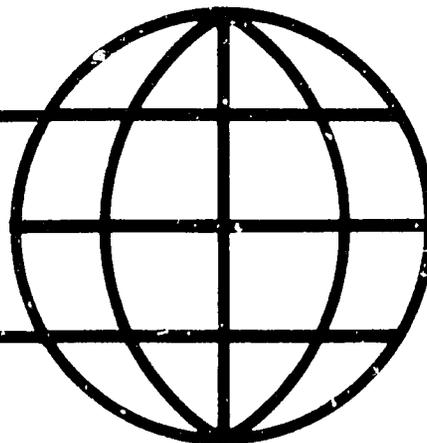


**COOPERATIVE AGREEMENT ON HUMAN SETTLEMENTS  
AND NATURAL RESOURCE SYSTEMS ANALYSIS**

SMALL TOWNS IN DEVELOPING COUNTRIES: POTENTIAL CENTERS OF GROWTH,  
TRANSFORMATION AND INTEGRATION

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A new thrust of research by social scientists and development planners into the characteristics, functions and potentials of small towns and intermediate cities has emerged over the past few years and has inspired a variety of policies and programs in developing countries for strengthening the capacity of these settlements to generate more widespread and equitable economic development. The resurgence of interest in small towns and cities arose from three major sources from the weight of theoretical arguments about the need for a diffuse and integrated system of settlements to promote economic growth with social equity; from the reactions against the undesirable results of "top down" macro-economic approaches to development that failed to consider or simply ignored the lowest levels of the spatial system; and from pragmatic policy concerns about the adverse effects in Third World countries of prevailing trends in urbanization and rural development.

Recent research and experience in developing countries underscore the potential advantages of small towns and cities--as market, service, commercial, processing, transport, distribution and communications centers and as centers of small-scale manufacturing, innovation diffusion and social interaction--in stimulating rural development and integrating urban and rural economies. Studies have found that in countries with diverse economic, social and political characteristics, small towns and intermediate cities have helped to transform the economies of rural regions by providing access for rural people to services, facilities and nonagricultural job opportunities and by providing incentives for the commercialization of agriculture. When adequate linkages were forged between small towns and cities and their rural hinterlands, these centers were able to help articulate the settlement systems in their regions and integrate them into the national space economy.<sup>1</sup>

But recent research also reveals that many small towns and cities in developing countries do not fulfill their potential for promoting equitable development. Many countries have inadequate numbers of small towns and cities that serve as central places. Small urban centers in many rural regions and in poor countries lack the infrastructure, services and facilities and the transport and communications linkages needed to promote the growth, transformation and integration of their regions. The linkages that have been forged between small cities and towns and their hinterlands were sometimes used to exploit rather than to develop human and physical resources in rural areas.

Because the potential for exploitation is sometimes as strong as that for beneficial and equitable development, some theorists and planners have argued against policies for developing small towns and cities. In theory, if not in practice, a strong debate still rages over the degree to which small urban centers should be the focus of regional development strategy and over the degree of linkage or "spatial closure" that should be encouraged through national and regional development programs. At the heart of the debate are a number of questions: Do small towns and cities perform sufficiently important functions to warrant large allocations of national investment in their development? Will small town development policies provide widespread opportunities in rural areas or merely drain them of their resources to support larger metropolitan centers

and the national economy? Can deliberate efforts to stimulate the growth and diversification of small towns and cities be effectively planned and implemented? Will investments in the development of small towns and cities result in higher levels of national economic growth?

This paper addresses some of these questions by reviewing current thinking and knowledge in three areas: first, it outlines the rationale for developing small towns and cities in Third World countries; second, it describes the potential roles and functions of these settlements in regional and national development; and third, it analyzes the effects of creating stronger linkages among small towns and cities, between them and their rural hinterlands, and between small and large urban centers. The paper concludes with a discussion of the policy implications of developing small towns and cities as a part of regional and national development strategy.

#### WHY DEVELOP SMALL TOWNS AND CITIES?

The recent interest in promoting the growth and diversification of small towns and cities is reflected in the policies of both international assistance organizations and the plans of developing countries. It stems from both theoretical and practical sources.<sup>2</sup>

##### Need for a Central Place System to Promote Economic

##### Growth

Theoretically, the argument for developing small towns and cities is based on central place theory. That theory argues that widespread economic growth requires the creation of an articulated and integrated system of settlements composed of towns and cities of different sizes and functions that are large and diversified enough to serve not only their own residents, but those of surrounding rural areas. Small towns and cities are viewed as essential nodes of trade and commerce within a larger network of market centers providing more diversified and higher order goods and services. They are also seen as links in the system of distribution and exchange between agricultural areas and urban centers. Although many of the highly theoretical aspects of the central place concept, as formulated by Christaller, Van Thunen and Losch, have been rejected or greatly modified in studies of developing countries, the basic principles of the theory underlie arguments for strengthening small towns and cities in rural areas.

Theorists such as Brian Berry have long insisted that in market economies a diffuse and integrated system of central places is a necessary but not sufficient condition for achieving widespread economic development.<sup>3</sup> They argue that an articulated and integrated settlement system is a concomitant of economic development. A network of urban centers is necessary to distribute specialized goods that are produced in some locations to consumers in other places. Urban

centers make services that require fixed locations or large numbers of consumers available to people living in rural areas. Goods produced in one community must be assembled in local collection points and distributed to consumers through markets, and thus through a central place hierarchy, the specialized goods and services of particular regions and communities are made available to consumers in other regions or communities. Thus, each community can specialize in those goods and services that it can produce most advantageously while having access to goods and services produced in other areas. As the system of central places becomes more articulated, smaller centers offer more frequently used, "lower order" goods. As the system becomes more integrated, centers performing lower order functions are "nested" within the trade areas of larger centers. In a region with a well-articulated and integrated system of central places, people living in or near small towns have easy access to basic necessities and convenience goods and services in local markets as well as to more diversified and higher order functions that must be located in cities with a larger threshold population. An articulated and integrated hierarchy of settlements provides potential access for people living throughout the country to markets of different sizes and to a wide variety of urban amenities.

Some theorists argue that the absence of an articulated and integrated system of central places obstructs the emergence of a sectorally and geographically balanced pattern of economic growth. E.A.J. Johnson argues that the "varied hierarchy of central places has not only made possible an almost complete commercialization of agriculture but facilitated a wider spatial diffusion of light manufacturing, processing and service industries...(and provided) employment of a differentiated variety," in both Western industrial countries and in more advanced economies in the developing world.<sup>4</sup> Poor countries without such a spatial system cannot achieve geographically diffuse development and reduce regional and urban-rural disparities because, without access to an integrated system of intermediate cities, small towns and market centers, farmers cannot easily sell their surpluses, obtain inputs, modernize their technology and adapt products to consumer demand. Nor can they easily obtain the services needed to make living in rural areas desirable.

Building on central place concepts explored by Berry and applied by Johnson, other researchers such as Rondinelli and Ruddle have argued from empirical as well as theoretical bases that small towns and cities are crucial to stimulating the development of rural areas. They offer economies of scale for a wide variety of basic social and economic activities, organize the economies of their hinterlands, provide access for rural people to basic services and facilities, provide access to transportation and communications networks, offer off-farm employment opportunities in tertiary or secondary sectors, and provide access to markets, services and facilities in larger towns and cities.<sup>5</sup>

## Need for Lower Order Centers to Create a More

### Equitable Pattern of Development

The increased interest in small towns and intermediate cities also arose from dissatisfaction with macro-economic theories that prescribed the concentration of investment in the largest urban centers in order to maximize the growth of national output. Many economists have argued that in capital scarce developing countries the highest rates of return from investment are achieved in the largest cities. Wheaton and Shishido, for example, contend that if developing nations seek to maximize economic output then "the optimum population size for a metropolitan area peaks at just over 20 million," when per capita GNP reaches about \$2,000.<sup>6</sup> Koichi Mera has argued that the growth of large cities in developing countries should not be inhibited--the marginal costs of continued growth are small compared to the increasing marginal benefits.<sup>7</sup> The results of these and other studies led economists to conclude that the vast sizes to which many primate cities are growing in the developing world are not economically inefficient: the high returns to investments concentrated in the largest cities would stimulate the growth of GNP and, through spread and trickle down effects, the benefits would accrue to the rural poor as the national economy continued to grow.

But much of the research on optimal city size--that is, the population size at which marginal social benefits equal marginal social costs--has been inconclusive. While the conventional arguments for concentrating investments in primate cities may be valid for high-technology, capital-intensive industrial activities, these are only a small part of the investments needed to promote sustained economic development in most Third World countries. The arguments do not hold for a wide range of processing, commercial, service and small-scale manufacturing activities. Studies show that these can be located efficiently in secondary cities and smaller market towns.<sup>8</sup> Concentrated investment theories came under increasing attack during the 1970s, moreover, as developing countries turned away from the goal of maximizing economic growth as an end in itself and sought more effective ways of increasing the income and productivity of those people living in poverty outside of the modern sector. If one goal of equitable growth strategy is to provide basic public and social services to large numbers of people in order to increase their productivity, employment potential and incomes, then much of the city-size research indicates that small towns and intermediate cities offer sufficient economies of scale for investment in a wide range of public utilities, infrastructure, social services, commercial activities and small- and medium-sized agro-processing and manufacturing enterprises.<sup>9</sup>

Moreover, the growth of massive metropolitan areas and primate cities has created serious economic and social problems with which most developing countries lack the resources to cope. The largest cities in Latin America and Asia are experiencing serious housing, transportation, pollution, employment and service supply problems. High levels of underemployment among squatters and recent migrants maintain these people in poverty. Difficulties in extending and maintaining existing sewer, water and drainage systems and utility services often

create health and sanitation problems in densely populated squatter areas and the strains on existing social, health and educational services become more severe with population growth.<sup>10</sup> Similar problems are beginning to plague the largest cities in the Middle East and Africa.<sup>11</sup>

In calculating the returns to investment in primate cities, macro-economists often overlooked or under-valued the social costs of massive urban agglomeration. Almost all attempts to assess the costs of meeting social needs in the largest metropolises have produced extremely high estimates that seem beyond the present or potential capacity of developing countries to meet. Unikel found that if Mexico City reached a projected population of 21 million by 1990, the national government would have to spend the equivalent (in 1970 dollars) of about \$3.2 billion a year to settle new migrants and to supply the existing population with minimal housing, water, electricity, transportation, and health and educational services. Unikel concluded that this amount--which does not include the cost of reducing deficits in housing, services and jobs over the period, was equivalent to the cost of establishing every year a city comparable in size to Guadalajara, Mexico's second largest metropolis.<sup>12</sup> Prakash estimated the costs of providing even minimum facilities in Asia's largest metropolitan centers at between \$5.2 and \$7.5 billion a year during the 1980s and up to \$11 billion a year during the 1990s. He notes that services are not only strained in Asian cities, but that they are deteriorating rapidly.<sup>13</sup> By building up the capacity and increasing the number of smaller towns and cities, governments hope to relieve population pressures on the largest metropolises and contain the growth of secondary cities to sizes that are more manageable.

Because both rural and urban populations are growing at relatively high rates in much of the developing world, migration from rural areas to large metropolitan centers continues to be high even as governments seek to increase productivity and improve living conditions in rural areas. About half of the population increase in the largest cities of developing countries has been attributed to rural migration. Countries with severe rural poverty -- such as Indonesia, Pakistan, Bangladesh and India--are expected to experience stronger rural to urban migration in the coming decades. The World Bank predicts that in these countries "intensive pressure on land--the rural population per square kilometer of arable land is expected to double in the next 25 years--which, even if it leads to a small percentage of outmigration from rural areas, will lead to massive growth in the cities."<sup>14</sup>

Thus, many governments in developing countries have become dissatisfied with the spatial distribution of their population. Of 116 governments surveyed by the United Nations in 1978, 68 reported that they were strongly dissatisfied with current population distribution and an additional 42 expressed partial dissatisfaction. Only 6 governments considered current patterns acceptable. In Africa, the complaint was extreme dispersion and lack of sufficient agglomeration to provide services efficiently. In Latin America and Asia dissatisfaction arose from the increasing concentration of people in a few large metropolitan centers. In Central America and the Middle East the concern was with finding ways to achieve more balanced distribution without promoting the spatial

polarization found in many industrializing nations.<sup>15</sup>

This dissatisfaction has been increased by criticisms of the basic assumption underlying concentrated investment strategies: that benefits would automatically "trickle down" and thereby reduce urban-rural and inter-regional disparities. Experience in most developing countries reveals a contrary trend: growth of the largest metropolitan centers often produces "backwash effects," which drain rural hinterlands of their capital, labor raw materials and entrepreneurs. Hansen argues that "the trickling down of modernization has not reached the poor, especially in rural areas, or else has yielded to them no more than marginal benefits.... The optimistic view that economic growth would result in a convergence of regional per capita incomes has not been supported by evidence."<sup>16</sup> Even where there has been a convergence in regional incomes, a lowering of real incomes of the poorest groups sometimes produced worsening intra-regional income disparities.<sup>17</sup>

The failure of development to spread is attributed, at least in part, to inadequately articulated and integrated settlement systems through which innovation and the benefits of urban economic growth could be diffused. Without an articulated and integrated settlement system impulses from the center cannot spread; as Berry observed, "growth and stagnation polarize; the economic system remains unarticulated."<sup>18</sup>

#### Need for a More "Balanced" Settlement System to Promote "Bottom-up" Development

If the serious problems caused by excessive urban agglomeration have been one motivation to promote the development of small towns and cities, the contention that urban and rural development are inextricably related, that small towns can play important roles as catalysts for rural development and that a system of secondary cities can be important in achieving economic growth with greater social equity has been far more influential. In a study for the World Bank, Richardson argues that the development of lower order centers can promote more equitable economic growth within and among rural regions, aside from whatever impact it has on slowing the growth of the largest metropolitan areas. These benefits include many of those already alluded to by central place theorists: commercialization of agriculture, provision of better services to residents of rural regions, national spatial integration, diffusion of social and technical innovations from the major metropolitan areas, the decentralization of job opportunities and, "most important of all, the more equitable distribution of welfare (among urban areas and among regions) resulting from an intermediate city strategy."<sup>19</sup> World Bank analysts underline the importance of planning to shape the urban system in predominantly rural countries before they reach high levels of urbanization, because "excessive urban concentration is difficult to correct once it has occurred."<sup>20</sup>

With the strong emphasis on rural development, poverty alleviation, meeting basic needs, and achieving a more equitable distribution of the benefits of

economic growth that appeared in the strategies of international assistance agencies and the plans of developing countries during the 1970s and 1980s came a greater recognition of the inextricable relationships between urban and rural development. It became more obvious that growth with equity requires not only increasing agricultural productivity in rural areas but also expanding the capacity of the secondary and tertiary sectors to provide basic goods and services and to absorb surplus rural labor. This requires a range of urban centers from small towns and market centers to secondary cities and large metropolitan areas.

In predominantly rural African countries such as the Sudan, Yemen, Tanzania and Upper Volta, the highly dispersed rural population remains largely unserved because rural villages are too small to support most services and facilities needed to stimulate development. The cost of providing services to widely scattered populations is extremely high and the use of such facilities is generally low. Studies of the Sudan point out, however, that "without access to markets, inputs, education, health and other services, development of the traditional market sector cannot occur."<sup>21</sup> It has been found that in areas of Tanzania that do not have central place systems, "the inability of rural farmers to market their goods wipes out any incentives offered by the government to increase production." One study points out that "the same problem exists with inputs supply. As a result many of the fertile areas are vastly underutilized."<sup>22</sup>

In Asia, even in countries with some of the world's largest metropolitan centers, the overwhelming majority of the population is scattered in very small villages. Over 80 percent of India's population, for instance, lives in villages of less than 5,000 people, and nearly 93 percent of the rural settlements have less than 2,000 people.<sup>23</sup> The potential value of larger and more diversified towns and cities for promoting rural development is underlined by studies of northeastern Thailand which found that towns "are in symbiotic relationship with the rural areas surrounding them. They are an important intermediate or ultimate market for agricultural production." Small towns and intermediate cities are "the local source of agriculturally related capital goods and services upon which modernization of the subsistence system is dependent."<sup>24</sup>

Dissatisfaction with conventional macro-economic growth strategies and the emergence of policies for alleviating absolute poverty and distributing the benefits of economic growth more widely refocused attention on settlements at the lower end of the size scale. In reaction to the overconcentration of investment in the largest metropolitan regions, some theorists argued that investments should be shifted from all cities to rural areas and households. Friedmann proposed an agropolitan development strategy that would focus on rural districts and villages and that would discourage linkages with larger cities and the modern sector. But others argued that such a strategy, if it did not include provisions for linking rural areas with larger settlements could disperse investments so widely that they would have little impact. Moreover, this strategy ignored the benefits that rural areas could derive from interaction with cities that offer economies of scale and proximity and advantages of agglomeration. Thus, strategies at both extremes--those prescribing highly concentrated investment in the largest urban centers and those advocating highly dispersed investment

in rural areas-space came under increasing criticism during the 1970s. Even some who had previously argued that the largest metropolitan centers were optimal locations for investment came to admit, as did Koichi Mera, that "either approach neglects the spatially differentiated impact of a city on its surroundings areas, and the agropolitan approach neglects the benefit of agglomeration economies within a city."<sup>26</sup>

An alternative approach to spatial development sought to move away from the highly skewed distribution of population and resources found in primate city systems and toward a more diffuse pattern of urbanization in which small towns and intermediate cities play an important role in integrating urban and rural economies. Friedmann has argued that although "balanced development" also remains an elusive concept, it implies a lessening or prevention of strong locational disparities in income and wealth. "No rigid, mathematical balance is intended," Friedmann asserts. "What is meant instead is a sense of systematic inter-relation between countryside and city in which their notorious differences in levels of living and opportunity will become progressively less pronounced."<sup>27</sup>

In some countries or regions this implies the need for a hierarchical pattern of settlement. In others, such as resource frontiers, a more diffuse and deconcentrated pattern might be more appropriate than a rank-size distribution. In any case, international assistance agencies and governments of developing countries have begun to recognize the potential benefits of an articulated and integrated settlement system for promoting economic growth with social equity. World Bank analysts have called for greater attention to the complex linkages between urban and rural areas and to what they have termed "the most important opportunities for increases in productivity and incomes and for a reduction in the incidence of poverty," that programs for strengthening small and intermediate urban centers can offer.<sup>28</sup> Officials of the U.S. Agency for International Development began calling for a long-range policy of building up networks of small towns, market centers, regional centers and intermediate cities. They argued that "this would have the dual advantage of (a) dispersing urban populations, perhaps thereby reducing the flow toward the primate cities and (b) building up other centers of urban activity which can serve as regional catalysts and accelerate the geographical spread of development."<sup>29</sup> The United Nations Conference on Human Settlements has called for the "development of a system of intermediate settlements with sufficient dynamism to counteract the attraction of the great metropolises," and recommended a strategy for designating "towns of appropriate size as social economic and cultural centers for their rural hinterlands."<sup>30</sup>

#### WHAT ROLES AND FUNCTIONS CAN SMALL TOWNS AND CITIES PERFORM IN NATIONAL DEVELOPMENT?

Evidence from countries with diverse economic, social, cultural and ideological characteristics and in various regions of the developing world indicate that towns with populations as small as 5,000 and intermediate cities with up

to 100,000 or more residents can and do perform important economic, social, and physical functions that can make important contributions to regional and national development. Indeed, their value in regional and national development is not so much in their population sizes as in their functional characteristics. Leeds has argued that as development occurs a threefold specialization begins to appear in societies: differentiation of economic and social functions among localities; differentiation of the structure of labor within localities due to technological specialization; and differentiation of institutions due to the separation of functions into more or less autonomously ordered ways of doing things. Locational, technological and institutional specializations are usually related and are the basis for urbanization:

Urban, therefore, is always a matter of degree and degree of urbaness is measured not by the size of nucleations (which may be profoundly affected by ecology, institutional structures and policies) nor by density (which may be profoundly affected by locality and technical specialization as well as by policy) nor generally by the classical measures of 'urbanization' effectively derived from recent Western experience, but rather by an interaction index of the three forms of specialization (to a large extent, these govern size and density).<sup>31</sup>

Evidence from developing countries indicates that at some minimum population size, which differs from country to country, the beginnings of specialization allow small towns and cities to perform a wide variety of functions that seem to grow in diversity and complexity not only with the size and density of settlements but with their accessibility to hinterland populations.

### The Developmental Functions of Small

#### Towns and Cities

The kinds of functions that small towns and cities can and do perform in developing countries include the following:<sup>32</sup>

1. They can provide convenient locations for decentralizing public services through 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 minimum population thresholds;
2. They can offer sufficient economies of scale to allow the location within them of health, education, welfare and other services, and to act as local or regional centers for a variety of basic social services and facilities;
3. 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. Many act as rural 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. 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 secondary cities also support large-scale industries;

6. Many act as agro-processing and agricultural supply centers for their regions and provide services to rural populations in their hinterlands;

7. They often create conditions that are conducive to the commercialization of agriculture and to increasing agricultural productivity and income to their immediately surrounding hinterlands;

8. They can be sources of off-farm employment and supplementary income for rural people and, through the remittances of migrants, provide additional sources of income to people living in rural towns and villages;

9. They often serve as 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. They can function as centers of social transformation: absorbing rural migrants that might otherwise go directly to the largest city or national capital, accommodating social heterogeneity and encouraging the integration of people from diverse social, ethnic, religious and tribal groups; providing organizations that help to socialize and assimilate rural people into city life, and infusing new attitudes, behavior and lifestyles that are more conducive to urban living; and providing new opportunities for social and economic mobility.

Although the literature on small towns and cities in developing countries has grown so large in recent years that it is impossible to survey all of it in the short space available here, samples can be cited to indicate the range and types of functions that these settlements perform. Studies of rural towns in West Bengal, India, reveal that even those with as few as 5,000 residents act as "minimal urban centers" for their rural regions.

West Bengal towns:

(1) serve as economic, political and cultural centers for the population of the villages in the surrounding rural micro-region, (2) provide the market where products not locally produced and specialized goods and services are available, and where local products may be sold; (3) provide the wide range of occupational specialists not usually found in rural villages, but necessary for the continuing existence of a primary agricultural rural population; (4) serve as centers in which administrative and educational specialists representing wider society and its urban centers meet and

interact with the local rural population; (5) are characterized by extreme diversity in occupation and heterogeneity in population compared to their relative size as urban centers (as rural towns, such settlements exist to serve a nonresident population dispersed in agricultural villages) and (6) characteristically draw a large segment of the elite population from outside the immediate locality, recruiting on the basis of education and experience in specialized administrative, professional and educational positions.<sup>33</sup>

Johnson found in his studies of small central places in India that they are particularly conducive to the types of commercial and industrial activity that cater to local, short-radii market demand and that have a small potential number of customers who are within easy reach by foot, bicycle or other forms of transport.<sup>34</sup> Thus small towns in India frequently contain a wide array of small retail stores, personal and commercial services, small cottage processing, fabricating or simple manufacturing operations. Those activities that cater to a small portion of a larger region can also be located successfully in small towns and cities if adequate transport and ancillary services are present. The most frequently found economic activities in Indian towns are weight-losing and bulk-reducing processing activities, such as sugar mills, saw mills, livestock slaughtering houses, canneries and oil crushing mills. These localized activities in turn create demand for transport and supply services, brokerage, storage, credit and insurance services.

Studies of rural industries in South Korea and Taiwan indicate that small towns and cities, in addition to supporting resource processing activities, are also good locations for small market-oriented activities such as animal feed shops, ice manufacturing plants, clay building products, earthenware and hand tool producers and makers of small concrete products. Medium-sized towns support a wider variety of services including commercial printing, motor vehicle repair and small machine, galvanizing and metal processing shops. Simple assembly, mixing or finishing activities and separable manufacturing operations can also be efficiently located in small towns and cities if they have good transport linkages with larger urban centers.<sup>35</sup>

In Southern Thailand towns from 14,000 to 57,000 in population provide health clinics, small hospitals, postal and district government services, elementary and secondary schools, small libraries, banks, bus service, telephone exchanges, and some types of vocational and higher education. Although few systematic studies have been done of the "influence" areas of small towns and cities in developing countries, estimates made in South Thailand indicate that the larger and more diversified centers--with median populations of about 33,000--have influence areas averaging almost 10,000 km<sup>2</sup> and serve hinterland populations averaging 630,000. Such centers are linked to up to 22 smaller and less diversified towns within their influence areas.<sup>36</sup>

Studies of the people who migrated from rural villages to small towns and cities in northeastern Thailand found a high level of satisfaction. Most migrants were able to increase their incomes and find better educational and health

facilities than in their villages of origin. Although housing conditions in the towns seemed to be of lower quality, the studies revealed that migrants on the whole were "rather pleased with their new life in town," and that among those who migrated voluntarily to small towns and cities "there is widespread satisfaction with the quality of life found at the destination."<sup>37</sup>

Indications that small towns and cities in Latin American can perform important economic and social functions come from Mexico, Bolivia, Honduras and Guatemala. Small cities in Mexico--such as Oaxaca, which has a little more than 100,000 residents--are important market centers for their regions.<sup>38</sup> The market in Oaxaca, for example, provides outlets for agricultural goods, livestock, nonagricultural products such as fibers and firewood, and a wide variety of artisanal products--pottery, baskets, mats and household and agricultural implements. An impressive array of people find employment directly or indirectly through market activities--carpenters, stonecutters, healers and curers, butchers, blacksmiths, small-parts sellers and marriage arrangers, mechanics and seed and equipment vendors. The market offers opportunities for farmers to sell their own goods and for a large number of intermediaries to engage in trade. Oaxaca supports traders who buy and resell goods within the market, traders who travel to small rural markets to collect goods for resale in the urban market, and traders who buy goods in the market and resell them door-to-door in town. The market offers opportunities for rural people to shop in stores located on the market's periphery and to visit doctors, dentists, clinics, lawyers and lenders. Wholesalers collect small quantities of local products in the Oaxaca markets and sell them in bulk to retailers in larger cities; they also buy manufactured goods in the city to sell in small lots back in Oaxaca. The city's market and other commercial activities provide employment for field buyers, agents, truckers and small-load haulers.<sup>39</sup>

Even very small towns in Mexico--those with 2,000 to 5,000 residents--support minimum basic services that are not available in rural villages-- primary schools, medical doctors' offices, health clinics, pharmacies, gasoline stations, secondary schools, cinemas, restaurants, small banks and hotels and in some places dentists, lawyers, veterinarians and technical schools.<sup>40</sup>

The degree to which intermediate-sized towns and cities absorb rural to urban migrants in Mexico depends very much on the settlement structure within states. The degree of primacy has been found to be an independent factor in migration. In those states with the highest degree of primacy more migrants are attracted to the largest city than in states with a more diffuse pattern of urbanization. Studies have found that:

The mere existence of a greater number of medium and large cities in a nonprimate state provides options for maximization of choice which are denied to migrants in a primate state. Migrants pushed from rural areas in primate states do not have the same spectrum of options for settlement and job opportunity.<sup>41</sup>

Field studies of small towns in Honduras and Bolivia indicate that even in the poorest countries of Latin America, towns with average populations of 10,000 to 12,000 can provide basic health, agricultural supply, educational, and commercial services. They are most important as transport and distribution centers and as markets for agricultural products grown in surrounding rural areas.<sup>42</sup> The degree to which markets in small towns facilitate and promote interaction between urban and rural residents is seen in anthropological studies of towns such as Antigua in Guatemala, where the bulk of trade is controlled by rural middlemen and where rural vendors travel long distances to participate in the periodic market.<sup>43</sup>

Similar roles are played by small towns and cities in many African countries. In Tanzania small towns provide the only real opportunities for employment in the nonagricultural sectors. On average about one-quarter of the economically active labor force in Tanzanian towns is employed in agriculture. The other three quarters are in nonagriculture jobs--about 10 percent are employed in manufacturing, about 15 percent in construction, utilities and communications, another 15 percent in commerce, and about 32 percent in services.<sup>44</sup> Small towns in Ghana like Techiman--with less than 20,000 population--are periodic market centers for their rural areas. Wunsch notes in his study of Techiman that trucks come on market day from as far away as Kumasi, Tamale, and Accra, as well as from rural areas in Upper Volta, Mali and the Ivory Coast. The town supports retail stores, schools, hospitals and wide range of skilled and semi-skilled craftsmen, including tailors, carpenters, masons and mechanics, miscellaneous services, physicians, nurses, ministers and civil servants. Larger towns like Obuasi, with a little more than 30,000 residents have a wider range of agro-processing, marketing, service, commercial and informal sector activities. Moreover, it encompasses population that is socially, religiously and ethnically heterogeneous. In the 1970s, it had more than 90 voluntary associations including religious, ethnic, occupational, trade, religious, and recreational associations, unions and trade associations, lodges and secret societies.<sup>45</sup>

### The Underdevelopment of Small Towns

#### and Cities in Rural Regions

Growing evidence that small towns and cities can perform the wide variety of functions just described has been accompanied by strong indications that relatively few of them that could promote growth, transformation and integration in rural areas actually do. This wide gap between potential and actual performance has been another reason for the renewed interest in small towns and cities in developing countries.

The settlement systems of rural regions and of many of the poorest developing countries are inadequately articulated and integrated for three basic reasons:

1. Lack of sufficient numbers of lower order central places. As noted earlier, in many countries a large majority of the rural population is scattered in settlements that are simply too small and too isolated to support even basic

services and facilities and to perform the variety of functions that larger and more accessible places can and do perform.

Studies of rural settlements in Northern Nigeria, for example, conclude that the vast majority of villages are "too small to provide the minimum population threshold for the successful provision of such amenities as water, electricity, health, postal facilities and educational centers." They also underline the fact that villages are "too far apart to be conveniently grouped into one central service system."<sup>46</sup>

In the poorest Latin American countries only a small percentage of rural settlements perform central place functions. Studies of Honduras indicate that less than one percent of the country's settlements have a sufficient range of functions to be considered central places for their rural hinterlands. Less than 800 of the nearly 20,000 villages and towns that are non-central places have more than a few services or facilities that serve their own populations. Moreover, in a sample of 925 towns and cities ranging in population from less than 1,000 to more than 160,000 surveyed in 1980, it was found that 88 percent were non-central places, having from none to less than 12 basic services and facilities. All had populations of less than 5,000. Only 23 towns were market centers and 75 offered a basic set of services for their own residents.<sup>47</sup>

Similar results were found in surveys of settlements in Bolivia. That country's recent five year plan noted that the majority of urban centers "do not completely fulfill a dynamic role for their respective areas of influence because they do not function adequately as marketing centers and as centers for the diffusion of cultural and technological innovation."<sup>48</sup> A survey of 112 settlements in the Department of Potosi found that about 70--63 percent of the total--did not have a sufficient range of functions to be considered central places. Another 26 settlements were so small in size and lacking in services, facilities and infrastructure that they could only serve their own residents. Only 16 towns had a wide enough range of functions to act as sub-regional or rural central places, and these were not widely distributed throughout the region.<sup>49</sup>

Studies of Melanesian countries--Papua New Guinea, Vanuatu and the Solomon Islands--found a much smaller number of towns than could be expected with the population sizes and numbers of villages these countries had, and that many of the towns performed only a few central functions.<sup>50</sup>

Studies of the Bicol River Basin in the Philippines yielded similar findings. Of the 1,419 discrete settlements in Camarines Sur and Albay Provinces, only 2 had a sufficient range of functions to act as provincial centers and only 11 others served significant numbers of people outside of their boundaries. About 43 small towns--mostly with periodic markets--served some residents of their immediately surrounding barangays (villages), but over 1,300--about 96 percent--were non-central places. They had average population sizes of less than 1,000 and provided either no services or facilities at all or less than 9, most of which were small-scale residentiary functions.<sup>51</sup>

The underdevelopment of small towns in Thailand creates significant opportunities costs. Douglass points out in his studies of the Central Plain region that the government could use existing administrative districts (amphoe) to organize the 100,000 to 200,000 population usually living in them and the more than 800 lower order centers ranging in population of between 2,000 and 40,000 to create intra-regional settlement networks linking rural to urban development.<sup>52</sup> He argues that with proper services, facilities, and linkages to smaller and larger settlements, many towns could, "by generating non-farm employment opportunities, increase incentives for local investment and production which might retain those rural surpluses now being transferred to the metropolis and abroad."<sup>53</sup>

2. Inadequate Distribution of Services and Facilities Among Small Towns and Cities in Rural Regions. Part of the reason that lower order settlements in rural regions are underdeveloped is that many small towns and cities that could support essential services, facilities and infrastructure lack them. In Honduras, for example, a survey of the distribution of services, facilities and organizations indicate that less than 7 percent of the settlements in that country had even the most ubiquitous function, an elementary school, less than 4 percent had a minimal water supply facility and that less than 3 percent had a third-level post office. Less than 3 percent of the 925 settlements surveyed in 1980 had grain marketing facilities, public health clinics, small hospitals, a permanent market or a postal facility. Only about 4 percent had a government store, second class market or complete secondary school, all of which could be located in small central places.<sup>54</sup> In the Potosi region of Bolivia, only 5 of the 112 settlements surveyed had more than half of the functions found in the largest town. In the Bicol River Basin of the Philippines, less than 1 percent of the settlements had half of the basic services, facilities and infrastructure found in the largest town. Nearly 90 percent of all of the types of services, facilities, organizations and infrastructure in the Basin appeared in less than 20 percent of the settlements. Moreover, nearly 60 percent of these functions could be found in less than 20 percent of the poblacions, which usually serve as central places for their municipalities.<sup>55</sup> These highly skewed distributions of services and facilities are not unusual, they are reported in both small island countries in the South Pacific and large poor countries such as India and the Sudan.

3. Lack of or Weak Linkages Among Settlements in Rural Regions. The relatively small number of settlements performing central functions and the highly skewed distribution of services and facilities would not in themselves necessarily be serious problems if those settlements that do perform central functions were easily accessible to their rural populations and were linked to each other and to larger cities and towns. In an integrated settlement system, not all settlements provide all services and facilities: people can easily travel to the most convenient next larger center to obtain goods and services that are not located in smaller and less diversified centers closer to where they live. Indeed, the value of an articulated and integrated settlement system is that it is locationally efficient--it allows different clusters of services, facilities and infrastructure that cannot be economically located in small villages and hamlets to serve a widely distributed population from an accessible central place.

But large opportunity costs that rural regions and developing countries incur because of the inadequate number and distribution of small central places are exacerbated by weak linkages among those settlements that do perform central functions. Johnson was led in his studies of the settlement system in India to conclude that although that country was not lacking in central places, "what is amiss is that they rarely constitute a functional hierarchy and for this reason they fail to provide an intermeshed system of exchange that will provide the requisite incentives for increased application of labor, capital and human skills."<sup>56</sup> A similar situation exists in Papua New Guinea, where in the 1970s, there was not a single connected road network linking towns and villages to each other. The Warús found that "no roads join the northern and southern side of the mainland and the principal towns of the 13 mainland provinces have no road links with any other major town."<sup>57</sup> In some provinces more than 40 percent of the population lives more than 2 hours' journey by road from any town.

In the Bicol River Basin of the Philippines no level of the settlement hierarchy is well integrated with the others. Most of the rural population lives in settlements that are not easily reached by roads. The cost of transporting farm products in interior rural areas is up to six times the amount in areas connected by access roads. Rural settlements are poorly connected to periodic markets and, as a result, they rarely attract people from more than 15 kilometers away. Studies show that as a result of the weak or incomplete linkages among settlements, the health, educational and other facilities located in some towns tend to serve only people living in them or those from nearby barangays. Social interaction among communities is limited, inter-municipal travel is low and trade and communications between the two largest towns in the Basin are weak.<sup>58</sup> The access of rural people to town-based services and facilities was also found to be weak in the Potosi region of Bolivia. Surveys indicate that because of the paucity of central places, the highly skewed distribution of central functions, and weak physical linkages among them, "overall accessibility throughout the Potosi region is extremely low."<sup>59</sup>

Thus, although increasing evidence shows that small towns and cities in developing countries can perform a wide range of social and economic functions that contribute to economic growth and social transformation in rural areas and that integrate these rural areas with urban centers, in many countries the full potential for development is lost because of the paucity of small central places, the highly skewed distribution of central functions among them, and the weak linkages between them and larger and smaller settlements.

#### HOW STRONGLY SHOULD SMALL TOWNS AND CITIES BE LINKED

##### TO THE NATIONAL SPACE ECONOMY?

How strongly small towns and cities should be linked to larger cities, and the degree to which small towns and cities should even be the focus of development policies remain issues of debate and contention. Two views are reflected in the literature.

### The Detrimental Effects of Linkages

One argument is that small towns and cities are predominantly parasitic-- they allow town-based elites and administrative agencies to exploit the rural population and to drain rural areas of their resources, which are invested in metropolitan centers. The implication is that small towns and cities should not be deliberately developed by the government. If they are encouraged to grow they will likely exploit rather than develop the rural areas in which they are located. Moreover, linking them to the national space economy will not facilitate the "trickling down" of benefits but merely promote rural-to-urban migration and the penetration of rural areas by exploitative national governments and multinational corporations. Schatzbur, for example, insists that "the structures and organizations of these small towns usually benefit the already wealthy elements of local society who have the means and skill to co-opt most developmental resources and initiatives that originate with the national governments." Thus, he maintains, small towns are "structured to enhance the well-being (social, economic and political) of those who are relatively advantaged."<sup>60</sup> Their development, he implies, would be detrimental to the rural poor because small towns and cities "are both centers of extraction that siphon off financial and human resources from the countryside and blockage points that inhibit the downward flow of resources as well."<sup>61</sup>

Others argue that rural people have limited access to farming innovations and that this lack of access makes small towns and cities ineffective dissemination points for innovation. Moreover, although farm people participate actively in town-based market trade, the urban traders who dominate the markets seek to maximize their profits and are uninterested in diversifying the agricultural economies in which market goods are produced. It is argued that capital and credit are usually controlled by townspeople who prefer to invest in the towns and to lend to other townspeople who have more collateral than to rural people who are perceived to be high-risk borrowers.<sup>62</sup>

Roberts concluded from his studies of provincial urban centers in Peru that the penetration of export industries and resource exploitation activities created greater dependencies in these towns on the national capital and made life increasingly difficult for subsistence farmers in the rural hinterlands:

Existing provincial centers find that their industry or workshop production cannot compete with the sophisticated technology of the industry concentrated in the large cities; equally, provincial centers provide far fewer ancillary economic opportunities. The large populations that concentrate in the great cities require higher and more efficient food production, so that increasing pressure is placed on farming to become more prevalent in the countryside. Their capital costs make it difficult for subsistence farming to continue; at the same time, the need for labor in the fields is reduced.<sup>63</sup>

Strengthening the linkages between small towns and cities and the metropolitan centers, it is argued, made many rural workers redundant, undermined the network of local trading and petty production activities and weakened the economic structure of small towns, making them ancillary and dependent on the metropolitan economy.

For these reasons, Friedmann proposes a strategy of "agropolitan development" based on the creation of rural districts of about 50,000 population. The objective would be to create self-reliant rural economies, with minimal linkages to the metropolitan economy.<sup>64</sup> Stohr and Todtling have suggested a variation of the strategy based on "selective spatial closure" as a way of protecting small towns and rural populations from backwash effects.<sup>65</sup>

### The Beneficial Effects of Linkages

A counterargument is that small towns and cities per se are not necessarily parasitic; indeed, many perform beneficial functions essential to rural development that were identified earlier. Nor is interaction with larger, more modern and economically diversified urban centers necessarily exploitative. Much depends on how the economies of small towns and cities are developed and the ways in which the linkages between them and larger and smaller communities are organized

Once urbanization begins it is impossible to expect spatial closure. Anthony Leeds argues that no nucleated settlement can be closed, its very existence even at a low level of agglomeration, is based on specialization, and that specialization requires exchange. He insists that "no town is an island of itself." The agglomeration of population in towns and cities is based on exchange and interaction:

For any locality, external connections are entailed. Theoretically, never should one expect to find autonomy, closure or boundedness. On theoretical grounds, one should always expect flows of goods, services, personnel, property, knowledge, information or possibly other values going in and out of any locality. The heart of this in and out is exchange--and the heart of human exchange is human strategizing...<sup>66</sup>

Moreover, a good deal of empirical evidence suggests that small towns and cities can perform beneficial functions for rural populations; that not all of the interactions between urban and rural people are to the detriment of the latter; and that although linkages with larger communities can bring profound changes to smaller towns and cities, in many cases they create new opportunities for the poor.

Preston found in his study of highland towns in Bolivia, for example, that their negative impact on some of the rural poor was usually minor, but that they did offer new economic and social opportunities to many others. He found that the most important influence on agricultural innovation in highland Bolivia

had been personal contact among farmers and that those contacts most often took place in market towns. Farmers, he points out, are "much more likely to be impressed by seeing large healthy new varieties of potatoes in the market rather than being told about them or even to some extent than actually seeing them growing."<sup>67</sup> The degree to which market towns made available new products was crucial in disseminating agricultural innovations to their hinterlands. Moreover, he found little systematic or serious exploitation of rural people by market operators or merchants, nor did individuals or institutions in the towns seem to be obstacles to capital accumulation by farmers. Preston concluded that "there is little feeling of injustice at the distribution of income" and that most rural families could get access to some capital. Likewise, the negative effects of administration in the towns were, with the exception of a few individual cases, not a serious problem for farmers and, indeed, municipal officials had a good deal of popular support.<sup>68</sup>

Other studies of market towns indicate that rural people can compete fairly with townspeople and that the linkages between the towns and rural areas are the primary channels through which rural people derive income. Studies of market-place interaction in the small Guatemalan city of Antigua, for instance, document the ability of rural people "to establish themselves as permanent market participants in competition with urban vendors, to obtain permanent rights in market space, to cope with hostile administrative structures and to form trading partnerships with urban customers."<sup>69</sup> Indeed, the very existence of the urban market in Antigua depends on linkages between the city and its rural hinterland, linkages in this case that seem to benefit rural residents as much if not more than townspeople. Swetnam points out that

While the Antigua Guatemala market-place is an institution organized and maintained by the city government, the bulk of its trade lies in the hands of rural middlemen. Vendors from outside Antigua outnumber city dwellers not only among the ranks of producer-sellers but also among the middlemen who constitute two-thirds of the selling population...The market is not a spot where urban merchants fleece rural producers, but rather an institution in which urban and rural dwellers mix freely playing the role of both buyer and professional market trader.<sup>70</sup>

Only about one-fifth of the market participants live in the city, more than half come from the surrounding rural hamlets or from other municipalities. Rural vendors come to the thrice-weekly market from as far as 100 kilometers away.

Nor do linkages between small towns and cities and larger metropolitan centers necessarily work to the disadvantage of rural regions. Dannhaeuser's studies of Dagupan City, a medium-sized town in Pangasinan Province of the Philippines that has had strong trade relationships with the primate city, Manila, as well as with other towns and cities in its region, conclude that those trade and commercial linkages have not been detrimental to Dagupan's

economic development nor to those people living in the town's surrounding areas. Sales penetration and contractual-ownership penetration by large Manila-based firms changed but did not destroy local trade relationships. Instead, they stimulated local innovations in distribution and opened new employment opportunities. Over a twenty-five year period of high inflation, household income in and around Dagupan remained stable. "Moreover, the expansion of infrastructure in Dagupan and Pangasinan, the rise in revenue base, continued brisk trade and vigorous demand in the province and in the city do not convey a picture of large segments of the population sinking into poverty," Dannhaeuser concludes.<sup>71</sup> He argues that trade with Manila was one of the major factors that has kept capital within the Dagupan region instead of being transferred elsewhere. The expansion of active marketing by Manila-based firms in Dagupan seems to have mobilized local capital and labor resources that had previously been idle. The economic ties did not impose a political dependency on the city. Local officials have levied high license fees for companies and taxes on salesmen doing business in the city, often to the dismay of the large companies.

Richardson comes closer to the truth in pointing out that "neither the 'diffusion pole' nor the 'parasitic' views of the role of small cities are correct as a general rule. Much depends on how the functions of these cities have evolved with respect to their hinterlands, on the institutional and cultural features of the country in question and on how policies for strengthening the small cities are formulated and implemented."<sup>72</sup> From extensive studies of middle-sized cities in developing countries, Rondinelli concludes that the extent to which small towns and cities have a developmental impact on their rural hinterlands and are catalysts for growth, transformation and integration depends on the following factors:

1. The degree to which local leaders in both the public and private sectors identify their own success and status with the economic growth and social progress of the town and its region;
2. The degree to which local leaders are willing to invest resources in the growth and development of the city rather than transferring surpluses generated from city activities to other places for investment;
3. The degree to which local leaders and entrepreneurs are innovative and aggressive in introducing more effective methods and techniques of production to increase output and income within the local economy;
4. The degree to which local leaders and entrepreneurs are aggressive and successful in bringing external resources into the city for economic development and diversification;
5. The degree to which the national government supports the internal growth and diversification of the city, rather than draining resources from it to support development in the national capital;

6. The degree to which economic activities established in the city or town are linked through mutually beneficial processes of exchange to the town's hinterland, thereby serving the needs of rural people and promoting higher productivity and greater distribution of income for the rural population;

7. The degree to which economic activities within the town are linked to each other to generate "multiplier effects" in investment, employment and entrepreneurship for both smaller and larger enterprises;

8. The degree to which economic activities within the city are organized to generate income for local residents and promote internal demand for goods and services that can be produced and distributed locally;

9. The degree to which public and private sector leaders and officials cooperate in promoting economic activities that generate widespread participation and distribution of benefits; and,

10. The degree to which the town's leaders are willing to promote and encourage, and residents are willing to accept and advance, social and behavioral changes that are responsive to new conditions and needs as they arise.<sup>74</sup>

All of this suggests that spread effects and beneficial interaction do not happen automatically as small towns and cities grow and diversify or as they are more strongly linked to other elements of the settlement system. Their economies and linkages must be structured to create benefits for their rural hinterlands and for the national economy. From their studies of growth poles in developing countries Misra and Sundaram conclude that "unless the new growth centers are planned as regional centers capable of serving the region they are located in, they cannot become instruments of modernization."<sup>74</sup> Smaller towns must not only serve their rural areas but also be linked to larger centers that can support a wider array of services, facilities, infrastructure and inputs that are needed to promote agricultural development in rural areas.

#### WHAT ARE THE ELEMENTS OF AN EFFECTIVE AND BENEFICIAL

#### SMALL TOWN AND CITY DEVELOPMENT POLICY?

The foregoing analysis suggests that small towns and cities in developing countries can and do perform a wide variety of social, economic and service functions that are important to regional and national development, although not all towns perform all of these functions and many do not perform them well. Moreover, under proper conditions, small towns and cities can be positive forces for developing their hinterlands, for transforming subsistence rural societies into commercial agricultural areas and for integrating urban and rural economies within developing nations. Creation of industrial "growth poles" in the ways attempted by many developing countries during the 1960s, however, seems to be neither appropriate nor sufficient to generate widespread development. The service, distribution, commercial, marketing, agro-processing and other functions

that small towns and cities now perform may offer a far better base for stimulating their growth and diversification than large scale manufacturing.<sup>75</sup>

And even if industrialization is one of the means of promoting the growth and diversification of small towns and cities, it is clear that the economic activities encouraged within them must create and serve regional demand as well as external markets. Although cities can have a strong and pervasive influence on the development of their regions, their areas of influence are clearly limited and the impact of urban centers on villages and rural populations declines with distance. Stohr's studies of diffusion influences in Latin America suggest that the spread effects from intermediate cities tend to deteriorate rapidly;<sup>76</sup> Gilbert's studies of the development impacts of the second largest city in Colombia found that they were highest within a 25 kilometer band around the city and dropped sharply for towns and populations located more than 50 kilometers away.<sup>77</sup>

Thus, the creation of selected industrial "growth poles" in rural regions is not sufficient to stimulate widespread economic growth in rural areas, nor to spread the benefits of urbanization equitably throughout developing countries. Because the spread effects tend to weaken rapidly with distance, a system of towns and cities--in which larger settlements are linked to rural villages and farm settlements--seems necessary to ensure wider diffusion of innovation, the stimulation of economic activities in rural areas and greater access for rural people to town-based services and facilities. Stohr argues that the only urban centers in Latin America that have been able to act effectively as regional growth centers are those that have developed a combination of externally-oriented and regionally-based economic activities. These towns and cities, "while producing for extra-regional (national or international) demand, usually possess sufficient integration between regional supply factors (capital, technology, labor, societal innovation) and regional demand (effective purchasing power) to provide for self-sustained growth."<sup>78</sup> Small town development policies must be focused on strengthening their capacity to stimulate agricultural production and the marketing of agricultural goods, to support small-scale agro-processing industries and to diversify the economic base of market centers. Activities must be organized to link town-based enterprises with rural supply areas and to make services, facilities and inputs essential for agricultural production and marketing easily accessible to rural populations living at low densities or scattered widely over the landscape. Investment in farm-to-market roads and all-weather access roads are essential to linking rural areas and central places. Attention must be given to providing water, basic housing, health and social services in towns to increase the productivity of the labor force. Attention must also be given to providing off-farm job opportunities and urban amenities that will keep people in rural areas. Rural industrialization thus is an important part of small town development strategies.<sup>79</sup>

## Application of Small Town and City

### Development Policies

A number of countries--with both socialist and capitalist ideologies--have been developing small towns and cities as the basis for creating more widespread participation in economic development and for promoting the distribution of the benefits of urban development more equitably throughout the country.

### South Korea

South Korea's industrialization policies have aimed not only at increasing export production and output for domestic consumption but also at generating and dispersing industrial employment, using small and medium-sized industries to stabilize the economies and populations of rural areas. National settlement policies seek to disperse population and industries from the two largest metropolitan centers and to encourage a more balanced distribution of urban population in middle-sized cities and small towns. These policies aim at creating job opportunities in rural areas and fostering commercial, service and small-scale industrial activities in small urban centers in economically lagging areas.<sup>80</sup> They call for the creation of eight planning regions in which 26 middle-sized cities will be strengthened to serve both urban and rural residents. Seventeen middle-sized "urban growth centers"--such as Gangneung, Wonju, Andong, Mogpo, and Pohang--will be developed to provide central place functions to city residents and those of surrounding rural areas. Other towns such as Yeongweol, Hongseong, Gangjin, Geochang, Jeonchon and Seoson, have been designated as "rural service centers" in which small-scale commercial, manufacturing, agro-processing and marketing activities will be developed to serve their hinterland population. In addition, some small and intermediate cities--Bucheon, Euijeongbu, Masan, Ulsan, Kimhae and others--are being developed as satellite centers for Seoul and Pusan and encouraged to perform supplementary social and economic functions for the largest metropolitan areas to relieve some of the population pressures on their core regions. The Korean urban strategy seeks to guide and direct national land development in a way that will "integrate large cities, medium, small cities and surrounding regions," within the national space economy. The Korean government has invested heavily during the past two decades in social overhead capital to increase the growth potential and employment-generating capacity of intermediate cities, and in social services and facilities to make small towns and cities more attractive for productive activities and rural migrants.<sup>81</sup>

### The People's Republic of China

During the 1960s and 1970s The People's Republic of China used a small town and city development strategy to attain a more geographically equitable pattern of development. The government sought to carefully allocate investments among cities of different sizes to promote more equitable distribution of income, to reduce regional disparities, and to create a hierarchy of settlements capable of performing a wide range of functions within each region and throughout the country. The Chinese used three levels of municipalities--

provincial capitals, prefecture capitals and rural towns or hsien cities-- to decentralize economic activities. The provincial capitals received the bulk of investments for heavy industry, modern infrastructure, heavy utilities and major highways. Prefectural cities received funds for investments in light industry, agro-processing, light farm machinery and those manufacturing activities using intermediate technology and locally available materials. The hsien cities and rural towns were conceived of as centers of direct urban and rural interaction and were designed to provide small components for manufacturing establishments in larger cities and farm inputs to rural villages. Hsien cities were made responsible primarily for the production of energy, cement, fertilizer, iron and simple farm implements, for repair of agricultural equipment and other production activities that could be performed by small-scale units. Chinese policy reinforced the existing system of towns and cities. Chang observed that "the overwhelming majority of hsien cities today were walled cities in imperial times and the present regime has simply transformed the old administrative centers into local industrial production centers, thus enhancing and endowing their traditional urban network with modern technology."<sup>82</sup> As small cities grew in population they were upgraded in classification and assigned new functions.

Perhaps the most important factor in China's apparent success with strengthening small towns and cities was that these urban centers were closely linked to activities in their rural hinterlands and that their industrial functions were intended mainly to increase the productivity of rural people. China attained a surprisingly uniform distribution of middle-sized settlements by the early 1970s. Population growth was slowed in the largest cities while it increased in intermediate and small urban centers. Chang predicts that as a result of these policies, "the largest cities will likely increase at the slowest rate, while the most rapid growth rate should occur in settlements with a population under 50,000, which in many ways have closer ties to the modernization process in rural areas." <sup>83</sup>

### Cuba

Since the early 1960s, the government in Cuba has experimented with a deliberate strategy of changing the spatial structure of the country to promote revolutionary socio-economic and political goals. It focuses on promoting economic growth with greater social equity, providing basic social services to the entire rural population, creating full employment, and increasing agricultural production. The spatial element of the strategy attempted to slow the growth of the national capital, but avoided a growth pole policy in favor of promoting the development of an integrated network of small and medium urban settlements throughout the country.

During the 1960s, 83 rural towns were developed to deliver public services to agricultural areas, provide better housing for peasants and distribute agricultural inputs. The towns were the focal point for mobilizing previously isolated peasants for training. Rural towns were the bases for "the gradual restructuring of the rural economy so that it might better respond to the needs of a longer-term development program."<sup>84</sup> Two new port cities were established

to relieve pressure on Havana and existing intermediate cities received investments to expand specialized consumer production capacity and to create a spatially decentralized system of import-substitution production centers.

Development of lower order centers in the settlement system was part of a broader policy to decentralize social and economic resources and opportunities. It was conceived of as part of the commercialization of agriculture and the application of appropriate technology to agricultural production. The government universalized higher education and forged a tie between work, research and training, and new forms of social organization were established in rural towns and cities to bring people together in larger communities to participate in the planning and implementation of development activities. Dispersion of industry was an important part of the strategy for diversifying rural economies and slowing the growth of Havana. With the decentralization of industry also came more widespread job opportunities in construction and processing. The transportation system was redesigned to link intermediate cities with the national capital and rural towns and cities with secondary urban centers. Moreover, there was a decentralization of social services, including specialized facilities, to the smallest settlements that could effectively support them.<sup>85</sup>

Since 1958, the number of secondary cities, with populations of 100,000 or more, increased from 2 to 6. Towns with from 50,000 to 100,000 residents have increased in number and population, claiming nearly 25 percent of the total migration from rural areas, as compared to about 13 percent prior to 1958. By 1975, more than 500 small urban centers were receiving investments for productive activities, services and infrastructure. Deliberate efforts were being made to integrate those centers into the national production system.

Underlying this strategy was a new conception of the role of small towns and cities. They became an important focal point for transforming people's conception of themselves from passive consumers to active, productive participants in the nation's development. "These cities have become work centers, foci for production," Barkin observed. "But since production itself requires the full mobilization of all the country's natural and human resources, the cities must be conceived not to concentrate and centralize resources but rather to facilitate their fuller use all over the island."<sup>86</sup>

### Planning the Development of Small Towns

#### and Cities

Not all small towns and cities can or should be developed as central places, nor should they all have a full range of services, facilities and infrastructure. As noted earlier, one of the benefits of an articulated and integrated settlement system is that it provides access to a wide range of functions without each settlement having to provide all of them. Thus, making a small town and city development strategy operational requires careful analysis and planning to ensure that essential and strategic services and facilities are provided in settlements to be

developed as central places and to reinforce the dynamics of growth and diversification that is likely to evolve from the provision of those services and facilities.

Methodologies now exist for analyzing national and regional spatial systems to identify settlements that might be developed or upgraded. The U.S. Agency for International Development has tested a macro-spatial analysis methodology through its Urban Functions in Rural Development projects in the Philippines, Bolivia, the Cameroons, Upper Volta and a few other countries. USAID's methodology involves ten phases:<sup>87</sup>

1. Analysis of the demographic, social, economic and physical characteristics of the region under study to serve as a data inventory for planning and as a baseline study for monitoring and evaluating changes in the settlement system;
2. Analysis of the existing settlement structure that describes elements of the settlement system, the functional complexity and centrality of settlements, the hierarchy of central places, and the spatial distribution and pattern of association among functions;
3. Description and analysis of the major socio-economic, organizational and physical linkages among settlements within the region and between them and settlements located in other regions of the country;
4. Mapping of information obtained from the functional complexity, settlement hierarchy, and spatial linkages analyses to determine the "areas of influence" or service areas of settlements in various functional categories with the region;
5. Delineation of areas where linkages are weak or non-existent, and of marginal areas that are not served by central places, or in which the rural population has poor access to town-based services and facilities that are crucial for rural development;
6. Comparison of information from the demographic, socio-economic and physical surveys, settlement system, functional distribution and linkage analyses to national and regional development plans and objectives to a) determine the adequacy of the settlement system to meet development needs and implement equitable growth policies and b) identify major "gaps" in the settlement system, in service areas for important functions and in linkages among subareas of the region or country.
7. Translation of the spatial analyses into an investment plan that identifies the projects and programs that will be needed to ameliorate major development problems, to strengthen and articulate the regional spatial structure and to integrate various levels of settlement within it;
8. Integration of projects identified through spatial and economic analyses into coordinated "investment packages" for different locations within the region, and the combination of the investments into a priority-ranked and appropriately

sequenced investment budget for the development of various towns and cities over a given period of time;

9. Creation of an evaluation system for monitoring the implementation of projects and programs, and for determining the substantive results of development activities on marginal areas and population groups within selected subareas of the region; and

10. Institutionalization of the planning procedures in local and regional public agencies charged with investment decision-making and with revising the spatial analysis and development plans at appropriate intervals.

This macro analytical approach can be used to identify cities and towns with functional characteristics that might be upgraded or strengthened, and as a framework for more detailed micro-analytical studies of particular towns and cities before investment programs are designed.

### The Need for Continuing Research and Development

Although a great deal is known about the dynamics of development of small towns and cities, a great deal more must be learned before strategies and policies can be refined and implemented more effectively. Among the important issues that need clarification through continuing research are the following:<sup>88</sup>

1. The relationships among population size, inter-urban distances, effective market areas and the capacity of small towns to perform specific types of economic and social functions;

2. The impacts of different patterns of national investment allocation on stimulating or retarding the growth and diversification of small towns and cities;

3. The changes that occur in comparative advantage, specialization and functional complexity in small towns and cities as nations become more urbanized and industrialized;

4. The interaction of economic, political, social and physical factors in the dynamics of middle-sized city and small town growth in countries with different national development strategies;

5. The impact of different combinations of socio-economic and political factors on the developmental or exploitative orientation of urban economies, and the impact of local and national policies on strengthening or changing those orientations;

6. The roles of local leaders in promoting the growth of small towns and cities as catalysts for regional development;

7. The effects of different forms of linkages and interactions among cities, smaller towns and villages on the development of rural areas;

8. The degree of linkage or "closure" needed to promote the development of smaller cities and towns in rural areas in an equitable and beneficial manner;

9. Ways in which the commercial and industrial sectors of small-towns and cities can be made more labor-absorbing and in which demand for local goods and services can be expanded in towns and cities with high levels of poverty; and

10. The effects of national policies aimed at limiting or redirecting the growth of primate cities and major metropolitan areas on the growth and development of small towns and cities.

Undoubtedly, this list could be expanded even further, but it indicates the magnitude of the need for systematic and comparative analyses of small towns and cities in developing countries before development policies and programs can be better refined. The pressures for development are unlikely to abate, however, while researchers gather more information. The most effective research will probably be applied, and done in combination with pilot and demonstration projects that test alternative development strategies and settlement policies in Third World countries.

## FOOTNOTES

1. See E.A.J. Johnson, The Organization of Space in Developing Countries, Cambridge, Mass: Harvard University Press, 1970 and Dennis A. Rondinelli and Kenneth Ruddle, Urbanization and Rural Development: A Spatial Policy for Equitable Growth, New York: Praeger, 1978.
2. For a more detailed discussion see Dennis A. Rondinelli, Secondary Cities in Developing Countries: Policies for Diffusing Urbanization, (Beverly Hills: Sage Publications, 1983) in press, Chapter 1, from which this section is derived.
3. Brian J.L. Berry, Geography of Market Centers and Retail Distribution, Englewood Cliffs, N.J.: Prentice-Hall, 1967.
4. See Johnson, op. cit., p. 171.
5. Rondinelli and Ruddle, op cit.
6. William C. Wheaton and Hisanobu Shishido, "Urban Concentration, Agglomeration Economies and the Level of Economic Development," Economic Development and Cultural Change, Vol. 30, No. 1 (October 1981), pp. 17-30; quote at p.29.
7. Koichi Mera, "On the Urban Agglomeration and Economic Efficiency," Economic Development and Cultural Change, Vol. 21, No.5, (January 1973) pp. 309-324.
8. See Rondinelli, op. cit., Chapters 3 and 4.
9. Colin Clark, Population Growth and Land Use, London: MacMillan, 1957; Stanford Research Institute, "Costs of Urban Infrastructure for Industry as Related to City Size: India Case Study," Economics, Vol. 20 (November 1969), pp. 316-320.
10. Wayne A. Cornelius, "Introduction," in W.A. Cornelius and R.V. Kemper (eds.) Metropolitan Latin America: The Challenge and The Response, (Beverly Hills: Sage Publications, 1978) pp. 7-24.
11. See Vincent J. Costello, Urbanization in the Middle East, London: Cambridge University Press, 1977; and M.H.P. Roberts, An Urban Profile of the Middle East, New York: St. Martins Press, 1979.
12. Luis Unikel, "Urbanization in Mexico: Process, Implications, Policies and Prospects," in S. Goldstein and D.F. Sly (eds.) Patterns of Urbanization: Comparative Country Studies, Vol. 2 (Liege, Belgium: International Union for the Scientific Study of Population, 1977), pp. 559-60.
13. Ved Prakash, A Study of Fiscal Policy and Resource Mobilization for Urban Development, Manila: The Asian Development Bank, 1977.
14. World Bank, World Development Report, 1979 (Washington: World Bank, 1979) p. 75.

15. See United Nations, Department of International Economic and Social Affairs, World Population Trends and Policies: 1979 Monitoring Report Vol. II, (New York: United Nations, 1980), pp. 40-41.
16. Niles Hansen, "The Role of Small and Intermediate Sized Cities in National Development Processes and Strategies," paper delivered at Expert Group Meeting on the Role of Small and Intermediate Cities in National Development, (Nagoya, Japan: United Nations Center for Regional Development, 1982), p. 1.
17. Ibid. p. 6.
18. Brian J.L. Berry, "Policy Implications of an Urban Location Model for the Kanpur Region," in P.B. Desai et al. (eds.) Regional Perspective of Industrial and Urban Growth: The Case of Kanpur, (Bombay: MacMillan, 1969), pp. 203-219; quote at p. 207.
19. Harry W. Richardson, City Size and National Spatial Strategies in Developing Countries, World Bank Staff Working Paper No. 252, (Washington: World Bank, 1977), p. 11.
20. World Bank, World Development Report, 1979, (Washington: World Bank, 1979), p. 77.
21. U.S. Agency for International Development, Country Development Strategy Statement FY 1981: Sudan, (Washington: USAID, 1979), p. 8.
22. U.S. Agency for International Development, Country Development Strategy Statement FY 1981: Tanzania, (Washington: USAID, 1979), p. 31.
23. See Om Prakash Mathur, "The Problem of Regional Disparities: Analysis of Indian Policies and Programmes," Nagoya: United Nations Center for Regional Development, 1975.
24. U.S. Agency for International Development, Country Development Strategy Statement FY 1982: Thailand, (Washington: USAID, 1980), p. 52.
25. John Friedmann, "The Active Community: Toward a Political-Territorial Framework for Rural Development in Asia," Economic Development and Cultural Change, Vol. 29, No. 2 (January 1981), pp. 235-261.
26. Koichi Mera, "City Size Distribution and Income Distribution in Space," Regional Development Dialogue, Vol. 2, No. 1 (Spring 1981), pp. 105-120; quote at p. 105.
27. Friedmann, op. cit., p. 246.
28. World Bank, op. cit., p. 75.
29. Harold Lubell, Urban Development Policies and Programs, Working Paper for Discussion, Bureau of Program and Policy Coordination, (Washington: U.S. Agency for International Development, 1979), p. 3.

30. United Nations, Commission on Human Settlements, "Development of Rural Settlements and Growth Centers," Report of the Executive Director, HS/C/3/7, (Mexico City: United Nations, 1980), p. 9.
31. Anthony Leeds, "Forms of Urban Integration: 'Social Urbanization' in Comparative Perspective," Urban Anthropology, Vol. 8, Nos. 3-4 (1979) pp. 227-247.
32. See Rondinelli, Secondary Cities in Developing Countries, op. cit., Chapters 3 and 4.
33. Lauren Anita Corwin, "The Rural Town: Minimal Urban Center," Urban Anthropology, Vol. 6, No. 1 (1977), pp. 23-43; quote at p. 39.
34. E.A.J. Johnson, "Scale Economies in Small Agric-Urban Communities," in F. Helleiner and W. Stohr (eds.) Proceedings of the Commission on Regional Aspects of Development of the International Geographical Union, Vol. II, (Ontario, Canada: International Geographical Union, 1974), pp. 583-612.
35. Sam P.S. Ho, Small-Scale Enterprises in Korea and Taiwan, World Bank Staff Working Paper No. 384, Washington, : World Bank, 1980.
36. Government of the Kingdom of Thailand, National Economic and Social Development Board, South Thailand Regional Planning Study, Vol. 2 (Bangkok: Hunting Technical Services, Ltd., n.d. 1979?), pp. 27-34.
37. Theodore D. Fuller, "Migrant Evaluations of the Quality of Urban Life in Northeast Thailand," Journal of Developing Areas, Vol. 16, No. 1 (October 1981), pp. 87-104; quotes at pp. 92 and 101.
38. Ralph L. Beals, The Peasant Marketing System in Oaxaca, Mexico, (Berkeley: University of California Press, 1975), pp. 120-121.
39. Ibid., Appendix 1 provides a detailed description of these activities.
40. See P.A. Doherty and J.M. Ball, "Central Functions of Small Mexican Towns," Southeastern Geographer, Vol. XI, No. 1 (1971), pp. 20-28.
41. Diane E. Davis, "Migration, Rank-Size Distribution and Economic Development: The Case of Mexico," Studies in Comparative International Development, Vol. XVI (1981), pp. 84-107; quote at p. 102.
42. See Joseph F. Lombardo, Jr. "Introduction to the Human Settlement System in Honduras," Unpublished Report, Tegucigalpa, Honduras: U.S. Agency for International Development, 1982; and Hugh Evans, Urban Functions in Rural Development: The Case of the Potosi Region in Bolivia, Part I, Washington: U.S. Agency for International Development, 1982.
43. John J. Swetnam, "Interaction Between Urban and Rural Residents in a Guatemalan Market Place," Urban Anthropology, Vol. 7, No. 2 (1978), pp. 137-153.

44. M.A. Hirst, "A Functional Analysis of Towns in Tanzania," Tijdschrift voor Econ. en Soc. Geografie, Vol. 64, No. 1 (1973), pp. 39-59.
45. James S. Wunsch, "Political Development and Planning in Ghana: A Comparative Study of Two Medium Cities," in R.A. Obudho and S. El-Shakhs (eds.) Development of Urban Systems in Africa, (New York: Praeger, 1979), pp. 137-156.
46. J.O.C. Onyemelukwe, "Settlement Structure as Sociocultural Constraint on Nigerian Rural Development," Ekistics, Vol. 7, No. 284 (1980), pp. 353-355; quote at p. 355.
47. Lombardo, op. cit.
48. Quoted Michael McNulty and Michael E. Conroy, "An Evaluation Report on Potential Sites in Bolivia and Paraguay for the Urban Functions in Rural Development Project," (Washington: U.S. Agency for International Development, 1977), mimeographed, p. 10.
49. Evans, op. cit., and Dennis A. Rondinelli and Hugh Evans, "Integrated Regional Development Planning: Linking Urban Centers and Rural Areas in Bolivia," World Development, Vol. 11 (1983) in press.
50. See R.G. Ward and M.W. Ward, "The Rural-Urban Connection--A Missing Link in Melanesia," Malaysian Journal of Tropical Geography, Vol. 1 (September 1980), pp. 57-63.
51. Dennis A. Rondinelli, "Spatial Analysis for Regional Development: A Case Study in the Bicol River Basin of the Philippines," Resource Systems Theory and Methodology Series, No. 2 (Tokyo: United Nations University, 1980) and Dennis A. Rondinelli, "Applied Policy Analysis for Integrated Regional Development Planning in the Philippines," Third World Planning Review, Vol. 1, No. 2 (1979), pp. 150-178.
52. Mike Douglass, "Thailand: Territorial Dissolution and Alternative Regional Development for the Central Plains," in W.B. Stohr and D.R. Fraser Taylor (eds.) Development From Above or Below?, (London: Wiley and Sons, 1981), pp. 183-208.
53. Ibid. p. 199.
54. Lombardo, op. cit., pp. 3-4.
55. Rondinelli, "Spatial Analysis for Regional Development," op. cit., pp. 22-27.
56. Johnson, The Organization of Space in Developing Countries, op. cit., pp. 70-71.
57. Ward and Ward, op. cit., p. 59.
58. Rondinelli, "Spatial Analysis for Regional Development," op. cit., pp. 28-38.
59. Evans, op. cit., p. 74.

60. Michael G. Schatzberg, "Islands of Privilege: Small Cities in Africa and the Dynamics of Class Formation," Urban Anthropology, Vol. 8, No. 2 (1979), pp. 173-190; quote at p. 174.
61. Ibid., p. 181.
62. David A. Preston, Farmers and Towns: Rural-Urban Relations in Highland Bolivia, (Norwich, England: University of East Anglia-Geo Abstracts, 1978) summarizes these arguments and tests them in Bolivia.
63. Bryan R. Roberts, "The Provincial Urban System and the Process of Dependency," in A. Porter and H.L. Browning (eds.) Current Perspectives in Latin American Urban Research, (Austin: University of Texas Press, 1976), pp. 99-131; quote at p. 104
64. Friedmann, op. cit.
65. Walter Stohr and Franz Todtling, "Spatial Equity--Some Anti-Theses to Current Regional Development Doctrine," Papers of the Regional Science Association, Vol. 38 (1977), pp. 33-53.
66. Anthony Leeds, "Towns and Villages in Society: Hierarchies of Order and Cause," in T.W. Collins (ed.) Cities in a Larger Context, (Athens: University of Georgia Press, 1980), pp. 6-33.
67. Preston, op. cit., p. 69.
68. Ibid., pp. 176-177.
69. Swetnam, op. cit. p. 137.
70. Ibid., p. 141.
71. Norbert Kannhaeuser, "Commercial Relations Between Center and Periphery in Northern Luzon: Detrimental Dependence or Generative Interdependence?" Philippines Studies, Vol. 29 (1981), pp. 144-169; quote at p. 165.
72. Harry W. Richardson, "Policies for Strengthening Small Cities in Developing Countries," paper prepared for Expert Group Meeting on the Role of Small and Intermediate Cities in National Development, (Nagoya, Japan: United Nations Centre for Regional Development, 1982), p. 14.
73. Rondinelli, Secondary Cities in Developing Countries, op. cit., Chapter.
74. R.P. Misra and K.V. Sundaram, "Growth Foci as Instruments of Modernization in India," in A. Kuklinski (ed.) Regional Policies in Nigeria, India and Brazil, (The Hague: Mouton, 1978), pp. 97-204; quote at p. 170.
75. See Dennis A. Rondinelli and Kenneth Ruddle, "Integrating Spatial Development," Ekistics, Vol. 43, No. 257 (April 1977), pp. 185-194.

76. Walter B. Stohr, "Some Hypotheses on the Role of Secondary Growth Centers as Agents for the Spatial Transmission of Development in Newly Developing Countries--The Case of Latin America," in Helleiner and Stohr, op. cit., pp. 75-111.
77. See Alan Gilber, "A Note on the Incidence of Development in the Vicinity of a Growth Center," Regional Studies, Vol. 9 (1975), pp. 325-333.
78. Stohr, op. cit., pp. 98-99.
79. The argument is made in more detail in Rondinelli and Ruddle, Urbanization and Rural Development, op. cit., passim.
80. Korea Research Institute for Human Settlements, National Land Development Planning in Korea, (Seoul: KRIHS, 1980), pp. 16-18.
81. Republic of Korea, Ministry of Construction, Long Range Planning for Urban Growth to the Year 2000, Seoul: Ministry of Construction, 1980; See also Dong-A Shinbun, August 24, 1981, for a more detailed account of the Second Long Range National Land Plan.
82. Sen-Dou Chang, "The Changing System of Chinese Cities," Annals of the Association of American Geographers, Vol. 66, No. 3 (September 1976), pp. 398-415: quote at p. 411.
83. Ibid. p. 415.
84. David Barkin, "Confronting the Separation of Town and Country in Cuba," Antipode, Vol. 12. No, 3 (1980), pp. 31-40.
85. Ibid., p. 34.
86. Idem.
87. See Rondinelli, "Spatial Analysis for Regional Development," op. cit., p. 20.
88. These suggestions are made in Rondinelli, Secondary Cities in Developing Countries, op. cit., Chapter 6.