that may occupy land in a given city or society; (2) able to assure the availability of sufficient land for necessary uses (such as housing, industry, recreation) and the utilities to service these uses (transportation, water, sewer, and so on) at the time and in the sequence required and at reasonable cost; and (3) able to resolve equitably conflicts among and between uses.

There are many different approaches to land-use control, ranging from flexible strategies of intervention that rely on governmental ability to direct growth through the provision of infrastructure and services, to highly complex and detailed city-wide use/density plans. Each approach elected may generate a different array of implementing techniques (for example, regulatory systems, tax mechanisms, acquisition devices), although similar techniques may appear in a variety of institutional settings. At best, land-use control is an imperfect exercise and highly responsive to economic, social, and political forces within a given society. It is basically an attempt to apply rationality to these processes as they affect urban land. And, as Arthur Glikson has said, must we not try to impose some rational order rather than allow the course of urbanization to proceed unchecked?⁶

Imperfect though these efforts may be, hopefully a community can meet its future more ably than in their absence.

A recent United Nations study, which stands as the most definitive compilation of global approaches to land control, provides a succinct rationale for such activity. It is a rationale that places the land-use issue in appropriate perspective as regards a developing country's economic and administrative commitments.

. . . As the world has become more and more urbanized, the effective control of urban land resource has become critical. The magnitude and physical scale of the urbanization process has clearly shown that urban land is a scarce resource that must be carefully and wisely allocated if the environment of man is to be improved. The increased demand for urban land is not only attributed to increased urban population but to changes in social and cultural habits, changes in transportation and communication systems, changes in how people spend their leisure time and the changing needs of production processes One point is clear Cities are experiencing and will experience acute problems in providing an adequate supply of land at the right place and at the right time. Indeed, the problems of urban land are found everywhere, regardless of the level of development or existing social, cultural and economic systems.

The demand for urban land is growing, yet the supply is both genuinely and artificially limited. This situation

radically increases land costs and in turn, consumes scarce investment capital better used elsewhere. It also irrationally distorts patterns of urban growth and development. This latter fact leads directly to a third round of undesirable consequences; as the urban infrastructure becomes more costly and inefficient and institutions and facilities fail to provide adequate services to their populations, urban social and economic imbalances and injustices are intensified, the quality of the total urban environment erodes, and it becomes difficult to harmonize man's activities with the components of the natural environment. Thus, pollution, noise, and other hazards all increase. The issue now is no longer the economic value as determined by the goals and needs of urban society.⁷

The report, a six-volume survey by continent, followed up by an international seminar in 1972, goes on to recommend adoption of land-use control procedures sensitively honed to the specific conditions (administrative, social, and economic) of each individual country. It furthermore emphasizes that financial resources be made available to acquire the sites and build the facilities determined through rational procedures and that political decision-making be supportive of the process.

On the specific subject of replicable techniques, the study offers the following comments:

Unfortunately, though some countries have used some land control measures more than others, empirical research findings on the effectiveness of the specific measures are not available. Therefore, the adoption of a technique used by another country, given the present state of knowledge, involves a calculated risk Only when clear policies are established as the basis of the control, and when strong enforcement procedures are put into effect can any control achieve its purpose.⁸

Today there is still almost no empirical research to measure the effectiveness of specific land-control techniques or to relate the impact of such techniques back to original policy objectives. This study can in no way fill that gap. However, our field reports on Turkey, Brazil, and Malaysia, based on first hand observation of various approaches will try to provide some insight into the factors that determine effectiveness.

THE METROPOLITAN FOCUS

With the exception of the United Nations study, in which we participated, and sections of the Ford, the International Bank for Reconstruction and Development (IBRD), and the AID reports cited earlier, there has been very little analytic literature dealing with the subject of land-use control for developing countries. Much of the material that does exist is directed toward projects and issues in the major metropolitan centers. This state of the literature is directly reflective of three phenomena: the recency of urban development as a matter of international concern; the relatively low intellectual and research priority for land use within this concern; and, most particularly, the fact that the primate cities claim the largest concentration of land-use professionals, agencies, and educational programs.

Most of the research and theoretical material, both international and in the LDCs, has concentrated on what might be termed "macro-analysis" in the urban field. Perhaps the most significant investigations have dealt with the roles that cities play in the national development process; with examinations of growth in population and economic activity and the implications of such growth for national development; and with large questions of urban development policy. The issues of economic concentration at primate centers have been well explored, along with theoretical examinations and case studies of various approaches to deconcentration, dispersion, "growth poles," and so on. Many case studies on social, economic, and political characteristics have been performed—on a national and individual city basis. There have been urban policy and urban administration analyses. Indeed, within the last decade, the literature on developing countries has been considerably enriched by widening interest in comparative urbanization studies. (A special field of concentration has been established at UCLA in comparative urbanization, for example, and several bibliographies and working papers have been produced.) Land-use material does exist but is essentially descriptive (for example, Walter Harris, Jr.'s The Growth of Latin American Cities) or the normative reports of foreign advisers prescribing programs and measures to be undertaken in the future. It is significant that our review of the reading list for the training program at the Institute of Social Studies in the Hague—one of the principal third-country training centers for urban planners and administrators—revealed that most of the literature was Western and most of that related to land-use issues and approaches in the United States.

To be sure, considerable documentation exists in the files of international technical assistance agencies, and plans and studies are in general circulation that deal with land-use issues in Lima, Dar Es

Salaam, Bogota, Calcutta, Istanbul, Rio de Janeiro, and other metropolitan centers.

There is good reason for the metropolitan focus. In 1970, the Rio-Sao Paulo megalopolis contained over 40 percent of Brazil's industrial employment. In 1960, Istanbul, Ankara, and Izmir held 40 percent of Turkey's industrial production. In 1951, Calcutta and Bombay together represented only 14 percent of India's urban population, but almost one-half of the country's industrial establishments. This is hardly a representative sample of places and times but would indicate that over the development decades since World War II the economic significance of primate urban regions has been such to demand the attention of what limited land-use control capability was available.

A more subtle condition has also helped. The primates are the chief centers of modernization and Westernization, the loci of the principal universities, theaters, and services. Many are national capitals (the control centers for the country), providing good private and bureaucratic employment and the amenities that attract an intellectual elite. Architects, planners, and economists are as susceptible to these blandishments as physicians and businessmen. They are as likely to stay in the metropolis as any other professional. It is not hard to see why the primate centers have become the most favored settings for communities of urban professionals.

This situation is highlighted by the following commentary in a report for Indonesia:

To an important extent, this concentration of development powers at the Centre has been associated with a noticeable, and again understandable, internal "brain drain" of the very small cadre of well trained professionals (in a variety of disciplines) and development leaders from the provinces to Jakarta. This situation, of the excessive concentration of the scarce resource of professional talent in the national capital, is of course by no means unique to Indonesia among the wide range of developing countries faced with the similar immediate priority of staffing the key central agencies of government. Whatever the complex reasons for the magnetic attractions of Jakarta—for the remarkably small group of skilled professionals, one of the consequences is the progressive weakening of the provinces, and of the sub-national levels of government and agencies of development, by the removal to Jakarta of a significant number of development leaders required to create the system of "development in depth" that is so urgently needed⁹

Moreover, the education and training provided in the United States and in Western Europe for urban professionals has reinforced the metropolitan concentration. And there has been a great deal of such training in Western universities over the past several years. Those aspects of formal Western education that are relevant to developing countries are primarily relevant to the metropolitan areas, because these have been the prime loci of interest for Western professors. But perhaps of equal or greater significance have been the ambience and opportunities present at Western university centers. After one has had a year or two of exposure to Berkeley or Paris, only the metropolitan regions of the LDCs can offer some comparability in life style. It is our impression that most of the candidates for overseas urban training come from the metropolitan agencies or universities of the LDCs, and it is a rare returnee who chooses to settle any place else. Commenting on this situation, rather ruefully, the chairman of one land-use training program directed towards LDCs said, "Overseas education reinforces the elites, and in so doing reinforces the duality between the metropolis and the rest of the nation."

The direct technical and financial assistance of international agencies has also reinforced concentration of land-use control activity and land-use policy in metropolitan regions. Because of the nature of international assistance—invariably in response to LDC priorities and requests, as well as needs perceived on the part of the agencies themselves—this focus is understandable. We reviewed both with the United Nations and the IBRD the nature of their present programs directed explicitly toward land use and integrated physical development (as distinguished from sectoral activity). Most of the United Nations technical assistance deals with planning for the major centers or advice to central government agencies on overall urban policy. The World Bank has purposefully concentrated land planning assistance in primates such as Istanbul and Bogota, and most of its sites and services undertakings—where land and utilities are provided as alternatives to squatter settlements—are in core cities. One bank official stated that IBRD has tried on several occasions to launch sites and services projects in intermediate cities, but with little success, due to lack of host-country interest or seemingly insurmountable bureaucratic obstacles.

There are however, some notable exceptions to this pattern—such as the AID and Ford Foundation support to Venezuela's FUNDACOMUN (a technical and financial assistance agency geared to the cities outside Caracas), UN regional planning projects in Panama and Korea, which involve strengthening regional urban networks; and most especially USAID support to Brazil's Instituto Brasileiro de Administracao Municipal (IBAM) and Servicio Federal Do Habitacio E Urbanismo (SERFHAU), both charged with developing planning and administrative

capability in smaller cities. Also, AID has made an urban-sector loan to Colombia that was primarily directed toward intermediate-size cities. Peace Corps volunteers have staffed provincial planning agencies in a number of countries. The Organization of American States (OAS) has held urban seminars in Brazil that involve officials of intermediate-size centers. These have been exceptions to the general pattern, for international technical and financial assistance in the land-use field has been directed primarily toward the institutions and issues of primate metropolitan regions.

We draw no adverse value judgments from this balance of experience. There is ample reason to conclude that the dynamism and importance of metropolitan regions warrant priority by national governments and international agencies. Nevertheless it is equally possible to conclude that the land-use control problems of many metropolitan regions have now intensified well beyond the capacities of the people, institutions, and resources deployed to deal with them. In short, even the current magnitude of concentrated effort is not up to the job.

No more dramatic example may be found than Brazil's Frontera I project. This is a massive undertaking to provide a new community for 250,000 low-income people in the Rio metropolitan area, many of whom are displaced from favela removal actions in the inner city. Regardless of the living conditions in these favelas, their residents did have ready access to employment and whatever services were available. But Frontera will be 80 kilometers from the center of Rio de Janeiro in an area that lacks any industrial employment and social services. Although some employment centers are planned in the vicinity, the residential areas will be constructed first, and even the best estimates of nearby job creation are lower than the anticipated labor force. Thus, arduous commuting is inevitable. The reason for the location was succinctly put by an official of the National Housing Bank: "This was the only area we could find of sufficient size where land costs were 2 cruzeiros per square meter, our maximum land cost for this type of housing. If we moved the project 40 kilometers closer to Rio, land costs would be 150 cruzeiros per square meter, and out of the question."

While the poor fare badly, unchecked metropolitan land speculation has put even middle-class areas in jeopardy. In Panama City, Rio de Janeiro, Ankara, and Jakarta, it is common to see pleasant older neighborhoods of single-family homes and small flats being ripped apart for high-rise apartments and office buildings. These are not slums in process of renewal, but well-constructed, low-density communities that provide open space and other environmental amenities. As one UN expert put it, "The elite haven't even been able to protect themselves against themselves."

Metropolitan land speculation is one of the chief, if not the chief, investment activities in developing countries and a principal barrier to rationalizing physical patterns. But as one high Turkish planning official commented, "It is difficult to legislate against speculation when many of us, the officials, make our own investments in land."

Due to the scale required, land speculation, the dwindling availability of sites, and the need to rip out existing buildings and activities for road improvements and utilities, the costs of metropolitan infrastructure frequently defy even those plans that are made.

In Istanbul, the IBRD is assisting a new comprehensive metropolitan planning and transportation program that is to be the basis for eventual infrastructure loans. But the tiny details, just of movement in the region, stand to thwart such a broad-gauge effort. Now, at mid-day it is literally impossible to cross the street in front of the planning office due to the flow and intensity of traffic. A traffic signalization system adopted by the city on the basis of an earlier study has not been installed, and the nearby public square that just a decade before was redeveloped for a broad pedestrian plaza is now a huge parking lot.

Yet despite the obstacles, and despite the prospects of never being able to "solve" once and for all the problems of metropolitan land development and services, the national import of these regions is such that continued and intensified planning efforts are inescapable.

THE INTERMEDIATE CITY

The Challenges

Serious though land-use issues in primate cities may be, the urban context in several countries is now further complicated by emergence of contemporary economies in intermediate-size cities as well. Some of these may be provincial capitals or processing centers far distant from the primates (Antalya in Turkey, Sao Luis in Brazil) and other fast-growing cities at the periphery of the metropolis (San Bernado do Campos in Brazil, Bursa in Turkey) that share in the dynamism of the core region but are physically and administratively distinct. The actual size may vary considerably depending on country (for example, David in Panama, which is 40,000 today and projected to reach 250,000 by the end of the century), but in general we can consider populations from 100,000 to 500,000 as the basic range. (These correspond to the international demographer Kingsley Davis's classification of "Class II" cities, a classification that is still the only available basis for an aggregate examination of comparative urban characteristics among developing countries.)

Size, however, is not the principal criterion. Far more important, in terms of raising land-use and utilities issues are the following characteristics.

1. Rapidity of population growth. The need to absorb relatively excessive increments of humanity precipitates demands on facilities and services that cannot be met by present levels or by past practices of gradual extension. Housing sites must be found, a residential building industry mobilized, and schools and health services and commercial areas created from whole cloth. Sao Luis, for example, a Brazilian port city of 270,000, is expected to increase at an annual rate of 20 percent over the next five years due to the advent of a new steel mill.

2. Presence of growing industrial or agricultural processing activities. While these core activities themselves require adequate sites and services, once they reach a certain scale, ancillary or complementary economic enterprises are attracted. Sites and services for these are required, and the process of creating industrial estates or creating a central area for commercial services is far more complex than laying out facilities for a single plant.

3. Increase in the physical "trappings" of modernization—such as automobiles, multistory buildings, supermarkets. These are signs both of economic complexity and of increasing aspirations on the part of the populace. They cannot be absorbed or serviced by a rudimentary street system or primitive sanitation devices. Thus Turkey's Trabzon is literally strangling in its own traffic now that both automobile and high-rise buildings have been superimposed on a 19th-century road pattern—and the increased density of sewage flow is dumping into the same stream as a decade before.

4. Growing threats to the community's environmental ambience, which served to compensate for relative economic deprivation at an earlier and lesser level of development complexity. As the growth pressures mount and failures at orderly absorption of new development intensify, ameliorative conditions such as clean air and water and relatively easy access to open countryside begin to disappear. Public action is required to avoid further degradation.

It is these conditions that "jolt" traditional patterns of land ownership and physical form, which come hand in hand with land speculation as investment and produce the conflicts that require land-use control. Formerly limited to the metropolis, they are now present in intermediate cities as well.

In so far as these intermediate cities do exist in LDCs, they are signs that—despite the disequilibria of migration and the hardships

of urban adaptation—economic and social development is spreading beyond its initial points of concentration into the metropolitan hinterland and to other regions. “Interregional balance and an hierarchial system of cities are essential conditions for national development,” says John Friedmann. “The simple center-periphery structure is gradually transformed into a multi-nuclear structure as investments are focused upon a number of strategically placed subcenters.”¹⁰

It is this hierarchy of cities, and their interurban and interregional linkages, that Friedmann, W. Christaller, and other urban theorists have suggested as coincident with a mature economy. And those LCDs in which a hierarchy is evolving may be making a transition to mature economic status.

To the degree that these cities grow without undue hardship and act as economic and social integrators for their respective rural regions, the cause of broadened national development is fostered. But the issues make the outcome by no means certain. Charles Boyce of the UN fears that the dualistic society of metropolis and periphery may be replicated in many Latin American intermediate cities as their problems of poverty and underemployment proliferate and the peasantry outside remain at primitive levels. To avoid this juncture, concerted efforts at regional planning and at regional development integration—with the economic and social potential of the intermediate cities as a focus—become increasingly necessary.

However, the traditional concerns and skills of regional planning are inadequate to deal with the internal land-use questions of the cities themselves. These problems—adequate open space, coordinated utilities provision, resolving competition among uses, land speculation, traffic relief, desirable densities, and so on—must be met at the scale of the city itself. They cannot be afterthoughts or subsidiary concerns within a regional planning framework. For many of these communities are now on the way to becoming the metropolises of tomorrow. Why permit them to be strangled at this early date? Prudence, or at the least some recognition of the lessons of urban history, would dictate planning and land control now. Relating this urban growth to external regional needs and to larger regional policy is critical. So, too, however, is existence of an internal mechanism for land-use programing and control.

Some Important Nuances

We suggested earlier that emergence of the intermediate city is a “two-edged sword” for a developing nation. On the positive side, there are increasing signs that public capital investment may have a higher benefit-cost ratio in intermediate-size (250,000 to 500,000

people) industrial communities than in the metropolis. This was a prospect raised in a paper by Charles Boyce and Sergio Boisier presented in September 1974. The authors analyzed data from Brazil and Venezuela and suggested that "in the design of the national urban planning strategy, the most effective manner of attacking income distribution is to emphasize the comparative advantages of cities of moderate rather than giant size."¹¹

There is also an inescapable conclusion that the "problems" of an intermediate city are not as intractable as in the primates. By and large, workers' housing, wherever it may be located, is within relatively easy reach of employment. There is relatively easy access to open countryside as an escape from congestion. Despite disagreements on where to put industries, services, and utilities, accessibility to available land on the periphery if not the center is relatively good, if only because the scale of present development is so much less. In principle the management of urban growth should be relatively straightforward here, if the techniques, funds, and manpower are forthcoming.

But there is a negative cutting edge as well.

Although unit costs may be less than in the metropolitan centers, fairly sophisticated utilities and services are essential. For example, because of favorable soil conditions, Turkey's Antalya had been able to dispose of sewage from individual structures in drainfields. Today the city with high-rise elevator apartments lacks, and needs, a modern sewer network, not to mention sustained sources of electric power. In requiring contemporary utilities and services to match new rounds of economic growth, these cities move into competition with the metropolitan centers for limited supplies of capital and for the manpower to plan and manage these investments.

By and large, these communities are economically dependent on national and provincial governments. For whether the system is federal or centralized, municipalities in LDCs appear to have or to mobilize few internal sources of revenue. They are unable to raise, locally, sufficient capital for sophisticated infrastructure—not to mention funds for acquiring public open space or for operating adequate health services. They must rely on grants and loans from higher levels of government. (Boyce classes the need to broaden revenue-raising ability of these intermediate cities as a principal task for urban reform in Latin America.) Thus, instead of a handful of complex development areas to worry about, a nation may now be concerned with many, and many competing for priority. But the pool of funds does not increase commensurate with national need, and it is possible that no single area may emerge with adequate resources.

Very often the local politicians and administrators (whether appointed by the central government or elected) are incapable of

managing the transition to contemporary economic status. Few of these communities can command local staffs of planners, regardless of skill, and planning decisions of great import are made by politicians and administrators often insensitive or unsensitized to the implications of their decisions. The caliber and training of the people who run these communities and their technical staffs become a matter of serious concern. For these are "the provinces," without the skill reserve of the primate center.

Complex development processes cannot be effectively planned and administered from a distance. Some countries have tried and, as the field reports illustrate, have learned that effective management and skilled manpower within the communities themselves are iron necessities. In many respects the management of development and land use in intermediate cities seems amenable to public action. However the human and fiscal obstacles are severe indeed.

Some Statistical Support

Because of the variability of data on LDCs, it was clear that the field investigations would provide the main sources of insight about land-use issues and intermediate cities. However, we felt it important to identify how widespread the problem might be, using what secondary source material was available.

How many LDCs are there that possess both primate centers and intermediate cities—countries where the land-use control situation in the latter may be an issue? As one basis for identifying a sample of countries to examine, we chose the list of those developing nations (70) where the U.S. Agency for International Development had some form of program activity in fiscal year 1973/74. The only recent comparable estimates of city size on a global basis were in Kingsley Davis's World Urbanization: 1950-1970, volume 1. We then examined this material to determine which of the above LDCs possessed both one or more large primate centers and one or more cities in the Class II category (100,000 to 500,000).

Conclusions were as follows:

1. Of the 70 countries, 13 had no city over 100,000 in size in 1970 and 27 had only one city above this figure. These 40 were clearly countries in, or not yet reaching, the initial "primate" stage of urban development.
2. Thirty countries had one or more cities over 100,000 in population in 1970.
3. Eighteen of the 30 held one or more large centers over 500,000 in population, and at the same time three or more smaller, Class II cities. These countries were distributed across three

TABLE 1

City Size Distribution in 30 Countries Assisted by USAID (1973-74)

Country	Class II Cities*		Class III Cities*		Class IV Cities*		Percent of Country Population That Is Urban
	No.	Percent of Urban Pop.	No.	Percent of Urban Pop.	No.	Percent of Urban Pop.	
<u>Latin America</u>							
El Salvador	2	34.1	—	—	—	—	39.8
Bolivia	1	10.0	1	50.0	—	—	25.3
Dom. Rep.	1	6.9	1	40.6	—	—	37.0
Ecuador	—	—	2	56.9	—	—	37.5
Chile	3	13.1	—	—	1	37.1	73.7
Peru	5	10.9	—	—	1	40.0	46.1
Venezuela	5	12.6	1	8.6	1	27.1	76.4
Argentina	11	14.5	4	16.8	1	55.4	70.5
Colombia	16	25.8	2	13.4	2	30.8	55.0
Brazil	25	12.3	5	7.0	6	44.1	53.5
<u>Africa</u>							
Ivory Coast	2	39.8	—	—	—	—	29.0
Zambia	3	43.5	—	—	—	—	26.3
Ethiopia	1	9.4	1	38.4	—	—	6.6
Kenya	1	27.9	1	50.0	—	—	9.2
Tunisia	3	18.2	1	33.1	—	—	43.4
Ghana	4	27.5	1	25.1	—	—	33.9
Zaire	4	22.2	1	19.3	—	—	17.2
Nigeria	17	22.1	2	11.3	—	—	20.9
Morocco	8	31.1	1	10.0	1	26.7	35.3

(continued)

(Table 1 continued)

Country	Class II Cities*		Class III Cities*		Class IV Cities*		Percent of Country Population That is Urban
	No.	Percent of Urban Pop.	No.	Percent of Urban Pop.	No.	Percent of Urban Pop.	
Asia							
Jordan	2	44.6	—	—	—	—	43.9
Afghanistan	2	20.8	1	44.3	—	—	5.7
Israel	2	29.8	1	38.1	—	—	81.3
Thailand	1	2.1	1	13.4	1	45.1	13.0
Vietnam	3	13.1	—	—	1	36.5	26.1
Philippines	10	22.8	—	—	1	46.2	23.2
Turkey	11	16.9	1	6.8	2	35.0	31.2
Korea	12	16.3	3	17.1	2	49.8	39.0
Pakistan (inc. Bangladesh)	14	18.9	4	14.7	2	28.3	15.9
Indonesia	17	16.7	5	16.1	3	35.0	17.9
India	106	21.7	12	7.1	9	24.5	18.8
Total	292		52		34		
	(186 w.o. India)		(40 w.o. India)		(25 w.o. India)		

*Class II: 100,000-500,000; Class III: 500,000-1,000,000; Class IV: over 1,000,000. Urban population also includes towns and cities under 100,000.

Source: 1970 estimates from Kingsley Davis, World Urbanization, 1950-1970, vol. 1 (Berkeley and Los Angeles: University of California Press, 1972).

TABLE 2

Phases of National Development and Regional Policy

Type of Economy	Preindustrial ^b	Transitional	Industrial	Postindustrial
Industry as share of GNP, 1950-55 ^a	0-10 percent	10-25 percent	25-50 percent	declining
Importance of regional policy for national economic growth	Inappropriate	critical	vestigial	shift to a new focus
Policy emphasis	Creating pre-conditions for economic development	Creating a spatial organization capable of sustaining transition to industrialism	Depressed area problems; area redevelopment; spatial adjustments to common market organization	Urban renewal; spatial order and circulation within metropolitan regions; open space and amenities of landscape
Examples of countries in each category	Tanganyika Paraguay Bolivia Afghanistan Cambodia Burma	Venezuela Brazil Colombia Turkey India Pakistan Iraq Mexico	France Italy West Germany Japan Israel United Kingdom Canada Australia	U.S.A. ^c

^aHollis B. Chenery, "Pattern of Industrial Growth," *American Economic Review* 1, 4 (September 1960): Table 1.

^bEstimated. See Everett Hagen, "Some Facts about Income Levels and Economic Growth," *The Review of Economics and Statistics* 42, 1 (February 1960): Table 1.

^cThe turning point, it appears, was 1953, when manufacturing industry accounted for 32.1 percent of the national income. The corresponding share of manufacturing for the average of the years 1960 to 1962 was only 28.6 percent. Compare U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States*, Series F 22-33 (Washington, D.C.: Government Printing Office, 1960), and *Survey of Current Business*, July 1963, Table 7.

Source: John Friedmann, *Regional Development* (Cambridge: MIT Press, 1966), p. 7.

continents and are as follows: Latin America (6): Chile, Peru, Venezuela, Argentina, Colombia, Brazil; Africa (5): Tunisia, Ghana, Zaire, Nigeria, Morocco; Asia (7): Vietnam, Philippines, Turkey, Korea, Pakistan (including Bangladesh), Indonesia, and India.

The subsequent field surveys provided actual census counts (1970) for both Brazil and Turkey. Since the Davis material represented estimates only, it was instructive to compare the two sources. Davis estimated 25 Class II cities for Brazil, while the 1970 census revealed 40. Davis's Turkey figure was 11. The census showed 17, and according to more recent review by Turkish authorities, there are now 20 urban areas that have passed the 100,000 mark.

Table 1 displays Kingsley Davis's data for the 30 countries cited above. Table 2 is a matrix from Friedmann, which is a shorthand classification of countries by stage of development. His "transitional" category contains many of the 18 countries that appear to possess the primate/intermediate-city mix. It is this category that he considers most promising to create "a spatial organization capable of sustaining transition to industrialization."

Again, population size is only an indicative measure, not a definitive one. From this limited statistical evidence, however, it certainly appears that the development prospects of intermediate cities should be matters of concern, if not priority, in several developing countries. Significantly enough, the United Nations, which has been in the forefront of recognizing urban development issues, is at this writing about to hold the first international seminar on issues affecting the intermediate-size city—in Nagoya, Japan, October 28–November 8, 1974.

NOTES

1. Robert S. McNamara, "Address to the Board of Governors" (Washington, D.C.: World Bank, September 29, 1969), p. 17.
2. John Friedmann, Regional Development Policy: A Case Study of Venezuela (Cambridge: MIT Press, 1966), p. 28.
3. From the statement of rationale for Decree no. 74.156, June 6, 1974.
4. U.S. Agency for International Development, "Focus on Urban Development: Perceptions, Problems, Approaches and Needs," Draft, April 1972, p. 4.
5. Frederick C. Terzo, "Urbanization in the Developing Countries: The Response of International Assistance" (New York: Ford Foundation, 1972), pp. 2-3.
6. See Arthur Glikson, The Ecological Basis of Planning, Lewis Mumford, ed. (The Hague: Martinus Nijhoff, 1971), p. xi.

7. United Nations, Urban Land Policies and Land Use Control Measures, vol. V, "Middle East," 1973, p. iv.
8. *Ibid.*, p. vi.
9. Colin Rosser, "Training in Regional Development in Indonesia," BAPPENAS, October 1974, pp. 4-5.
10. Friedmann, *op. cit.*, p. 37.
11. Charles P. Boyce and Sergio Boisier, "Medium Size Centers in Latin America and the National Policy of Urban Planning: The Case of Venezuela" (Panama: X Congreso Interamericano de Planificacion, September 1974), p. 22.

CHAPTER

3

**TECHNIQUES OF
LAND-USE PLANNING
AND CONTROL**

BASIS FOR SELECTION

What are the tools for programing and control of land use in intermediate cities? In answering that question, we must begin by drawing a distinction between techniques that are potentially applicable by professionals or administrators and those that are practical to foster within a particular developing country.

In the first instance, there are a number of approaches that appear to lend themselves to the variety of circumstances described in Chapter 2. This chapter is devoted to identifying these approaches: in respect to establishing (1) an information base; (2) a planning framework; and (3) control devices that may be employed in implementing that framework. If a government were interested in establishing a land guidance system for an intermediate-size city, these would probably represent a reasonable array of approaches from which selection could be made. All have been attempted in one fashion or another within a developing country (although mainly in a metropolitan setting). They have been cited in the United Nations land control study (in which we participated), and in other literature or have been employed by one or more of the countries visited during the field investigations. They are identified in the following pages as a kind of check list from which action programs could be derived.

Although this listing attempts to be inclusive, notably absent are activities that require elaborate mathematical modeling, computer processing, or large, skilled research teams. Given a presumed paucity of human and fiscal resources in intermediate cities, the levels of population involved, and the relatively discrete character of land-use issues, we believe such approaches are a priori inapplicable and could be paralytic if adopted in most instances. Such activities may have meaning in the primates or at a national or regional level if data and resources exist.

Even with this initial screening, practicality and adaptability depend less on the particular technique than on the institutional and human context within which the technique is to be applied. As we have indicated, little or no empirical assessment of any of these approaches exist. It would be necessary to examine critically specific national and municipal circumstances before making any prescriptions.

Thus, the case studies in Chapters 4, 5, and 6 attempt to "put meat on the bones" by examining interactions between techniques, institutions, and people to the degree possible within a modest probing effort. We therefore progress from identifying the range of possibilities to a search for factors that determine how practical or adaptable a possible technique may be. Chapter 7, on conclusions and recommendations, addresses where, in this picture, key opportunities for international assistance may lie.

INFORMATION

Availability of information is fundamental to the operations of any land-use programming or control process. Clearly the more information available about the community, its resources, and its potentials, the more sensitive the program and control process can become. However, it is important to stress that lack of extensive information on a particular subject, or information whose accuracy is clearly flawed, should not be deterrents to planning. So long as the gaps are known and some working assumptions constructed in their place, planning can proceed. Since planning can be a sequential and iterative operation, successive stages of review can benefit from successively fuller bodies of information.

The elements for which information is desirable are as follows:

Land Use and Soils

Land-use and soils mapping can be performed by relatively unskilled people using straightforward observation and coding techniques. However, it is in this area of information mapping that relatively new technological innovations can be most readily employed. Aerial photography is the most relevant of these, and it is conducted by the military or central government in many countries. Theoretically the military, planning ministries, or national research institutions could provide complete and recurring photo coverage on urban land use, soils, topography, and so on. The photos can be translated to maps, again at a central or regional level, and made available to communities. Turkey, for example, does the city surveys at the central level. Brazil's SERFHAU has contracted with individual cities for coverage as part of an overall planning package. Malaysia has an excellent

national mapping and survey system. At the present time, satellite photography is not applicable (according to our discussions with firms and governmental agencies in the field) primarily because discrimination cannot be achieved at a small enough scale for in-city use, although within a few years satellite systems may be available.

Cadastrals

Cadastral surveys provide mapped information on land ownership, identifying the dimensions of parcels as well as the owners. Under the SERFHAU program in Brazil, cadastrals have gone further to identify the quality and character of individual lot use. Cadastrals are extremely important as a base for evaluating issues of future land availability, but they are also the basis for assigning land and building values for tax assessment purposes and for condemnation proceedings. The OAS is placing particular emphasis in its technical assistance programs on training of teams to perform cadastral surveys. Venezuela's FUNDACOMUN has, through cadastral teams, rationalized the land tax systems of a number of cities and directly contributed to increased local revenues.

Demographic and Economic Base Data

What are the characteristics of the present urban population and economy? What trends are in evidence? Census material, local police population records, and interview surveys are all possible sources. As successive stages of planning may evolve, more extensive field observations, record searches, and interviews can be pieced together to provide portraits of social structure, retail activity, unemployment, housing, and other community characteristics.

Both the Turkish and Brazilian planning agencies have established detailed check lists of information to be gathered within each community, and the Turkish Ilker Bank sends teams from Ankara to intermediate cities and small towns prior to undertaking any planning work. These teams prepare a basic information document that then acts as the foundation for subsequent planning activity.

One of the most promising and indeed exciting products of technical assistance in the area of information-gathering (as well as planning) has been the handbook prepared by Charles Boyce for Venezuela's FUNDACOMUN entitled Elementos de Planificacion Urbana (1968). This document was written with a clear understanding of Venezuelan information sources and planning standards and provides a step-by-step approach to data-gathering, evaluation, and presentation of materials. It has subsequently been given wide circulation.

Policy and Program Review

Knowledge of what public agencies are already planning or have proposed for a community is extremely important. The same holds true for major private developments. This may be obtained by going directly to officials of various relevant government departments, seeking out known investors, and requesting the information. Simple and straightforward though a compilation may seem, it is surprising how infrequently those charged with a planning exercise undertake to assemble and present such material.

THE PROGRAM AND CONTROL FRAMEWORK

Planning

Planning can take place at many levels of sophistication and interaction. At one extreme is the planning "process" now being attempted in several developed nations that involves a continual flow of information; alternative formulation; consultation between planners, decision-makers, and citizens; preparation of planning policies and programs; and periodic revisions. This "process" depends on the presence of sizable and sophisticated staffs, good information, and a receptive political system.

A far more rudimentary approach is one that might be conducted, often without significant technical assistance, by the mayor or administrators of a small community. This is a "guide plan" method, under which gross areas are selected as suitable for various kinds of land uses, and then basic site location is identified for major roads, schools, and other public improvements. It is a highly flexible approach and suited to situations of imperfect information and rapid change. A guide plan provides a "gyroscope" for policy-makers and forces the thinking through of land-use decisions. It can serve until more extensive technical skills are brought to bear and is far better than no planning at all. Brazil's SERFHAU has tried to encourage a form of guide planning as the first step for communities, and some similar attempts have been made in Indonesia.

The British system, generally used throughout the former colonies, involves preparation of extremely detailed land-use, transportation, and density plans, which have official status as the pattern to be achieved. The Turkish approach is a variant on the British, with a whole series of documents and maps at various levels of generality and scale—culminating in a specific use and density prescription for each building lot. The principal problem with this method, of course, is that if the whole plan cannot be implemented, often none of it is put

into effect. Latin American land-use planning, perhaps influenced more by three-dimensional building and space design ("urbanismo"), has suffered similar problems. The rigidity of such approaches has contributed to the "gap" between plans and performance . . . although, again, if there are sufficient financial resources and political commitments to implement the product, such planning can function as a meaningful blueprint for a city. Witness the case of Brasilia, where an extremely detailed plan was implemented.

A more flexible approach is now generally fostered by international technical assistance agencies. It basically involves the following: preparation of some statement as to goals and objectives for land use and facilities; preparation of forecasts on population and economic trends and assessment of physical needs; preparation of generalized land-use and transportation guides; preparation of functional plans and programs that identify sites and capacity of open space, schools, health facilities, roads, water, sewer, and other utilities; some definition of staging, timing, and linkages of investments; and an implementation program involving legislation, government, and private action.

Again, the precise character and sequence of these steps, the level of detail employed, and the kinds of supplementary analyses prepared are all matters to be worked out in context of the specific country and specific city involved. Here, too, the Boyce guide to planification in Venezuela represents an excellent example of tailoring planning approaches to indigenous social and political circumstances.

Capital Budget

The capital budget forms a critical juncture between land-use planning and other elements of urban administration. While there is little evidence that it has been tried significantly in developing countries (although Brazil and Turkey are now experimenting as part of the planning process), we suggest it here as one of the few "essential" ingredients to a land-use control effort. Forms can vary from very rudimentary check-lists to elaborate schedules. Even without a formal land-use planning operation, a capital budget can be prepared by local administrators to provide some rationale for public activity. Ideally, however, it is an element in the planning effort. The following depiction is from the paper we presented to the United Nations.

The capital budget is perhaps the most powerful tool for shaping a city short of direct government action. Indeed, one of its functions is to order government action in scale and in sequence to make the most impact from scarce resources in the short run. The short-run nature of the capital budget is

critical. Ideally, the capital budget gives very specific directives for the use of public funds over a 1-5 year period. It is formulated according to the following process:

- a. The development goals of the city or region are assessed, and the goals of each public agency responsible for public works are identified.
- b. The specific projects which each agency wants to work on over the five-year period are identified and priced.
- c. All of the projects are identified on a map of the urban area so that complementarities and conflicts are revealed.
- d. Decisions are made, by the budget authority or planning agency, as to which land areas are critical for short term development or improvement and which of the areas or projects are appropriate for the purpose.
- e. The budget authority or planning agency then rejects or defers the projects which are incompatible with the land development objectives or each other.
- f. The chosen projects are then scheduled in sequence over the time period and provisions made for the necessary appropriation of funds for each agency.
- g. The governing body approves or modifies the budget and it is enacted into law.

One of the most serious urban problems—regardless of a country's stage of development—has been the unwise scheduling of public investment—the premature opening of areas for growth before or without adequate services. Thus, in many developing countries industrial areas were established without adequate electric power or transportation of workers. In developed nations, such as the U.S., sewer and water mains were extended to new suburban land, followed by housing, without provision for schools or adequate road systems. A firm capital budgeting process, conducted at the scale of the urbanizing area, can prevent these diseconomies and premature growth from occurring. Even more important, however, it can serve to direct public investment and allied private activity to growth areas that are deemed desirable by the governing body—areas where sufficient services can be provided.

In developing nations, where the scale of capital expenditures is modest, the lack of coordination among those expenditures which are made is legendary. Thus, the capital budgeting process can be of extreme importance. It demands disciplined growth and coordination. It appears to have worked effectively in Great Britain, other European countries and the United States, and is one of the most adaptable tools which exist.¹

SPECIFIC CONTROL TECHNIQUES

Planning and capital budgeting provide a framework for public exercise of land-use control. In and of themselves, without supplementary public actions, they are not control techniques. Ideally, such techniques should be applied consciously to implement the prescriptions of a planning/budgetary process. In practice, however, the techniques are often brought to bear independently of linkages to larger public objectives, a most regrettable occurrence.

In general, publicly exercised land-control techniques fall into one of three classifications: (1) positive actions by government, utilizing government power and financial resources; (2) negative actions by government, utilizing government power to restrain or otherwise direct private land-use and development activities; and (3) government actions that include both positive and negative elements.

Positive Techniques

Provision of Infrastructure

Infrastructure provision is the single most powerful tool for shaping the urban environment, short of public building of entire cities, neighborhoods, and so on. While a capital budget is a strong guide for growth, provision of roads and utilities can actually produce and channel growth. Once the basic services for new development are installed, a given area becomes particularly advantageous for such development. Infrastructure provision can take two forms: the basic transport and utilities systems that lead growth, and the service facilities such as schools, health, and community centers that support growth when it occurs. In most countries such infrastructure provision is a governmental function, although it may be distributed among a number of agencies and levels.

Next to sheer availability of funds for infrastructure, coordination of such investment so that land is made available and complementary services are installed when needed is perhaps the most significant recurring problem. In addressing the coordination issue, Brazil has only recently made the financing of all local infrastructure (from roads to schools) the responsibility of one public agency, the National Housing Bank (BNH). Turkey's Ilker Bank provides financing for only certain services, with the remainder in other agencies whose timing and budgets are often unrelated. Several countries, such as Colombia, have semi-independent local authorities (outside the framework of municipal government) to provide one or more services, an approach that aids provision of the specific service but often operates outside a coordination framework.

Land Acquisition

Most commonly, government acquires sites for public open space, schools, and other public facilities. These actions should come in advance of need, when land prices are low. Frequently, for lack of planning or programming, the acquisition action takes place well past the need, when speculation has driven up the costs to an often prohibitive level. As we review the literature, however, there appears to be a definite trend among LDC governments to recognize that public land acquisition is a most central element in development control. It is often the only firm guarantee of land availability for public purposes. The negative or restraining measures (see below) produced through regulatory action just cannot (administratively or politically) control speculation. Thus, despite excessive costs, countries are turning to advance land acquisition for housing and industry as well as public facilities.

This system of land banking has been practiced with great success in Sweden, the Netherlands, and certain parts of Canada (notably Saskatchewan). Now in India, the New Delhi government has acquired large areas of undeveloped territory as a land reserve. Land reserves have been attempted in Quito and Santiago. Turkey has recently established a Land Office in the Ministry of Reconstruction that is empowered to acquire land for both public services and industry in intermediate cities. While in principle a powerful new tool, the Land Office has been given a minuscule budget that enables it to acquire only a small amount of land in one or two communities. Here is another example of a promising technique, adopted with considerable political support, that is hobbled for lack of implementing resources.

The land-cost issue is particularly pressing in regard to fast-growing intermediate cities, which typically generate little in the way of local revenues for public works. In countries such as Turkey where property taxation is nationally levied and nationally collected, there is little opportunity for a city to do more than "compete" for national allocation of land-acquisition funds.

In several Latin American countries, where local government has a wider authority for taxation, there have been efforts to stimulate more local responsibility for land acquisition. Venezuela's FUNDA-COMUN has assisted several intermediate cities with cadastral surveys to rationalize the tax base and build up greater revenue-raising capacity. One of the most interesting exercises has been a recently prepared FUNDACOMUN report for the city of Merida entitled "Instrumentos para una Política de Tierra Urbana." Here the agency studied a range of issues involved in providing land for public open space and facilities and for overall urban expansion. Working with the municipal council, the study team outlined a cost/

benefit procedure for evaluating specific purchases and a strategy whereby Merida itself could undertake a long-term acquisition program. Again, this is an example of how technical assistance from the national level can be applied to ease a particular land-use problem in intermediate cities.

Creation of Land Development Authorities that would acquire, hold, and then redistribute land for public and private use, has been a matter of particular interest to the international technical assistance agencies. One example of the kind of information material available has been prepared for AID by the U.S. Department of Housing and Urban Development (HUD) and the Planning and Development Collaborative International (PADCO) and is entitled "Guidelines for Establishing and Administering Land Development Agencies in the Developing Countries." At least one such authority has been established in metropolitan Karachi.

Government as the Financier and Developer

Regardless of the political system, capitalistic, socialistic, or mixed, governments are turning to the direct financing and development of housing, industry, and even commercial facilities. The forms of action are numerous, and the implications for land use considerable. The forms range from financing of low and moderate-income housing, to construction of low-income public housing, to government development of industries and allied residential communities, to the rare cases of total new city building as in Brasilia.

Some of the activities, as they affect intermediate cities, extend back many years. During the 1930s, for example, it was conscious Turkish Government policy to acquire land and build state-owned industrial enterprises in what were then small cities of the interior. In addition to the factories, whole communities of housing and services were constructed. Again, it is theoretically possible for such governmental land development activity to be ordered within the framework of an overall physical plan for a given community. In practice, however, many of the individual public enterprises operate independently of each other and of any local regulatory framework. A current outstanding issue in Turkey is the failure of the public mortgage-granting agencies to require that private housing sites and densities be in accord with city plans that do exist. The result is considerable high-rise building in intermediate-size cities, without expanded utilities and services, and often in violation of land-use elements in adopted plans. Without the government financing, however, the building could not occur.

Brazil's new program to concentrate all local housing and infrastructure financing in one agency, the Housing Bank, is directed

toward rationalizing and coordinating all of these activities within a given community.

One of the most promising vehicles for international financial and technical assistance now appears to be the "sites and services" approach being undertaken by several countries. These activities, which trace their origins to the early period of post-World War II technical assistance, involve the acquisition of land, installation of utilities and services, and then leasing or sale to low-income families who construct their own dwellings, again with financial or technical help. The World Bank in particular is engaged in financing several sites and services projects, and both the United Nations and AID have been participants. For the most part, however, these projects are in metropolitan areas, but should be suitable for intermediate cities as well.

Perhaps the most comprehensive, multipurpose public development agency is Malaysia's Urban Development Authority. The UDA is a national agency empowered to work in all urban areas. It has the "traditional" powers to acquire and bank land and to build public housing, but—in the name of producing greater Malay participation in the economy—it can also (1) finance and build commercial and multi-use complexes; (2) participate in joint ventures with Malays, other racial groups, or foreign private capital; (3) purchase existing or portions of new commercial, office, and residential facilities, for lease or sale to Malays; (4) purchase existing businesses, which are then turned over to Malay businessmen; (5) undertake comprehensive urban renewal schemes in which existing land ownerships and pooled and present owners retain participation; and (6) build new towns.

The UDA has been in existence for less than five years but has already undertaken a broad range of projects within its framework of powers. The project approach of UDA and other public corporations has effectively substituted, in the Kuala Lumpur region, for areawide planning.

Tax Incentives

As part of national policy to direct certain kinds of development to intermediate cities or to growth regions, a number of countries employ tax incentives for location outside the metropolitan regions. Thus, if a plant has a choice of locating in the metropolis or in an intermediate center in the interior, a government may provide a 10-to-20-year tax exemption for an interior site. Israel, Turkey, and India are examples of countries using this form of incentive. At least for a period during the 1960s India combined the tax incentive package for certain types of industry with the denial of construction permits for these industries in Bombay and Calcutta, but with little effectiveness.

Measures That Contain Both Positive and Negative Elements

The Plan, or Planning Process, as the Control Device

In some countries, particularly those influenced by British and French experience, the finally adopted master plan is the instrument to regulate both public and private land uses. Where the master plan contains density, height, and setback regulations, these are applied to new development. A permit system, whereby each application is checked against the plan, is normally employed. Thus, the plan both provides the directions for land-use activity and prevents violation of duly adopted local policy.

In Singapore, under the planning ordinance of 1959, the Singapore master plan is itself a statute and all proposals to develop land must comply with its provisions. The Planning Authority must review all development requests and must give or deny permission in writing. Reasons for denial must be made explicit and an appeal procedure is available—but the intent of the law is clear.

. . . Singapore, along with a few other countries, also possesses a technique which limits permission to develop according to a plan to a fixed period of time. In Singapore, that period is two years to be extended at the discretion of the authority. The rationale is:

. . . It has been found that many of the written permissions granted prior to 1964 were never, in fact implemented as, of course, many of the landowners and developers were only interested in speculation . . . resulting in the wastage of planning officials' time and in freezing the use of land for the future.²

While the principle of the plan as the controlling device is an excellent one, here again the capacity of those who administer it, local political conditions, and the availability of public financial resources becomes the key to effectiveness. It is our impression that there are many countries in similar positions to Turkey and Indonesia where local plans exist in great detail with full regulatory authority but where actual development bears little resemblance to what the plan prescribes.

A direct contrast is Brasilia, which over a 15-year period has been constructed largely in accordance with the development plan. Here was an implementing agency (NOVACAP) with the power, personnel, and money to do the job.

Public/Private Development Instruments

One of the most promising new tools for orderly land development is an instrument created in Brazil called Cura. It calls for close public-private cooperation and considerable political courage on the part of those municipalities that adopt it. Cura, is a creation of the National Housing Bank, which, as noted above, has now complete responsibility for the financing of local infrastructure. A municipal government adopts Cura for a specific area earmarked for future development, normally on the fringe of the existing city. A plan is prepared for the area, down to the detail of use, densities, and required utilities. BNH then agrees to finance construction of all the utilities and services required. Payment for this construction is then produced by levying a betterment tax on all the properties within the area. The tax is considerably higher than what the property owners are paying for undeveloped land. It is pegged to be so high that most owners will proceed to develop productive uses in accordance with the plan or sell to someone who will. Issues arise because only certain areas of the community are earmarked for the special taxation, while property owners elsewhere may be paying at quite low rates. It is this that requires considerable political courage from the municipal officials who wish to enact Cura.

To our knowledge no Cura project is yet in operation. At least two intermediate cities (Goiania and San Bernado do Campos) have adopted the technique and planned Cura areas and some 27 other communities have it under consideration.

Negative Techniques

Negative techniques consist of those applied to remove or prevent development that is counter to public objectives.

Slum or Squatter Removal

A number of governments have torn down housing areas considered physically deficient or squatter settlements on public lands. These actions are sometimes combined with attempts to resettle the population elsewhere in publicly assisted housing and to redevelop the razed sites for new uses. Almost invariably these actions have occurred in the metropolitan regions. However, Brazil has done this both with favelas in Rio de Janeiro and with squatter settlements that

arose during the construction of Brasilia.* Turkey has tried on several occasions to raze "gecekondus" in Istanbul and Ankara and to conduct resettlement schemes. Results have been mixed, and there has been considerable resistance on the part of the displaced population to move into government-built quarters, often much further removed from work opportunities than the original settlements. Indeed, sites and services programs have frequently been criticized for remote locations dictated by expediency or low cost of land. In Kuala Lumpur, however, the Malaysians have rebuilt public housing on central sites from which squatters were removed.

Aside from Brasilia, we know of no "removal" efforts in intermediate cities, although the squatter populations in many such cities are increasing.

Zoning and Subdivision Control

Zoning divides the community into a series of districts designated by their predominant use (for example, residence, commercial, industrial). It spells out in precise detail which uses are allowed within each district and which are excluded. Minimum lot sizes may be established and prescriptions, often extremely complex, deal with floor space, height, bulk, and access to light and air and regulate allowable density.

Subdivision control is applied mainly to residential areas, providing standards on lot sizes, shape, width, utilities availability, and the size and development standards of access roads.

The intent in both cases is to prevent development from occurring below a standard of amenity or service the government has established. Often, as in Turkey and the Commonwealth countries, these regulations are an integral part of the master development plan. In Latin American countries, they are often separate instruments, enforced by a local building department.

*The Brazilian Government removed several squatter settlements near Brasilia and proceeded to set aside land for low-income "new communities" several kilometers away. Many of the displacees reconstructed their shacks on the new sites, and over the years more permanent dwellings have been erected both with and without public assistance. Taguatinga is now a bustling permanent community for the "underclass" linked to the capital by roads and bus transportation. None of these settlements is now visible from the capital itself, and it is a rather peculiar sensation to see the totally modern, middle- and upper-class Brasilia while knowing that quite distinct low-income settlements are hidden some distance away.

Brazil has followed the lead of many North American communities in its subdivision regulation approach. In Brazilian cities, permission must be granted to allow the "urbanization" of any new fringe area that has not been designated for development. The owners of the property must identify public open space and roads that they will dedicate to the community prior to receiving development permission. In theory this is an excellent means of obtaining needed sites, but in actual practice, there appears to be only marginal enforcement of these provisions.

Withholding of Permission

While zoning and subdivision regulations are deterrents to undesirable development, the ultimate "weapon" is denial of permission to build. It is our impression that most city administrations in LDCs have a building or zoning inspector who is empowered to deny permission to development that is incompatible with public regulations. Insofar as the Turkish and Brazilian experience is concerned, this power is exercised only sporadically. Malaysia frequently uses the denial technique, both to force Chinese and other owners into joint ventures with Malay businessmen and to prevent urban sprawl.

Value Freezing

Often it is not possible for a public authority to acquire needed land for public works or housing in a short period of time after a particular project need has been determined. A known desire for particular land frequently produces speculation and increased land values in advance of condemnation, making acquisition prohibitive. Turkey has a regulation that enables a freezing of site values for a four-year period, during which time public acquisition can presumably take place. Similar value freezing is used in Malaysia, where each state can set the length of time for control, generally no more than a year. These are variants on the "preemption" technique, tried with some success in Europe and Japan. Under preemption the government has the right to purchase designated (usually fringe-area) land at a fixed price at any time the owner decides to place it on sale. To our knowledge preemption as a technique of acquiring large areas of expansion land has not been tried within LDCs.

Taxation

In principle it would be possible for governments to levy heavy taxes on land held out of development for speculative purposes and on the proceeds of land sales that show excessive profits. In practice,

few governments of LDCs have taken this course because land speculation is so much a way of economic life and because of the political implications involved. Singapore has a land-value increment tax. South Korea has tried a real property speculation tax, and Taiwan has instituted a land-value increment tax as well as a "penalty" tax on properties that are not developed as planned within certain periods of time. According to very preliminary World Bank evaluations, however, these taxes have contributed to revenue-raising but have not notably slowed the rise in land costs. Again, as with so many other techniques, the shortcomings may be less of procedure than of enforcement and enforcement personnel.

Malaysia has just this past year taken the boldest of approaches to speculation control through taxation. A 50 percent tax is levied on profits from all land transactions, both urban and rural, that exceed what is computed through a formula as a fair increment over original purchase price. It is too soon to say how effective enforcement will be.

SUMMARY

Many techniques of land-use control exist, and doubtless there are others besides those presented here. Ideally any technique or combination of measures should be applied within some planning and budgetary framework, based on adequate information about key features of and trends in the community. Although all of the suggested measures have been tried in one form or another within developing countries, we have little hard evidence on their effectiveness. Techniques must also be applied by people within an institutional setting. In the following chapters on the field studies, we attempt to provide some dimension to understanding the interaction between people, institutions, and the methods of land-use planning and control.

NOTES

1. Malcolm D. Rivkin, "Urban Land Policies and Controls: Issues, Prospects, and Relevance for Developing Nations," United Nations, 1971, pp. 72-73.
2. *Ibid.*, pp. 57-58.

PART



THE CASE STUDIES

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RKEY

Field investigations were conducted during the summer and fall of 1974 in Turkey, Brazil, and Malaysia. Plans to include one or two African countries were not realized. In addition, visits were made to United Nations experts in Panama and to the Institute of Social Studies in the Hague and the Bouwcentrum in Rotterdam, two prominent third-country training institutions for planning professionals.

Several factors bore on case-country selection. Each of the three was undergoing rapid economic development and evidenced a number of fast-growing intermediate-size cities. Turkey represented a centralized form of government; Brazil a federal system; and Malaysia a federal system with strong influences from relatively recent British colonial rule. The three were widely separate in the Near East, Latin America, and Asia. Both Brazil and Turkey have had extensive AID programs, but not Malaysia. While no means "representative," it was felt that the three could demonstrate a wide variety of circumstances relevant to this study.

The researchers conducted parallel investigations in each country. Meetings were held with officials of governmental agencies, university professors and other professionals, and local officials in administrative, elective, or planning positions. Beyond the interviews, background materials were obtained where available and visits made to intermediate-size cities.

Each of the case reports differs somewhat in structure and emphasis; and more time for research might have produced more complete and consistent information. However, similar subject matter is covered in each case, providing revealing insights into the urban land development frameworks of the three nations.

URBANIZATION IN TURKEY

The Turkish report is presented first because our personal familiarity with the country and its urbanization pattern dates back some 14 years.* This was a period of early international agency technical assistance and of considerable regional planning emphasis. It was also a time when many of the country's presently fast-growing intermediate centers were relatively small, with much less complex economic activity and consumer demand than exists today. Turkey is especially important because the development of interior cities and regions, outside the traditional primate centers of Istanbul and Izmir, has been fairly consistent public policy since formation of the republic in 1923. Ankara predated Brasilia by 35 years as a capital moved to the interior and has now become Turkey's second city, with a population well over 1 million and a diversified economy.

Urbanization in Turkey, as measured by population in cities over 10,000, has continued to increase. In 1945, only 18.5 percent of the population was in such cities. In 1960 it was 25.2 percent, and in 1970 it was 33.5 percent. Projections suggest an urban population of about 50 percent in 1985 out of a countrywide total of over 40 million. Turkey is a "transitional" country, with increasing industrialization and service development, whose GNP has been growing at about 7 percent annually over the past several years.

In this process, the three principal centers of Istanbul, Izmir, and Ankara have continued to expand (each at a rate of over 5 percent annually between 1965 and 1970). Istanbul's metropolitan population was about 2.5 million in 1970, Ankara's 1.2 million, and Izmir's over 500,000. The three comprised 64 percent of the population in cities over 10,000 in 1965, which was reduced to 58 percent for 1970.

At the same time, census figures showed that there were 17 cities in 1970 with populations between 100,000 and 500,000. Current estimates indicate about 20. Although the population figures are much smaller than in the primates, several of these have been growing at rates exceeding 5 percent annually. Two that we visited, Antalya and Trabzon, are now between 100,000 and 125,000 in size and have grown by about 50 percent in nine years.

The following description by Keles and Map 1 underscore the emerging significance of the intermediate cities.

*The writer was an adviser to the Turkish Ministry of Reconstruction from 1960 to 1962 and assisted in establishing the country's first formal regional planning activity.

Several cities that have populations under 250,000 can be identified as potential growth centers. Their average size today is around 100,000, and they are growing relatively fast economically. Some of them are already within the boundaries of existing metropolitan areas, and therefore do not need independently to be subject to development inducements other than those which apply generally to the metropolitan areas of which they are a part. Izmir and Adapazari represent this category.

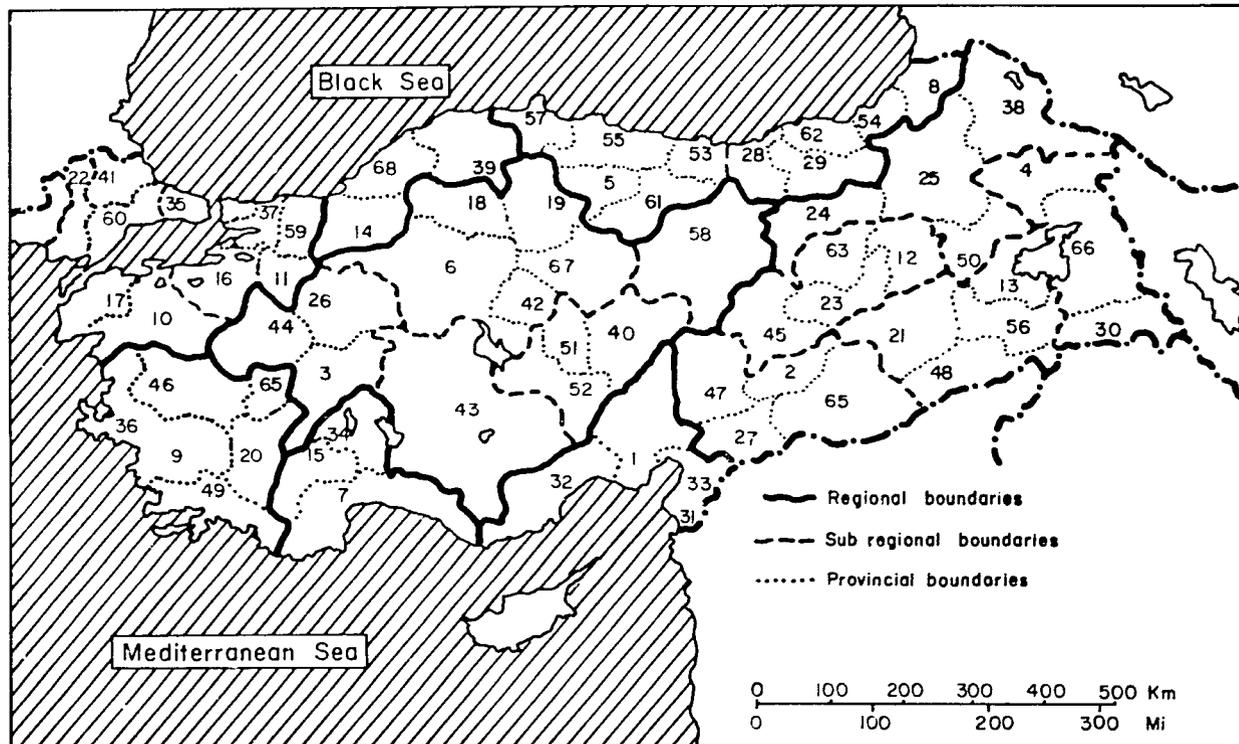
Some others have already been chosen by the State Planning Organization (S.P.O.) in cooperation with the Regional Planning Department of the Ministry of Reconstruction and Resettlement, as potential growth centers. These are indicated on the attached map as "centers to be developed as metropole." In order to realize this aim, significant infrastructural and cultural investments have been made in these cities, of which Samsun and Elazig are examples. Samsun is a rapidly growing commercial center on the Black Sea with a large hinterland, and Elazig is one of the fastest growing eastern cities, mainly due to mining and related industrial activities fostered by the construction of the Keban Dam. The sizes of these cities are 134,272 and 108,337 respectively.

Four additional cities have been selected as secondary growth centers: Eskişehir, Kayseri, Gaziantep and Diyarbakir, whose sizes vary between 100,000 and 250,000. The first two are located in the Central Anatolian Region; the other two are regional centers in South Eastern Anatolia. Their average annual growth rates during the past five years have been 4.8 percent, 6.4 percent, 8.2 percent, and 6.8 percent respectively.

In summary, six potential growth centers and secondary centers have been identified by the government, in addition to those that are already large metropolises with populations over 250,000. Since their development priorities are not indicated by the government, it would appear logical that the development of six growth centers simultaneously within two or three plan periods could create serious resource allocation problems. Besides, it is not easy for the government to justify the selection of these centers as potential growing points, as the criteria underlying their selection have not yet been made public.¹

MAP 1

Turkey: Regions and Subregions



Key to Cities

- | | | |
|----------------|----------------|---------------|
| 1. Adana | 24. Erzincan | 47. Maras |
| 2. Adiyaman | 25. Erzurum | 48. Mardin |
| 3. Afyon | 26. Eskisehir | 49. Mugla |
| 4. Agri | 27. Gaziantep | 50. Mus |
| 5. Amasya | 28. Giresun | 51. Nevsehir |
| 6. Ankara | 29. Gumushane | 52. Nigde |
| 7. Antalya | 30. Hakkari | 53. Ordu |
| 8. Artvin | 31. Hately | 54. Rize |
| 9. Aydin | 32. Icel | 55. Samsun |
| 10. Balikesir | 33. Iskenderun | 56. Siirt |
| 11. Bilecik | 34. Isparta | 57. Sinop |
| 12. Bingol | 35. Istanbul | 58. Sivas |
| 13. Bitlis | 36. Izmir | 59. Sokarva |
| 14. Boiu | 37. Izmit | 60. Tekirdag |
| 15. Burdur | 38. Kars | 61. Tokat |
| 16. Bursa | 39. Kastamonu | 62. Trabzon |
| 17. Canakkale | 40. Kayseri | 63. Tunceli |
| 18. Cankiri | 41. Kirklareli | 64. Urfa |
| 19. Corum | 42. Kirsehir | 65. Usak |
| 20. Denizli | 43. Konya | 66. Van |
| 21. Diyarbakir | 44. Kutahya | 67. Yozgat |
| 22. Edirne | 45. Malatya | 68. Zonguldak |
| 23. Elazig | 46. Manisa | |

Source: Adapted from Rusen Keles, "Urbanization in Turkey" (New York: Ford Foundation, 1972) with permission of the Ford Foundation.

Field Investigation Activities

The eight days in Turkey were distributed among Ankara, two intermediate cities of Antalya and Trabzon, and Istanbul. In Ankara interviews were held with the undersecretary and deputy undersecretary of the Ministry of Reconstruction, with regional planning officials of the ministry, with officials of the Bank of Municipalities, the State Planning Organization, with AID personnel, and with faculty members of the Middle East Technical University and School of Political Science at the University of Ankara. In addition the head of the planning team for Gaziantep, an intermediate city, was interviewed.

In Trabzon and Antalya we met with the provincial governors and members of their technical staffs, with the mayors of both cities, and with individuals responsible for planning or building administration on the city staffs. Trabzon also afforded an opportunity to meet with faculty members in the new planning department of the Black Sea Technical University.

Organization of the Field Report

The report initially examines the technical capacity of Turkey to deal with land-control issues in intermediate cities and the basic control structure that exists over local land use. It then attempts to address what appear to be the primary issues impeding the effectiveness of local land-use planning and control and the efforts currently being made within the country to deal with these issues.

THE TECHNICAL CAPACITY

One measure of present Turkish ability to absorb, adapt, and transmit land planning techniques is the growing use of Turkish planning experts by international institutions. Turkish planners are in executive positions within the United Nations, and Turks have for five years headed UN technical assistance teams in Korea. The Organization for Economic Cooperation and Development (OECD) and international private firms have utilized Turkish personnel on consulting assignments in Africa, the Middle East, and Asia, and Turkish planners may be found on the faculties of Western universities in this field. This has been a relatively recent achievement.

At the same time, however, Turkish planning talent within the country is concentrated in the three major cities of Istanbul, Ankara, and Izmir. Until just recently, to our knowledge there have been no professionally trained planning personnel operating in the intermediate cities except on temporary, specialized missions. This situation has now begun to change, but it will be some time before any place outside of the primates has sustained, resident professional planning capacity.

Even today, most people who term themselves planners come from architectural and engineering backgrounds, primarily out of the architectural faculties of Istanbul Technical University and the Istanbul Architectural School. The reasons have as much to do with markets for services as with existing educational opportunities. Over the past decade, however, this dominance by traditional architectural-engineering education has been modified by an important educational institution—the Middle East Technical University (METU) founded at the end of the 1950s with United Nations sponsorship and motivated to a great degree by a recognition of a need to broaden planning capabilities. The Architecture and Planning School at METU has received international assistance, through funds and foreign professors, for most of this period. Its work includes heavy ingredients of social and economic subject matter as well as a more development-oriented approach than the traditional schools. METU has been an innovator in Turkish urban education and now includes course preparation in such newly emerging interests as historic preservation and regional planning. Its faculty's research activities now include studies on environmental protection issues and on the morphology of small cities. Although METU has made a major contribution in approach and personnel, its output in numerical terms is still small. Between 1962 and 1970, it had only 80 graduates in the planning field, including 20 with master's degrees.

Turkish urban education has been supplemented by considerable overseas opportunities for postgraduate work—ranging from degree activities in American, English, and French universities, to the short course programs of Bouwcentrum and the Institute for Social Studies in The Hague.

Although not directly a "planning" institution, considerable contribution to actual resolution of planning issues has been made by the Faculty of Political Science (SBF) in Ankara. This faculty is the principal training ground for local administrators, and almost all the governors in Turkey's 78 provinces are SBF graduates. For several years, SBF has offered courses in urban planning that are now prerequisites for all of the administrator candidates. The rationale has been quite clear: local and provincial administrators are the ones most responsible for land-use decisions. Lacking trained professional

help, they must operate as planners and require some technical capacity for such contingencies. In terms of impact on day-to-day decision-making, SBF's work has had perhaps more effect than any of the duly constituted planning-architectural schools. This emphasis on land-use sensitivity for the nonplanners has pervaded the faculty's special, short-course training activities for local officials, an activity that is discussed below in the context of a larger governmental response to the technical inadequacies in local and provincial administration.

The market for trained planners may today be found primarily in the following: central government authorities in Ankara (primarily the Ministry of Reconstruction, the Bank of Municipalities, and the State Planning Organization), the three main urban and regional planning administrations (Istanbul, Ankara, Izmir), a limited number of architectural and planning consulting firms that work partially on contract to the Ilker Bank (Bank of Municipalities) and are located in the major cities, and the existing universities.

It is significant, however, that a growing concern for social, economic, and legal considerations in land development has resulted in a broadening of skills by the planning agencies and architectural firms. Their staffs include economists, sociologists, and lawyers as well as a growing number of technicians concerned with "environmental" matters—a positive sign that the nature of planning concern is being broadened within the responsible authorities.

Despite this concentration of professionals at the "center" and the very small numbers involved, the Turkish Government's approach to planning throughout the country contains a high level of sophistication—when a planning framework is determined to have priority.

For example,

- Due to military mapping capabilities, highly competent aerial photography and photographic interpretation is applied to any city or region where a planning effort is undertaken.
- In the same manner, a central government cadastral office has performed detailed ownership surveys on urban places throughout the country and is able to provide adequate mapped information on the city level.
- Due to the considerable attention paid to growth centers and interior development, regional planning studies through the Ministry of Reconstruction (Bolge Planlama Idaresi) are available for every region of the country. The depth of analysis and the policy commitments on the part of government vary considerably. However, this research base, which has evolved since 1960, is available as a context for all plans and programs in individual cities; and both the ministry and the Bank

of Municipalities require that all new urban plans be set within the context of these regional studies.

- Ilker Bank, which is responsible for all city planning in communities under 250,000, both spells out and conducts a wide range of physical, social, and economic research prior to any actual planning effort. (Various national infrastructure authorities in water, sewer, and electricity handle service provision in the larger cities and on a regional scale.)

THE STRUCTURE OF AND BASIS FOR LAND-USE CONTROL IN THE INTERMEDIATE CITIES

Turkey has a highly centralized governmental system, with all provincial (Vilayet) governors and county (Kaza) executives appointed from Ankara by the Ministry of Interior. All infrastructure agencies are national, with regional administrations. All municipal budgets are allocated from the center as well, and municipalities do not have property tax authority (the property tax structure is centrally determined and assessments and taxation are handled by the national government). Municipal governments, in the person of the mayor and council, of intermediate cities are locally elected, however, and they have been traditionally granted considerable responsibility over land-use decisions.

Planning

In keeping with this centralized system, one national agency has the responsibility for preparing physical plans in all communities between the size of a large village and a city of 250,000. That is Ilker Bank, whose creation and responsibility date back to the 1930s, when legislation had been passed requiring all municipalities to prepare land-use plans—and reality made that task impossible. Ilker Bank also combines the financing and construction of most urban infrastructure for these communities. In principle, a duly adopted plan is a prerequisite for water, sewer and other public projects.

Ilker Bank, although somewhat independent, is a constituent agency of the Ministry of Reconstruction, and its plans must be approved by this ministry (Imar ve Iskan Bakanligi). The ministry also has responsibility for regional planning, for the construction of public housing, and for disaster reconstruction (earthquakes, floods, and so on). Again, in principle, there is a direct linkage between the planning and some implementing functions of land development.

The nature of physical planning and the regulatory character of final development plans merit comment. This approach is standard throughout the country. Normally a community requests a plan from İller Bank—or the bank determines that a plan is required and obtains consent of the municipality. The Ministry of Reconstruction gives final approval, as it does to every phase of the planning procedure.

The Plan Procedure

Once it is determined that a plan will be undertaken, İller Bank establishes a budget and covers the entire costs of the professional work. (There have been rare cases where a community has the funds to pay for or contribute to its own plan preparation. But the competition process is still the same and the output is reviewed and approved by İller Bank.)

The first step is a detailed community inventory. Planners and other technicians are sent out from the bank's own staff to conduct research both in Ankara and the community, an undertaking that often lasts several months. Following the surveys, a voluminous comprehensive study is published covering a wide range of physical, social, and economic data and trends. Detailed maps are prepared on land use, soils, building conditions, community facilities, and services and are presented at a standard scale of 1:25,000. The final report becomes something of a "bible" for all subsequent planning effort.

At this point—an extremely important one—the plan is put out for competition. Sometimes the competition is completely "open" to all architectural or planning firms or university professors. Sometimes a limited number of competitors is selected. Each competitor is asked to prepare a fairly detailed conceptual planning scheme based on the research document. In practice the competition may take several months, as those who decide to enter visit the community and evolve basic development schemes with more or less community contact. A distinguished jury is appointed to review the submissions. It includes professors, independent architects, ministry and other governmental officials, and representatives from the municipality involved.

We must note that none of the competitors are paid for the often extensive amount of work they do for their submissions. This very fact tends to limit the "planners" to established architectural or engineering firms that have sufficient backlogs of other activity to afford the inputs or to university professors who have other means of support. (The competition system is deeply rooted in Turkish architecture and planning, to some degree as a means of guaranteeing impartial selection. Only in the plans for very small communities or in certain disaster-relief efforts where speed of performance is essential, do awards become "sole source.")

A winner is selected and is paid a certain amount for the work. The team then enters into a contract with İller Bank, sometimes as long as three years in duration, to prepare the final plan. The final plan must be prepared according to an established set of requirements dealing with content and character of the materials. Physical studies, along with more social and economic research, are required. The bank has codified the requirements in a detailed 24-page manual entitled "İmar Planlarının Tanzimi, İle İlgili: Teknik Sarılasma."

The physical elements of the plan are prepared at various levels of scale and detail. The basic concept at 1:25,000 is refined. Concept plans are prepared at 1:25,000 and 1:10,000 or 1:5,000. The ultimate product is a series of maps (with accompanying documentation) at 1:1,000, showing the intended land uses for every lot in the city. Public facilities and open space are identified as well as areas for private development. Road rights-of-way are superimposed identifying the parcels or portions to be taken eventually for street systems. The plan includes specific area and lot identifications for height limits and set-backs.

The plan (once approved by the central government and the city) then becomes the control for all land development and acquisition in the municipality; and ostensibly no building permission can be granted without the local building inspector's reference to the plan. In view of the mass of final documentation, only a few copies of the plan are actually prepared: for İller Bank, the ministry, the municipality, and some other government agencies.

Control

Although İller Bank prepares the document, which is adopted and approved both by the ministry and the municipality, and is responsible for financing water and sewer projects and internal roads, the following aspects of the control and implementation process must be cited. (1) The municipality, through its elected officials and building department, is responsible for enforcing the plan. (2) The municipality is responsible for acquiring—with funds from its own budget, not from İller Bank—all of the public land for open space and services. Other ministries (such as Health and Education) will acquire and build for certain services; public housing will be handled by the Ministry of Reconstruction, and state-owned industries by the various agencies and ministries involved. But the basic job is up to the city unless, by virtue of some special national priority (a matter discussed below), a higher degree of national governmental involvement is determined.

ISSUES IMPEDING THE EFFECTIVENESS OF LAND-USE PLANNING AND CONTROL

Although the basic procedure seems rational, straightforward, and comprehensive, several factors impede the performance and effectiveness of planning efforts in Turkey. These involve the planning process itself and both fiscal and administrative matters. It is fair to say that Turkish authorities are aware of the shortcomings and have at least initiated responses to each. In order, below, we will review the plan-preparation issues and the government's response, the fiscal issues and the response, and the administrative issues and the response.

Planning

Issues

Locus and Method of Preparation. Thus far all the plans for intermediate cities have been prepared by consultant teams in Ankara and Istanbul. These plans are prepared on contract, with relatively little interaction between the consultants and the community, and are handed to İller Bank upon completion. In view of the dynamic changes at work within these communities, it is hard to believe that a professional team can establish sufficient understanding of needs and opportunities from such a distance. Since the municipalities are responsible for implementing the plans, planning from the center provides little real comprehension of the peculiar local institutions and political processes at work, and, conversely fails to engage municipal officials in a planning process for whose implementation they will "feel" responsible. Relatively little interaction, moreover, appears to exist between the planners and those public agencies that have fiscal authority for infrastructure provision. (Since few copies of the plan or any summary are distributed, this also impedes both local and central government understanding.) Thus a final plan document, regardless of technical competence, can often be a product of the technician's interpretations rather than an "instrument" fitted to the land-use control conditions of a specific community.

The full force of this shortcoming came to us in Trabzon, where the plan showed wide proposed street rights-of-way and extensive public open-space acquisition in the very areas whose congestion was increasing: areas where five-to-seven-story buildings were replacing the two-story structures on the same small lots, with the old narrow street pattern kept intact. Trabzon's mayor was proud of his city's

growth, and the plan's value was limited indeed. Trabzon is an important port city on the Black Sea and a processing center for the region's tea and hazelnuts. Development and land speculation are so intense that many older houses display "for sale" signs and some store windows carry land-sale listings.

Allocation Deficiencies. As noted above, some 20 cities are now between 100,000 and 500,000 in population, and several more of a smaller scale are growing rapidly. It has been Iler Bank's procedure to conduct full-scale planning activities in each place selected, but to our knowledge only 10 such planning efforts have been conducted in intermediate cities over the last decade. Most of the other cities have "plans" that were prepared, however, many years ago.

Budgetary constraints have precluded more extensive commitments, but most of the 20 cities above 100,000 are growing rapidly, as are many smaller ones as well. The bank does not do shorter-range or policy planning at the urban scale, so that all of the funds available must, under present policies, be committed to the long-range planning studies.

Character of the Plans Produced. Iler Bank plans are "end-state" plans. They do not deal with short-range "critical issues," and any planning or land-use policy provisions produced come as a product of the effort to produce lot-by-lot designations. They do not contain staging programs and have no built-in mechanism for adaptation to changed circumstances. Indeed, once produced, these plans stand for many years, lacking provisions for revision or trained people in the municipal offices who can make revisions. They are basically unrelated to municipal budget capacities or needs and have not included capital improvement budgets tied to commitments of the central government construction agencies. As a result, the implementation record of most existing plans is a weak one.

Personnel Involved. Because of the nature of the Turkish competition system, Iler Bank has had to rely on architects and engineers with private construction practices as the main source of production. Not only are trained planners few in number, but also the opportunities for sustaining a planning practice via the competition route are constrained.

Efforts to Improve the Planning Process

Given these constraints, a number of efforts have been made within the last several months to improve the process.

Competition Requirements. Since 1973 two plan competitions have been conducted and awarded, one for the city of Gaziantep and one for three neighboring cities of Zonguldak-Kozlu-Kilimli, the latter functionally linked communities in the Black Sea coal-mining area. The terms of reference of these competitions have been substantially changed over past practices. They include the following:

1. The award-winner must agree to establish his team operations in the cities involved. No longer can the project be done from Ankara and Istanbul. The commitment is for a three-year period, and liberal financial incentives, trips back to the capital, and vacation benefits are included as inducements in the package.
2. The award-winner must use an interdisciplinary team, including social scientists, economists, and lawyers as well as designers and engineers. This is a major departure from past practice (although Turkey's regional planning efforts have included multidiscipline teams), and the battery of skills must be resident in the community.
3. The terms of reference contain explicit requirements to deepen the social and economic research base of the plans (beyond what Iler Bank prepared in its project prospectus) but, even more important, requirements that the planning teams work with the local municipal officials and the ministries on rationalizing city budgets to mesh with the plan recommendations.

Perhaps the most significant outcome of these competitions has been their award to teams of young planners (one of whom is headed by a woman) who are recent graduates of the Middle East Technical University—not the traditional design institutions. These young people, who were searching for opportunities outside what has become a professionally crowded metropolitan core, were prepared to mount the kind of effort required. For them the incentives have meaning. They exemplify the comment by a UN official in our New York discussions: "Only when the opportunities in the metropolitan cities get filled up, do the professionals look for other places to make a name."

We talked with the chief of the Gaziantep team. (Gaziantep is a city on the plateau about 300 kilometers from Ankara.) He was enthusiastic about the challenges but cited two serious drawbacks that he had discovered in the first few months of effort: (1) some feeling of lack of confidence on the part of the municipal officials, due to his team's being "consultants," not official representatives of government agencies from which the capital works grants would emanate; and (2) a deep concern about implementing any recommendations that would come from the planning work, since there was no municipal mechanism established to follow through on these recommendations. In terms of actual activity, however, he was far more involved with

advising on immediate decisions and controls over pressing issues than on the end-state plan, a sign in itself that a planning "process" had begun to evolve.

Peripheral Planning. Peripheral planning is a new technique applied directly by the Ministry of Reconstruction to resolve shortcomings in the planning process—such as confinement of detailed physical planning within municipal boundaries, and long time periods required to prepare and approve master plans. Peripheral planning is brought into play when a particular land-use problem spills over municipal boundaries, or when a series of changes in a larger region threaten some aspect of the national interest. Such planning is performed directly by the staff of the Regional Planning Department (Bolge Planlama), the same agency that has prepared the framework studies for regions across the country. The types of "problems" range from increase in squatter settlements and expanded industrialization to proliferation of camping and other facilities in tourism areas.

Bolge Planlama, along with the provincial governor and other government agencies, defines the area to be treated. A concept plan at the scale of 1:25,000 is prepared and approved by the General Directorate of Planning in the ministry. Then detailed land-use plans at smaller scales are prepared. Land uses can be frozen in accordance with these plans and areas set aside for directed development. Some 15 peripheral plans have been prepared over the past few years. Although the technique is a promising one and permits fast response to issues, it is unclear precisely how the plans are enforced.

Decentralization of Institutions. There has begun to be some decentralization of planning and research institutions. A number of provincial Turkish universities have been established within the past decade. Architecture/planning faculties and development research have become matters of some interest in these schools. The Black Sea Technical University at Trabzon is one such example. This school has an architecture program and wants to start both a planning faculty and an urban research center. Trabzon is a key development center in the eastern Black Sea region, and our observations indicated that the city was expanding rapidly with no controls and without the utilities and services to support a population that had doubled in 10 years. The three planners on the faculty hope that they can become an influence in the region. They have opened up communications with the elected officials in Trabzon and have done some research on the problems of speculation and development. Significantly, each of the three had postgraduate studies in Europe and had come to Trabzon for the opportunities it offered outside of the established universities. The faculty has established a modest program of seminars and research

for the next year and has begun to explore with UNESCO the possibilities of financial and technical assistance (the latter by supplementing the staff with European or American professors).

All of the above are small beginnings, modest in terms of the scale of demand but evidence that Turkish agencies and officials have begun to reconsider past approaches in response to present realities.

Financing

Issues

Municipal financial resources and the national approach to allocating funds for capital works make implementation of plans extremely difficult.

Municipal Budgets. It is the municipal responsibility to acquire land for public open space, internal roads, water and sewer lines, and other public facilities except schools. Municipal budgets are allocated from Ankara according to a formula, based primarily on population. In practice, land-acquisition needs are not considered in the allocations. Indeed, we were told by both central government and municipal officials that the budget allocations were generally sufficient for staff salaries and some maintenance activities. They rarely included funds for land acquisition.

In Trabzon, for example, land prices in the central area where major open-space acquisition appears on the plan are presently on the order of 5,000 Turkish lire (TL) per square meter (over \$300). Municipal land acquisition at this or even lesser costs, clearly becomes impossible. Thus in communities that have plans, the rights of way and parks stay on the map, totally unrelated to physical change that is allowed to occur. As taxes on land and buildings are collected by the central government, this avenue for supplementing budget resources is closed to the local jurisdictions.

National Allocations. The State Planning Office (SPO) of the Prime Ministry establishes the capital works allocations to the various agencies. Some locational priorities are also set by SPO. The SPO has an extensive research staff, and we learned that they had made an assessment, nationally, of the infrastructure needs of Turkish municipalities between 1970 and 1977. The analysis included estimates for both the primates and the individual intermediate-size cities. Estimates for Istanbul were on the order of 21 billion TL. For Antalya,

as an example of an intermediate city, the comparable figure was 987 million TL.

The SPO officials stated that, within these parameters and their estimates of fund availability, principal priority was being given to sewage and water systems for the three primate centers. Other communities and other projects were receiving funds as available, and there was no concerted effort to work out linked programs for any of the intermediate centers.

Efforts to Improve Financial Constraints

Unlike the efforts now under way to revise the planning process, there is no evident formal attempt to provide a more effective budget allocation framework for intermediate cities. There are signs of informal activity, however, which provides some measure of differential assistance.

Priorities. Certain communities do appear to enjoy a measure of national priority and are granted financial resources as a reflection of their importance. Antalya, which we visited, is an example.

Antalya, like Trabzon, is a rapidly growing city of about 125,000. In 1960 it was about 55,000. Situated on the Mediterranean, it is the principal processing and distribution center for a large citrus and vegetable production area. Antalya, like Trabzon, has an historic central district. Most important, however, Antalya is a major tourist center. There are many archaeological sites along the coast and inland, and the wide beaches in the region have become known as the Turkish Riviera. Antalya is situated on a plain about 100 feet above the water and (unlike Trabzon whose development is collared by close-in mountains) has plenty of room to expand. A considerable number of high-rise, elevator apartments are being built at the edges of the city along the water, and automobile ownership has increased greatly over the years. The tourist travel to the Antalya region is an important source of foreign exchange, but the area has also become extremely popular with Turkish vacationers, especially during the summer months. Both tourism and the crop export make this city important to the Turkish economy and national "image."

Antalya has a master plan, which is currently being refined to the 1:1,000 scale by a firm in Ankara. It is one of the few cities to pay for its own planning work, under Iller Bank supervision. The plan is being designed for a long-term population of 500,000.

Antalya needs an expanded water and sewer system, and in this sense is in a similar position to Trabzon—but there the similarities cease. About 15 years ago, the Antalya region was selected by the

Turkish Government and by the United Nations as a pilot regional development project. Efforts were made to develop the city as a processing and tourism center, and the present character of the community may be a reflection of this earlier "priority" regional development effort. The following are clear examples of the priority character of this city:

1. The central government has purchased most of the land and buildings in the old historic district and is enforcing restrictions against new buildings in the district. Substantial rehabilitation is under way, and the old port is being restored as a yacht harbor, with a new commercial port recently built several kilometers from the city.
2. The highway agency, Karayollari, has recently improved major roads within the city and between the city and the major beach areas to the east and west.
3. Assisted by a World Bank loan, a new sewer system is being designed and will soon be constructed.
4. A forceful governor has been appointed, who has taken the lead—both in lobbying for public works assistance in Ankara and in diverting a large state-sponsored paper mill from locating in the town ("We do not want heavy industry here") to an area many kilometers away.

Much of the relative effectiveness of development control and public works provision in the city must also be due to the character of local leadership. The city itself has over the years acquired and maintained an excellent set of public parks and gardens. It has built a sports stadium and an archaeological museum and is this summer completing a large public beach, complete with bathhouse, showers, and restaurants. The city has several architects on its resident building department staff, including one with planning training from a European university. Its new mayor is a young man who has taken a special interest in preservation of the old town and in controlling the city's expansion.

As a rich agricultural community, Antalya has a number of wealthy citizens among whom a spirit of public service is beginning to grow. In an action still rare for Turkey, a group of these citizens established a hospital association and, when construction funds were not forthcoming for expansion of the public hospital, themselves paid for modernization and a new wing. Antalya thus stands as an example of the peculiar mix of elements that must go into effective shaping of a city: a national standing sufficient to obtain development funds; a quality of leadership from appointed and elected officials; citizen interest; and the ability to obtain technical support personnel. Antalya

is probably not unique as a favored community, although there is not an explicit national governmental policy that identifies which ones are.

Land Freezing Legislation. In the cases where municipalities or other public agencies have identified a public works undertaking, recent Turkish legislation allows a freezing of site values for a three-to-four-year period until the property can be purchased. This, of course, presumes a budget commitment for purchase but does succeed in preventing speculative price rises if that commitment is made.

The Land Agency. In 1969, an Urban Land Agency was created within the Ministry of Reconstruction. The agency was empowered to purchase land in municipalities throughout the country for industrial, housing, and tourism sites as well as certain public facilities and services. It was especially designed to work in communities that lacked the budget to make these purchases.

In 1971, Keles's study for the Ford Foundation stated,

Although its powers are vast, this agency is deprived of the means, both in land and in money, to carry out its functions properly. The revolving fund which the agency possesses consists of only 250 million TL, and it is expected that this will be paid out of the central government budget within 10 years. For the present the agency is not functioning because it is a newly created organization and has not had enough time to complete the hiring of personnel.²

In 1974 the agency was operable, but with an annual budget of only 50 million TL (about \$3 million). Given constant inflation of land values, this budget level means only a small amount of acquisition can be achieved.

Revenue Raising by Municipalities. Municipalities are empowered to operate revenue-producing facilities, and Antalya is an example of one community that has turned the profits from certain publicly operated restaurants and night clubs into needed public facilities—in its case, the new beach and bathhouses. These opportunities are limited, however, in the context of the great demand for public services.

Lobbying. Extensive lobbying of central government public works agencies by municipal officials does take place. There are continual delegations of mayors and councils to Ankara to present shopping lists for needed improvements. Some agencies are responsive to persuasive approaches, which is in a way a measure of local leadership ability.

Taken together, these signs of efforts to improve the financial capabilities of the intermediate cities are still ad hoc and well short of the needs.

Administration

Issues

Actual decision-making responsibility over land development is vested in elected municipal officials and such technical staff as they have available. By and large, neither the mayors and councils nor the local building departments have the skill or will to deal with issues of growth. Growth, as we witnessed in both Trabzon and Antalya, has a very positive image at the local level. Often, it is welcomed regardless of the consequences.

The criticisms levied by Turkish planners, as well as our own observations fall into the following categories:

1. Local government often fails to understand or appreciate the physical plans during the process of their preparation and when they are ready for implementation.
2. There is often a paralysis in the face of the plan's requirements when compared with financial resources that are available. Feeling that it may be impossible to acquire public open space or widen a road network, municipal authorities often approve building projects that are in direct violation of the plan—further compounding the difficulties.
3. Corruption on the part of some officials and considerable political pressure from local entrepreneurs result in "overlooking" a plan.
4. Local government often does not know how to request or lobby for financial and technical assistance that can be made available through İller Bank and other government agencies.
5. Local government often does not know how to establish its own revenue-raising projects, which can aid in land acquisition and facilities development.

We do not know what combinations of these circumstances occur in Trabzon; but, even while the local building department was assuring us that development applications were denied when they did not meet the plan, the evidence of massive construction in violation of the plan was abundant.

It is important to point out that—even in situations where no formal planning instrument exists—local officials have the power to

direct and control development. We talked earlier about simple guide planning, where it might be possible to allocate areas for specific uses and close off sections of a community where further growth was clearly deleterious. With some sensitization, these are actions that could be taken by local officials without a great deal of technical support. It was our general opinion, backed up by comments from professionals in Ankara, that this ability rarely exists among Turkish elected officials.

A second administrative roadblock is the unwillingness or inability of the government bodies that provide residential mortgages (largely for individual apartments*) to require that a building be located in an area and constructed at a density that is in accordance with some form of planning instrument or appropriate environmental standards. As a result, in the city of Ankara as well as in Trabzon, we saw many high-rise structures replacing small buildings—on precisely the same lots, with precisely the same road system that once served low-density areas. Given the spreading automobile ownership, these roads are already clogged with vehicles, and no rights of way have been reserved for widening.

In the context of the foregoing issues, the coordination difficulties that exist between the Iller Bank planners and other governmental agencies that fund public works may seem academic. But they do exist, as each agency derives its own system of appropriations and timing that may not reflect overall planning priorities for a given municipality. Such issues are not limited to the smaller cities, however. One of the most formidable problems that the present World-Bank-

*Although there are numerous ways in which residential units are built in Turkey, the following appears to be a most common practice. Individuals take out mortgages for apartments. Either before or after, these individuals' financial commitments are "pooled" by a builder into sufficient units for an apartment building. Sometimes a builder starts with enough for partial occupancy and goes on to sell or rent the remainder.

While the extraordinary high land prices foil public acquisition, this situation has frequently been overcome in residential construction. Typically, we are told, a builder will go to the owner of a small house and plot in an area that seems possible for apartment construction. He makes a deal with the owner whereby, in return for a grant of the site, the builder will give over one apartment in the new building for the previous landowner's personal use, plus one or two others, which he can rent out for income. Thus, the "informal" process of residential entrepreneurship is able to overcome land costs and further contribute to the strain on municipal services.

assisted planning program for the Istanbul area faces will be the coordination of infrastructure agency expenditures. For the specially created planning bureau has no power to regulate these expenditures or to determine their physical location, except in so far as its direct tie with the Ministry of Reconstruction and the ministry's own housing programs is concerned.

From the structural standpoint, the basic concept of central government control over municipal budgets juxtaposed with municipal control over land, should perhaps be challenged. This is, however, an example of a specific and deep-rooted national tradition. It is not easily or even desirably altered, given the special circumstances of Turkey. While adaptations may occur in time, this is nevertheless the fundamental condition around which all foreseeable efforts at land-use control must be designed.

Efforts to Resolve Administrative and Political Issues

In all fairness, Turkish central government officials and university leaders are deeply aware of the "human" shortcomings at the local level. They have for some years, and with increasing frequency, been conducting training and "sensitization" programs of various kinds. These include the following:

For Provincial Governors. Going well back into Turkish history, the provincial governor was the representative of the state in the region, having great control over all administrative affairs. Governors were schooled as administrators and enforcers—not as developers. As cited earlier, Ankara University's Political Science Faculty now has a compulsory planning course for students bound for public administration positions. In recent years, SBF has inaugurated short courses and periodic training programs for governors and other field officials that deal with their roles in economic development and planning. SBF is also active in many of the other training programs cited below and has been joined by the Turkish Institute of Public Administration in the preparation and dissemination of text materials to the officials.

USAID has provided financial and technical assistance to some of these activities. It has also had special tours of the United States for provincial governors and, prior to the cessation of USAID activity, had been considering one tour of smaller American cities to observe administrative and land-control procedures.

Elected Municipal Officials. On this level, both SBF and the Turkish Municipal Association have been involved in seminars and the preparation of training materials. The chief problem with the training activities deals with their location, primarily in Ankara. It is difficult

to reach a wide selection of elected officials in this manner, particularly in view of the frequent turnover involved and the lengthy travel times. There is some interest in conducting regional or area seminars, hitherto few because of the costs. Certainly if the proposed urban and regional research center at Trabzon does become established, along with others in provincial universities, they can serve as vehicles for disseminating ideas and techniques more effectively at the municipal level.

Local Staff. For local staff, primarily engineers and architects who are in building departments, Ilter Bank conducts continuing courses in Ankara. These courses are a week or two to several months in duration and generally fall under the heading of remedial education (drafting, mathematics, basic engineering, mapping, and so on). Some lectures on planning issues are given during these sessions. They are not set up, however, to train or retrain local building staff as "planners."

Ilter Bank and the ministry also send fact-finding teams throughout the country periodically to check on what communities perceive as development issues with which they need technical or financial assistance. Certainly the new competition "format," which requires the stationing of planning teams in the cities for which they plan, is a step toward building increased local competence.

CONCLUSION

Turkey is a country where many intermediate cities and the regions they service are in a state of rapid growth. From the standpoint of land-control techniques and national legislation creating planning and implementing instruments, Turkey is quite well-equipped. Universities and government agencies exist, along with a core of skilled planners and administrators, who have the know-how to grapple with the issues, and their activities are broadening. Yet the pace of development has far surpassed the resources, commitments, and institutions. Means are required to adapt the planning process more directly to the needs of specific communities and to more communities; to provide a more predictable and ample flow of funds for public works, land acquisition, and services; and, perhaps most important of all, to broaden and deepen the ability of local authorities to respond to their responsibilities for land development and control.

NOTES

1. Rusen Keles, "Urbanization in Turkey" (New York: Ford Foundation, 1972), pp. 6-7.
2. Ibid., p. 98.

URBANIZATION IN BRAZIL

The Brazilian economy is expanding at a rate of about 10 percent annually, and Brazil's population has passed the 100 million mark. The nation is so vast, and its prospects are so mind-bending, along with the contrasts of wealth and poverty, that any attempt to set Brazil in context with other countries is difficult indeed. But Brazil is an urbanizing country, one whose population in cities over 20,000 is about 35 percent of the total.* It has many large metropolitan centers, but also 40 cities between 100,000 and 500,000 in size.

Cities have long played an important role in Brazil's economic and cultural life. Salvador, Fortaleza, and Rio de Janeiro have a significance that dates back to the sixteenth century; and Sao Paulo has become one of the great contemporary commercial/industrial centers of the world. Belo Horizonte was one of the first planned cities of any size in the western hemisphere, and Brasilia is the foremost example of how a country can transfer its capital to a lightly populated region and create a viable urban complex in the process—in less than 15 years.

Brazil now has nine major metropolitan centers with over 500,000 population (Rio, Sao Paulo, Porto Alegre, Belo, Salvador, Recife, Belem, Curitiba, and Fortaleza). Rio and Sao Paulo are each over 4.5 million. All of these metropolitan regions have their own area-wide planning instruments or some form of core-city approach to

*The population in all cities and towns with over 1,000 inhabitants is about 60 percent of the total. The distribution of urban population varies greatly among regions and is much more dominant along the coast and in the southeast.

land control. As a federated nation, with significant power delegated to the states, Brazil probably has more variety in approaches and level of effectiveness in respect to metropolitan land administration than most developing countries. Despite the federal characteristics, however, the intermediate-size and smaller cities have a dependence relationship to the central government for planning assistance and infrastructure funding similar to more centralized systems.

The population in Rio and Sao Paolo represent about one-quarter of Brazil's urban total, a portion that has held over the past 10 to 15 years. However, the megalopolis, which includes the two metro regions, contains over 40 percent of Brazil's industrial employment.

While the primates continue to expand, the growth of many intermediate cities has been nothing short of spectacular during the past decade. In 1950 there were only 7 cities between 100,000 and 500,000 in population; in 1960, there were 19, and there were 40 in 1970.

Goiania, as one example, has grown at an annual rate of over 16 percent since 1960 and is now on the order of 400,000 in population. Although many of these cities are agricultural or mining centers serving a rural hinterland, many others are centers for highly contemporary industry—for example, steel and petrochemicals—and they have attracted a large proportion of rural emigrants in preference to the main metropolitan areas.

For many years Brazil has laid special emphasis on development of the northeast region and has also given a general priority to growth of the interior. Creation of Brasilia was a manifestation of this priority. Also, in Brazil, a wide variety of urban land-use programming and control techniques have been tried and training efforts initiated to improve urban administration. Until recently, however, these activities have not occurred within a framework of explicitly linked national policies and programs.

The situation is changing. Our visit to Brazil came at an extraordinary time, when two new refinements in the framework for urban land control had just been instituted. In June 1974, the national government decided to establish a powerful mechanism at the cabinet level to formulate urban policy. Along with this new policy council, far-reaching changes were instituted in the approaches to land-use planning and infrastructure assistance. The intermediate-size centers figure prominently in this new posture.

It is impossible yet to judge the impact of the changes, or even the depth of support behind formal public announcements and new tables of organization. But the fact that these initiatives have occurred, after quite some time and effort at conscious public involvement with urban land-use issues, is of special interest to this study.

Field Investigations

The 10 days in Brazil were spent in Rio de Janeiro and its region (with visits to Nova Iguaçu and Petropolis), Brasilia, and Goiania. (See Map 2.) Meetings were held with the newly appointed secretary of Local Planning and Development and his chief aides, with officials of Instituto Brasileiro De Administracao Municipal (IBAM, the public administration institute) and Banco Nacional De Habitacao (BNH, the housing bank), faculty members at the Federal University of Brazil, the OAS and University of Edinburgh planning advisers to Servico Federal Do Habitacio E Urbanismo (SERFHAU), the chief of the Economic Commission for Latin America (ECLA) mission, and private planning consultants. In Goiania we met with members of the city's planning staff and in Brasilia with a representative of the AID mission.

Approach to Analysis

The new approaches in Brazil represent a "next stage" of evolution in a complex series of efforts to deal with local land-use issues, efforts that date back a decade or more and have been supported in some measure by USAID and other international agencies. Whether impetus for change stems from a trial-and-error recognition of "technical" shortcomings in the earlier approaches or from political pressures for reform cannot be assessed here, although something from each is clearly involved. Of principal importance is that a system was developed to cope with a particular set of perceived circumstances. After a substantial period of application, certain elements of the system were found wanting and revisions introduced.

Our exposition here will first review the technical capacity of Brazil to conduct urban land-use planning and control and then review the system for exercising this capacity and broadening it that has existed over the past decade. The principal development issues of the intermediate cities will be examined, and the new approach to dealing with urban-land issues will be depicted.

TECHNICAL CAPACITY: EDUCATION, RESEARCH, AND TRAINING

Brazil has a cadre of skilled and trained professional planners. It also has public and quasipublic institutions concerned with training

MAP 2

Brazil



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local administrators and other technicians in land-use related fields, training to expedite intelligent decisions in concert with or in lieu of a formal planning process within a given community.

One sign that the technical capacity exists is, as in Turkey, the increasing use of Brazilian professionals by international agencies to provide assistance to other developing countries (particularly the OAS and the United Nations). Yet Brazil differs from Turkey, and indeed from most other developing nations, in that at least one Brazilian institution has reached the stature where it can provide—as an institution—help to others in establishing mechanisms to deal with development issues. This is IBAM (Instituto Brasileiro de Administracao Municipal), which has, since 1972, been aiding Colombia, Paraguay, and Costa Rica to set up similar vehicles for the training of local administrators. This outreach takes place while Brazil continues to receive international technical help in areas where it still lacks sufficient domestic talent. That very fact is indicative of Brazil's transitional status.

Education and Research

Formal planning education has been extensive in Brazilian universities. It is extremely design oriented (*urbanismo*) and stems primarily from the architectural faculties. Brasilia is a prototype of the "urbanismo" approach applied to the problem of total city development. Its successes, and those of lesser projects involving creation of new central business areas and upper-income housing complexes represent a triumph of strong architecture manipulated by government agencies and private developers with the powers and resources to create urban form quickly. The shortcomings of *urbanismo*—primarily in the realm of providing for the poor and providing public services and in the more administrative areas of retarding speculation and of staging development—have led Brazilian authorities to modify the dominance of architecture in favor of greater multidisciplinary approaches. Economists, geographers, sociologists, and public administrators have been attracted in increasing numbers to the planning field. The movement has been encouraged by employment opportunities offered in Brazilian planning institutions, research agencies, and private consulting firms. Overseas education, particularly in American universities, has supplemented and broadened the design orientation of top Brazilian talent. (The University of California at both Berkeley and Los Angeles and the University of Edinburgh in Great Britain have been especially active in attracting Brazilian

professionals—both in architecture and the social sciences—for advanced degrees.)

This broadened orientation has recently been translated into new, government-supported planning programs in four major universities. One of these, Coordenacao dos Programmas de Pos-graduacao de Engenharia (COPPE) at the Federal University in Rio, has now been operating for two years. A second in Porto Alegre is due to open shortly, with others to follow in Curitiba and Recife. These are multidisciplinary planning programs open to graduate students only, offering both master's and doctor's degrees. COPPE's faculty represents both Brazilian professionals with overseas education, and several young Americans and British on leave from their universities to complete doctoral programs with research on Brazil. COPPE is soon to open a specialized master's program for people already employed in governmental agencies that may be carried along with their professional work. The Secretariat of Local Development supports the programs with funds.

Practical planning education has for some time been paralleled by extensive, government-supported research programs dealing with economic, social, and physical aspects of urban development in Brazil. The most prominent and productive of these are located in Rio de Janeiro—for example, Instituto de Pesquisas Economicas Aplicadas (IPEA) from the Ministry of Planning, IBAM's research division, and the Vargas Institute. COPPE also encourages research, and universities in other primates (Sao Paulo, Porto Alegre, and Belo Horizonte) have set up research institutes dealing with both theoretical and regional issues of significance. The special problems of intermediate cities along with their investment potential and role as recipients of rural migrants represent an increasing focus of research concern. Doctor's theses are being written at COPPE about the smaller cities, and articles dealing with migration issues, and economic development characteristics have recently been published by researchers from IPEA, IBAM, and international agencies.¹ It may be said that Brazil demonstrates a high degree of concern for statistical and theoretical underpinnings of urban development policy—a concern and a relative degree of effort that can be linked much more to the United States than to other developing countries.

The net result of all these activities is a strong core of planning and research talent, located, however, almost entirely in the primate metropolitan centers, especially Rio de Janeiro and Sao Paulo. All of the government agencies that deal with cities and urban development have remained in Rio, rather than being transferred to Brasilia. Most of the consultant firms that handle local planning are in Sao Paulo and Rio. While there are planners in some provincial and local administrations and at the universities of other metropolitan areas,

by and large the skill bank is in Rio and Sao Paolo. Here again is an example of the dualism that besets developing countries. If anything, the centers are overpopulated with professionals and the provinces deprived. With this excessive concentration, one can more readily understand how it is possible for Brazil to establish a creditable international technical assistance presence and yet suffer considerable skill shortages in some of its most rapidly growing communities at home.

The problem is compounded by the very fast growth rate of the Brazilian economy. Private enterprise needs trained administrators and design and engineering talent. It has the money to pay as well and can offer salaries many times those of public service, particularly in the smaller provincial cities.

It is not uncommon for a man to learn a local planning or development assignment and walk off the job for a private position when he has learned enough to be marketable (indeed this happened on several occasions during the IADB-sponsored metropolitan planning program for Salvador). While the government has responded by increasing financial incentives for its top personnel in Rio, the generally low salary levels were constantly presented to us as the primary reason for lack of good-quality people in the intermediate cities. Thus both the overseas training and the Brazilian economy reinforce the concentration of professional design and planning skills in the primate centers.

In all fairness, Brazilian authorities and international assistance agencies foresaw the expanding skills gap several years ago. While only partially related to land use and planning, programs have been launched to force diffusion of contemporary administrative skills throughout the country. The primary vehicles for these efforts have been IBAM, SERFHAU, and the OAS.

IBAM and Others

IBAM is a unique institution, perhaps one reason why several Latin American countries are studying its applicability to their own situations. It is a quasipublic independent organization, supported primarily by government contracts (Ministry of Planning), and has tripartite functions of training, dissemination of information, and research. It is a membership institution, and an annual subscription by a municipality gives access to IBAM's information service, its training activities, and ability to respond with advice to specific queries. The research program backstops the training and information effort and deals largely with economic and demographic

studies and with investigation of practical urban management problems. IBAM has published dozens of studies on subjects ranging from accounting procedure to planning. These studies are disseminated through the information service as are up-to-date bulletins on new governmental legislation or administrative regulations and items of general interest. Some 1,000 municipalities out of about 3,500 in all are members of IBAM.

The training effort is perhaps the most significant. It involves correspondence courses (some 20,000 people have been enrolled), but most especially seminars and workshops lasting from a week or two up to eight months and held in Rio.

IBAM's primary missions are to disseminate technical and administrative skills throughout the Brazilian municipal structure; to keep these skills current; and to compensate for shortcomings in the formal educational system. IBAM recognizes the growing drain on public talent by private enterprise and has responded (at least theoretically) by trying to impart job specific knowledge that will help an individual in the performance of this assignment but not equip him to compete in the larger job market. This is, of course, not easily done, but IBAM's broad range of programs each have a highly specific focus on one or more aspects of municipal administration.

USAID has been a primary source of technical and financial support to IBAM, a support that was phased out only recently on the conclusion that the institution was now self-sustaining. Indeed, some of IBAM's own technical aid to other Latin American countries is partially financed by USAID with the attitude that IBAM is in the best position to transfer its successful approaches to others.

Planning and land-use control have always been of importance within the IBAM program. Today, the agency operates recurring eight-month seminars. Most of the students are members of building and budget departments or allied operations in the smaller cities. They go on leave for the seminar period. After initial and extremely intensive (eight hours per day) class work, the trainees are asked to prepare a plan for a specific community. They go to that community, conduct research, meet with the mayor and other officials, and return to prepare their planning studies. These studies are comprehensive in character and treat budgetary capacity as well as physical design. Upon completion of the work, the draft plans are submitted to the local community for comment and critique. According to the director of IBAM's educational activities, the communities frequently use these plans as policy guides, especially if no others are available. One of IBAM's techniques is to bring students from other courses into the planning seminars (and vice versa) to report on their own specialties (accounting, management) and further broaden the experience.

There is a considerable waiting list for the planning seminar, and some 100 people applied for 20 positions in the last series.

IBAM's objectives for the planning course are somewhat different from its other fields. It does not have the expectation of being able to convert an engineer or a building inspector into a planner in a few months. Rather, this is a "sensitizing" experience, trying to give designers and administrators a feeling for the broad range of issues with which planning is concerned. It is directly pegged to a criticism we heard frequently about technical personnel in the municipal administrations, namely, "They are often very good in coming up with solutions (such as a road intersection design or a sewer system) but ignorant of the problems the solutions must address."

IBAM has gone a long way to modernize local government in Brazil, but the task ahead is formidable in view of the more than 3,500 independent municipios that exist, the fast growth rates being experienced, and the rapid turnover in personnel.

The OAS approach is somewhat different. For several years, OAS has been conducting technical aid in Brazil in conjunction with SERFHAU, an agency of the Ministry of Interior. OAS operates on the traveling seminar basis. Each year for the past three or four, the team involved has prepared a textbook on a specific subject relating to land use, such as planning techniques, land-control procedures, and so on. The text contains several articles directly related to facets of the issue in Brazil by Brazilian and foreign experts who are the faculty for the ensuing seminars. These seminars last approximately three weeks and again meet from morning to night. They are held in a number of centers outside of Rio de Janeiro (mainly the smaller "primates" such as Porto Alegre, Fortaleza, Belo Horizonte as well as Brasilia). The seminar participants are officials of the region, state, and local agencies in the vicinity.

OAS has carried the seminar approach still further and prepared a working model of an urban/regional development strategy on a state level. The state is Parana, just south of Sao Paulo. Several relevant agencies contributed to the effort entitled "Politica de Desenvolvimento Urbano para o Estado do Parana." They included the regional development agency (SUDESUL), the state government, SERFHAU, and the Federal University of Parana at Curitiba. Curitiba is the capital of Parana, which is a heavily populated state with a large number of intermediate-size and small cities, many experiencing rapid growth. The plan report included detailed economic, physical, and social analyses of the urban pattern, an exposition of alternative development schemes, and a proposed development strategy for the future. It is one more manifestation of the considerable technical skill and interest in urban development at the central level and in the primate cities.

SERFHAU has itself conducted an effort to "retrain" municipal officials and reorganize specific municipal governments. This is in addition to its primary responsibility as the Brazilian HUD, discussed below. The SERFHAU activity was in the form of administrator teams of three or four technicians. At a municipality's request these teams became resident for a period, sometimes up to several months. They worked with local officials to reorganize such matters as budgets, accounting, and cadastral procedures and would leave for another community when new instruments had been prepared. In our discussions at the Secretariat for Local Development, now SERFHAU's parent body, considerable criticism was raised about the performance of these teams, and the entire experience has been scheduled for re-evaluation.

Although the diffusion of planning talent leaves much to be desired, one may conclude from the above evidence that Brazil has, and has access to, considerable technical expertise and has tried, with mixed effectiveness, to prepare its cities with the human resources necessary to manage contemporary development pressures.

THE PLANNING AND LAND-CONTROL STRUCTURE OF INTERMEDIATE CITIES

Several key factors must be recognized in addressing this subject:

1. There are three levels of government in Brazil: federal, state, and municipio. Municipio jurisdiction covers both urbanized and rural areas, the former usually demarcated by an urban expansion limit "perimetro urbana." Thus the municipios are most similar to U.S. counties rather than cities or smaller units of government. In theory, then, the municipio has jurisdiction over expansion land in rural areas. Brazil also has several regional development authorities with broad development guidance and infrastructure authorities that each cover several states but are not general-purpose governments.

2. Brazilian municipios are autonomous in terms of land-control procedures. They have the responsibility for preparing and administering land-use plans and building regulations.

3. Brazilian municipics have considerable revenue-raising power, including the establishment and levying of property taxation. In practice, however, property taxation is low and the municipios depend for much of their resources (80 percent of revenue or more) on a highly complex revenue-sharing allocation from the federal government. The annual allocations were prepared by the Vargas Institute,

and municipal operating and capital (where available) budgets are subjected to federal government review.

4. For some years, the federal government has accepted responsibility for improving municipal planning and land-control procedures and for providing technical assistance. The initiatives for such assistance must invariably come from the local level, and the communities must pay back the assistance they receive.

Thus, there is opportunity for considerable variety in planning approach at the local level, depending on the sophistication, wealth, and aspirations of the community involved. In general, however, the four circumstances depicted below (sometimes in combination) represent the range of situations.

1. Most municipios contain a local building department, which issues permits regulating the scale, character, and location of each new subdivision or building. These officials may work with rudimentary zoning ordinance and subdivision regulation, or with an approved master plan. All communities also have assessment offices, which maintain land records and establish the basis for property taxation. The two functions may be in the same hands or unrelated to each other.

2. Many municipios have one or more planning instruments prepared by consultants under contract with SERFHAU. The SERFHAU process, which represents the major federal government effort to date, is now being subject to evaluation and overhaul and is discussed below.

3. Some municipios have their own, locally funded planning offices. These offices either prepare planning instruments themselves or work with SERFHAU or other consultant prepared plans. Goiania is one such community, and among our contacts this approach was generally regarded as the most effective in terms of providing realistic development guidance.

4. A few communities have created planning/promotion/development corporations for the entire jurisdiction or for newly developing sections. This is a separate municipal corporation, responsible to the mayor and council, which undertakes land-use planning and arranges for both public infrastructure and private projects. To our knowledge this technique is brand new. It has been established in San Bernado do Campos, Curitiba, and Blumenau with no measure yet of its effectiveness.

In addition to the foregoing, the local planning and land-control activities have been widely joined by the housing efforts of BNH. The restructuring of BNH to deal with literally all aspects of local infrastructure financing as well as housing was one of the most prominent

changes over the past few months. Until this change (discussed below), over the past decade BNH was principally concerned with the location and financing of public housing throughout the country. Operating with the vast resources of the workers, pension funds, BNH lent money to locally organized COHABS, or public-housing authorities, for land acquisition and construction. Issues of site selection and haphazard local land-use control as they affected new housing estates were among the principal factors to force SERFHAU-assisted planning on local communities. Although not a guarantee of support, a SERFHAU plan became the prerequisite for federal housing assistance in many cases.

In assessing these approaches to planning, it is important to consider the great importance that land development in general, and public works in particular, holds in Brazilian political life. Mayors, governors, and other politicians have traditionally identified themselves with large-scale construction projects as a means of building their public image. One commentator describes this "public works complex" in none too flattering terms:

The phenomenon has the following features: (a) a relatively greater emphasis by politicians, in deeds and words, on the construction of physical public projects (obras) as opposed to the on-going tasks of public administration, the institution of new programs other than public works, and changes in the pattern of social relations; (b) the identification of individual political personalities with the public works they sponsor, and the furtherance of their careers on this basis; and (c) the connection of most works only haphazardly and uncertainly with programs or plans of a longer duration and scope than a single executive term of office.²

The head of instruction at IBAM recalled that some years ago there was a spate of fountain-building in Brazilian cities and that some communities had erected far more and far more elaborate schools than there were pupils or teachers for—pointing out that IBAM's thrust to inculcate administrative wisdom was directed at moderating such enthusiasms. SERFHAU had a similar objective—to establish a planning capability within communities and to provide incentives for political figures to identify with long-range, comprehensive development guidance.

The SERFHAU Approach

Much of Brazil's formal institutional arrangements in this field appear to be modeled on the U.S. experience, or at least bear close similarities to U.S. approaches down to the liberal use of acronyms as titles. For example, IBAM reflects elements of the International City Managers Association and the Brookings Institution. The BNH, except for its vast resources of funds, has operated much like the old Public Housing Administration in its financing of local housing authorities. SERFHAU could have been derived from the local planning assistance program (Sec. 701) of the U.S. Department of Housing and Urban Development. There is that much in the way of conceptual and operational similarity between the two, and, from very limited evidence thus far, the successes and failures of the two have a good bit in common.

SERFHAU itself was created in the early 1960s along with BNH and functioned as part of the Ministry of Interior. It too received some AID support. Its planning effort began about middecade and eventually involved 1,500 municipios prior to a moratorium on new commitments that went into effect in the spring of 1975. (It too has a research and information arm, CIDUL.) SERFHAU's principal planning objective was to develop local capability for land control and, as a corollary, see to it that public investment, especially from the federal government, was placed within some form of rational framework at the municipio level. It was a direct response to the inability of local building departments to rationalize development procedures with their rudimentary zoning ordinances and to the "politics" of land development.

SERFHAU's program was most extensive at a time when federal government funding of local housing and public works was scarce (a situation that has changed considerably, as is noted below), and as one of its present top officials told us, "Since there wasn't the money to build projects, at least we could try to institutionalize comprehensive planning."

Financing of SERFHAU Plans

A principal point (and a difference from the U.S. 701 system) of the SERFHAU approach was that communities would have to pay back the money advanced them for the planning effort. Planning loans were

amply available, but these were loans only, to be paid off during a period of years at interest (8 percent) plus the index factor to compensate for inflation. This very fact screened out communities that were especially poor from the program, but there was much merit also in that a repayment requirement symbolized some form of commitment by the community to implement the planning recommendations. What in fact often happened was the following.

Many communities never got beyond the early data-gathering or preliminary report stages of a SERFHAU undertaking. As work toward a "Plano Integrado" grew more intensive, and commitments more definitive, many cities abandoned the effort. Nevertheless, an extraordinary amount of work was done in the space of less than a decade, particularly because existence of a plan was often a prerequisite for financial assistance from higher levels of government.

Stages of Production

The SERFHAU system has been an eminently logical one. It involved three basic stages of effort:

1. Preparation of a preliminary report. This was a reconnaissance study outlining problems and possibilities of the community and the required work in subsequent phases.
2. Mapping, cadastral surveys, and data-gathering. Despite Brazil's considerable technological sophistication, by and large in the 1960s local mapping via aerial survey was sparse indeed, and the basic land records of the smaller cities were a mess. Thus the first real order of business under SERFHAU was to get these basic elements into shape. Air surveys were flown, and base maps were prepared. The cadastral surveys were often quite extensive, delving beyond actual lot ownership and use into structural conditions of buildings and sometimes house-to-house occupant interviews. Efforts were made to have the local building and assessment departments use these surveys and establish a more equitable basis of assessment and taxation. Here is where many of the projects met their first (and sometimes insurmountable) hurdle because of the extreme reluctance on the part of some local politicians to consider the assessment/taxation issues.
3. Preparation of detailed plans and reports, the Planos Integrados, which involved policy statements, land-use prescriptions, budget calculations, staging, and the like. Certainly from the technical standpoint, the SERFHAU work has been comprehensive and thorough.

Method of Preparation

The SERFHAU plans were invariably prepared by outside consultants, again a similarity to the U.S. 701 system. The Brazilian method of selecting consultants also resembled the U.S. experience but was totally different from that employed in the Turkish competitive process cited earlier.

Normally SERFHAU representatives and the city administration would meet to prepare the terms of reference for a limited competition. Although sometimes the competitions were completely open, more likely, two or three firms were contacted. Whenever possible, SERFHAU solicited the municipalities advice on consultants to screen. At this point a document similar to U.S. RFPs (requests for proposals) was sent to the firms identified. They in turn responded with detailed presentation of scope of work and manner of performance, along with any basic concepts they wished to put forward. The submissions were then reviewed both by SERFHAU and the municipio and a consultant was selected for contract.

As noted above, most of the consultant firms are physically located in Rio and Sao Paolo. In keeping with the Brazilian urbanismo tradition, most have been architectural or engineering firms; however, the nature of the survey work involved and the recommendations required have dictated that a broad range of disciplines had to be represented on the team. In the plan for Sao Luis, for example, still under preparation, there have been economists, geographers, lawyers, and sociologists. The more that environmental concerns have come to the fore (Brazil has had institutions concerned with environmental protection since the late 1960s, and one of the most important roles for the recently reconstituted ECLA office in Rio will be to build sensitivity to environmental impact into Brazilian planning at the regional as well as local level), the more environmental sciences have been brought into the consulting work.

An important requirement of many SERFHAU plans has been for the consultants to work in the field, with the municipio staffs in data-gathering and in preparation of recommendations. The Sao Luis plan is one example. Sao Luis is a port city of about 270,000 that was selected as the site of a new steel mill that will in a few years double Brazilian steel production. The population is projected to increase by about 20 percent per year over the next five years. Here the consultant team spent several months in the field and tried to rely on the local building department and engineering staff to supplement their work. The local staff turnover was considerable, and cooperation was

difficult. In the end the consultants spent much effort trying to train the people in basic gathering of data.

At the end of the planning process, the consultant plan is turned over to the municipality for implementation. Sometimes the consultants leave. Sometimes they are retained for a period to work on implementation and revisions. In this respect, the resemblance to the 701 assisted local planning in the United States is remarkable.

Assessment: The Issue of Local Capacity

The SERFHAU experience represents perhaps the richest store of information on planning and planning assistance in the developing world. It has not yet been subjected to searching and systematic evaluation. One study has been prepared as a master's thesis by a graduate student at COPPE involving a questionnaire on the degree of implementation of SERFHAU plans. Although the results of this survey have not been made public, we were told that it figured prominently in the national government's rationale for creating an urban policy body to oversee both planning and capital investment in Brazilian cities. An evaluation of the SERFHAU activity is high on the list of research priorities for the new Secretariat of Local Development. Although that experience should be assessed (for the benefit of other countries as well as Brazil), one theme kept recurring throughout our interviews—the critical need for local capacity and support. From consultants and government officials alike, we heard the refrain: without local political and technical support, these planning studies go nowhere.

Some examples: Nova Iguaçu is a boomtown at the edge of the Rio de Janeiro metropolitan area, about 40 kilometers from the center of Rio. It is a sprawling industrial community, with a cluster of high-rise office and apartment buildings in its central business district and severe shortcomings in its water and sewer system and traffic pattern. Favelas abound. The SERFHAU plan went as far as a cadastral survey and recommendations for new approaches to taxation. According to the consultant who supervised the work, the local authorities rejected the suggestions, proceeded to offer further tax incentives to industries that wanted to locate in Nova Iguaçu, a matter that produced further strains on public services, and the planning project was terminated. The same consultant completed a plan for a small city in Bahia, where the mayor and council did provide considerable political support. Follow-through and implementation became the major issue here, and the city staff contained no one who could provide the needed continuity. The city was a poor one, and its budget was unable to support a well-paid planning professional. Recommendations to SERFHAU that the

community be granted funds for personnel were not accepted, and, according to the consultant, "The plan is dead."

Goiania is the state capital of Goias, a rich mining area from which the federal district of Brasilia was carved. Goiania is about 150 kilometers from Brasilia. We were urged to visit it as an example of a well-planned community, due in large measure to the presence of a local planning staff with close ties to local political leadership. The city is now about 400,000 in population and has been growing at a rate of over 16 percent per year since 1960.

From a superficial view, Goiania certainly lives up to expectations. It too has a high-rise core and looms up from the rolling countryside like an architectural model. Its main residential areas, even the rapidly growing low-income settlements on the fringe, appear compact and neat. Its main streets are tree-lined and the business district appears prosperous. Goiania has a university, agricultural processing industries, and even an international auto racing stadium. But the attractiveness and seeming order of the place belie the considerable unemployment that exists, the shortages of health facilities, and the growing squatter colony in a dried-up river bed that runs through the town. Goiania is grappling with its problems, however, and we learned some interesting things about why.

First of all Goiania is a relatively new planned city. It represents a relocation of the state capital in the early 1930s. A formal, geometric plan had been worked out (much reminiscent of Pierre L'Enfant's plan for Washington, D.C.) for a city of 60,000, and the central areas (excepting, of course, the high-rise office buildings) were largely worked out according to that street system and density plan.

By the early 1960s, the long-range plan of the 1930s was clearly obsolete. Local officials went to SERFHAU, and a Sao Paulo consultant firm was retained to prepare a new plan. The mayors (there were a succession of two or three in the 1960s and early 1970s) identified with the planning effort and used it as a public demonstration of community concern. One mayor was so involved that he was able to obtain appropriations, first for hiring local people to work with the planners and then for creating a planning office as a permanent instrument of the government. The two top people today have been with the project team from the beginning, and the staff now comprises 20 and includes a sociologist as well as architects and engineers. It is significant that none of the staff has had overseas training and the director and deputy are long-time residents of Goiania. An American Peace Corps volunteer (now an instructor at COPPE) had been on the staff.

We talked with the deputy director (a forceful and forthright woman who has become something of a legend in Brazilian planning

circles for her persistence with politicians) and some of the staff. The following were key points of discussion.

1. There had been considerable criticism of the SERFHAU plan because of its essential unrelatedness to the community. The official felt that the Sao Paulo consultants had not come with an open mind to study the particular needs of Goiania. They practiced "urbanismo" and tried to impose a structure "that might be suitable in Rio de Janeiro or Sao Paulo" on the city. She talked of road systems unrelated to land-use requirements or to budgetary prospects. She contended that much of the planning staff's effort had been in revising the consultant proposals to tune them more effectively to Goiania.

2. Even with the presence of a "realistic" plan that had been adopted by the local government, new installations and new proposals kept cropping up to violate it. She talked about projects (some local government, some national, some private) that were put into available sites on the perimeter of the city (the autodrome, a factory, public housing) that were not scheduled for development and cited continual hassles to coordinate projects with available infrastructure.

3. There had been considerable turnover among the top elected officials over the years, and it was a continual—but apparently successful struggle—to maintain support for the planning organization and its approaches.

4. The city had recently received a substantial commitment from BNH for public works funding as well as housing. She attributed the commitment, and the relatively low interest rate to be charged, to the lobbying of the elected officials and the planners in Rio with the BNH executives. Without this direct and frequent contact, she felt the needs of Goiania would not have been given priority.

5. Goiania was one of the few to adopt the BNH-sponsored "Project Cura," mentioned in Chapter 3. This was a scheme whereby infrastructure would be provided in a growing section of the city but financed through special tax levies on property-owners in the area. In Goiania, the Cura project was to provide parks and open space in a rapidly developing area of middle-income subdivisions. "Cura" she commented, "is very good, but only for the rich." Nevertheless, there was sufficient political support to permit this differential to be levied.

She and other members of the staff had many exciting ideas about ways to finance public services for the poorer areas of the community—and the significant fact was that they were allowed to hold, indeed encouraged to hold these views and still had the confidence of the local establishment.

In Rio de Janeiro, one of our meetings was with the planning director of SERFHAU, who is to head the program as it is reconstituted under BNH. He reviewed a list of all the SERFHAU projects and cited those he felt were the most successful. Invariably these were communities that had local staffs to carry on the work and/or considerable local political interest in controlled development. Two communities (San Bernado do Campos and Blumenau) had created local development corporations responsible for continued planning of new growth areas and for coordinating both infrastructure and private investment. It was the local skill and local support that made the difference.

Land-Control Issues

Coordination of infrastructure provision with planning is put forward as a basic issue by many authorities and is clearly one to be addressed by the new urban policy structure. However, the most serious issue, the one pervading most of our discussions, is one for which no viable solution has yet been found—the escalating cost of land, which distorts the urban pattern. Land speculation appears to be part of the Brazilian way of economic development. It is most extreme in the largest cities and has served to preclude the location of new, publicly assisted housing, in areas close to work places and services. For while land speculation affects the siting of productive enterprise and utilities, it is on the housing problem that its effects are worse. The situation is compounded in Rio de Janeiro, where central-area favelas have been removed and relocation housing, if at all available, is at the fringe. Land values in Rio are higher than in midtown Manhattan. We cited earlier the example of Fronteira, a new housing estate sponsored by the BNH over 80 kilometers from the center of Rio. This, according to BNH authorities, was the only location that afforded both a large enough site and low enough land costs—and it is a location devoid of employment and services.

One BNH official cited the case of a resort city 100 kilometers from Rio where a friend had bought two lots in the spring for 15,000 cruzeiros each and had just sold them for 50,000 cruzeiros each, without paying any taxes on the profit.

The arduous process of finding housing sites has been one factor to heighten BNH's interest in intermediate cities. For in these smaller communities, land for assisted housing that is accessible to employment and services can be made more easily available.

BNH has been an innovator in what new control techniques are being tried. Its project Cura combines a commitment by BNH to

finance all related infrastructure for new development areas in return for payment via betterment taxes on all the property-owners affected. In theory, these taxes will be so high as to force early use of the properties in accordance with an advance plan. Some 27 communities have been studying the idea. A handful have adopted it, and the first exploratory efforts are now getting underway. This is certainly a device to be studied for broader application.

Even with Cura, however, the costs for residential land escalate. One BNH official believes at this time there is no direct means to control the prices. The bank has instituted some "indirect" techniques, which he feels may be more effective on a project basis.

The most promising is the "trade-off" approach now being tried in Curitiba. Curitiba, through its development corporation, is planning a large new industrial town outside the border of the present city. It will have several factories and some 80,000 dwelling units for various income levels. BNH is scheduled to build 10,000 units of low-income worker housing, but the land cost has appeared impossible. A deal has been worked out that represents a major breakthrough. If the industries provide, at an appropriate cost, sites for housing 10,000 workers adjacent to the work areas, then BNH will finance all the required infrastructure for the new city. The private entrepreneurs and the city have agreed, and the former will absorb any losses for the property.

Provision of complete public services is a new role for BNH, and a powerful one in respect to the prospect for achieving viable development control. It converts the agency into a comprehensive development authority able to direct the growth of whole neighborhoods, and perhaps cities. Establishment of this role is part of the country's new look in urban policy, a subject to which we now turn.

THE NEW URBAN POLICY AND STRATEGY

In 1972, James A. Gardner of the Ford Foundation prepared an extensive study of urbanization in Brazil as part of the Foundation's global urban review. Gardner identified the considerable efforts made since the early 1960s but came down hard on the lack of a national urban policy within which these efforts could be integrated. He stated:

Without belaboring the point, the "interior" focus of urban policy may be very desirable as a conceptual approach. Unfortunately, however, the settlement of the interior is all too often presented as the urban policy, rather than as a part of a more comprehensive policy which also takes cognizance

of and responds to the problems of extant urban centers, large and small. With regard to the large agglomerations, there is something of a conceptual void in Brazilian urban policy. This void is probably hidden and perpetuated in the "hinterland mystique." In Brazil, where it would take half a dozen new Brasílias to absorb the growth of Sao Paulo alone over the next ten years, a parallel policy, focussed on the urban areas per se is imperative. At present the conceptualization of urban policy is lacking in analysis and understanding of this increasingly urban character, and lacking in comprehensive policy with which to address urban growth and problems.³

Given recent events, it is clear that Brazilian authorities and intellectual urbanists have either listened carefully to Gardner or have been thinking along the same lines. Brazil had tried many approaches but, with experience, found "the whole" wanting. On June 6, 1974, the president of the republic issued a decree (no. 74.156), which would henceforth form the basis of an overall policy approach. The decree established a National Commission on Metropolitan Regions and Urban Policy at the highest level of government to prepare an overall urban strategy and to evaluate the results. The commission includes the following membership: the secretary general of the Secretariat of Planning; the secretary general of the Ministry of Interior; the president of the BNH; representatives from the Ministry of Transport, the Ministry of Agriculture, and the Ministry of Industry and Commerce; and four members selected jointly by the secretary of Planning and the secretary of the Interior Ministry. This commission will be headquartered in Brasilia, rather than in Rio. As staff the commission will use both the research capability of the Ministry of Interior and of the Planning Agency (for example, IPEA).

Aside from the significance of the commission per se, the decree joins together these two ministries and their professional staffs, which have in the past frequently been at loggerheads, a factor that contributed to coordination failures. Along with the decree, the government published a statement of purpose, which was to guide the deliberations of the commission. This statement itself established national priorities for comprehensive urban effort. It included the following directives:

1. An urban policy will be developed as a means of producing national integration and reducing inequities between regions.
2. A "national urban structure" will be defined that identifies national and regional metropolises and a system of growth poles to encourage decentralization. In those cities that are selected as growth

poles, economic, fiscal, social, and physical programs will be worked out and implemented, with particular concern to establishing a viable physical structure for the cities.

3. The specific outlines of an urban strategy for each region will be:

A. For the Southeast: Efforts will be made to contain the growth of Rio and Sao Paulo and divert economic development to cities on the periphery of each. Efforts will be made to build up the Belo Horizonte region, particularly the city of Victoria.

B. For the South: Development plans will be made for Porto Alegre and Curitiba. Urban expansion will be fostered in Santa Catarina state. Regional growth poles will be promoted in Rio Grande do Sul and Parana.

C. For the Northeast: Incentives will be established for the development of the regional centers of Salvador, Recife, and Fortaleza. Other state capitals will be encouraged as regional centers, and national priority will be attached to the growth of Sao Luis as a major steel center.

Of special importance will be the development of intermediate-size cities to act as targets for migration.

D. For the North and Central East: Special priorities will go to Belem, Manaus, and Santarem. A new development complex will be encouraged in the region of Brasilia-Anapolis-Goiania. New growth centers will be established at key transportation junctions in the Amazon.

Generally this policy framework will highlight controlled investments in both the metropolitan centers and the intermediate-size cities, and a full range of economic, social, and physical investments will be encouraged. Special attention will be given to working through the regional development authorities and the state governments to build up their capabilities for financial and technical assistance.

Along with the commission have come two major structural changes within the government's urban development agencies: the creation of the Secretariat for Local Development to "replace" SERFHAU in the Ministry of Interior and the ascension of the BNH as the principal agent for planning activity plus the sole financier of all local infrastructure, in addition to its housing functions.

Although SERFHAU nominally remains in existence, it has effectively been replaced by the new secretariat, and most of its planning assistance functions will be transferred to BNH. The secretariat will function as a policy and research body within the ministry. It will be concerned with implementing the June decree as a main staff arm of the commission and will be a "trouble-shooter" within the ministry, identifying new programs that may be established to further the urban

policy. One of its chief functions will be to evaluate all of the planning and technical assistance work that took place under SERFHAU, ostensibly to form the basis for new methods. The secretariat has an ambitious research program, including a detailed profile of Brazilian cities to serve as the basis of resource allocation under the new policy initiative and an assessment of migration patterns to determine which intermediate and smaller cities are most appropriate to act as diverse points. They are particularly concerned with the training of technical and administrative personnel for intermediate cities and hope to build up training centers in the communities selected as development poles—not in the primate centers. One of the secretariat's most important tasks will be to work with the regional development agencies and the state governments in the effort to expand their urban assistance capabilities.

This is an ambitious and as yet unfunded effort. The secretariat was created after the 1974-75 budget was passed. It began to work with earmarked funds from SERFHAU, and not until spring 1975, will it know the extent of potential fiscal support.

The movement to restructure BNH appears to have the following origins. The bank, given its substantial resource of pension funds, has been unable to spend all the money it has available for housing. The reason given is the lack of adequate planning and of support infrastructure for new housing projects, particularly in the smaller cities. By creating a "one-stop shop" for financing just about every aspect of urban public works (for example, water, sewer, roads, mass transit, schools, health centers, even shopping complexes) policy-makers believe the bank can affect both the coordination of investment and the application of sufficient resources within a given community to avoid the shortages of the past. Again it must be remembered that these will be long-term loan funds, rather than grants, and there will be considerable effort devoted to ensuring the target cities' ability to raise revenues for repayment.

One of the criticisms leveled at SERFHAU in the past had been the lack of juncture between the comprehensive planning studies and actual project needs of the communities. By realigning the planning-assistance function with the project-financing responsibilities of the bank, the government believes more realistic and more directed planning can be established.

It is entirely possible that the realignment may mark the end of comprehensive planning as an independent exercise for the intermediate cities. The emphasis may well lie on short-term programming of projects—for example, entire neighborhoods and industrial-service complexes—in the name of speeding economic development of hinterland cities, controlling the location of that development without major legislative changes to control speculation, and making more efficient use of scarce personnel and resources.

These new initiatives are so recent and so far-reaching that the Brazilian planning establishment—both public officials and consultants—is in a state of some confusion. Many anticipated planning projects have been put on “hold” while the evaluation process begins and the new mechanisms go into action. Yet, according to our interviews, the pressure is now on to make the new system work, and the years ahead should see its outlines take form.

The self-analysis to which past planning approaches are being subjected should be closely watched. For, whatever the outcome, this reevaluation of past practice in light of present realities will illuminate the basic issue of which techniques of land-use programming and control are effective and why.

NOTES

1. Examples of some of these studies, all published since 1973, are Milton Da Mata, “Urbanizacao e Migracoes Internas” (Urbanization and Internal Migration); Francois Eugene Jean de Bremaeker, “As Cidades Brasileiras” (The Brazilian Cities); Hamilton Tolosa, “Macroeconomia da Urbanizacao Brasileiro” (The Macroeconomy of Brazilian Cities); and Sergio Boisier, “Localizacion, Tamano Urbano Y Productividad Industrial. Un Caso de Estudio de Brasil” (Industrial Location, Urban Size, and Industrial Productivity: A Case Study of Brazil).

2. David G. Epstein, Brasilia: Plan and Reality (Berkeley and Los Angeles: University of California, 1973), pp. 31-32.

3. James A. Gardner, “Urbanization in Brazil” (New York: 1972), pp. 192-93.

CHAPTER
6
MALAYSIA

THE CONTEXT FOR URBANIZATION AND LAND CONTROL

Malaysia is an excellent example of our thesis that physical, economic, and political conditions endemic to each country mold both the pattern of urban development and the policies for dealing with urban issues. Technically speaking, Malaysia has not spawned the primate-city characteristic of other Southeast Asian countries. Even with rapid growth of Kuala Lumpur as capital and chief economic center, Malaysian urbanization is essentially that of intermediate-size and small cities. In fact, however, the primate does exist, although since 1965 it has been politically separate from Malaysia. That is Singapore.

The sundering of Malaysia from Singapore acted as considerable stimulus to the growth of Kuala Lumpur by requiring aggregation of the political and commercial functions characteristic of a national capital. More important, however, the approaches Singapore has taken to handling its problems of urban development have had a profound influence on the type of urban-development-control measures elected by Malaysia, as well as the actual physical form of urban development itself. Singapore, now over 2 million people, continues as a focus for some Malaysian migration and maintains many economic and social linkages with Malaysia. The influence of Singapore is certainly as great as the legacy of British colonial rule, which has helped shape the Malaysian administrative pattern.

But the "content" of control measures and the "style" with which they are being applied is genuinely Malaysian. Malaysia is one of the few developing countries with an explicit government emphasis on urbanization and on a decentralized pattern of city development. This

emphasis is a fundamental element in the country's New Economic Policy (NEP). It has been adopted only partly for economic growth considerations. Directed urbanization is primarily a technique to achieve social and economic integration of the Malay population, the country's racial and political majority whose participation in the economy and whose standards of living are well below that of the Chinese minority. Directed urbanization is intended to increase the wealth and improve the social conditions of the Malay population, and from this the strategy derives its strength and political support.

In Malaysia, it may be said that the basic policies for urban land-use programming and control now exist along with the institutional structure within which those policies can be applied. Moreover, so long as general economic conditions maintain their increasingly favorable character, resources for applying these policies from both the public sector and private enterprise also exist in a degree not common to developing countries. However, Malaysia relies heavily on foreign consulting firms and urban development professionals for much of its substantive planning activity. Assuming economic conditions hold up, the principal issues will lie with the country's ability to mobilize, through education and training, sufficient Malaysian professional talent to operate the machinery now in effect. For the implementation of policy can be conducted only by the Malaysians themselves, and on this matter, the country's human resources are extremely thin.

The five days in Malaysia were spent in Kuala Lumpur, with visits to the new towns of Petaling Jaya, Shah Alam, and to the Port of Kelang. Discussions were held with officials of the Economic Planning Unit, the Urban Development Authority, the Town and County Planning Department, the City Planning Department of Kuala Lumpur, the Selangor Development Corporation, and the Malaysian Development Institute. Also, we met with United Nations advisers to the Urban Development Authority, and with faculty members of the Marah Institute of Technology, the University of Malaysia, and the planning program of the University of Sains at Penang, a number of whom are also private planning consultants. The Malaysian trip followed upon a two-day visit to Singapore.

GENERAL DEVELOPMENT BACKGROUND

Peninsular Malaysia has a relatively small population of approximately 9 million.* (See Map 3.) In the past few years, economic growth has been accelerating at a rate of approximately 7 percent a year, while population has been growing by about 3 percent. Malaysia has primarily an export economy of rubber, tin, palm oil, and petroleum. However, the country has an increasing manufacturing base and expanding tourist facilities. Malaysia has a relatively high per capita income, below only those of Japan and Singapore in Asia.

The key to understanding Malaysia and its approach to urban development is the racial question. According to the 1970 census, some 56.7 percent of Peninsular Malaysia's population is Malay by race. Some 31.3 percent is Chinese, and 11.2 percent, Indian. The distribution of income, however, is considerably different from the racial balance.

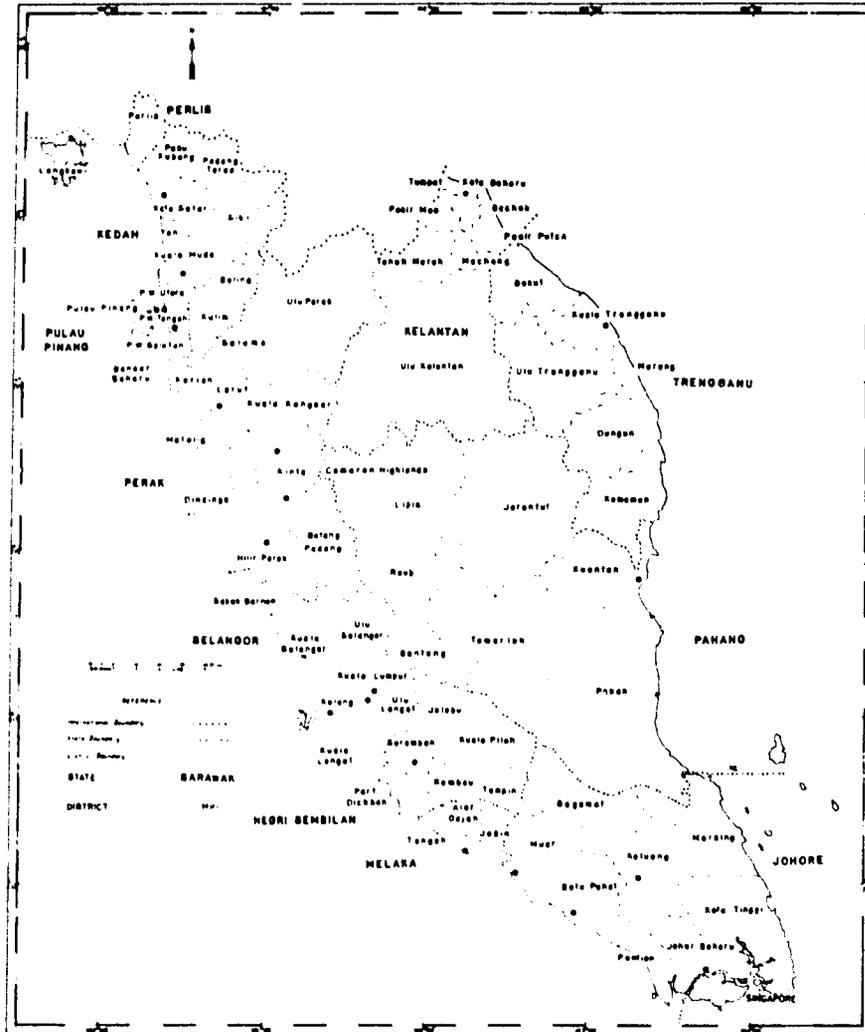
Some 75 percent of the Malay population had incomes under 200 Malaysian dollars per month in 1970. This contrasted very strongly with only one-third of the Chinese population with incomes below that level. Of the relatively small Indian population, about one-half had incomes below \$200 per month. Over 10 percent of the Chinese population had incomes higher than \$700, a level reached by only 3 percent of the Malay population. Mean monthly income of Malay households in 1970 was \$179, while that of Chinese was \$387, and Indian, \$316.

A similar, if even more extreme, pattern exists in the ownership of wealth and production capacity. (See Table 3.) There is considerable foreign control of corporate ownership in both modern agriculture and in industry, particularly the rubber plantations and the new factories. In the corporate sector, however, some 26.2 percent of assets are owned by Malaysian-Chinese, whereas less than 1 percent are owned by Malay entrepreneurs. The noncorporate sector shows over 90 percent of assets controlled by Malaysian-Chinese and less than 3 percent by Malays. (A similar pattern exists in commercial activity.) It is only in the noncorporate agricultural sector that Malay

*Total population of Malaysia is about 12 million, including East Malaysia, which represents two states on the Island of Borneo. Due to the special internal political character of the federation and the generally different racial composition on Borneo, certain distinctions exist in administration and policy between Peninsular Malaysia and East Malaysia. The urban development pattern and policies that we discuss below are primarily characteristic of Peninsular Malaysia, and it is Peninsular Malaysia that is the area for discussion in this book.

MAP 3

West Malaysia



Source: James Osborn, Area, Development Policy, and the Middle City in Malaysia (Chicago: University of Chicago, 1974). Used with permission of the author and of the University of Chicago Department of Geography.

TABLE 3

Ownership of Assets in Modern Agriculture and Industry, Peninsular Malaysia, 1970

Ownership	Modern Agriculture ^a (Planted Acreage)				Industry ^b			
	Corporate Sector		Noncorporate Sector		Corporate Sector		Noncorporate Sector	
	(thousands of acres)	(percent)	(thousands of acres)	(percent)	(millions of dollars)	(percent)	(millions of dollars)	(percent)
<u>Malaysians</u>	515.0	29.2	697.6	94.1	559.7	42.8	167.2	97.6
Malay	5.0	0.3	349.3	47.1	11.2	0.9	3.9	2.3
Chinese	457.0	25.9	243.3	32.8	342.3	26.2	158.0	92.2
Indian	4.9	0.3	74.8	10.1	1.5	0.1	3.9	2.3
Other	48.1	2.7	13.2	1.8	187.2	14.3	1.4	0.8
Government ^c	—	—	17.0	2.3	17.5	1.3	—	—
<u>Non-Malaysians</u>	1,249.6	70.8	44.0	5.9	747.3	57.2	4.1	2.4
Total	1,764.6	100.0	741.6	100.0	1,307.0	100.0	171.3	100.0
Percent of Total		70.4		29.6		87.4		12.6

^aModern agriculture covers estate acreage under rubber, oil palm, coconut, and tea. The Federal Land Development Authority (FELDA) is included in this category—under the noncorporate sector.

^bThe industry sector covers manufacturing, construction and mining. Ownership is in terms of fixed assets. Total excludes unallocatable assets amounting to \$25.2 million.

^cGovernment ownership of 17,000 acres in modern agriculture is included in the noncorporate sector, while its ownership of \$17.5 million of fixed assets in industry is included in the corporate sector.

Source: "Mid-Term Review of the Second Malaysia Plan 1971-1975" (Kuala Lumpur: Economic Planning Unit, 1974).

ownership predominates, a reflection of the primarily agricultural character of the Malay population. It is Chinese capital and entrepreneurship that dominates in the urban areas, and, by and large, the Malays, although a majority, are a poor rural population.

The Malays control the government, however, and political life. Despite a surface appearance of separate racial communities living in harmony, considerable economic and political tension exists. Indeed, racial riots occurred as recently as 1969. There is thus a strong imperative for the government to improve conditions for the Malays and to increase their participation as owners of commerce, industry, and services and as professionals.

The government's Second Five-Year Plan, its New Economic Policy, calls for 30 percent of corporate wealth and control to be in the hands of Malays by 1990. Improvement is ostensibly to occur without expropriating the wealth of Chinese and others. And this puts the burden squarely on continuous and accelerated expansion of the economy, with major governmental programs directed toward the Malays. This expansionist philosophy is articulated in the midterm review of the Second Five-Year Plan:

The degree of restructuring which is required in the ownership of assets will not result in loss and deprivation on the part of other Malaysians, as the process of restructuring is to be undertaken in the context of a rapidly expanding economy. There should, therefore, be no grounds for fear or anxiety on the part of other Malaysians that government intervention in the private sector on behalf of the Malay community will lead to deprivation of the rights or prospects of non-Malays.¹

Formally stated, the NEP is an effort to achieve a "national unity" through a two-pronged strategy, which consists of the following:

(a) Eradicating poverty by raising income levels and increasing employment opportunities for all Malaysians, irrespective of race. This is to be achieved by programs aimed at raising the productivity and income of those in low productivity occupations, the expansion of opportunities for inter-sectoral movements from low productivity to higher productivity activities and the provision of a wide range of social services especially designed to raise the living standards of the low income groups;

(b) Accelerating the process of restructuring Malaysian society to correct economic imbalance, so as to reduce and eventually eliminate the identification of race with economic

function. Programs for this purpose include the modernization of rural life, the rapid and balanced development of urban activities, the establishment of new growth centers and the creation of a Malay commercial and industrial community in all categories and at all levels of operation. The objective is to ensure that Malays and other indigenous people will become full partners in all aspects of the economic life of the nation.²

Once an expansionist strategy is elected, the emphasis on urbanization becomes a natural one. First of all, per capita income in urban Malaysia is considerably higher than that in the rural areas. In 1970, over 80 percent of the households in Peninsular Malaysia with incomes below \$200 a month were rural, and about one-third of the rural households had incomes below \$100 per month. Less than 10 percent of the urban households were in this category, and overall the mean income of rural households was less than half the mean income of urban households. There were also on the average more wage-earners per family in the urban areas than in the rural areas, and amenities in urban areas were significantly higher, despite urban unemployment of over 7 percent. The incomes of the urban Malay population were considerably higher than those of the rural Malay population.

About 27 percent of the population in 1970 was located in urban areas. However, less than 30 percent of the urban population were Malays and other indigenous people (together termed "Bumiputras"). In the rural areas, however, over 63 percent were Bumiputras, with Chinese and Indians the minority.

Government policies and rural poverty have accelerated the movement of Malays to the cities.

Between 1957 to 1970, Malay urban population grew at 5.4 percent compared to 2.6 percent for non-Malays. This represents increasing opportunities for the urbanization of Malays as well as emphasizes the need to ensure that rural underemployment is not simply transformed into urban unemployment and underemployment.³

Urban unemployment and underemployment are high. But generally greater economic opportunities in urban areas through rapid expansion of industry and services have contributed to the urban policy emphasis of the Second Five-Year Plan.

It is important to note that urban policy is not undertaken in a context of downgrading rural development. On the contrary, most public expenditures during the plan period go to rural infrastructure, rural development, increasing the well-being of the rural population.

Indeed the government's principal development institution is FELDA, the Federal Land Development Authority, which has for some years concentrated on creation of new rural villages along with land-redistribution schemes. It would be most accurate to say, therefore, that policy is intended both to improve the conditions of rural life and to accelerate the process of urbanization. The basic approach is one of regional development expressed as follows:

The aim of regional development is to reduce the marked economic disparities which currently exist between states. However, the underlying objective is the development of the totality of the nation's resources wherever they may exist so that they contribute to optimum implementation of the New Economic Policy. The strategy will thus involve the full exploitation of presently untapped economic resources, especially in the less developed states, the promotion of population migration to areas with large economic potential and the expansion of infrastructure and social services in those states and areas which now lag in development so as to achieve greater balance between the various regions and people residing therein.

The strategy adopted is pragmatic. In some cases it will be possible to accelerate development where population is concentrated. In others it will be necessary to induce people to move to areas where there is greater potential. Indeed, the full development of the nation's vast natural resources will require substantial movements of labor to the better endowed regions.⁴

THE URBAN PATTERN

Kuala Lumpur

Kuala Lumpur is, in many respects, a "new city," for the split with Singapore served to accelerate its growth as a governmental, commercial, and university center. Up-to-date statistics are hard to come by, but it would appear that KL's present population is somewhere between 700,000 and 800,000, with an immigration rate of about 30,000 people a year. Although the city government and other public agencies have built about 15,000 units of public housing, in 1970 a World Bank planning team estimated that about 48,000 families were living in slum or squatter housing. Still, in all, this seems to be a

relatively modest component of total housing compared with other capitals of the developing world.

The general impression of development in KL is that of recency and high-quality construction, generous landscaping with an overall sense of green, and serious though not paralytic traffic congestion. There are high-rise offices, hotels and apartments, luxurious single-family subdivisions, shopping centers, and sizable blocks of public housing within the city itself, as well as numerous tin-roofed kampongs and wood shacks still in evidence.

As the Shankland-Cox report for the World Bank commented:

Taller buildings, often entirely in commercial use are rapidly replacing the old ones. There is some modern architecture of considerable distinction, but little evidence of conscious integration between new city building and the city fabric as a whole. . . . Kuala Lumpur seems to be smaller and less densely populated than it actually is. This is a quality well worth trying to protect and enhance as the population increases and a much larger area becomes urbanized.⁵

A principal factor that has thus far prevented chaos in KL has been the regionalization of its own development. And in this sense, the urbanized area is for its size of population and extent of activity, practically unique as a metropolitan capital. For the metropolitan population of Kuala Lumpur is actually on the order of about 1.5 million. Much of this population and extensive industrial activity is decentralized in development nodes along the 30-mile valley that extends from Kuala Lumpur to the port of Kelang, at the west. There are the new towns of Petaling Jaya and Shah Alam and a substantial concentration at Kelang itself. Although a ribbon of growth has begun to connect the two major centers, rubber and palm oil plantations and other agricultural uses still provide "greenbelt" forms of separation.

The Kelang Valley contained in 1970 about 14 percent of the Peninsular Malaysian population. Thus far this pattern of linear development and strong nodes of population has been responsive to government direction. The "decanting" of growth has been public policy, implemented through strong development corporations as we discuss below. But the region continues to outstrip other Malaysian cities in its attraction powers for new investment and new population. Although the Kelang Valley is not yet a "great wen," the government itself recognizes increasing difficulties in diverting new investment elsewhere and in protecting the nodal pattern within the region.

Other Cities

Urban centers are well-distributed across Peninsular Malaysia, although the western side is distinctly more "urbanized" than the east. There are five other cities over 100,000: Georgetown (Penang) is the second city at about 350,000 to 400,000. Ipoh, the tin capital, is next at about 275,000, followed by Johor Baharu, Malacca, and Seremban. Another 10 or so communities are in the range of 30,000 to 100,000 and figure prominently in the country's policy to build up "growth centers." Although migration figures are not available, squatters are reported in both Penang and Ipoh.

Penang especially has begun to undergo rapid expansion, spurred by manufacturing, its status as a free port, and a burgeoning tourist industry. High-rise buildings are proliferating, and the extremely aggressive area leadership is backing construction of a new civic and commercial center. The center will feature a totally air-conditioned geodesic dome, whose inventor, American architect Buckminster Fuller, is overall design consultant to the project. Penang has an important two-year-old university and an entrepreneurial class and is a prime example (in relation to KL) of the kind of intermediate-level city that has been this study's concern. Other communities may not be growing as rapidly, but both Johor Baharu and Ipoh have concentrations of wealth and are experiencing industrial expansion.

The Influence of Singapore

One should not underestimate either the economic and social relationships between Malaysia and Singapore or the continuing influence of the latter on urban development in Malaysia. Two comments might serve to convey the closeness of ties. The first is by a Malaysian writer in introducing a collection of short stories about the region:

Yesterday Malaysia and Singapore were one country; today they are two; tomorrow they may be one again. These changes are beyond the writer's control—or province. What he can affirm is simply a fidelity to the region as a whole, a region consisting of many population groups (not only let us add at once, racial) each to some extent astray in unfamiliar conditions which demand a breaking out of old patterns.⁶

The second is a statement made to us by a Malaysian government official: "When Singapore sneezes, Malaysia catches a cold."

The influences on urban development of Singapore may be seen in three different ways.

1. The physical form of contemporary development in Malaysia is considerably influenced by what has occurred in Singapore. One example is the creation in both areas of mixed-use, multipurpose shopping-office-entertainment centers—enclosed, air-conditioned, complete with parking, and literally beehives of activity. Singapore was the first in the region with these, and some in both Singapore and Kuala Lumpur have been done by the same architects. In this writer's opinion, these superbly designed multiuse facilities are the equal of (and in some respects superior to) such complexes in Western Europe and the United States, certainly in terms of their human scale and the multiplicity of activities integrated within single building complexes. Peoples' Park in Singapore was one of the first of these and represented a relocation of existing merchants in Chinatown. It was done with the intervention and participation of the Singapore Government. As often happens in derivative situations, the Malaysians have carried the enclosed multipurpose complex perhaps a step further now than those in Singapore. The Ampang Center in Kuala Lumpur, which was partially financed by Malaysia's Urban Development Authority, is a striking example. Here is an enclosed five-story complex with a supermarket, specialty shops, offices, small light assembly operations, and bars and restaurants, all vertically connected by both escalators and stairs and topped on the roof with an amusement park for children, a stage, and a beer garden. It works!

The city of Penang is building a new multipurpose central commercial complex. We are told that the Penang principals have frequently stated it will be a facility to "rival" the attractions of Singapore.

In its form of public housing, Malaysia has been influenced by the Singapore model, although it is now undertaking significant departures. According to John Taylor,

. . . Although with its limited land area and high per capita income of U.S. \$1,000 per year, Singapore's situation is unique in Southeast Asia, it is serving as a model which other countries are attempting to copy for better or worse. This is particularly true in Malaysia where Kuala Lumpur is launching a similar program of squatter clearance and

construction of large new housing projects. . . . Thus far over 15,000 units have been built. Most of this housing is highrise but a greater proportion than in Singapore is of the walk-up type. In fact, the controversy has ensued over the type of low-cost housing to be built, with physical planners calling for highrise apartments to save on land.⁷

Penang also has built high-rise public housing on the Singapore model to the tune of nearly 4,000 units. But the Malaysian housers have recently recognized that what is essential in Singapore due to the shortage of land is not necessarily adapted to Malaysian circumstances. Malaysian cities are not land poor, and the predominant population to be housed are rural Malay migrants, rather than urban Chinese. Thus an adaptation process is under way, and more lower-density units may be expected.

2. Development of Johor Baharu, Malaysia's fourth city, is intimately tied with the future of Singapore. Johor Baharu is linked by causeway to Singapore, and it enjoys a relationship comparable to that of Windsor, Ontario, to Detroit, Michigan. There is some commuting of workers between the two, and Johor is a major goods entrepot. The rubber plantations of Johor feature prominently in the organized tours for visitors to Singapore. Most especially, however, Johor is getting spinoff from Singapore's own economic development because land is extremely scarce or nonexistent within Singapore itself for land-extensive industrial and warehousing activities and because of Singapore's increasing emphasis on environmental quality and reduction of pollution. This is an emphasis characteristic of more developed countries, which now have the luxury to concentrate on improving environmental quality. Malaysia is not quite in those circumstances and is open to whatever economic development it can get. Thus Johor Baharu will have a new shipyard and may become the site of an oil refinery.

3. The most profound influence, however, of Singapore has been in the forms of growth control and the urban development instruments elected by the Malaysian Government.

For many years (long before the federation of Malaysia was created), Singapore had had powerful governmental intervention in public housing and urban renewal. Public effectiveness in controlling and channeling development in Singapore, within a private enterprise economy, can be matched by few other cities. Therefore it is no accident the Kuala Lumpur is second in the region in terms of squatter removal and public housing.

Singapore has also been outstanding with one special aspect of housing policy: attempts to locate worker housing close to places of employment. Its new towns are built around considerable concen-

trations of jobs. Within the city proper, housing has been built for port workers, for example, near the port and for power-station workers near the power stations. When squatter settlements have been removed in the city, by and large new public housing has been built in their place.* This emphasis on relating residential areas to sources of employment has been adopted by Malaysia. Certainly there is considerable effort in Kuala Lumpur and in Kelang to locate public housing near to jobs and to construct new public housing on squatterments that are replaced. The new towns of Petaling Jaya and Shah Alam are built around industrial concentrations rather than being decentralized residential suburbs.

An important element in Singapore's success has been rigid control on land speculation. Sites can be found and purchased for social housing and other public purposes in desirable areas. That too has been transferred to Malaysia, which stands almost alone among developing countries in this respect. Malaysia now levies a 50 percent tax on gains from property transactions that exceed an amount or a rate determined to be reasonable in light of market conditions and owner improvements. The act is only a few months old, and we have no way of knowing how well it is being enforced. Malaysia has been fortunate, however, in the amount of state and federal government ownership of urban land and in broad public land acquisition authority dating back to 1966.

In 1970 Malaysia created an Urban Development Authority (UDA) as the fulcrum for its efforts at controlled and accelerated urban construction. The authority was modeled to a great degree on the UDA and other public agencies that have been characteristic of Singapore's efforts. But while Singapore stands as a powerful example by virtue of its adjacency, replication or slavish imitation is not the Malaysian approach. "We admire their efficiency," an official of UDA told us, "But we have a somewhat greater responsibility to a democratic process and a process of negotiation" (as distinguished from the rather autocratic approach of Singapore). Then, too, the Singapore system was arrived at as a response to the basic shortage of land within its boundaries. Malaysia has considerably more in the way of development flexibility. Most especially, Singapore's efforts lack any special ideological basis, and Malaysia sees urbanization and economic development from an ideological standpoint. The economic and social integration of the Malay population is a fundamental underpinning of the modes it has chosen. While Singapore is a special and important

*This is an approach quite different from that employed in squatter removal areas in Brazil and other Latin American countries, where even new public housing is often remote from employment and services.

influence, Malaysia has evolved policies and institutions that meet its own ideological imperative.

URBAN POLICY

Urban policy, as we have indicated, is part of a larger regional development strategy for the NEP. According to an Economic Planning Unit report:

Currently the most attractive opportunities for the development of manufacturing and service industries are in the west coast states of Peninsular Malaysia. A major part of the country's population is located in these states, where the infrastructure and system of public services are more developed. In so far as they already contain a network of secondary and tertiary industries, they also generate external economies inducing new industries to agglomerate there.

Perpetuation of this overall regional pattern will not be optimal in terms of the attainment of the objectives of the New Economic Policy. The government recognizes that the development of primary industries alone in natural resource-rich states will not provide the long-term solution for reducing regional disparities. The sizable opportunities for developing natural resource-based manufacturing activities should also be seized. These will, in turn, open up further opportunities for other secondary industries to establish in these areas. These, however, require time to be affected but in the process of developing each region's natural resources, with appropriate planning of settlements and infrastructure, the foundation will be laid for secondary industrial development. In this connection, the government recognizes that it is only when towns reach a threshold level of 30,000 to 50,000 people that general industrial activity begins to accelerate. Consequently, development will be strategically located in new growth centers. Such new growth centers will also provide opportunities for introducing larger numbers of Malays and other indigenous people to modern urban activities.

The development of these centers will also reduce the drift of people to already established large urban centers. Such a drift will create problems of congestion, squatter settlements and physical problems of overloaded infra-

structure. While Penang, Johor Baharu and Ipoh are rapidly developing as important first order growth points . . . second order growth points include Alor Star, Taiping, Kelang, Shah Alam, Seremban, Malacca, Muar, Batu Pahat, Kluang, Kuantan, Kuala Trengganu and Kota Bharu. These are towns where the population has grown large enough to support a wide range of services and industries. Within such a hierarchical order of urban growth centers, third order towns, which have not yet reached the threshold population level, will require special planning efforts to promote their rapid growth.⁸

It is especially interesting that two of the towns identified as second-order growth points are within the Kuala Lumpur metropolitan region, namely Shah Alam and Kelang. They are targets for the policy of decanting metropolitan growth in preference to unrealistic attempts to limit it entirely.

However, contradictions do exist in application of a decentralization policy. Contradictions arise because the Malaysians, in the name of growth and racial integration, are intensifying efforts to attract contemporary economic manufacturing and service to the Kuala Lumpur region. Special tax incentives, which apply to so-called pioneer industry, apply in the Kuala Lumpur region as well as elsewhere. There is free-port status at Kelang and at industrial sites even closer to Kuala Lumpur itself. The government is actually trying to build up these areas simultaneously with Penang, also a free port, and other towns. Operating in the Kuala Lumpur area also are the two most powerful, best-staffed development authorities in the country, the Selangor Development Corporation and the UDA. Kuala Lumpur is also where most Malaysian professional talent is concentrated.

Thus, there is a real possibility that what has occurred elsewhere will occur here, namely that the attractiveness of the capital region will widen the gap to other areas. These prospects point up one inherent weakness in the country's formulation of urban and regional development policy. A basic, overall strategy has been established, but the details of that strategy, the resolution of contradictions, and identification of the particular mixes of investment to be applied in the various regions and urban centers have yet to be formulated in detail. (Perhaps the one significant decision yet taken at this next order of detail has been that to concentrate investment in Kuantan, now about 50,000 people, which is to become primary growth center for the less developed southeast.)

In all fairness, the Malaysians themselves recognize they are now at a crossroads where it will be essential to define policies and strategies further in order to avoid contradictions and to provide specific investment guidance. The Economic Planning Unit does intend

a study on long-term urbanization and new growth centers but has still to initiate the effort. Perhaps the most relevant work is now being conducted by the United Nations advisers to the Urban Development Authority. This team is trying to evolve an overall framework for UDA's own activities, which are now essentially ad hoc projects and concentrated in KL.

In a way, this need for detailed investment strategy is a reflection of great strides Malaysia has made in establishing urban policy itself. These are strides that exceed those of most other developing countries and place Malaysia in a position where it must solve new problems produced by the level of sophistication it has elected to adopt.

INSTITUTIONAL MECHANISMS AND CONTROL TECHNIQUES

Role of the States

Land and land-use control in Malaysia are the responsibilities of state government. There are some 14 states in Peninsular Malaysia. There are, however, no state land-use plans or land-development plans and very few city plans, except for Kuala Lumpur's. On a state or city level, no overall frameworks for physical development have been established. Physical planning itself is essentially an ad hoc administrative function of state government.

A national Town and Country Planning Department plays several roles. It is an adviser to both the federal and state governments and can prepare urban plans at the request of local administrations who do not have the staff or capability. Its principal substantive function, however, seems to have been the coordination with other public agencies of regional plan preparation (discussed below).

Actual development control has been considerably assisted by two factors: First of all, there are large ownerships of federal and state land, especially at the edges of existing urbanization. State and federal government, furthermore, have broad acquisition powers to expand holdings or purchase new land for public purposes. This has allowed the Selangor Development Corporation and UDA to act as the principal vehicles for urban development in the Kelang Valley, along with similar state development corporations in other cities.

A second expediting factor is the considerable amount of agricultural zoning, again applied on a state level, at the periphery of existing urban areas. State government must approve any conversion of agriculturally zoned land to urban use. The states exercise vetoes on conversion of land that is not considered to be in keeping with

general public policy. The veto power has been exercised frequently for two purposes: to protect the projects undertaken by the various development corporations from encroachment and to ensure Malay participation in new private undertakings. (Thus development permissions have been used as a means to force joint ventures between Chinese and Bumiputra interests.)

Although urban planning is not extensive, the country has at its disposal excellent urban and rural map surveys and physical evaluation material for most areas. It also is expanding its complement of technical personnel to continue this work. Compilation of essential physical data has been a legacy from the British that is now deeply ingrained in the Malaysian system.

Regional Plans

To say no overall guidance instruments for physical development exist is incorrect. Although city planning efforts are relatively weak, a number of regional plans cover states, portions of states, or portions of several states. Indeed these plans have been prepared for most principal development areas: the Kelang Valley, Penang, Johor, Trengganu, and a number of others. Extremely high levels of sophistication have been employed, and the plans deal with economic, social, physical development, transportation, and allocation of resources along with recommendations for implementation and administrative reform.

However, all of these regional plans have been prepared by foreign consulting firms on contract to international development institutions (World Bank, United Nations) or directly for the Malaysian Government. These are "consultant plans," not explicitly adopted government policy.

One problem in this reliance on foreign expertise has been the relatively minor participation of senior Malaysian personnel. Each of the teams has had Malaysian professionals and counterparts, but many of them were quite junior.

The problem of indigenous participation has been partially mitigated through the strong control by Malaysian authorities over plan preparation. They have not been prepared in a vacuum. Indeed, councils comprised of key development agencies, including Town and Country Planning, have kept close supervision through the device of a steering committee that gives periodic review and direction. Important officials have been members of the steering committees, and it is clear that at the top of the decision-making structure there is considerable understanding of the scope and thrust of the consultant reports.

It is not the technical preparation of the plans that is the matter of concern, or their meaning, but the implementation and the impact of implementation on the Malaysian financial and administrative structure. The Shankland-Cox report, for example, cites some 50 agencies that have decision-making responsibility within the Kelang Valley region and calls for a streamlined commission to control overall development. Such a commission has not been established and it is too soon to say whether this plan, which calls for limitations on the growth of the region, will be implemented.

Multipurpose Authorities

Malaysia favors private enterprise, and its economic successes have been due largely to private domestic and foreign investment working closely with government guidance mechanisms. Thus, regional plans notwithstanding, the principal forces that appear to shape the Kuala Lumpur-Kelang region (and now in Penang and Johor) are broad-gauged public development corporations. These corporations have significant powers and financial resources. They have effectively used the expansionary desires of private business capital in achieving their objectives, and they operate on a project-by-project approach. Each state has a development corporation. However, the two most effective are the state-sponsored Selangor Development Corporation and the federal UDA.

There is significant difference between the Malaysian public corporations and those of many other developing countries that are concerned with housing, land development, or industry. It is a difference that assists the Malaysians in substituting the power of the development corporation for overall area or community planning. That difference is the very broad multipurpose character of the corporations. As we noted in the case study on Brazil, the Brazilian National Housing Bank has consolidated provision of all local infrastructure and service financing in a single agency. However, the Malaysians enter heavily into the private business world with their governmental powers and join with private enterprise in the provision of industry, commercial services, shopping facilities, housing, and the like, and do it on land controlled by the corporations.

Selangor

The Selangor Development Corporation dates back some 15 years to initiation of the new town of Petaling Jaya (PJ) some 10 kilometers west of Kuala Lumpur. The corporation has had complete responsi-

bility for the development of PJ as well as a second new town some 10 kilometers further to the west, Shah Alam. It has handled the planning and location of industry, housing and services, and industrial promotion and has participated in joint-venture financing with numerous of the industries. Today PJ has a population of close to 100,000 and covers some 6,000 acres. Its industrial complex contains over 700 acres and already some 300 operating factories. The corporation considers development of the town almost complete. Shah Alam is also designed for about 10,000 people, but may expand to two or three times that size. It consists of some 5,000 acres and has well over 100 factories in operation with a total labor force of some 6,000.

The corporation has been extremely cognizant of the special facilities required to build up the attractiveness of a new town, particularly within a region where most development is focused on the capital of Kuala Lumpur. Specifically, Shah Alam is the site of the Marah Institute of Technology, a relatively new institution that is a major source for training Malay technical personnel in a wide variety of fields. The state-capital functions of Selangor are also to be moved out of Kuala Lumpur to Shah Alam as a means for accelerating this community's growth. A third new town, Bandar Lagut, is also planned for the region north of Kuala Lumpur; it too, will have a university as an essential component in its development package. Each of these new towns has been built primarily on state or federally owned land, and the corporation has succeeded thus far in retarding sprawl by preventing the grant of building permission to owners of peripheral land.

The corporation is more than the development agency. It actually acts as the local authority for these towns and collects the taxes in the name of the state government. The corporation has also been instrumental in developing the housing and service components of these new towns. All told, it has been involved in one way or another in production of over 7,000 housing units. Many of them have been built by private enterprise, including some upper-middle-class suburbs. There is public housing also, and the corporation rents its units to tenants for three years to ascertain reliability before allowing individual sales. (According to the director, one means of reducing the rents and purchase costs of public housing is by subsidizing it with the sale of the middle- and upper-middle-income housing, a technique, by the way, that has often been discussed within the United States and has rarely been attempted with success.)

But the new towns represent only a portion, although the major portion of the corporation's activity. It has been the prime factor in the growth of the port of Kelang and is in the process of reclaiming and developing a new port area of over 2,000 acres. It has created the Subang Industrial Area only seven miles from Kuala Lumpur on the main Kelang highway, a free trade zone, which now has 11 (primarily electronics) factories under construction. Three other major

industrial areas are under jurisdiction of the corporation, in addition to a large number of scattered sites throughout the region.

The corporation has been fortunate in developing its own staff and is one of the primary institutions that now operates with the government on the technical and administrative levels. As a quasigovernment institution it is able to pay far more than the actual government agencies. Still in all, the staff is under considerable pressure and is involved in far more than it can handle effectively. (For example, the director told us that the joint-venture financing of many of the industrial firms has required considerable attention to the continuing internal management of these operations, a role far beyond that of actual development activity. He believes the situation has now become so extreme that this function should be split off from the corporation and a new and special authority created for that purpose.)

The Penang Development Corporation, modeled on Selangor's, is a sponsor of Georgetown's new core complex. Each of these agencies works with loan funds from the state and federal governments. Interest rates are low, amortization periods are long, and they have been able to afford a risk-taking that has been considerably greater than what private enterprise can support. This has been a particularly attractive factor in encouraging private enterprise to cooperate in joint ventures.

The Urban Development Authority

The UDA is perhaps the ultimate such corporation undertaken thus far in the nonsocialist world. It has been created with considerable public support, and, as the deputy director commented to us, "We are an expression of the government." The agency is only three years old, and it has a multitude of projects underway. It is not place-specific like the state development corporations and is enabled to work anywhere within Malaysia, although as a matter of practice almost the entire effort thus far has been spent in the Kuala Lumpur region.

The UDA was created in 1971 and now has a staff of some 300. The legislation gives UDA three principal functions.

First, to improve the urban environment. Secondly, to do this with urban development and redevelopment projects that will achieve a distribution of opportunities in commerce, in industry, housing, and other activities among the various races. And thirdly, to translate into action the government policy to restructure society through urban development. In short, this calls for change in the urban racial composition.⁹

The agency has four distinct programs, which represent the great breadth of its functions.

1. The first program is to buy existing commercial buildings so that Bumiputra businessmen can set up new shops in established business areas. According to the deputy director, these premises are always bought from "willing" sellers at market prices. ("Where owners are unwilling to sell, they are persuaded to lease their property to UDA who then subleases to Bumiputras.")¹⁰ Once purchased, the agency then leases or sells the premises to Malay businessmen at commercial rates. A considerable amount of technical and financial assistance is afforded so that they can establish operations at comparable standards with those of the Chinese community.

Thus far the UDA has purchased and sold or leased some 300 individual shops representing over 40 different types of business from printing plants to commercial schools and used car firms, shops, and restaurants. The UDA will provide up to one-third of the capital for equipping and remodeling the facilities as loans. "We don't help with the working capital," one official commented in a UDA report. "We're dealing here with people who have been promoted from the push-cart level and we're not interested in opening stalls."¹¹

2. A second program is purchase or partial purchase of commercial premises currently under construction by private enterprises. The UDA attempts to book somewhere between 20 and 30 percent of floor space in a major commercial complex and to obtain a discount of up to 15 percent on rent in return for guaranteeing full occupancy.

3. A third program is initiation of joint ventures with Malay, Chinese, or other investors. The UDA tries to get 30 to 50 percent shares in the corporations in return for assistance with financing, and it then takes a management position in the concern. UDA officials stress that this technique is extremely attractive to non-Malay business people who are concerned with making profits, specifically because of the considerable financial resources that the UDA can bring to bear and its guarantees of occupancy. Also the UDA is in a particularly strong position to expedite necessary building and development approvals for any project in which it participates. Here the thrust is to establish not only Bumiputra ownership but also staffing of all levels of the corporate structure by business and professional Malay people.

The Ampang shopping center complex cited earlier is one of these joint ventures and is intended to be the first in the chain throughout the country. To date, such joint ventures have involved some \$43 million of UDA investment in a total potential construction value of some \$1.6 billion. The design skills of UDA staff and architectural

consultants are brought to bear on these projects, and, from our limited viewing, the results are outstanding in terms of architectural quality, amenity, and contribution to the evolving urban character of Kuala Lumpur.

4. The fourth program is the more familiar comprehensive urban renewal or urban redevelopment approach that has been practiced in Singapore and in the United States. Here, land classified as slum or poorly developed is acquired by the UDA, and a total redevelopment package is prepared by the UDA staff. The UDA will participate in financing of developments on the land.

This has been one of the most controversial activities of the UDA because "The areas considered for redevelopment are at present predominantly occupied by non-Bumiputras [and thus] the process of redevelopment provides opportunities for restructuring of society in line with the act."¹²

UDA officials counter the concern for heavy-handed removal of non-Bumiputra property-owners by explaining the approach they claim to use. If their contention is true and no coercion is employed, then it too represents an outstanding success story in the developing world. Instead of condemning the properties outright, the UDA has gone to owners and offered to form a development corporation using the land as a base. They give the present owners shares in the corporation in proportion to the value of their land within the larger urban development area. The UDA says that these terms have been accepted because of the considerable desire for profit among the present owners and the recognition that this offer represents the only means by which their land can be so mobilized. Thus far this land-pooling technique has been tried in about four places within Kuala Lumpur. (We might add that it is an approach that also has been considered by many redevelopment authorities within the United States, but with little success.) Already one major multipurpose office and commercial complex, Pertama, is under construction on redevelopment land in central Kuala Lumpur.

The UDA is also empowered to construct new suburbs and new towns on public land. Thus far, projects in this area have not started, but the target is to produce 70 percent ownership of assets and floor space by Bumiputras in such developments. A number of projects are being constructed on public land within Kuala Lumpur, however.

The UDA is empowered to establish a land bank both in the Kuala Lumpur area and elsewhere. It is now acquiring private land in Kuala Lumpur and planning transfer to its jurisdiction of holdings by other governmental agencies.

Although the UDA concentrates most of its efforts in Kuala Lumpur, it does have a national mandate. It has begun in small ways to participate in urban projects elsewhere in the country.

There are two small hotels under construction in Kota Bharu . . . and an urban renewal scheme is underway in the same town also. In Kuala Trengganu there are a few shops, the Hotel Warisan, and an urban renewal scheme. In Kuantan, agreement has been reached in principle to develop some choice pieces of land.

Up north in Tedah, UDA is developing a housing scheme for teachers called Taman UDA. In Penang, it is negotiating with the Penang Development Corporation for joint development of the Tanjong Tokong area. In Ipoh, Seremban, Malacca, Johor Baharu, and Kuching, UDA is working with the state development corporations to develop shops and houses.¹³

Practically all of these locations have been targeted as growth centers or potential growth centers by the New Economic Policy. The UDA will probably be a particularly important force in Kuantan, which is to be the principal growth point in the southeast.

However, it is clear that the bulk of UDA effort is concentrated in the Kuala Lumpur region and will help to increase dominance of the capital area. But, given the shortage of Malaysian professional talent, and the extraordinary imperative for urban economic development, these authority approaches are probably most appropriate to present conditions, assuming of course that economic growth continues to expand.

THE KUALA LUMPUR PLANNING AGENCY

The authority approaches are particularly appropriate given the state of formal planning activity in Malaysia today. Kuala Lumpur is the only city that can really be said to have a physical development plan, and that was prepared 10 years ago for an area now considerably smaller than the federal district itself. It is basically a land-use and a zoning plan with nothing in the way of budget relationships or social analysis. We visited the planning staff of Kuala Lumpur (which, as perhaps a reflection of its importance, is relegated to the fourth floor of a parking garage in downtown Kuala Lumpur).

There are only two harried and immensely overworked professionals on this staff plus several technicians and administrators. Apparently, the main work is approving or denying building and subdivision permits within the city and the expanded federal district. One of the professionals, herself only two years out of a British planning school, stated that they have been trying for some time to

revise the plan to make it a more effective guidance document but, because of the staff shortages and the press of development review activity, have been able to make no headway whatsoever. According to her, even the prescriptions of the plan for central Kuala Lumpur are obsolete in view of the considerable development pressures.

The agency is consulted however by the UDA and other institutions that are considering projects within the city. It functions not as a guidance mechanism but rather as a means for achieving the specific project objectives of UDA by using its powers of approval or denial within the framework of those objectives.

THE CRISIS OF PROFESSIONAL TALENT

The Malaysian approach to urban development and land control is predicated on continued expansion of the economy. There is evidence that economic development is holding firm and may continue so that the country will reach its target of 30 percent Malay ownership of private development by 1990. If it does not, however, and if economic crises or even lack of expansion should ensue, then the national policy to expand Malay participation without cost to the Chinese and other minorities may be in for some rough sledding. That is not our particular concern, however. Assuming that the expansionary economy does continue, the really great weakness in Malaysia's approach to urban development is the extraordinary lack of Malaysian professionals to undertake planning, administrative, and development responsibilities. There are few planners and urban administrators, and most of those are in Kuala Lumpur (although Penang, for reasons discussed below, does figure rather prominently in the future).

So long as primary development activity lies with the UDA and the special state corporations and so long as that activity is primarily in the Kelang Valley, the true shortage of talent can be absorbed and is not really revealed. However, if major land-control issues and conflicts arise in Kuala Lumpur and if urban development does spread to a number of communities elsewhere, Malaysia is in for trouble.

First of all, much of the serious planning and the conceptual urban development thinking has been done by foreigners. Only recently have Malaysian consulting firms been established, primarily by faculty members of universities or people in architectural or engineering practice. Many of them have been assisted by or are participating in joint ventures by foreign consulting firms. Malaysian consulting firms are doing technical work for new town planning in Johor and for a new capital of Sabah in east Malaysia. This does represent a major achievement. However, the utilization of foreign planners and

even Malaysian consulting organizations is appropriate only for the technical work associated with urban development. These firms and people are not and cannot be in administrative or implementive positions. Moreover, there is serious question as to how long the foreigners can be effective and how responsible their technical work can be as the social imperative of Malay racial integration becomes increasingly dominant.

The few Malaysian public planners are incredibly overworked. "There is so much to do by so few," says one official of the Town and Country Planning Agency. "So much land to develop and so many towns to develop." It is fair to say that similar manpower shortages pervade many aspects of Malaysian society; these are treated in the Five-Year Plan.

We are not among those who believe in the "numbers game" as far as evaluating professional quality and competence is concerned. But the fact remains that in the urban development field, the shortage of professionals in Malaysia is critical. A recent assessment of need was made by the director of the planning program at Marah Institute of Technology. He forecasts by 1980 a requirement of over 200 more professional planners than the 40 who exist today in the country. In the subprofessional group (planning aides and junior personnel), he estimates there are all told a total of 50 such people in the federal, state, and private sector today. He forecasts a demand, including present gaps, of 450 additional by 1980. On the technician level, primarily draftsmen and survey personnel, he estimates a total of 200 presently trained for these responsibilities and a need by 1980 of an additional 5,500.

There is no in-service training program in Malaysia today for presently employed public servants to equip them with planning skills. Malaysia does have an agency of the government similar in concept to IBAM in Brazil. INTAN provides short courses in a variety of fields so government technicians can upgrade skills. However, at the present time, INTAN has nothing dealing with planning or planning-related matters. The situation is further complicated by the very low government salaries in relation to private enterprise and the encouragement under the NEP of Malay professionals to enter the private sector rather than public service.

Presently three university-level educational programs are attempting to alleviate the shortages. Two of these are for subprofessionals (at Marah Institute of Technology and the Technical University). Only one is geared to train higher-level planning professionals. That is at the two-year-old University of Sains in Penang.

During our visit to Malaysia, we met with faculty and administrators of two of these programs, at the Marah Institute and the University of Penang. Each institution is conducting creditable efforts to narrow the gap against rather considerable odds.

Marah is itself a Bumiputra institution especially designed to help Malays enter private professional life. Its planning department is part of a larger school to train architectural assistants, surveyors, and appraisers. Marah currently has two training programs. One is a three-year certificate activity to produce planning technicians. About 30 of these have been graduated in the past three years. The second is a two-year certificate program for planning aides that in 1974 graduated its first class of 14. A new and higher-level diploma program for professional training will be instituted by 1975.

Marah has a very small faculty and a very ambitious curriculum. A number of the present faculty are currently on leave abroad themselves to gain professional training, leaving only three full-time people, including one American. The program itself is designed with considerable scope to provide both the technicians and the aides with a somewhat broader understanding of urban issues than would be required by their subprofessional specialties. The department head says that many of his students will be called upon to perform far more evaluative and policy work than their basic skills would permit, particularly because of continued expectations of shortages. Marah is notable because its faculty is trying to prepare course work on urban development in Malaysia itself and elsewhere in Southeast Asia to relieve dependency on Western texts. There are still however no texts or course materials specifically devoted to Malaysian or Southeast Asian circumstances. The faculty would like to develop such materials but are prevented from doing so by lack of funds.

We have no way of judging the competence of the students who have been graduated from the programs. However, apparently only one of those graduated thus far is employed by a governmental agency involved in regulation or administration of urban planning. Most of the others are with either the quasipublic state development corporations and the UDA or in private consulting firms. This is totally compatible with Marah's objective of producing Malay professionals for private enterprise.

The main hope for professionals lies with the Sains University in Penang. This university, 50 percent of whose faculty are foreigners, has assembled an 11-man planning faculty. Seven of these are foreigners, mostly American, and they have designed a rather broad-scale and ambitious curriculum.* The school's target is to produce

*All of the foreign faculty in the planning program at Penang have directly contracted with the university and are being paid in Malaysian dollars at quite a high salary. None is from a technical assistance agency. This is in a sense a reflection of some priority on the part of the country and the continued reliance by Malaysia on Western professional talent.

in the next decade, at least 10 professional graduates a year (there are presently only six master's degree candidates in the graduating class). This would mean a doubling of the present professional planning population in Malaysia over the next five years. The Penang faculty is also trying to prepare course materials that deal directly with Malaysia and to document present student practical work as case materials for future courses.

One of the most unusual aspects of both Marah and Penang is the acceptance by public agencies of student studio work as the basis for technical planning of particular governmental projects. At Marah, for example, the UDA has contracted with the school to do a student project on an urban renewal area in Kuala Lumpur. Students are developing plans of an industrial park for the Selangor Development Corporation as well as a prospective urban renewal area adjacent to Petaling Jaya. At Penang, the students are preparing the plans for a new town near Kuantan. This plan is a direct outgrowth of the large-scale regional development plan for the area and is intended for implementation. Faculty members of the schools are participating in the evolution of these projects and are supervising them.

But while the confidence of the government is a sign of some priority interest, one cannot help but wonder about the quality of the product. Certainly, it is exciting and educationally productive for students to have their work adopted by public agencies. However, in view of the fact that these are the first efforts by the students who have not been "blooded" before by practical projects, some danger adheres to acceptance of the products of such an effort. This may be a sign of Malaysia's desperate position as far as availability of indigenous professional talent is concerned.

We believe that foreign experts should be used to train the Malaysians for greater roles in their own urban affairs and that there should be a gradual phasing-out of the exclusively foreign technical product. Certainly the Malaysians are trying by requiring joint ventures with Malaysian consulting firms and by emphasizing the role of foreigners in the educational institutions.

However, even this start is minuscule in relation both to the need and to the policy objectives of the country. For if Malaysia is to continue emphasis of urbanization as a principal public policy and if efforts are to be made in the future to prevent the Kuala Lumpur region from becoming a primate after all, then there must be a premium placed on the development of internal Malaysian competence to guide these programs and policies. It is a competence that must extend well beyond that of private practice. It is a competence that must be reflected in the existence of planning administrators and technicians for both Kuala Lumpur and the numerous communities that have been selected as growth points. Without such competence, it is problematical

whether the urban development objectives of the New Economic Policy can be achieved.

NOTES

1. "Mid-Term Review of the Second Malaysia Plan, 1971-1975" (Kuala Lumpur: Economic Planning Unit, 1974), p. 85.
2. Ibid., p. 1.
3. Ibid., p. 26.
4. Ibid., pp. 18-19.
5. "Plan for the Kelang Valley Region," by Shankland-Cox Associates, IBRD, 1973, pp. 36-37.
6. Lloyd Fernando in 22 Malaysian Stories (Kuala Lumpur: Heinemann, 1968), p. 1.
7. John Taylor, "Slums and Squatter Settlements in Southeast Asia" (mimeographed, 1972), p. 19.
8. "Mid-Term Review," op. cit., pp. 19-20.
9. "UDA's Projects Are Changing the Face of Malaysian Towns" (Kuala Lumpur: UDA, 1974), p. 4.
10. Ibid., p. 5.
11. Ibid., p. 8.
12. Ibid., p. 11.
13. Ibid., p. 13.

PART



**CONCLUSIONS AND
RECOMMENDATIONS**

CHAPTER
7
AN APPROACH FOR
INTERNATIONAL
ASSISTANCE

PRACTICALITY AND ADAPTABILITY OF TECHNIQUES

Are there techniques that can be made practical and adaptable to land-use programming and control in the small-to-medium-size cities of the developing world? This was the basic question to be addressed in this study.

We believe the answer is a qualified "yes." Yes, there are techniques that can be applied. These were cited in Chapter 3, and many were elucidated within the individual case studies. There are techniques for information-gathering, approaches for establishing a planning framework, and specific control measures that can be designed to implement planning and control objectives. A body of experience exists, in developing nations as well as in the Western world, from which materials of relevance to a particular country or community can be distilled.

However, the techniques do not represent a single, sequential system, or even a standard set of measures that might work in representative circumstances. Rather, there is an array of possibilities from which picking and choosing becomes essential within each specific country's circumstances.

Simple guide-planning, for example, applied to a number of communities might be suitable for one nation at its level of urbanization and sophistication. It might be impossible to introduce in another nation, except as a function of more familiar plot-by-plot overall community design. Incremental project planning, incorporating land-use and infrastructure decisions in a single process, might be appropriate for a third. One society might be able to institute and enforce legislation to control speculation; another might have to resort to indirect means; and so on down the line. Our basic conclusion is that practicality and adaptability—whether in information-gathering,

planning, or control—are performance derivative from conditions within each given country context. It is unlikely that any scholar or international assistance agency could arrive at a universalistic formulation.

Now, having subjected the internal-development context of three countries to scrutiny, it is our opinion that techniques of land-use programming and control per se do not represent an appropriate focus for international assistance. Techniques, when combined with attention to more fundamental issues dealing with land-control process, however, can become a matter for productive effort.

A BASIS FOR PRODUCTIVE EFFORT

If we were to reformulate the initial question, the following conclusions could be drawn from the three country case studies and the broader background research:

1. Land-use planning and control issues in intermediate-size cities are or will become matters of serious concern in a number of developing countries. Although we have used a population range of 100,000 to 500,000 as a screen for identifying such cities, the principal criteria must be increasing development complexity, rapidity of growth, and nonprimate character. More stable, less complex communities or small cities that have not yet begun rapid transformation to a contemporary economy evidence less demanding land-use issues. These can be handled within the context of regional resource-planning efforts where a modicum of urban land-use planning is incorporated. While the fast-growing intermediate centers should also be assessed in a regional and national context, the nature of their growth requires explicit, concerted attention to internal-development requirements.

2. Any efforts to deal effectively with the land-use issues of intermediate cities must rest on some solid underpinnings. There appear to be four prerequisites that would give evidence that a nation's institutional structure is at least prepared to deal with the problems of intermediate-size cities:

- A. The existence of some institutional mechanisms on the national level expressly interested in land-use and development issues of cities outside the main metropolitan regions. In addition to a tangible manifestation of national interest, this would also serve as a primary funnel for any international assistance. Examples cited in the course of this study are FUNDACOMUN in Venezuela, Ilker Bank in Turkey, SERFHAU and IBAM in Brazil, and the Economic Planning Unit and UDA in Malaysia.

B. A national commitment to develop local capacity in provincial cities for planning, administration, and control. We believe that "master plans" prepared from the center for application in the provinces are almost as meaningless as master plans prepared by foreign consultants for transfer to LDC's. People on the scene in responsible positions must participate in whatever planning exercise is established and must be meaningfully involved in implementation. Each of the countries examined in detail is trying to rectify severe shortcomings of local capacity, with varying degrees of success.

C. The assignment of some measure of national priority for infrastructure investments to individual intermediate cities so that hope may exist that planning efforts will not proceed in isolation. Here, Sao Luis in Brazil and Antalya in Turkey are examples. Even though formal priority statements had not been forthcoming for either of these, a sensitive observer would have been able to identify their favored status by viewing government actions. In Malaysia such priority policies are explicit.

D. The presence of a political climate favorable to controlled growth within the specific municipality or other levels of government with statutory land-control responsibilities. This is perhaps the hardest matter of all for an outsider to judge, but at the same time perhaps the most critical. For local leadership has been the *sine qua non* of any of those planning efforts that even the officials in the three countries have depicted to us as effective.

3. Given the presence of all or most of the above preconditions within a specific country, there are a number of areas where international assistance—involving some attention to planning and control techniques—could be productively applied. These are as follows:

A. Assistance to establish planning and control projects for specific intermediate-size cities in which innovative approaches can be attempted.

B. Research to establish empirical measures of effectiveness for land-planning and control techniques.

C. Training of professionals and administrators in a wide variety of substantive fields who will themselves be in positions to evolve and to apply techniques.

D. Dissemination of research, information, and data to local agencies and to institutions of higher education.

The scope for international assistance in this special area of land-use concern can be considerable, although the conditions under which such aid can be effectively employed are restrictive. Many institutions have resources and capabilities that could be brought to bear, if the requisite conditions are met by the individual host countries and required by the assistance agencies.

The recommendations that follow pinpoint activities that international assistance agencies could initiate as first steps to deal with land-use issues in the intermediate-size cities. A number of longer-term opportunities are also presented. The initial commitments would focus on specific intermediate-size cities in a twofold effort to provide development guidance and to build up local capacity for dealing with land-use issues on a continuing basis. The longer-term undertakings would be directed toward improving the capabilities of national and local institutions and personnel to deal with urban development concerns.

NEXT STEPS FOR INTERNATIONAL ASSISTANCE

Demonstration Planning Projects

We propose, therefore, that demonstration land-use programming and control projects for intermediate-size cities be launched in a few countries, with foreign assistance. A demonstration project of this kind would be directed toward a city that has recognized national and regional significance and for which some measure of development targets have been set within a regional study or planning effort. The foreign assistance would supplement, but not be a substitute for, national financial and administrative commitments. It would be geared to the evolution of new approaches in an LDC setting where all of the four prerequisites for national institutional support have been established.

The objectives of such a project would be (1) to prepare a land-use programming framework for the city, which is linked to explicit techniques of growth control; (2) to train, through participation, planning professionals and other technicians for continuing responsibilities in the city; (3) to institute, from the very outset of the undertaking, a research and evaluation system that will be able to generate information on effectiveness of procedure and technique; and (4) to produce a linked and staged set of infrastructure projects for the city, some of which may be eligible for international financial assistance.

Such a project would be comparable in focus to the present World-Bank-assisted program for metropolitan Istanbul or the Ford Foundation program for Calcutta a decade ago. The difference, and it is a major one, is that the scale at which the program takes place be a manageable one—for example, in an intermediate-level city whose growth and complexity have not yet reached the stage where the situation is objectively beyond control and where assistance efforts can

at best have ameliorative consequences. Any replicative possibilities could, therefore, be substantial. International assistance would be helping to build a national system of urban development guidance.

Such a project could employ a variety of assistance resources. For example:

1. Counterpart funds could contribute to the basic project support.
2. International technical planning aid could be applied—ranging from senior professional staff to juniors from the Peace Corps. It is well to point out that, while the major international programs have relatively little direct experience in the planning of intermediate-level cities, the Peace Corps does. A number of Peace Corps volunteers have been stationed in Brazilian cities as planners (for example, Goiânia and San Bernado do Campos) and have assisted with urban planning in Tunisia, Afghanistan, and other countries.
3. American skills in evaluation research and in technician training, which have frequently been brought to bear both in other fields and in developing countries, could be employed throughout the undertaking.
4. Advanced aerial photography and mapping techniques could be applied in the survey stages.
5. International loan funds, which might normally be committed to key infrastructure undertakings in the city or surrounding region (for example, water, sewer, road systems) can be reserved for application within the demonstration plan framework.

A project of this kind might also afford opportunities for unique funding approaches directed toward major roadblocks we have perceived in establishing effective land-use control.

For example:

1. Salary differentials for LDC professionals who are resident in the intermediate cities. If trained people are to have the incentive to stay with the community, adequate monetary return is essential. Turkey's İller Bank has approached this issue indirectly by providing considerable financial incentives to the young consulting groups in Gaziantep and Zonguldak. Given a commitment by the LDC government to establish such incentives and maintain them on a sustained basis, international agencies could consider an initial "seed money" contribution or loan.
2. Land acquisition. We have cited the inability of municipal and national governments to acquire suitable sites for infrastructure, open space, and public housing. Both land speculation and sheer lack of funds are reasons. To our knowledge, foreign assistance agencies have not commonly made loans for land acquisition in LDCs—for example, they have agreed to finance infrastructure after land is

acquired—and the land obtained may not be appropriate. Again on a demonstration basis, the prospect of land-acquisition loans to implement a planning effort could be offered—in return for governmental action to hold down speculation, to establish more equitable taxing methods, and to establish new sources of municipal revenue to repay the loan. Unless the land-acquisition problem is intensively addressed in many countries, land-control efforts will continue to be a sham. Such international initiative under proper circumstances could have great significance.

Scope of Project and Costing

In our opinion, the precise scope of work to be undertaken in a demonstration project and an estimate of costs are intimately woven together. The variables are numerous, and without assessing the resources available within a specific country context and the particular problem community to be assisted, no meaningful cost estimates can be established. For example, some communities may have existing planning mechanisms with counterparts available for foreign experts along with basic survey data. Others, which could be likely candidates, might have none of these. Some countries might have a planning budget for the community already; in others, foreign funds would have to “seed” the operation. Some situations could require a sizable international expert staff for a number of years; and in others the primary emphasis could be on initial project organization with periodic monitoring.

The items to be costed would include: (1) expert and technician salaries and benefits, both foreign and local; (2) administrative staff and operations; (3) survey materials and equipment; (4) travel and miscellaneous support requirements; and (5) publication and dissemination requirements.

There is also the issue of whether the expert services to be employed would be furnished directly by an assistance agency or by a contract consultant organization, a factor that has major impact on financial requirements.

For these reasons we propose the following immediate next steps as a follow-through to this “prefeasibility” analysis by any interested international institution.

1. Identification of one or more countries where demonstration planning projects for intermediate-level cities could presently be undertaken.

2. Preliminary discussions with planning authorities in these countries to identify their prospective interest in this form of technical assistance.

3. Dispatch of a survey team to the most promising candidates. This team would spend sufficient time in observation and discussion (three to four weeks) to ascertain the feasibility of a demonstration project and the levels of commitment required by the host country and community. On the basis of this investigation, the team would prepare a detailed scope of services and budget for agency review. Only then could the financial basis for international involvement and support be established.

LONGER-TERM OPPORTUNITIES FOR INTERNATIONAL ASSISTANCE

International assistance has made important contributions to the general practice of regional and metropolitan physical planning in many nations that face incredibly difficult problems. Foreign aid and both U.S. and European educational institutions have played significant roles in creating the technical capacity that does exist in these countries. Indeed, probably most of the individuals with primary planning responsibility in most of the developing countries have had some overseas training or education.

We believe the kinds of activities now being conducted in this field by the broad array of international assistance agencies and Western universities should continue and intensify—for example, assistance to metropolitan and regional planning programs, sites and services schemes, infrastructure loans, education in Western universities, assistance to national governments in formulating urban policies, and so on. (This is not to say we agree with the emphasis or character of all of these activities. For example, we believe the practice of sending large teams of foreign consultants to prepare a metropolitan or regional plan, which is then submitted to a host country in the form of massive reports should be drastically curtailed. Few of these exercises make meaningful use of counterparts, and the local assimilation capacity—not to mention implementation ability—for the documents is limited. Secondly, many overseas educational programs continue to suffer irrelevancies to the countries from which the students come, even for metropolitan area planning. These would profit by more sensitive curriculum design and the preparation of case study materials drawn from the developing world rather than Western experience.

A third area for review lies in the site-selection process for many of the metropolitan-area sites and services schemes assisted by international agencies, particularly in regards to the suitability of land and its accessibility to employment and social services. Considerably more attention to land-use planning by both assistance agencies and recipient countries alike is warranted. These, and related issues, cannot be explored in depth in this report. They should be elsewhere. By and large, however, we believe the foreign urban and regional aid has been helpful and should be continued.)

It is clear, furthermore, that any special assistance directed toward intermediate-level cities should be cast within some larger policy framework by whatever agency is involved. Any such undertaking should definitely demonstrate linkages to regional and national settlement programs to which the LDC governments are committed and to investment plans for industry, highways, and other public works.

While a limited number of demonstration planning programs appear to us as an appropriate immediate response to the issues, three subject areas could be matters of special concern by the several international institutions active in this field. Each would in some measure be addressed in the proposed demonstration programs, but each offers a still wider challenge for support. These are research, training, and information dissemination.

Research

Despite the growing interest, there is little real research on the morphology of cities in developing countries except for the primates. Nations should be encouraged to develop their own urban research institutions and to direct analytic and data-gathering activities of university faculty toward building a better understanding of urban social, economic, and physical characteristics. Those Western universities that specialize in training for developing areas should be encouraged to produce more in the way of case investigations of urban development conditions within specific countries, both as contributions to the literature and as a more effective base for their educational activities.

A certain category of research, however, is at once typically a strength of American intellectuals, a traditional interest for American governmental support within this country, and a subject where the need for enlightenment has something of a "desperation" character. That is the area of evaluation. There are practically no empirical materials extant that assess the effectiveness of different approaches or techniques of land control in developing countries. There is little to identify the results of a process and to compare those results with initial

objectives. There is nothing, save impressionistic assessment, to provide guidance for a country or community preparing to establish new measures or revise the old. This conclusion came through strongly in the United Nations land-control study, and in the two intervening years we found nothing to change the judgment.

For example, Brazil's SERFHAU-sponsored planning programs over the past decade represent the greatest potential storehouse of information in the developing world. With the exception of a limited-interest master's thesis, they have not been studied rigorously. The same might be said for Venezuela's FUNDACOMUN activities, the development plans of the Inter Bank, the Indian Government's land-acquisition and land-banking activities, or sites and services projects already completed.

Some years ago the U.S. Department of Housing and Urban Development sponsored a rigorous review of its "701" local planning assistance program (upon which SERFHAU indeed, appears to have been modeled). This review contributed considerable insight into the process of local planning in the United States and led to major revisions in approach. The federal government has commissioned similar undertakings for OEO- and HEW-sponsored activities in the social sphere, and public works agencies such as the Army Corps of Engineers and the Bureau of Reclamation now have the concept of "post-evaluation" built into their programs. Many American professionals in universities and private organizations have become adept at evaluative research. This is not yet a skill that has been significantly transferred to developing countries.

We believe such studies can contribute to identifying suitable techniques and policy approaches, both for the intermediate cities and the metropolitan areas.

Activities in research can take the following forms:

1. Grants to governmental agencies, research institutions, or universities within specific countries that agree to conduct assessments of ongoing or completed programs or of specific planning approaches or control techniques that have been applied.
2. Provision of short-term technical assistance by professionals skilled in evaluation who will help set up such research, monitor it, and assist in preparing the results.
3. Grants to Western universities and research institutions for studies that they might initiate either independently or in concert with developing-country institutions.

Training

It is essential to train planners and local administrators for work in the intermediate-level cities. It is also essential to develop means of reaching local political leadership that has decision-making responsibility, to sensitize that leadership to the necessity for land programming and control.

The basic approach to such training is critical. The training can be effective only if it (1) makes primary use of the planning and administrative skills of the existing cadre of professionals within the developing countries; (2) is conducted within the countries themselves, preferably not in the primate cities but within regions close to the hinterland areas of development; and (3) involves selective, limited use of Western professionals.

The array of training prospects are as follows:

1. Financial support to university-level programs that provide curricula in economic and social as well as physical planning and engineering and agree to emphasize, with both curricula and research, nonmetropolitan studies. Examples of such institutions that can be likely candidates are Indonesia's Bandung Technical Institute; Brazil's COPPE in Rio and allied programs in Porto Alegre and Recife; and Turkey's Middle East Technical University. Regrettably, in a sense, most of these institutions are physically located in metropolitan centers. Even more likely prospects—in so far as effectiveness for the hinterland is concerned—would be emerging regional universities. One example is Trabzon's Black Sea Technical University, where a planning program has just been initiated.

2. Financial support to national institutions that agree to undertake in-service or "refresher" training activities for local planning and administrative personnel now in the field and that agree to establish some form of seminars or outreach programs to local political leaders. The classic examples of such institutions now functioning are, of course, IB/M and FUNDACOMUN. However, other Latin American countries such as Colombia, Costa Rica, and Paraguay are establishing training institutions, and Indonesia has the basis for one now operating out of Bali with Belgian support. The variety of training activities short of degrees can be quite wide—from formal courses of a few weeks to several months in duration, to traveling workshops with leaders who will journey from community to community. In each of the above cases, limited technical assistance by Western-country experts is warranted, to provide instruction, to help design curricula, and to assist in management.

3. Financial and technical support in the design and production of training materials that are expressly related to the land-development issues of specific LDCs. We have cited frequently in this study the overdependence on Western literature, Western approaches, and Western case studies by present educational and training programs. These grow even less appropriate when applied to communities outside the metropolitan centers. We have also cited the outstanding example of Charles Boyce's text on "planification" written for Venezuelans, within the context of Venezuelan laws, customs, and conditions. Such work has also been done through the OAS seminars in Brazil. In addition, preparation of training materials, ranging from texts to case studies to audiovisual presentation, is an excellent area for cooperative effort between Western professionals and those of the LDCs.

4. Short-term travel. Tours to view urban-development undertakings in the United States and Europe for LDC professionals, administrators, and local political leaders have a place within a training framework. They must be carefully organized, however, and conducted with limited objectives.

We do not believe either the Western development situations or the approaches and techniques by which they are being addressed have a great deal of direct relevance to the LDC settings. We do believe, however, that the exposure to different situations from the LDC and the direct contact with people who are trying to grapple with them can have a broadening effect on perspectives. It can at least challenge traditional patterns of thinking and provide some stimulus for new approaches. Thus, exposure itself should be the objective, rather than any expectation of transfer. Such short-lasting a few weeks--travel opportunities could be established as a function of other in-service training activities.

Careful organization is a must, however. We know of a number of group travel experiences where the recipients came away bewildered rather than enlightened by the kaleidoscope of cities and meetings they had been exposed to. A more promising approach is one recently conducted by the Colombian Government, which sent a number of planners and municipal officials on a six-week tour of the United States and Europe. The tour was carefully arranged by an American planning group familiar with Colombia, two of whose members accompanied the party and were able to interpret the significance of the meetings as they occurred.

Information Exchange

Meaningful and relatively noncontroversial undertakings could be established to build up the flow of urban-development information in developing countries. Although not the most pressing of problems, by and large provincial municipalities as well as the formally established university programs have great difficulty in obtaining statistical and research documentation on developments in their own countries—not to mention those overseas. Even where documentation is available, the number and distribution of copies is often restrictive. For example, few copies of Iler Bank plans exist in Turkey, a matter that has led to confusion among government officials and local residents alike. These could be prepared in executive summaries, however, and given wide distribution. Often cost is not as much a problem as the basic sensitivity to broadened information needs and the means of production and dissemination.

Some documentation centers have been established. IBAM in Brazil, with a steady flow of materials to member municipalities, is an example. International agencies, using resources of documentation experts, could assist with studies of urban information needs and provide financial support for the purchase and dissemination of Western research materials as well.

Within the broader context of these long-range needs and international-assistance opportunities, an immediate international effort with demonstration planning programs for a limited number of intermediate-size cities could be a meaningful beginning.

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