

41399

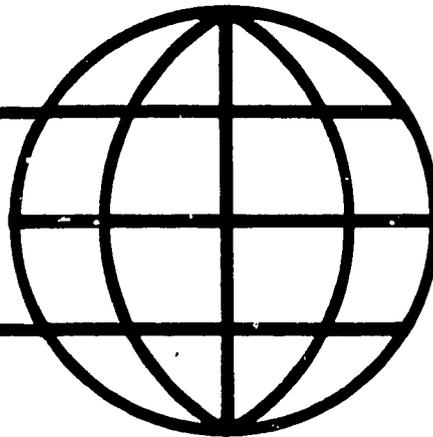
**COOPERATIVE AGREEMENT ON HUMAN SETTLEMENTS
AND NATURAL RESOURCE SYSTEMS ANALYSIS**

A Preliminary Concepts Paper on
THE ROLE OF SECONDARY CITIES IN REGIONAL DEVELOPMENT

by

Eric Belsky
Robert Hackenberg
Gerald Karaska
Dennis Rondinelli

Regional Cities Project
Clark University/Institute for Development Anthropology
Cooperative Agreement (USAID)



Clark University
International Development Program
950 Main Street
Worcester, MA 01610

Institute for Development Anthropology
Suite 302, P.O. Box 818
99 Collier Street
Binghamton, NY 13902

A Preliminary Concepts Paper on
The Role of Secondary Cities in Regional Development

by

Eric Belsky
Robert Hackenberg
Gerald Karaska
Dennis Rondinelli

Regional Cities Project
Clark University Institute for Development Anthropology
Cooperative Agreement (USAID)

1983

Table of Contents

	<u>Page</u>
I. Preface	3
II. Introduction.	4
III. The Regional Perspective.	8
IV. Secondary Cities as Catalysts for Productive Activities	12
A. Agricultural Production	12
B. Commerce.	14
C. Industry.	16
D. Human Services.	25
V. Issues of Special Concern	28
A. Introduction.	28
1. Selective Regional Closure.	28
2. Regional Context.	33
3. Institutional Capacity for Regional Administration, Planning, Financing and Service Delivery.	34
4. Urban and Rural Led Development Stimuli	35
5. Urban Informal Sector	36
6. Entrepreneurship.	41
B. Impacts of Infrastructure on Generating Economic Growth	43
VI. Summary	44
References	

I. Preface

A team from Clark University and associates from other American universities have undertaken a project for one year that will prepare a pre-proposal paper on the role of secondary cities in regional development. This pre-proposal will serve as the basis for a proposal by the Office of Multisectoral Development, U.S. Agency for International Development, which will designate future studies including specific projects and case studies, as well as the design of methodological approaches to strengthen the contribution of secondary cities to development. These activities signify that the Agency is interested in establishing a research and technical assistance priority on secondary cities.

As a first step in preparing a pre-proposal that will lead to practical Agency projects, we describe here our preliminary views on the role of secondary cities and the issues relevant to a better understanding of this role. This paper will be distributed to scholars and practitioners who have worked with secondary cities who will subsequently be engaged in interviews and discussions. Finally, papers and studies will be commissioned for inclusion in the October, 1983 pre-proposal.

This research activity flows directly from pioneering work already conducted by the Office of Multisectoral Development on urban-rural linkages in development at the level of market towns and rural villages under the office's Urban Functions in Rural Development Project. The next logical step is to move up the urban hierarchy to the level of the secondary city, an activity directly related to the research and development goals of the Clark/IDA Cooperative Agreement. Under the agreement, Clark/IDA is extending the state-of-the-art ability to analyze, plan, implement, and manage urbanization and

its linkages to the national development process in general, and to rural areas in particular.

II. Introduction

Planners have experimented with a number of different approaches to regional development over the past thirty years. Each approach's specific objectives were quite different from each other, but they shared the common goal of attempting to guide and facilitate the development process. Most of these strategies have tended to be sectorally-oriented (that is, staged-growth and industrialization approaches), and the few which have been multi-sectorally-oriented (such as integrated rural development projects) have generally focused on only one spatial regime, usually rural. Most recently, planners in Third World countries are beginning to include "regional" perspectives in their development strategies. While there are a wide range of interpretations as to the content and context of the region, it is commonly understood that the area is relatively large and that cities within it are vital centers or foci of the growth and development process. Hence, regional planning approaches tend to view a regional space as a totality--one in which there are urban and rural areas and in which the impacts of any development intervention are determined by a complex interplay of forces within the regional space.

Each successive approach to planning was developed to improve upon its most immediate predecessor. The latest approach tested in integrated rural development projects attempted to plan for a rural area across sectors through investments in agricultural production, rural infrastructure, credit, marketing, extension and social services. One recurrent problem which was not

commonly addressed, however, was the lack of off-farm and non-farm productive employment opportunities (Carroll 1982). In light of the increasing importance of off-farm income to the vast numbers of peasants who need this income to survive, this was a critical omission. Since there were few opportunities for this kind of employment in market towns and rural service centers, Third World planners recognized the need to shift attention away from rural development.

The integrated perspective on regional development, however, is quite new and is still being tested. Most planners are not sufficiently aware of the mutually interdependent role of urban and rural enterprises. They have not recognized that within a region each city, according to its size, has a distinctive function whose place and role is carefully defined through the operation of a region's economic, social, and political processes. Thus, while Third World development strategies have recognized that cities can make a vital contribution to national development, planning efforts have largely treated urban problems and rural problems separately. It is only at the smallest city size--the market town--that a rural-urban development strategy has been acknowledged and pursued.

The role of cities above the level of the market town has yet to be adequately assessed and included in any but a few regional development plans. It is imperative that methods for assessing these roles be developed and employed by Third World planners, because the large cities in the urban hierarchy perform functions that are not only unique to the total regional functional structure, but many of these same functions and activities represent a stage of development beyond primary production and processing.

In 1980, the Office of Multisectional Development sponsored a study entitled Developing and managing middle-sized cities in less developed coun-

tries, written by Dennis Rondinelli. Based on a review of the theoretical and empirical literature on the subject, the report concluded that secondary cities were not only capable of meeting the objectives defined for them by USAID missions and host governments, but that these cities were in fact the only ones capable of performing certain development functions that are vital to rural and regional development.

Based upon a careful examination of thirty-one case studies from seventeen developing countries, Rondinelli (1981) concluded that secondary cities (defined as those with populations of greater than 100,000) can or do perform at least twelve functions that are supportive of rural and regional development. They can, according to the evidence presented in the study, act as:

1. Points for Decentralization of Public Services - They can provide convenient locations for decentralizing public services through municipal governments, field offices of national ministries or agencies, or regional or provincial government offices, thereby creating greater access for both urban and rural residents to public services and facilities that require population thresholds of about 100,000 or more.
2. Public and Social Service Centers - They can offer sufficiently large populations and economies of scale to allow the concentration within them of health, education, welfare and other services, and often act as regional or provincial centers for a variety of basic social services and facilities.
3. Commercial and Personal Service Centers - They usually offer a wide variety of consumer goods, and commercial and personal services through small-scale enterprises and through extensive "informal sector" activities.
4. Regional Marketing and Trade Centers - Many act as regional marketing centers offering a wide variety of distribution, transfer, storage, brokerage, credit and financial services through their regularly scheduled and institutionalized markets or through periodic markets and bazaars.
5. Centers for Small-Scale Industry - They often provide conditions that are conducive to the growth of small-and-medium-scale manufacturing and artisan and cottage industries that can serve local markets and satisfy internal demand for low-cost manufactured goods, and some of the larger intermediate cities also support large-scale industrial activities.

6. Agro-processing and Supply Centers - Many act as agro-processing and agricultural supply centers for their regions and provide services to rural populations in their hinterlands.
7. Center for Promoting the Commercialization of Agriculture - They often create conditions--through relatively high levels of population concentration, their advantageous locations, marketing and agro-processing functions, and linkages to rural communities--that are conducive to the commercialization of agriculture and to increasing agricultural productivity and income in their immediately surrounding hinterlands.
8. Center of Off-farm Employment - They can be sources of off-farm employment and supplementary income for rural people and, through remittances of migrants, provide additional sources of income to people living in rural towns and villages in their regions.
9. Regional Transport and Communication Centers - They often serve as area-wide or regional centers of transportation and communications, linking their residents and those of rural villages and towns in their hinterlands to larger cities and other regions in the country.
10. Center for Absorbing Migrants and Providing Income Remittance - They can absorb substantial numbers of people migrating from rural areas to urban centers, transforming a "rural-to-primate city" migration pattern to a "stepwise" pattern, and offering long-term or permanent residence to some migrants, thereby creating a more balanced distribution of urban population.
11. Centers of Social Transformation - They can function effectively as centers of social transformation by: (a) accommodating social heterogeneity and encouraging the integration of people from diverse social, ethnic, religious, and tribal groups, (b) accommodating organizations that help to socialize and assimilate rural people into city life, supporting them during their transition and mediating conflicts among them, (c) infusing new attitudes, behavior and life-styles that are more conducive to urban living, (d) providing opportunities for economic and social mobility, and (e) offering new economic and social opportunities for women.
12. Center of Diffusion, Linkage and Integration - They can be channels for the diffusion of innovation and change, the spread of benefits of urban development, the stimulation of rural economies and the integration of urban centers and rural settlements within their regions through social, economic and administrative linkages.

The report also concluded that although secondary cities can perform all of these functions, they continue to play a rather weak role in rural and

regional development. Enormous regional disparities in levels of development and standards of living persist, and secondary cities have not yet fulfilled their potential for reducing regional disparities providing off-farm employment and stimulating rural development in many countries.

III. The Regional Perspective

In order to build on the unique opportunities for development which secondary cities offer, it is necessary to view them within a regional/spatial framework. With few exceptions, strategies aimed at developing secondary cities have focused on a single urban place without viewing the city as only one place of many at a particular level of a functionally defined central place hierarchy. They have failed to recognize that every secondary city has particular functional characteristics that make it uniquely suited to support productive activities and services vital to rural development. Further, they have failed to take into account how a central place's external relations influence the dynamics of regional growth.

A regional perspective recognizes the demographic, economic, social, and political dimensions of the organization of space. That space, in turn, may be delimited into urban (nodal) and rural (uniform) areas. These spaces, and the linkages among and between them, define the region's structure. Urban and rural areas are also organized in a hierarchical and nested fashion. The urban centers are hierarchically organized so that settlements of various population sizes suggest appropriate sets of functions. The types and diversity of functions associated with each level of the hierarchy are based on the needs of its inhabitants, as well as on the demand in the broader region for central functions. The expanse of space for which an area acts as a central place

corresponds roughly to its position (and hence population and functional complexity) in the hierarchy.

To simplify, it can be assumed that there are three broad levels in the urban hierarchy of developing countries. At the highest level is a primate city which generally has a substantially larger population than the next largest city and which serves the entire nation. At the next level are a series of secondary cities serving subnational regions. Market towns and villages servicing small rural areas are the lowest hierarchical level. Employment at each level of the hierarchy is predominantly in the tertiary sector, demonstrating that central service functions dominate the economy of central places. Figure 1 illustrates the central place functions often found at each level of the hierarchy.

Ideally, all central places in a spatial system are linked together and the rural areas surrounding them are integrated into the center's economy. The regional hinterland for each secondary city is nested within the primate city space (the nation). The space within which market towns and villages are nested is the regional space of a secondary city. All locations, thus, should be served and accessible to functions at each level of the hierarchy, although these ideal conditions are not met in most countries.

The implications of this regional perspective for the effective provision of goods and services are profound. According to this model of spatial organization the economies of cities, regardless of size, are directly related to and intimately involved with their rural hinterlands. At the lowest level of the hierarchy are small settlements that are more rural than urban in character. They provide low order services, facilities and infrastructure that support rural populations and their agricultural activities. They are too

Figure 1: General Functions in the Urban Hierarchy

SERVICES AND ORGANIZATION	VILLAGE CENTERS	MARKET AND DISTRICT TOWNS	"MIDDLE LEVEL" AND INTERMEDIATE CITIES	PRIMATE CITIES AND METROPOLITAN CENTERS
Administration	Police Post	District Officer District Court Police Station (with Jail) Specialized Officers (e.g. Agriculture)	Provincial Administration Special Govt. Services Headquarters	Seat of State/National Govt. Seat of Judiciary Embassies Headquarters of Government Departments
Health	Dispensary	Physicians Dentists Health Center/Clinic Drugstores	Regional Medical Offices General Hospital Specialized Physicians Large Drugstores	Specialized Hospitals Medical Research Institutes
Marketing & Shopping	Small Retail Shops Periodic Market Specialized Shops (rare)	Large Retail Stores Specialized Retail Shops Gas Station Small Wholesale Stores	Large Retail Stores Retail of Large Consumer Service Station Large Wholesale & Distrib. Warehousing	Luxury Retail Shops Headquarters of Chain Stores and Import-Export Houses
Industry	Artisan Shops	Larger Cottage Industry Occasional Agro-industrial Plant	Large Agro-industrial Plants	Heavy Industry
Finance	Village Money Lender	Commercial/Cooperative Post Office Banks Finance Co. Offices Pawnshops	Banking Insurance Brokerage Middlemen	Domestic and Foreign Banks Financial Headquarters Chambers of Commerce Trade Association
Public Utilities	Branch Post Office	Electricity Post Office Telephone Service Telegraph Office	Electricity Sewer System Water Supply	Full Range of Municipal Utilities
Traffic	No Traffic Junction Unsurfaced/Seasonal Roads	Surfaced Roads District Transport. Focus	Regional Transpt. Serv H.Q. Regional Road Focus Imp. Railroad Station All-Weather Highways	Metropolitan Transp. System Riverine and Ocean Shipping Airport
Education	Primary School Small Secondary School	Large Secondary School(s)	Secondary School Technical Schools Colleges	Universities Technical Institutes National Research Institutes Scientific Academies
Recreation	Coffee/Tea Rooms Bar	Cinema Caffes	Theater Restaurant Hotel with Nightclub	Theater, Ballet Museums Art Galleries Orchestra, Opera

Source: Rondinelli and Ruddle, 1976

small to support "higher order" services such as agro-processing industries, hospitals, large credit institutions, and regional markets.

At the level of the secondary city, however, the situation is quite different. Middle-size cities perform the functions described earlier because of their large hinterlands and populations. They act as central places for a region, not just a rural hinterland. Subsumed in the region are both many rural areas and the small urban centers. The secondary city, therefore, presents very different opportunities for rural and national development than small towns and market centers.

A regional outlook to secondary city development must be tailored to each individual case. This requires careful empirical studies in the field. The first step would be to survey the functions which a secondary city performs, identifying actors and processes. A next step would be to determine who uses these functions, both within the city and without. Determining how functions and services are delivered to consumers outside the city and who these consumers are would require studying its economic, social, and political linkages to rural areas and the smaller towns in the region. An assessment of how well services and functions are provided over space could then be performed.

The most difficult step is to assess service delivery and demand, matching these with opportunities to provide them within the secondary city, as it requires a more extensive understanding of the city itself. Next, investments would be identified that would both provide these services and functions at the least cost and would create a sustained growth process within the city and the region. Determining these kinds of investments, it appears, requires studies of the informal sector, entrepreneurial activity, and marketing systems.

The outcome of a project like this or a series of carefully designed studies and surveys could lead to a list of investments that would generate growth and contribute to a thriving secondary city economy, while strengthening the city's contribution to rural and regional development.

To design a large project or series of studies is the goal of the first year's activities. The "project" sketched above is only meant as an illustrative example that would obviously need to be further developed. The project represents the broadest and fullest application of a regional and spatial perspective. Currently it appears that the U.S. Agency for International Development is most concerned with the role of secondary city in agricultural production and productive enterprise development; and, to the extent that the Agency's concerns also reflect those of host governments, these should be the primary concerns of the Office of Multisectoral Development.

IV. Secondary Cities as Catalysts for Productive Activities

Secondary cities have much to contribute to the development of Third World countries, for they can play a leading role in: (1) increasing the productivity of agriculture; (2) increasing the efficiency, productivity, and employment in commercial activities; (3) increasing manufacturing employment and productivity; and (4) increasing the efficiency in productivity and employment of service activities.

A. Agricultural Production

The recognition that urban and rural development processes are inextricably linked and are, in fact, parts of the same development process, has led to the realization that intermediate cities can be catalysts for agricultural

development. Secondary cities support rural development by providing regional markets, agro-processing enterprises, agricultural extension and innovation diffusion functions, and urban-based inputs to agriculture.

The productivity of agriculture can be raised by the use of technologies such as fertilizers, innovative technologies, pesticides and new seeds. Also, availability and access to credit can clearly enhance productivity. On the demand side, improvements in the road network and market facilities enable farmers to draw upon a larger size market with effective pricing mechanisms to stimulate the productive process. Further, the production system clearly requires continued inputs of new technology and training, including machinery repair and processing, in order to achieve efficiency.

Secondary cities can enhance agricultural productivity by assisting financial institutions in providing credit to farmers. For example, government insurance to private credit institutions can be critical in raising agricultural productivity, as can direct public credit programs located in secondary cities. In addition, public investment in key commercial services that are supportive of agriculture can be another method of affecting agricultural productivity.

Agro-processing is another important function which secondary cities can perform to raise agricultural productivity and farmers' incomes, as it increases produce demand and price. By increasing the incomes of farmers, it enhances the ability of savings to procure inputs, which, in turn, will increase individual farm productivity. Similarly, employment in one of the many non-farm jobs available in secondary cities (in small cottage industries, commercial and non-commercial services, or agro-processing) can provide income that can be applied to improving farm productivity. In a study conducted by the World Bank, for instance, Collier and Lal (1980) found that employment of

rural migrants in cities not only provided a steady stream of income remittances to rural villages, but also that these remittances are frequently the chief source of funding for the adoption and use of new technology.

In summary, larger, secondary cities assist and serve in the efficiency of the agricultural production system in the following ways:

- a. inputs to agriculture (such as seeds, fertilizer, and machinery);
- b. marketing functions (bulking, sales, distribution, and pricing),
- c. credit and financial service availability;
- d. agricultural extension activities;
- e. diffusion centers for technology transfer;
- f. maintenance and repair facilities;
- g. sites of agro-processing industry;
- h. markets for agricultural products.

B. Commerce

The principle sources of employment in secondary cities are in product retailing and wholesaling, and the full range of personal and business services. This fact lends credence to the hypothesis that secondary cities act very much as regional "central" places.

Rondinelli has noted that:

By 1980, commerce and services still played a strong role in the economies of intermediate cities, accounting for about 44 percent of employment in those with more than 500,000 people, nearly 40 percent in cities with populations of between 200,000 and 500,000 and nearly 56 percent in cities ranging from 100,000 to 100,000, but the percentage of the labor force engaged in social and personal services dropped drastically in all population size categories between 1960 and 1980... Employment in wholesale and retail trade increased...as did employment in production-oriented services (Rondinelli 1981, 176).

This indicates that the private sector has become increasingly important to production-oriented activities and in creating employment through wholesale and retail trade activity.

Many authors (see "Urban Informal Sector" in Section V below) have observed that the informal sector of urban economies are an important component of the commercial sector. The realization that the informal sector can and does contribute to the urban economy, however, is relatively recent.

It is important to recognize that the commercial activities found in a secondary city, taken as a whole in both formal and informal sectors, represent the regional market function. The profundity of secondary cities as regional market centers cannot be overstated. Development planning has traditionally failed to analyze the spatial scope of the regional marketing system and has failed to develop methods to improve that system through spatial planning. Because the share of employment in secondary cities accounted for by regional marketing activity is so great, and because the marketing of agricultural produce is so critical to the farm producers, the regional market is central to understanding, building on, and increasing the contribution to development of secondary cities.

Case studies are beginning to suggest that, contrary to expected spatial behavior, small farmers will frequently market their produce in a secondary city at greater distances from them than smaller towns closer to them. Frequently this journey can be of great financial cost and economic risk to the farmer. One reason advanced for this behavior is that far better prices can be obtained for produce in the competitive environment of a regional market and that, secondarily, the trip to market can also be combined with purchasing agricultural inputs and consumer goods which are only available in larger places (Dias 1982). Small farmers or farmers in cooperatives can make the

longer journey to market, but the fact remains that spatial planning for a market, focusing on the secondary city regional market, can benefit both urban and rural dwellers. Spatial market planning can lead to intelligent choices as to which commercial services to invest in and how and in which linkages to invest to provide better access of rural populations to these services.

C. Industry

It is at the level of the secondary city that manufacturing first appears as an important regional activity. While secondary city economies still tend to be dominated by commercial and service activities, manufacturing employment, primarily in the small-scale industrial sector, is nevertheless significant. How significant manufacturing is to the economic composition and mix of activities that generate income and employment in a secondary city seems to vary principally according to the size of the city. Studies for some Asian countries suggest that the following occupational structures are characteristic of cities in different size classifications (Lo and Salih 1978, 191-234):

- a. Cities with populations smaller than 100,000 have high proportions of employment in agriculture and related marketing and commercial activities, in small-scale cottage and artisan manufacturing, and lower order services that have a relatively low growth rate in total urban employment.
- b. Cities with a population of between 100,000 and 250,000 have generally high rates of employment in small-scale manufacturing and in consumer-oriented commercial and service activities and have relatively high rates of total urban employment.
- c. Cities with populations of from 250,000 to one-half million are characterized by an increasing rate of growth in the producer-oriented commercial sector. They tend to have substantial manufacturing and tertiary activities, with increasing rates of growth in the producer-oriented commercial and services sector.
- d. Cities of one million or more have a relatively high proportion of employment in manufacturing, but their occupational structure is dominated by producer-oriented, commercial, and service sectors.

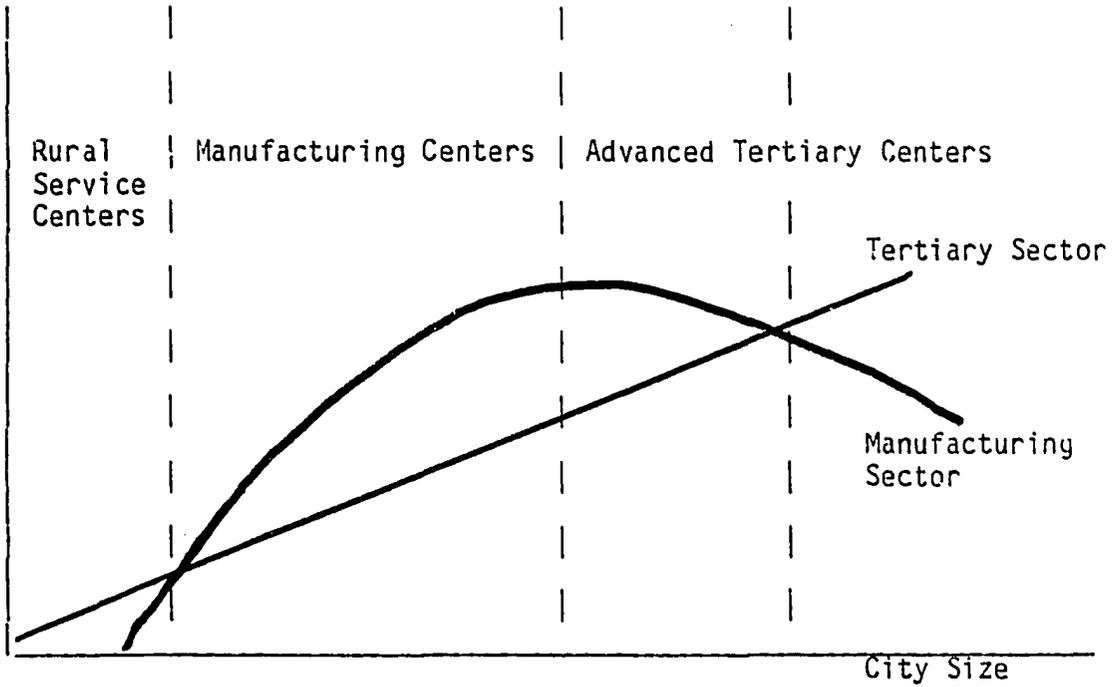
Variations in the economic structures of cities in different size groups may be explained in part by the economies of scale they offer to various economic activities. Cities smaller than 100,000 may not have sufficient population to support large scale commercial and manufacturing activities that are dependent on local markets; they do offer sufficiently large markets, however, to sustain lower order, small-scale, consumer and service functions, and agricultural marketing and service activities. As cities increase in size they begin to offer economies of scale and proximity that allow larger volumes of production and generate demand for producer-oriented commercial goods and services, and thus allow secondary and tertiary sectors to operate more efficiently. Lo and Salih suggest that in Asia manufacturing efficiency increases with city size up to about one million and then begins to decline, while producer-oriented tertiary activities continue to increase in efficiency with population size after cities pass the one million mark (Figure 2).

While secondary cities are able to support manufacturing activities on a scale that is not feasible for smaller cities (due to economies of scale and other considerations), their role in total manufacturing output and employment for most developing nations is not as strong as one might expect. Manufacturing activities are disproportionately concentrated in primate cities. Historically, it was the deliberate policy of many colonial governments in the developing world, and post-independence regimes as well, to concentrate investments in infrastructure and productive activities in the largest cities, particularly in the national capital. Smaller and middle-sized cities often received little of the nation's industrial investment.

A study of urban development in Colombia during the 1960s and 1970s, for instance, pointed out "the serious discrimination between the major cities and intermediate cities" in that country in the allocation of both public and

FIGURE 2

Sectoral Efficiency Curves for Cities
of Different Size Categories



SOURCE: Lo and Salih 1978, 198-234.

private investment. Only 15 percent of total bank and investment corporation financing for manufacturing in Colombia reached the twenty-six largest intermediate cities, although their value-added in manufacturing was about 24 percent, and they had 28 percent of the population (USAID 1972, 13).

In Nigeria during the 1960s, middle-size cities accounted for a relatively small percentage of industrial establishments, employment, or output. The largest city, Lagos, had nearly 30 percent of all industrial establishments and employment, and accounted for nearly 40 percent of gross industrial output (Mabogunje 1977). Studies that compare Lagos with the secondary metropolis, Kano, indicated that the industrialization of the two cities has been quite different. Investment by multinational corporations has been concentrated primarily in Lagos, with far less investment in Kano. Lagos was characterized by large-scale industrialization while Kano, as is characteristic of secondary cities, was dominated by small-scale producers (Lubeck 1977).

In Kenya, industrial activities are highly concentrated in the largest city, Nairobi, and relatively small shares of industrial employment are found in smaller cities. In 1975, nearly 57 percent of manufacturing employment was in Nairobi, while among the next three largest cities Mombasa had only 17 percent, Nakuru less than 6 percent, and Kisumu a little more than three percent (Richardson 1980). Indeed, 58 percent of the country's total wage employment was accounted for by Nairobi, with secondary cities of Mombasa, Nakuru, and Kisumu having only 19.0, 4.3, and 4.9 percent, respectively.

Even in relatively industrialized developing nations, such as Taiwan, large manufacturing firms tend to remain concentrated in the largest city. The three secondary cities of Taichung, Tainan, and Kaoshiung combined had less than half the number of firms with 10 to 500 workers than Taipei during

the 1970s. The three cities had about 20 percent of all manufacturing establishments with more than 500 workers, while Taipei alone accounted for a third of these industries. The three secondary cities contained a larger percentage of small-scale industries employing less than 10 workers that formed the base of the intermediate cities' manufacturing sector (Ho 1980).

Overconcentration of manufacturing in primate cities, however, need not be a permanent condition. In fact, there is scattered but convincing evidence which suggests that secondary cities can substantially increase their share of total manufacturing when a country undergoes rapid industrialization and/or a government deliberately attempts to deconcentrate urban economic activities. South Korea is one country that has pursued such a deconcentration policy. In 1980, manufacturing firms in five secondary cities with more than a half-million residents employed more than a million people, almost double the number working in industries in those cities in 1974. More than a half-million people were employed in industry in smaller intermediate cities. In 1974, establishments located in Korean secondary cities contributed about 54 percent of the country's manufacturing value, and although no individual secondary city's manufacturing sector added as much as that of Seoul's, the middle-sized cities together contained a substantial amount of Korea's manufacturing capacity (Republic of Korea 1980).

The Korean experience shows that secondary cities can play an important role in countries where government seeks to deconcentrate manufacturing employment from the largest metropolis. By 1980, although small scale establishments still accounted for about 90 percent of all industrial firms in secondary cities, large industries (those employing 100 or more people) engaged more than 50 percent of the industrial labor force in nearly half of the Korean cities with 100,000 or more residents. In Pusan, Incheon, and

Daejeon--three of the five largest secondary cities--large factories employed from 55 to 68 percent of the industrial workers. In smaller secondary cities, where the government has created industrial estates, a large majority of the manufacturing workforce is employed by large-scale industries: in Masan, 82 percent; in Ulsan, 80 percent; in Cheongju, 61 percent; in Pohang, 70 percent; and in Chuncheon, a little more than half. In Iri, more than 61 percent of the manufacturing labor force was employed by large firms as were 73 percent of the industrial workers in Gunsan, 61 percent in Weonju and 76 percent in Andong. By 1980, the average number of workers in industrial firms in cities of more than 200,000 population was 85, and the large firms had an average of 54 employees each in cities with between 100,000 and 200,000 residents. In only one-third of Korea's secondary cities did more than 60 percent of the manufacturing labor force still work in small scale industries in 1980.

Korea's policy of extending highways, providing utilities, upgrading power and energy capacity, and establishing essential infrastructure in middle-sized cities that were designated as centers of manufacturing, allowed these cities to support large-scale industry successfully. By 1980, half of the smaller intermediate cities had more than five large factories, as did all of the cities with populations of 200,000 and 500,000.

Experience in Taiwan indicates that under favorable conditions, intermediate and smaller cities can support a substantial number and variety of small and medium scale industries, as well as larger manufacturing establishments. Ho points out that between 1930 and 1956 industrial employment increased by nearly 4 percent a year in Taiwan's seven largest cities, and that between 1956 and 1966 it increased by about 5.6 percent a year in secondary cities outside of the Taipei metropolitan area (Ho 1979). Employment in food, textiles, furniture and fixtures, nonmetallic mineral products, and

machinery and equipment increased from 3.0 to 6.9 percent a year, in chemicals by over 7 percent, and in wood and metal products by more than 12 percent a year in secondary cities. By 1966, Kaohsiung, Taichung, Tainan, and 23 urban townships adjacent to these secondary cities had 23 percent of Taiwan's employment in manufacturing and eight smaller cities had an additional 10 percent. Ho's review argues that a decentralized pattern of industrialization based in intermediate and smaller cities in rural areas improved non-agricultural employment opportunities for rural households. By allowing commuting to manufacturing jobs in nearby cities, rural inhabitants could still take part in farm activities on weekends, create numerous linkages with small commercial, service, and repair establishments in rural towns and make it possible for small businesses to develop in rural areas. Decentralized industrialization created employment and entrepreneurial opportunities for rural people, giving them more income to spend on manufactured goods produced in the intermediate cities (Ho 1979).

These experiences with industrial growth in the secondary cities of Korea and Taiwan indicate that secondary cities, under proper conditions, can compete favorably with primate cities and act as viable points for industrial deconcentration. However, consideration of the role which manufacturing currently plays in secondary cities, and may reasonably be expected to play in the future, raises a number of issues, to wit:

(1) Measurement of employment in industrial activities. Employment data collected by national and international agencies rarely take into account informal activities. Because manufacturing activities are overwhelmingly concentrated in the informal sector, this poses a serious problem for accurately

constructing profiles of a secondary city's economic structure. An occupational profile for the labor force would be ideal, but collecting the household level data necessary to construct the profiles is costly, time-consuming, and not generally available for international comparison.

(2) Multiplier effects. Every industrial enterprise or potential industrial enterprise has associated with it some multiplier effect. The value of this multiplier and how it manifests itself in the economy depends on the nature of the industry being analyzed, its backward and forward linkages, enterprise scale (output and employment), its location, and whether or not it is in the formal or informal sector. Where massive amounts of data are already available and where the money, computers, and expertise are also available, these effects can be estimated through a combination of techniques including regional input/output analysis and industrial location analysis. The necessary inputs to perform these analyses are rather costly, and thus not often feasible for developing country planning efforts.

(3) Policy considerations. Industrial policies in developing countries continue to favor private and public investment in primate cities. The Taiwan and South Korean experiences demonstrate the power of policy reform in fostering a broader dispersion of industry, although both these cases have yet to be thoroughly analyzed. These country cases, along with others, should be more carefully examined and assessed in the light of experience with industrial policy and theories tested and developed by economists and public administration experts. In addition, attention should be given to how one initiates a productive and open policy dialogue on the issue of deconcentrated industrial development in nations that may not yet understand its utility.

(4) Feasibility of attracting private investment. It is critical not only to identify and enact policies which encourage private investment in secondary city industries, but also to examine what considerations other than policy lead to the selection of a particular site for a firm by private investors. Promoting investment in secondary cities requires a more thorough understanding of the criteria adopted by private investors in industry for site selection. Many of these are doubtless industry- and person-specific, but commonalities must nevertheless exist. Both objective profit-maximization concerns and the more subjective psychological concerns of private investors should be explored.

(5) Mix of small, medium, and large scale enterprises. Taking advantage of the unique locational opportunities for manufacturing which secondary cities provide requires a careful consideration of the scale and size of appropriate industries. Also, informal and formal industries should be considered and the targets of strategy identified based on adopted goals (be they employment generation, absolute output, or growth and equity). There is currently a difference of opinion on the question of whether to foster growth in the informal or formal sector and in large, medium, or small industries.

(6) Strategy options other than manufacturing. Clearly, there are many other sectors in the economies of secondary cities in which one might invest. For instance, one could argue that investments should only be made in commerce and services; because secondary city economies are dominated by commerce and services and because secondary cities act as regional centers it can be argued that these sectors have the greatest growth potential and are the most vital.

On the other hand, it can be argued that historically, manufacturing in secondary cities has been underdeveloped because of over-concentrated investments in primate cities. Under more favorable competitive conditions, manufacturing in secondary cities could burgeon and lead to rapid and more equitably distributed growth than commerce and service sectors which have already reached the limits of their growth. Both arguments must be assessed and combined in order to develop a sound secondary city development strategy.

(7) Equity issues. As with any development intervention the questions of who benefits and at what opportunity costs to whom, applies to a strategy which includes investments in manufacturing in secondary cities.

A great deal of wisdom can be gained by directly addressing these issues. Within the broader framework of a coordinated set of research studies relating to secondary cities in a regional context this wisdom can be effectively utilized to determine manufacturing's place in a broader strategy for secondary city development.

D. Human Services

There is a clear and urgent need to adequately provide human services for secondary cities. Deficiencies already exist in the quality and coverage of basic social, health, and educational services in third world countries, and these deficiencies are growing worse with population growth. Local municipal governments have not been able to maintain existing services and have failed to extend even the most minimal services to secondary cities with large numbers of migrants and urban poor.

From a humanitarian standpoint, effective human services are essential. Lack of health care services, for instance, coupled with inadequate sanitation

results in serious health problems for large numbers of urban poor. In addition to the very compelling humanitarian reasons for improving human services, there are pragmatic economic reasons as well. First, the provision of human services has great employment generating potential. Government, health, education, extension services and infrastructural facilities--particularly if labor intensive methods are used--can create many productive jobs. Second, the successful delivery of these services can contribute significantly to the productivity and marketability of the labor force through education and training. Third, provision of adequate municipal infrastructure, coupled with a healthy, well-trained workforce, increases the chance that additional private enterprise investments will be made in secondary cities, more off-farm employment opportunities can be created, and the purchasing power of the urban residents can be significantly expanded.

The lack of adequate human services in secondary cities can be attributed to: (1) overreliance on the public sector to provide human services and infrastructure; (2) limited resources available to local, regional, and national governments to expand expendable resources; (3) fragmented responsibility for maintenance of higher order services among local, regional, and national government institutions; (4) limited institutional capacity to plan, implement, and manage effective, efficient, and employment-generating service delivery systems; and (5) failure of public institutions to actively involve the private sector in service delivery.

In the short term it is reasonable to expect that technical assistance can only have an impact on the planning, implementation, and management of service delivery systems, and through this planning, on involving the private sector in the human services sector. Limited resources are an unavoidable constraint, and inducing host governments to permit municipal governments to

generate their own revenues and administer their own services takes time and the voluntary support of the central government. However, effective planning can go a long way in stretching limited resources. With careful planning and the help of the private sector, delivery of services can be more efficient, generate employment and improve the health capabilities and productivity of the labor force.

At any given level of expenditure, provision of human services can be made more efficient and cost-effective. Spatial planning for a decentralized delivery system can make a significant contribution in this regard. Services should be provided in secondary cities which apply to their regional role, but do not act as replacements for services that can more efficiently be provided by market towns. Furthermore, spatial planning within a city can make the delivery of services to urban residents (including the poor) more efficient, cost-effective, and directly responsible for generating employment. A good deal of evidence suggests, for example, that basic health care can be provided at lower costs in secondary cities by converting them from delivery systems which are exclusively or primarily curative to those that emphasize disease prevention. Yet, because municipal governments lack the expertise to deliver such a decentralized system, health care remains more costly and less efficient than it need be.

An important component of a secondary cities development strategy is, hence, improving the institutional capacity of local municipal and regional authorities to plan, implement, and manage human service delivery systems. By employing a regional and spatial planning perspective on the decentralization of appropriate and labor-intensive delivery systems, jobs can be created and the labor force's productivity and attractiveness in terms of private investment can be expanded. Further, by building the institutional capacity of

municipal governments to coordinate private and voluntary organizations active in the human services sector, the private sector can increasingly assume responsibility for those human services which need not be solely provided as public services.

V. Issues of Special Concern

A. Introduction

The issues described below appear to require more attention before projects for secondary city development can be effectively designed and carried out. These issues focus on: (1) selective regional closure; (2) regional context; (3) institutional capacity for regional administration; (4) urban and rural led development stimuli; (5) the informal sector; (6) entrepreneurship.

Each issue is described separately, but when viewed from a spatial perspective they are obviously interrelated. The challenge of this project is to develop the concepts underlying these issues so that they can be directly related to and applied in an operational strategy for the development of secondary cities under the wide variety of conditions found in developing countries.

1. Selective Regional Closure

It has been argued that one of the principle reasons for the continued under-development of many regions in developing countries is the extraction or "leakage" of a region's surplus value to the metropolitan economy or to corporate interests abroad. This reasoning is based on dependency models and has been used by those who argue for closing a regional system entirely. Viewed narrowly, solving the problem of regional disparities in economic development

is a question of how agricultural surplus can be retained in rural areas for rural, not only urban, development (Lo and Salih 1978).

This extreme statement has since been tempered by those who believe that surplus extraction is a problem to address, but who also believe that inter-regional and international linkages (through which agricultural products flow to markets, and innovations and capital flow into rural areas) are important for regional development. This group has argued for "selective" regional closure. A strategy for selective regional closure would include identifying methods for and taking steps to keep the surplus value generated within that region, while at the same time establishing interregional and international linkages that support regional development.

Inequitable income distribution within developing countries is a problem that must be addressed along with that of increasing productivity. Inequitable distribution frequently results from investment concentration in the primate city and its metropolitan area. Wealth derived from primary resource extraction in rural locations produces regional imbalances when resources are sent to distant points for processing, marketing, and export--frequently through the primate city and its port facility. Imbalances are intensified and multiplied when profits from these transactions are reinvested in the primate city and its industrial core. Through the familiar process of polarization, the primate city accumulates wealth at the expense of areas that produce raw materials.

Regional imbalance creates problems for national development under two frequently encountered sets of circumstances. When resource producing areas are primarily agricultural, they tend to evolve as labor intensive local economies with low productivity and large and rapidly growing populations. Since

primary resources of these areas are finite, their quality and quantity diminish; soil erodes, timber and minerals are depleted, and local economies become "downward transitional." The worst imbalances occur, of course, where both high population growth and rapid resource depletion are encountered.

While there is widespread concurrence on the need for polarization reversal to redress the imbalance between the primate city, its metropolitan area, and the resource-producing hinterland, there is little agreement on appropriate policy instruments. Current opinion holds that the growth pole strategy (concentrated investment in regional cities coupled with dispersal of industry from the center to the periphery) is neither effective nor practical (Lo and Salih 1978). It is often argued that cities intended as "regional growth centers" serve merely as bridgeheads for the more effective exploitation of the region by the primate city.

An alternative is selective regional closure. Imbalance can only be corrected by permitting a larger proportion of the wealth based upon resources extracted from an area to remain within the area. Retention of wealth can best be achieved through adding value to a resource at or near its point of origin. This can be accomplished efficiently through the creation of a suitable environment within the region for rural-based industry, such as agro-processing, production of petrochemicals, or manufacture of timber products. Additional wealth can be generated and retained if the products are marketed and exported through regional facilities.

Local addition of value to regionally produced resources, however, is only part of the strategy. Receipts for the sale of processed materials must remain within the region so that capital formation for local reinvestment occurs. The requirements of local rural-based industry for transportation, supply, maintenance, technical, and financial services provide a range of

opportunities for local reinvestment. These enterprises achieve an improved distribution of income within the resource-producing region, primarily through the stimulation of rural non-farm employment. Employment expansion in rural areas has the added advantage of keeping the population dispersed in local communities where investment needs for urban infrastructure are minimized. Prevention of mass migration of rural villagers to cities unprepared to provide physical requirements and economic absorption is an added benefit derived from this strategy.

The essentials of the selective regional closure strategy are (1) rural processing of resources within the region producing them; (2) reinvestment in support services required by those rural based industries; (3) using expanded rural non-farm employment as a mechanism for income distribution without substantial rural-to-urban migration; (4) creating purchasing power for urban services within resource producing zones.

Selective regional closure does not imply breaking links with the primate city, which must continue to provide administrative support, capital goods, credit, managers, technicians, and sophisticated services to dependent peripheral districts. Selectivity, however, implies that this dependence is greatly reduced and confined to higher-order functions that the region is unable to provide for itself. The region has been closed to the flight of processing opportunities (and the employment which they provide) to the primate city and its satellites. It has been closed to the flight of capital generated by the sale of its commodities through the primate city, acting as broker, to foreign investors. It has been closed to the importation of all forms of support and services which can be provided effectively and cheaply from a local base within the region.

Implementing selective regional closure strategy requires institutions that are rarely in those countries suffering most from regional imbalance. The intermediate city is the mechanism for shaping, guiding and supporting the growth of rural-based industry within the peripheral resource-producing region. It must be developed as a service center to facilitate the region's economic growth, rather than monopolize its potentials and recreate polarization in miniature.

If governments are to accept selective regional closure as the appropriate strategy for polarization reversal, then decentralization of planning to the regional level, and formulation of locally appropriate investment strategies is imperative. A certain degree of competition between semi-autonomous regional development agencies (public corporations), and with the primate city, would appear to be healthy if this route is pursued.

Much research remains to be done on the strategy of selective regional closure. It should be focused on the following types of concerns:

- (1) the merit of selective regional closure as a policy option compared with alternative strategies;
- (2) criteria for establishing priorities among regions for selective closure if it proves to be the chosen strategy. For instance, does one choose the region with the most abundant endowment of resources or the region containing the densest concentration of rural poverty?
- (3) selection of suitable policy instruments and investment strategies for stimulating the establishment of a chain of rural-based industries;
- (4) institutional requirements of the intermediate city conceived as regional nerve center for a dispersed network of small, rural communities containing concentrations of rural-based industries and nodules of non-farm employment.

If these issues can be clarified, it would be possible to prepare and test a sequence of multisectoral programs for implementation in developing countries with different socioeconomic and political characteristics.

2. Regional Context

It is generally agreed that different regional contexts give rise to different functional characteristics of secondary cities and pose certain opportunities for and constraints upon their development. There is also a consensus that in providing strategies for the development of these cities it is germane, if not vitally important, to distinguish between different levels of regions. There is no broad consensus, however, concerning which dimensions are the best along which to distinguish between regions. Hackenberg has argued that the most important regional considerations are the number of towns, physical infrastructure, degree of interaction between places, levels of spatial organization, and resource potential (Hackenberg 1981). Many other factors, which vary from region to region, strongly influence how a secondary city functions and the opportunities available for its development. Among these, development potential, levels of spatial articulation, proportions of populations living in urban and rural areas, secondary city population size and functional characteristics, government policy, historical development of the settlement system, and regional natural resources are most frequently cited.

Despite the need for and interest in distinguishing among regions, it appears that there are very few models that account for regional variations in the form and function of secondary cities and for characteristics affecting these forms and functions. Those that do exist tend to be for planning purposes and are not analytical. Hansen argues for making a distinction between "resource frontiers" and "lagging regions." He contends that each kind of region requires a different development, and hence investment, strategy. Resource frontiers, according to Hansen, should receive public investments in "economic overhead capital" while lagging regions should receive it in "social

overhead capital" (Hansen 1981). Along similar lines, Pernia distinguishes between national capital, central industrial, frontier, and sluggish regions (Pernia 1981). Friedmann, in his now classic study of regional development in Venezuela, distinguished between a core region, and upward transitional, downward transitional, resource frontier and special problem regions (Friedmann 1966).

One limitation of these models is that they focus almost exclusively on development potential and not directly on demographic, historical, functional, and political variables. A much more satisfying functional and demographic typology of regional structure has been developed by Lo, Salih, and Douglass (1978). They differentiate between rural dominance regions, mixed rural-urban regions, metropolitan shadow regions, and metropolitan regions, based on the mix between formal and informal sector employment and between manufacturing, services, and agriculture activities.

In formulating broad strategies for the development of secondary cities it is important to tailor strategies to their unique regional contexts. The models must meet rigorous demands of analysis and plan formulation if they are to be of use. Discussions on this issue will, therefore, revolve around expanding variables accounted for in regional typologies so that broad strategies for a number of regional types can be developed.

3. Institutional Capacity for Regional Administration, Planning, Financing, and Service Delivery

In order for a secondary city to play a catalytic role in regional development it must have the capacity for decentralized regional administration, decision making, and planning. Unfortunately, such a capacity is generally lacking in most secondary cities.

Five principle problems with current institutions and institutional arrangements tend to recur in secondary cities. First, most secondary cities lack local sources of revenue and are dependent on funding from the central government to undertake development projects and finance their routine operations. Second, most city government offices are understaffed, and the planners and managers are underpaid. Institutional arrangements in these cities are usually such that regional and municipal institutions have little control over the services and facilities needed to strengthen the economies of secondary cities, the control being retained by national institutions or fragmented among many local and provincial institutions. Severe constraints are also often placed by national governments on local governments' ability to raise revenue. Finally, secondary cities usually lack appropriate equipment, supplies, and facilities to provide basic services needed to stimulate growth and to guide or manage development.

If secondary cities are to provide higher-order public services for their regions, they must have the necessary facilities and the related personnel, expertise, and training programs. We hope to design studies which will examine the roles that secondary city governments currently play in regional administration, planning, and development. These studies will aid planners in determining what institutions must be strengthened to support regional development.

4. Urban and Rural Led Development Stimuli

The debate usually called urban versus rural led development has been active for quite some time. The debate is a very complex, and one which calls into play a number of issues, concepts, assumptions, and values that cannot be adequately summarized here. A concept which is introduced here called urban

and rural led development versus regional development. Arguing whether rural development leads to urban development or vice versa is a moot point, since urban and rural areas should co-evolve and be supportive of each other if development is proceeding properly. Both kinds of development are a necessary, but not in and of themselves a sufficient condition for national development.

It is more useful, we believe, to recognize the need for both kinds of development and to recognize the complementarities between them. As Friedmann and Weaver write:

...lower order centers (and intermediate order centers) do not generate socio-economic development; rather, they respond to the changes in agricultural production within their area of general accessibility. Nevertheless, they may be useful in helping to articulate the spatial organization of the rural economy through the location of services, the lay-out of transportation and communication networks, the establishment of public offices and governmental institutions and the development of rural industries (Friedmann and Weaver 1979, 175).

A more integrated concept of regional development is needed, in which relationships between urban and rural development are clearly recognized, and rural and urban investments and programs necessary for effective regional development are identified.

5. The Urban Informal Sector

Dualism characterizes the economic structure of most cities in developing countries. It is most visible in the "coexistence of high and low technologies within the same city" (Mohan 1976, 11). High technology, consisting of capital goods imported from MDC's, is consumed in the manufacture of exports, and in the operation of the commercial and technical services required to maintain the industrial core. Low technology, consisting of conventional

means of producing and marketing consumer goods, survives from traditional village economic systems which have been transferred to the city.

Industrial, technical, and commercial portions of the urban economy comprise the formal sector. High technology operation requires corporate-structured enterprises. Employment within them is characterized by fixed wages and hours, salary increments, vacation rights, retirement, and elaborate benefits (medical, credit, training). The consumer goods producing portion of the economy comprises the informal sector:

The distinguishing characteristic of the informal sector lies in the way activities within it are organized. Participants are either individuals or households, are self-employed, work irregular hours, negotiate prices for goods and services, and engage in microscale operations (Hackenberg 1980, 398).

These properties are compatible with operation and maintenance of low technology which is characteristic of market stall-keeping, street-vending, and arts and crafts production.

Dualism refers to the existence of adjacent informal and formal sectors. The two are brought into existence, of course, by transfusions of twentieth century technology into an urban institutional matrix of much older vintage, although there is a deeper level of explanation. In commenting on the structure of developing cities, Ingram and Carroll (1978) observe that never before in the history of urbanization have cities grown so fast at such low levels of household income.

The speed of developing city growth has outstripped the capacity of the formal sector labor market to expand at a parallel pace. At the same time, low incomes have failed to generate local demand for the expensive products of high technology. The inevitable consequence is that (1) the world market fixes the rate of formal sector growth, while (2) rural-to-urban migration and

urban fertility determine the demand for informal sector products and, therefore, the rate of its growth.

Although public and private sector investments are usually concentrated in the highly capitalized formal sector, it has a very limited capacity to provide employment. Furthermore, because high technology reduces skill requirements for employees, and because the labor supply tends to keep wages to a minimum, the informal sector frequently offers higher wages than industrial employment and better upward mobility opportunities through entrepreneurship, than the formal sector provides through promotion and seniority (Hackenberg 1977, 1980).

It is rather well known that the food and clothing requirements of the populations of developing cities are met through informal sector activities of vending, peddling, and personal contracts for services by self-employed artisans. Home construction and repair or maintenance of appliances and equipment is handled similarly. It is less well known that because of the absence of a tax base that would support public services and provide for their administration, many vital functions required by the urban community (such as sanitation, water provision and transportation) are also fulfilled by the informal sector.

Since the informal sector has evolved from traditional economic institutions of trade and manufacture, it is labor intensive and has few capital requirements. It is an efficient redistributive mechanism for profit sharing among a large number of participant urban households. It has also proven to be an effective laboratory for low-risk experimentation with new products or marketing procedures; finally, it provides cost-effective on-the-job training in entrepreneurial skills.

Some observers have argued that the selective regional closure, agropolitan, or rural-led emphases in development planning all require the creation of new urban centers, or substantial expansion of facilities and services in existing small cities. Capital for this purpose is generally lacking and the presence of higher public investment priorities (road construction, electrification, irrigation) precludes substantial allocations.

The informal sector's capacity to provide support required by rural-based industries and also to provide for the needs of intermediate cities is seldom considered in the selection of appropriate development strategies and policy instruments. In light of the foregoing observations, it would seem that this sector is a vital component of the urban economy and more salient for program development than the formal sector, which receives most of the attention from planners and administrators.

Among the objections to this position are those of labor economists who maintain that the absorptive capacity of the informal sector amounts to little more than distributing the returns in ever smaller portions to accommodate new urban households. This argument may be countered with evidence that indicates that a portion of informal sector small businesses actually evolve into larger, formally-organized enterprises with substantial growth potential and capacity for capital formation and reinvestment (Anderson 1969, Carroll 1965).

Another frequently encountered objection, based on the Todaro (1976) model, is that the informal sector merely provides a "holding pattern" in which recently arrived migrants may sustain themselves at a marginal subsistence level while awaiting more desirable, formal sector employment in industry or commerce. This argument may be countered in several ways. Substantial evidence exists that the bulk of participants in the urban informal sector

consist of older urban residents rather than recent arrivals (Fields 1980, Mohan 1979). Mobility patterns also indicate that movement is more frequent from formal sector employment in industry into informal sector occupations rather than the reverse (Hackenberg 1980).

Despite the attention accorded the informal sector by urban and regional scientists in the past decade, planner have made little effort to use it. An exception is the USAID Program for investment in the small capital enterprise sector (PISCES 1981). This experimental effort to provide assistance to informal sector enterprises met with substantial success at both a conceptualizing level and a limited demonstration of potentials.

It is a paradox of the development process that attempts are made to create, through intervention and policies in the LDCs, the type of economic institutions and settlement hierarchies that arise in the MDCs through the interplay of market mechanisms that were neither planned nor consciously organized. Among these, small business and entrepreneurship played an important role. The PISCES project sought to capitalize on a resource that had been so often overlooked.

Any attempt to formulate a new strategy for the development of intermediate cities must consider the role the informal sector will play and assess the opportunities for generating regional and urban growth which occur within it. The advice of experts and experienced administrators must be sought on the following:

- (1) Which urban functions and services can the informal sector provide most effectively? From which, if any, must it be excluded?
- (2) Under what circumstances does the informal sector enterprise experience maximum growth and evolve into a corporately structured firm?
- (3) What differences exist between informal sector enterprises which are effective instruments for capital formation and others which distribute earnings among participants?

- (4) Are there limits to the effective absorption of labor by informal sector enterprises? Is there an informal sector labor market? If so, does it operate in terms of the human capital model or does it have its own dynamics?
- (5) What policy instruments are available for stimulating, directing and controlling the growth of informal sector enterprises?
- (6) How may the productivity and profitability of informal sector enterprises be improved?
- (7) Can a mutually productive relationship be established between informal sector enterprises, formal sector firms, and administrative agencies?

6. Entrepreneurship

In developing strategies for secondary cities it is important to strengthen productive enterprises. Empirical evidence suggests that entrepreneurs, particularly in the informal sector, are responsible for creating non-farm employment opportunities and for generating surplus capital for reinvestment. While entrepreneurs are certainly found in commerce and services, their greatest potential seems to be found in small scale manufacturing activities. Hackenberg has observed that "development economists maintain that growth of entrepreneurial activity is a critical factor in stimulating the emerging small and medium scale industry which is essential to the transfer of the bulk of the labor force from agriculture" (Hackenberg 1979, 18).

While entrepreneurs can and frequently do play an important role as small scale industrialists, Rondinelli points out that:

small scale industrialists face myriad problems in establishing themselves and surviving in developing nations. They often lack the skills necessary to identify good potential investments, to prepare proposals for external funding, to test the feasibility of potential investments or to negotiate loans from commercial banks and government agencies. They are generally excluded from government incentive schemes that benefit large industries and lack access to manpower and markets needed to produce and sell their goods. They finance their activities either from family savings or from credit

obtained at high interest rates from moneylenders, buyers or suppliers. Small industries generally have low levels of productivity, poor quality output, inadequate technology, obsolete equipment, poor packaging and limited and uncertain markets. In addition to their limited access to credit and finance, they generally have insufficient raw materials and lack the managerial skills and knowledge of modern marketing, production and accounting methods that might help them to increase profits. Without resources small scale industrialists lack access to technical assistance and managerial advice. They are often discriminated against in government programs offering financial aid, subsidies, preferential purchasing and export assistance to large industries. Small scale industrialists often fail to survive and grow because they lack the knowledge needed to manage their enterprises efficiently (Rondinelli 1981, 294).

Rondinelli also notes, however, that:

countries that have made deliberate and serious efforts to expand small-scale industries have increased the number, distribution, productivity and employment capacity of enterprises employing less than 50 workers. Korea, Taiwan, India, China and, most notably, Japan in its early stages of economic growth provided the supporting services and investment incentives needed to expand small and medium scale industries in secondary cities and smaller towns and rural villages. A number of actions must be taken by governments to stimulate small scale manufacturing in intermediate cities. They include assisting small scale industrialists with identifying investment opportunities; providing technical assistance to small scale manufacturers' access to financial resources and credit; providing operating assistance and training in management and production; and helping them to expand demand and overcome the limitations of small size (Rondinelli 1980, 295).

While entrepreneurs as a group are emphasized, it is also particularly interesting to consider the role of ethnic minorities in entrepreneurial activity and why they are so apparently powerful. Bauer has observed that expatriates make up the great majority of entrepreneurs found in almost every developing country, while Rondinelli has observed that ethnic entrepreneurs first appear in significant numbers at the intermediate level of the urban hierarchy. It is important to understand why ethnic minorities have assumed such an important role in entrepreneurial activity: what is it about their particular skills, beliefs, and forms of organization which permit them to be so successful?

By better understanding the entrepreneur, both the expatriate and the indigenous in both the formal and informal sector, one can assess how the energies, expertise, and resources of the entrepreneur can be directed to facilitate regional development and growth-with-equity goals.

B. Impacts of Infrastructure on Generating Economic Growth

One of the principle devices recommended by many planners for facilitating development is investment in infrastructure. Faced with a limited amount of public resources to be allocated toward development, they see infrastructure as the critical element in attracting private investment. The Clark project is primarily concerned with those investments in urban infrastructure that promote urban-rural linkages. For example, we are less concerned with projects such as irrigation schemes, though such rural infrastructure may be very important and directly affect the demand for urban-based functions of various kinds.

It is argued that if the social, physical, and economic infrastructures in an urban area are improved, urban areas will then become a more attractive location to private sector economic activities. Whether this is or is not the case, however, depends on the particular situation. For example, if sanitation in an urban area is improved through central administration and capital intensive schemes, this may be an additional incentive to firms who wish to locate in areas with good sanitation. On the other hand, if a firm prefers a location where economies of scale are greatest and/or where there is a cosmopolitan lifestyle, an improved sanitation system may not be much of an inducement.

More to the point, without careful studies of how new infrastructure is to be provided, the provision of infrastructure may actually represent a net loss of economic health to a city. To use the same sanitation example, the

advent of a formally organized sanitation system could very well displace a large number of informal sector laborers who previously performed sanitation functions.

Even more important to the secondary cities project is the impact of urban-rural linkage infrastructure. Many development theorists and planners emphasize physical linkage infrastructure in their regional development strategies. They contend that roads, electricity, utilities, and other infrastructure are critical for attracting private investment, modernizing agriculture, and increasing accessibility of rural populations to urban centers. Many dependency theorists, however, postulate that an increase in the number of roads and a higher general level of infrastructure in rural areas has the opposite effect on growth with equity. They contend that improved transportation only makes the extraction of surplus more efficient, and hence, heightens urban-rural and inter-regional income disparities.

Both the impact of infrastructure on equity goals and on economic growth are not adequately understood. Conceptually, there is a great difference of opinion concerning the impact of infrastructure. Further, there appears to be a dearth of empirical case studies on these impacts. It would be very useful, therefore, to consider this issue in case studies.

VI. Summary

To reiterate, the primary purpose of this year's activities is to develop a project for the Office of Multisectoral Development which will have a number of field applications. The goal of this project will be to assist national planners in planning and implementing strategies which build on the dynamics of secondary city growth and develop secondary cities as regional centers

supportive of rural development. We are therefore attempting to achieve a workable strategy for USAID.

While a number of the topics discussed in this paper have been largely conceptual, our purpose is not to develop these concepts for academic purposes, but to develop the operational implications of these concepts. In order to develop a successful operational strategy, the strategy must be based on a firm conceptual and empirical understanding of the internal character of secondary cities and their external relations in space. It is for this reason that we have presented here some thoughts in the form of an initial conceptualization of the regional perspective and of the critical issues.

The scope of work for this initial year's effort is to establish contacts with scholars and planners who not only have an interest in the topic but also would be willing to participate in long-term projects. Included in this initial strategy are: numerous one-on-one interviews between the Clark team and interested scholars; small and large conferences; invited papers; exploratory/preliminary country studies; and workshops.

References

- Anderson, D. and M.W. Lieserson. 1980. Rural non-farm employment in developing countries. Economic Development and Cultural Change 28:227-247.
- Anderson, J. N. 1969. Buy and sell and economic personalism: Foundations for Philippine entrepreneurship. Asian Survey 10 (9):641-668.
- Atmodiriono, A. and J. Osborne. 1974. Services and development in five Indonesian middle cities. Bandung: Institute of Technology.
- Bauer, P.T. 1972. Dissent on development. Cambridge: Harvard University Press.
- Brutzkus, E. 1975. Centralized versus decentralized patterns of urbanization in developing countries. Economic Development and Cultural Change 23:633-652.
- Carroll, J.J. 1965. The Filipino manufacturing entrepreneur: Agent and product of change. Ithaca: Cornell University.
- Carroll, T.F. 1980. Rural and Regional Development and the Role of the Bank in the 1980's. Draft paper, Inter-America Development Bank.
- Cohen, M., J. English, and H. Brookfield. 1977. Functional diversity at the base of the urban system in Malaysia. Journal of Tropical Geography 49:(1) 12-25.
- Collier, P. and D. Lal. 1980. Poverty and Growth in Kenya. World Bank Staff Working Paper No. 309. Washington: World Bank.
- Dannhaeuser, N. 1977. Distribution and structure of retail trade in a Philippine commercial town setting. Economic Development and Cultural Change 25:(3) 471-503.
- Darwent, D.F. 1969. Growth poles and growth centers in regional planning--a review. Environment and Planning 1:5-32.
- Dias, H. 1982. Can small towns help farms get better income? A study of rural-urban trade relations in Asia. Discussion paper presented at the Asian Institute of Technology Symposium on Small Towns in National Development, Bangkok.
- Fields, G. 1980. How segmented is the Bogota Labor Market? Urban and Regional Economics Report No. 80-1. Washington: World Bank.
- Friedmann, J. and M. Douglass. 1978. Agropolitan development: Toward a new strategy for regional planning in Asia. In Growth pole strategy and regional development policy, ed. by F. Lo and K. Salih, pp. 163-192.
- Friedmann, J.R. 1966. Regional development policy--A case study of Venezuela. Cambridge: MIT Press.

- Friedmann, J. and C. Weaver. 1979. Territory and function: The evolution of regional planning. London: Edward Arnold.
- Gibb, A. Jr. 1974. Local industries: Nonagricultural production and employment in agricultural regions. Washington: USAID.
- Gilbert, A. and D. E. Goodman. 1976. Regional income disparities and economic development. In Development planning and spatial structure, ed. by A. Gilbert. New York: Wiley. 113-114.
- Hackenberg, R. A. 1977. Exports, entrepreneurs and equity: A solution to the problems of population and poverty in Southeast Asia? In Economic development, poverty and income distribution, ed. by W. Loehr and J. Powelson. Boulder: Westview Press, 81-111.
- _____. 1979. A second look at urbanization and demographic transition. East-West Population Institute Conference Memorandum.
- _____. 1980. New patterns of urbanization in Southeast Asia. Population and Development Review 6(3):391-419.
- Hansen, N. 1982. The role of small and intermediate cities in national development. In Small and medium sized cities in national development, ed. by O.P. Mathur. Nagoya: United Nations Center for Regional Development.
- Ho, S.P.S., 1979. Decentralized industrialization and rural development: Evidence from Taiwan. Economic Development and Cultural Change 28(1):77-96.
- _____, 1980. Small scale enterprises in Korea and Taiwan. World Bank Staff Working Paper No. 384. Washington: World Bank.
- Ingram, G., and A. Carroll. 1978. The spatial structure of Latin American cities. World Bank City Study Project Paper. Washington: World Bank, Urban and Regional Economics Division.
- _____, 1979. Population income and employment in a developing metropolis. Urban and Regional Economics Report No. 79-11. Washington: World Bank.
- Lo, F., and K. Salih. 1978. Growth pole strategy and regional development policy. New York: Pergamon.
- Lo F., K. Salih, and M. Douglass. 1978. Uneven development, rural-urban transformation, and regional development alternatives in Asia. Working paper. Nagoya, Japan: United Nations Center for Regional Development,
- Lubeck, P.M. 1977. Contrasts and continuity in a dependent city: Kano, Nigeria." in Third World Urbanization, ed. by J. Abu-Lughod and R. Hay, Jr. Chicago: Miarouta Press, 281-89.

- Mabogunje, A.L. 1977. The urban situation in Nigeria. In Patterns of urbanization: Comparative country studies, ed. by S. Goldstein and D.F. Sly. Liege, Belgium: International union for statistical study of population, 569-641.
- _____. n.d. Growth poles and growth countries in the regional development of Nigeria. In Regional policies in Nigeria, India and Brazil, ed. by A. Kuklinski. The Hague: Mouton Publishers, 3-96.
- Mazumdar, D. 1976. The urban informal sector. World Development 4 (8):655-79.
- McGee, T.G. 1979. The poverty syndrome: Making out in the Southeast Asian city. In Casual work and poverty in third world cities, ed. by R. Bromley and C. Gerry. New York: Wiley, 45-68.
- Mohan, R. 1976. Toward modeling poor cities: A review of urban economic and planning models. Staff Working Paper No. 232. Washington: World Bank.
- PISCES. 1981. Assisting the Smallest economic activities of the urban poor. Washington: U.S. Agency for International Development, Office of Urban Development.
- Republic of Korea. 1980. Long range planning of urban growth for the year 2000: Data collection. Vols. I and II. Seoul: Ministry of Construction.
- Richardson, H.W. 1980. An urban development strategy in Kenya. The Journal of Developing Areas 15:97-118.
- _____. 1982. Policies for strengthening small cities in development. Conference on the role of small and intermediate-size cities in national development. Nogoya, Japan: The United States Centre for Regional Development.
- _____. 1979. Small industries in rural development: Assessment and perspective. Productivity 19 (4):457-80.
- _____. 1981. Developing and managing middle-sized cities in less developed countries. Washington: USAID.
- Rondinelli, D., and K. Ruddle. 1976. Urban functions in rural development: An analysis of integrated spatial development policy. Washington: USAID.
- Sant'Anna, A.M., T. Merrick, and D. Mazumdar. 1976. Income distribution and the economy of the urban household. Staff Working Paper no. 237. Washington: World Bank.
- Sethuraman, S. 1976. The urban informal sector: Concepts, measurement and policy. International Labour Review 114 (1):69-81.

- Souza, P.R., and V. Tokman. 1976. The urban informal sector in Latin America. International Labour Review 114 (3):355-365.
- Todaro, M. 1976. Internal migration in developing countries. Geneva: International Labour Office.
- U.S. Agency for International Development. 1972. Colombia: Urban-regional sector analysis. Bogota: USAID.
- _____. 1977. Rural service center project paper. Manila: USAID.
- Vapnarsky, C.A. 1969. On rank-size distribution of cities: An ecological approach. Economic Development and Cultural Change 17:584-595.
- World Bank. 1978. Thailand: Urban sector review. Background Working Paper No. 7. Washington: World Bank.
- _____. 1979. Brazil--Medium sized city project. Washington: World Bank.