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PERSONAL AUTHORS - RONDINELLI, D. A.

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# Balanced Urbanization, Spatial Integration, and Economic Development in Asia: Implications for Policy and Planning

DENNIS A. RONDINELLI

Urbanization has been an enigma for many planners and policy analysts in Asia. The rapid urbanization in East and Southeast Asia over the past three decades has at once been described as a catalyst for economic growth, a concomitant of modernization, a cause of serious social problems, and an obstacle to more equitable distribution of growth's benefits. The goals of modernization sought in the development plans of Asian nations for more than a quarter of a century were largely achieved in their major urban centers. The great cities of Asia have modern infrastructure, sophisticated technology, and highly trained professionals. They boast of strong export industries, growing capacity for domestic production, a panoply of Western consumer goods, advanced institutes of education and research and centers of culture and the arts. Economic growth in Japan, Taiwan, Singapore, Hong Kong and Korea came through export industrialization in the great metropolitan centers. By the end of this century these growing economies in Asia are expected to be highly urbanized with expanding middle classes that may well attain standards of living approximating those in Western industrial societies. And cities grew rapidly after World War II even in those Asian countries with lagging economies. The number of people living in Asia's urban areas more than doubled between 1950 and 1975, and by the end of this century more than half of all Asians are expected to be urban dwellers.[1]

**DENNIS A. RONDINELLI is Director of the Graduate Planning Program in the Maxwell School of Citizenship and Public Affairs at Syracuse University.**

But at the same time that cities are growing and prospering, Asian societies remain overwhelmingly rural and poor. The World Bank calculated that by the end of the 1960s nearly 75 percent of the world's poorest people—those earning less than $50 a year—were concentrated in Asia, principally in India, Bangladesh, Pakistan, and Indonesia and scattered in rural areas of every Asian country. Nearly two-thirds of Asia's poor now survive on subsistence incomes.[2] In much of Asia per capita GNP remains less than $250 a year.

The economic development of East and Southeast Asia has been characterized by pervasive dualism. Great disparities remain between industrializing economies and those in which agricultural predominates; between wealthy elites living in urban centers and the poor masses that populate rural areas and the urban fringes; among geographic regions even within growing economies; and between those poeple with access to productive resources and employment opportunities and those with little hope of gaining access to them, no matter where they live. Asian governments face severe problems of stimulating sufficient economic growth over the next two decades to reduce their high levels of abject poverty, narrow the disparities in income and wealth, absorb increasing numbers into the labor force and change the spatial pattern of development to foster more geographically equitable growth.

These problems now dominate the national development plans of Asian governments, and while they are primarily economic matters they have strong social and political implications. Some ruling elites have discovered that neither economic growth nor political stability can be attained by perpetuating

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Most villages in rural areas of Asia are too small to support even basic developmental functions and their populations lack access to larger urban centers with those services and facilities needed for rural development. Albay Province, the Philippines.

dualism. More widespread participation in economic activities and more equitable distribution of the benefits of growth are prerequisites to modernization and preconditions for creating socially just and politically stable societies. The goal of more equitable development is offered as the keystone of Thailand's Fourth Five-Year Plan for 1977-1981, for instance, which admits that "the socio-politico-economic transitions in this country during the past three years have forced the Government to adopt a new set of development positions and priorities . . . . Several basic policy reforms are considered necessary for promoting greater economic security for the nation and for creating a more equitable economic and social order which would mean an eventual eradication of poverty among a large segment of our population."[3] In India, the perennial struggle to alter the direction and accelerate the pace of economic growth is seen in the renewed determination of drafters of the 1978-1983 plan to expand employment opportunities for the poor, provide basic social services, increase agricultural output and income, and reduce regional disparities in productivity and wealth. Indonesia's plan for 1979-1983, Repelita III, is also concerned with promoting growth with equity.

Asian development planners have also begun to realize that many of the problems of dual economies are reflected in and perpetuated by the spatial pattern of development. The seeming contradictions between rapid urbanization and continued growth of rural populations and between modernization in urban enclaves and stagnation in the hinterlands are also increasingly addressed in Asian development policies. The disparities have occurred to a large degree because investments have been concentrated in one or a few metropolitan centers that contain the overwhelming majority of the nation's industries, educated and skilled manpower, commercial services, educational facilities, capital assets, productive resources, and modern infrastructure. The spatial system in these countries has been shaped by the rapid growth of primate cities that have become islands of modernization in lands where the majority

of people live at or near subsistence levels in vast numbers of small, under-productive, rural villages. Many Asian nations have spatial systems with relatively few intermediate-size cities and market towns, which could provide services and facilities for the rural poor, serve as exchange points for agricultural and commercial goods, or absorb significant numbers of people in nonagricultural jobs. The polarized settlement systems of most Asian countries are inadequate for coping with increased urbanization, promoting faster economic growth and equitably distributing its benefits.[4]

Many analyses of development in Asia, however, indicate that urbanization will continue along with rapid growth in rural population, that pressures on land will force growing numbers of rural people into the cities, and that the primate centers of Asia have reached, or soon will reach, their capacities to absorb larger populations without creating social and economic problems. Many cannot now provide sufficient jobs for their labor force, and they offer limited opportunities for new migrants seeking employment. The pace of urban growth has placed increasing demands on already over-strained public facilities, social services, and housing supplies. The over-expansion of major metropolitan areas has made extensive slums, oppressive air pollution, widespread unemployment and regular breakdowns in transportation, communications, and power systems the hallmarks of large Asian cities. And although the prospects for increasing the absorptive capacity of Asia's largest cities are dim, World Bank analysts contend that even in those nations where urbanization has been relatively slow—Nepal, Pakistan, Bangladesh and Indonesia—potential urban growth over the next two decades is substantial. "Intensive pressures on land—the rural population per square kilometer of arable land is expected to double in the next 25 years—which," they argue, "even if it leads to a small percentage of outmigration from rural areas, will lead to massive growth in the cities."[5]

## Economic Development and Spatial Policy

Thus, the problem facing policy-makers in nearly every Asian country is clearly stated in Thailand's Fourth Plan: to devise a "decentralized urbanization strategy to support overall national redistributive objectives and development programmes for various lagging regions and their rural peripheries." The need, as Thailand's planners explicitly recognize, is to "plan for better human settlement patterns to accomodate future population growth, and to bring about significant changes in regional production structures as well as to effectively decentralize administrative power."[6]

The rapid and highly concentrated urbanization seen in most of Asia over the past quarter century has led some analysts to conclude that Asian countries are over-urbanized, that their primate cities are manifestations of "pseudourbanization," based on growth of the tertiary sector rather than on productive economic activities. But these analysts often incorrectly associate urbanization exclusively with primate city growth and use the overexpansion of large metropolitan centers as arguments for discouraging urbanization generally. They overlook the crucial role that cities play in economic development, as marketing centers for agricultural surpluses and in stimulating increased production in their hinterlands. The cities make available to both urban and rural people services and facilities that require substantial population thresholds. In nearly every country urban centers are catalysts for social change, the focal points of innovation and the places through which new ideas, methods and technologies are disseminated. Urban agglomeration, moreover, even at relatively low levels can provide economies of scale for efficient production, convenient markets for a variety of goods and services, economies of proximity that lower distribution costs and ready supplies of labor.[7]

Despite extensive and legitimate criticisms of primate cities, negative attributes of urbanization are often overstated. Indeed, it will be argued here that the problem in developing nations is not the pace of urbanization, but its pattern; and, indeed, that most Asian countries are not urbanized enough. Many of their problems stem from the fact that urbanization has been too slow and overly concentrated in a few places. A larger number of urban centers of different sizes performing different functions widely distributed throughout a country and linked together would form an articulated spatial hierarchy that could provide diversified and accessible markets for agricultural goods, efficient locations for the operation of industrial and agro-processing establishments, and employment opportunities in nonagricultural activities. Intermediate and smaller size cities can absorb migrants from rural areas who currently have nowhere to go but to already overcrowded primate cities. Promoting the growth of middle and small size cities, which have received virtually no attention in past development policies, could serve to link urban and rural areas and to integrate regional spatial systems. Creation of more articulated and integrated spatial systems seems essential to achieving growth with equity goals in Asia, but it requires an understanding of current patterns of spatial development and of how they can be changed most effectively to meet emerging development needs.

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In Korea and other Asian nations, middle size cities play a crucial role as marketing, production and service centers for the rural population.

## Characteristics of Spatial Development in Asia

Any attempt to generalize about urbanization patterns in regions as diverse as East and Southeast Asia—where definitions of such terms as "urban" and "city" vary widely and where the availability and reliability of census data leave much to be desired—is somewhat dangerous and always open to challenge. But sufficient research has been done on urbanization in individual countries to provide a broad overview of spatial development trends that yield conclusions useful for planning and policymaking. Designing a spatial strategy for promoting more equitable economic growth must be grounded in an understanding of the characteristics of current spatial patterns in Asia:*

1. *A strong relationship exists between urbanization and economic development in Asia.* Urbanization is a concomitant of economic development. Measured by per capita GNP, economic development is highly correlated with urbanization in developing countries. The World Bank observes that those nations with per capita GNP of less than $100 in 1968 had median urban populations of only 13 percent in 1970 and none had more than 24 percent of their populations living in urban areas. Nations with per capita GNP of from $200 to $500 had median urban populations of 38 percent; those with $500 to $1000 per capita GNP had median urban populations of 55 percent and none had less than 39 percent of their people living in urban areas. Those countries with the highest levels of per capita GNP had median urban populations of 75 percent and all were at least 60 percent urbanized.[8] Similar relationships can be found between economic growth and urbanization in Asia. (See Table 1.) Those developing countries in Asia with the highest levels of GNP per capita—Hong Kong, Singapore, Taiwan and Korea—have at least 47 percent of their populations living in urban areas. Malaysia, an exception, is about one-third urbanized. Countries with lower levels of

*This analysis is limited to developing nations with mixed economies, thus excluding Communist Societies such as The People's Republic of China, North Korea, Laos and Cambodia and developed economies such as Japan's.

GNP per capita—the Philippines, Thailand and Indonesia—have from one-fifth to one-third of their populations in urban areas. And among the lowest income countries are two groups: those in which urbanization has not yet begun, such as Nepal and Bangladesh, where more than 90 percent of the people live in rural areas and those with about one-quarter of the population in urban areas but where population growth has outpaced average annual growth rates of agricultural GDP and where rates of urban population growth are higher than industrial GDP increases. Growth in the rate of GDP contributed by services is strongly related to levels of urbanization throughout Asia. Moreover, life expectancy, overall income levels, literacy rates and other indicators of development are higher in more urbanized and faster growing economies than in the less urbanized and poorer societies.

both median and average annual income for urban households is nearly double that of rural families; income distribution is less inequitable in cities than in rural areas; and smaller percentages of urban families are living in abject poverty. Even when income and expenditures are adjusted for differences in living costs, urban families tend to be far better off than their rural counterparts. About one quarter of urban families in the Philippines had incomes below the minimum necessary for adequate food consumption in 1971, but nearly half of all rural families had incomes below the food threshold.[9]

Regional disparities in levels of development and poverty are also related to levels of urbanization in the Philippines, as is the case in other Asian countries. Goldstein observes that in Thailand the "regional differentials in levels of urbanization and in the rate of urban growth tend to be related to regional variations

Table 1

INDICATORS OF ECONOMIC DEVELOPMENT, SELECTED COUNTRIES OF EAST AND SOUTHEAST ASIA

| Country | GNP Per Capita 1976 | Percent Population in Urban Areas, 1975 | Average Annual Growth in GNP Per Capita (%) 1960-1976 | Average Annual Growth Rate of Population | | | Average Annual Growth Rates of Gross Domestic Product 1970-1975 | | | | Life Expectancy at Birth 1975 | Adult Literacy Rate, 1974 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Total 1970-1975 | Urban 1960-1975 | Urban 1970-1975 | Total | Agriculture | Industry | Services | | |
| Hong Kong | $2,700 | 95 | 7.5 | 1.9 | 2.4 | 1.7 | 7.5 | -5.1 | 7.1 | 8.6 | 70 | 90 |
| Singapore | 2,100 | 90 | 6.5 | 1.7 | 3.6 | 2.5 | 8.9 | 0.3 | 9.1 | 8.6 | 70 | 75 |
| Taiwan | 1,070 | 64 | 6.3 | 2.0 | 5.6 | 2.0 | 7.8 | 1.5 | 14.1 | 5.5 | 71 | 82 |
| Malaysia | 860 | 30 | 3.9 | 2.7 | 4.2 | 2.7 | 7.8 | 6.4 | 9.6 | 7.6 | 59 | 60 |
| Korea | 670 | 47 | 7.3 | 1.8 | 5.6 | 4.9 | 10.3 | 4.8 | 17.1 | 8.6 | 61 | 92 |
| Philippines | 410 | 36 | 2.4 | 2.8 | 4.6 | 4.8 | 6.3 | 4.6 | 8.7 | 5.1 | 58 | 87 |
| Thailand | 380 | 17 | 4.5 | 2.9 | 5.0 | 5.3 | 6.5 | 4.3 | 8.2 | 6.9 | 58 | 82 |
| Indonesia | 240 | 19 | 3.4 | 2.4 | 4.5 | 4.7 | 8.3 | 4.0 | 12.4 | 7.3 | 48 | 62 |
| Sri Lanka | 200 | 24 | 2.0 | 1.7 | 4.4 | 4.3 | 2.9 | 1.2 | 3.0 | 3.7 | 68 | 78 |
| Pakistan | 170 | 27 | 3.1 | 3.0 | 4.1 | 5.3 | 3.6 | 1.6 | 4.1 | 5.0 | 51 | 21 |
| India | 150 | 22 | 1.3 | 2.1 | 3.6 | 3.8 | 2.7 | 1.4 | 3.8 | 2.4 | 50 | 36 |
| Nepal | 120 | 5 | 0.2 | 2.1 | 4.8 | 5.6 | 3.3 | 1.9 | – | – | 44 | 19 |
| Bangladesh | 110 | 9 | -0.4 | 2.0 | 4.3 | 3.8 | 1.6 | 2.5 | 2.8 | 3.0 | 50 | 67 |
| | | | | | | | | 0.5 | 1.8 | 2.2 | 42 | 23 |

Source: International Bank for Reconstruction and Development, *World Development Report, 1978* (Washington: World Bank, 1978), Tables 1, 2, 13, 14, 15 and 18.

And even within most Asian countries, large disparties appear in personal and household income, access to public services and employment, and overall standards of living between urban and rural areas. In the Philippines, for instance, nearly all indicators show urban populations to be more prosperous, and that those living in cities have greater access to social services, public facilities and income-earning opportunities, than their rural counterparts. Household and family income surveys taken in 1974 indicate that

in socio-economic status as well as to other demographic variables." The percentage of people engaged in nonagricultural activities and average income of rural population correlate positively, and fertility and death rates negatively, with urbanization.[10]

2. *Most Asian countries have experienced relatively rapid urbanization over the past quarter century.* Although many Asian countries still have small percentages of their populations living in cities, the

rate of growth in urban population has been relatively high over the past three decades. In nearly every country, rates of annual urban growth outpaced those of total population increase, ranging from 3 to 5 percent in most countries, with Malaysia and Nepal recording 6 and 8 percent respectively. The percentage of people living in urban areas increased substantially between 1950 and 1970 in every Asian society. Taiwan's urban population rose from 59 to 64 percent, Korea's from 28 to 39 percent, and Indonesia's from 15 to 18 percent during the 1960s. In Thailand, urban population grew by 5 percent a year between 1947 and 1960, and 4.8 percent annually between 1961 and 1967. And if the definition of urban is refined to mean places of 20,000 people or more, these centers grew by about 7 percent a year between 1947 and 1967, while other parts of Thailand had population increases of about 3 percent annually. Urbanization in Korea is only a recent phenomenon beginning significantly around 1930; yet, annual growth in cities with populations of 100,000 or more was greater than 6 percent during the 1940s and 1950s and more than 10 percent a year between 1960 and 1966. From the mid-1960s to 1970 these cities grew by more than 9 percent a year.[11]

3. *The highest rates of growth occurred in the largest cities of Asia.* Throughout Asia during the 1950s and 1960s, the highest rates of population growth were found in the largest cities: cities of one-half million or more people recorded the largest increases in population growth in Taiwan, Korea, Indonesia, the Philippines and Pakistan. They grew by more than 10 percent a year in Taiwan, 15 percent in Korea, and nearly 6 percent in Indonesia between 1950 and 1970. Cities of smaller size grew much less rapidly, and in Taiwan, Inodonesia, the Philippines and India, cities smaller than 100,000 lost population. (See Table 2.) In Korea, population growth was most rapid in cities of 100,000 or more; they expanded in size by 86 percent between 1949 and 1960. The four largest cities grew by nearly 93 percent. During the 1960s the growth of the largest cities (100,000 or more) was about 117 percent, while those with 50,000 to 100,00 people grew by only a little more than 16 percent, or by less than two-thirds of overall population growth.[12]

Much of the population growth in the largest cities was due to migration. United Nations studies claim that nearly 72 percent of urban growth between 1950 and 1960 in East Asia was due to rural-urban transfers as was 43 percent of urbanization in South Asia.[13]

4. *Urbanization has been highly concentrated in, and the spatial systems of most Asian countries have been dominated by, primate cities.* In most countries of East and Southeast Asia, a single city—usually the national capital—recorded the largest increases in population, accounted for the greatest percentage of migrants, and attained a size at least three to four times that of the next largest city. In some cases, Asian primate cities have grown to 30 or 40 times the country's median city size. In Taiwan, Korea, Indonesia, Malaysia and Pakistan the principal city is at least three times the size of the next largest city; in India, Calcutta and Bombay have grown to nearly double the size of New Delhi; in the Philippines, Metropolitan Manila is ten times larger than the only two other regional centers and the Bangkok-Thonburi metropolitan area is now 30 times the size of Thailand's second city. Indeed, the figures in Table

Table 2
PERCENT POPULATION DISTRIBUTION IN THREE URBAN SIZE CLASSES, SELECTED ASIAN COUNTRIES, 1950 and 1970

| | Percent Population Living in Cities of | | | | | |
|---|---|---|---|---|---|---|
| | Less Than 100,000 | | 100,000-499,000 | | 500,000 or More | |
| Country | 1950 | 1970 | 1950 | 1970 | 1950 | 1970 |
| Taiwan | 28.2 | 26.7 | 14.2 | 17.6 | 9.8 | 20.0 |
| South Korea | 3.1 | 6.6 | 5.4 | 6.4 | 9.8 | 26.1 |
| Burma | 7.7 | 8.9 | 1.5 | 2.5 | 3.7 | 4.4 |
| Indonesia | 6.2 | 5.8 | 2.6 | 3.0 | 3.5 | 9.2 |
| Malaysia | 16.5 | 28.7 | 7.9 | 10.1 | — | 6.9 |
| Philippines | 7.4 | 7.2 | 3.7 | 5.3 | 8.8 | 10.7 |
| Thailand | 4.1 | 5.1 | 1.4 | 0.3 | 4.5 | 7.5 |
| India | 9.1 | 8.8 | 3.5 | 4.1 | 4.6 | 5.9 |
| Pakistan | 4.5 | 5.6 | 2.3 | 3.0 | 2.5 | 7.3 |

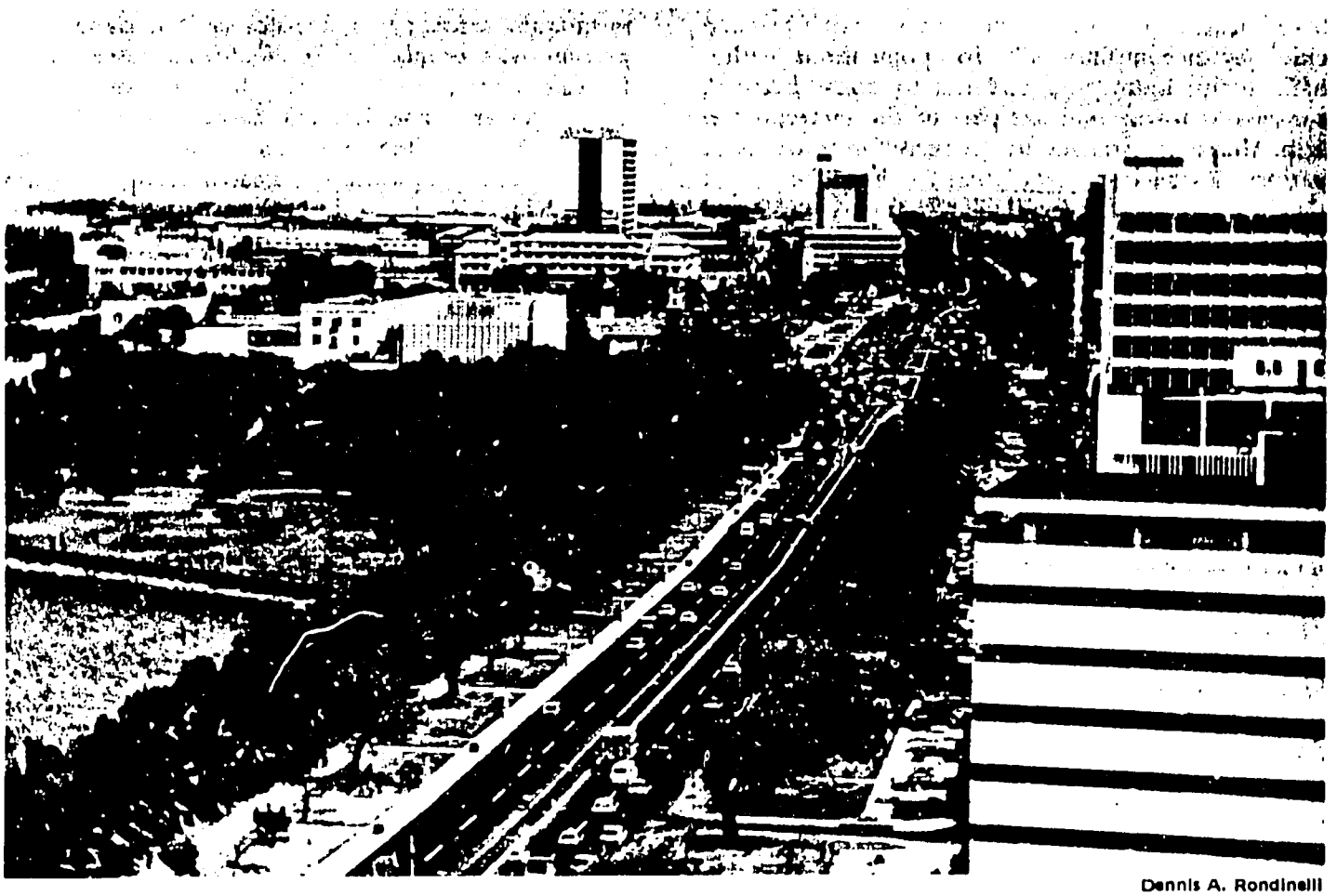
Source: Kingsley Davis, *World Urbanization 1950-1970*, Vol 1, "Basic Data for Cities, Countries and Regions" Rev. Ed. (Berkeley: University of California, Institute of International Studies, 1969)

3 seriously underestimate the size of Asia's primate cities by accounting only for populations within official city boundaries and not for those living in contiguous towns that are part of the metropolitan area. Moreover, primacy has increased in some Asian nations. Bangkok, in 1947, was 21 times the size of the next largest city in Thailand, but by 1960 had grown to 27 times and by 1967 to 32 times the size of the second city. In 1947 Bangkok had 45 percent of Thailand's urban population living within its metropolitan area; two decades later it claimed 56 percent. The primacy of Seoul also increased during Korea's period of economic development, as did Taipei, Jakarta, and Karachi during the 1950s and 1960s. Metropolitan Manila's proportion of the nation's total population increased from about 26 percent in 1939 to 32 percent in 1970, a period during which the urban population shares of smaller cities fell from slightly more than 18 percent to nearly 12 percent.[14]

Table 3
POPULATION SIZE, ANNUAL PERCENT GROWTH OF THREE LARGEST CITIES IN SELECTED ASIAN COUNTRIES, 1950-1970

| Country and Cities | Population 1970 (In Thousands) | Annual Percent Growth 1950-1960 | Annual Percent Growth 1960-1970 | Annual Growth Rate of Principal City 1960-1970 | Principal City Population as Percent of Urban Population |
|---|---|---|---|---|---|
| Taiwan | | | | | |
| Taipei | 2,150 | 5.9 | 4.9 | 4.7 | 23 |
| Kaohsiung | 735 | 5.0 | 5.0 | | |
| Tainan | 475 | 3.9 | 3.7 | | |
| South Korea | | | | | |
| Seoul | 4,661 | 5.2 | 6.7 | 8.0 | 37 |
| Pusan | 1,592 | 7.9 | 3.2 | | |
| Taegu | 989 | 7.2 | 3.9 | | |
| Indonesia | | | | | |
| Jakarta | 4,500 | 7.0 | 4.7 | 4.7 | 21 |
| Bandung | 1,500 | 6.4 | 4.6 | | |
| Surabaja | 1.400 | 4.8 | 2.6 | | |
| Thailand | | | | | |
| Bangkok-Thonburi | 2,725 | 3.6 | 4.5 | 6.0 | 45 |
| Songkla | 100 | – | – | | |
| India | | | | | |
| Calcutta | 7,350 | 1.8 | 1.8 | 1.8 | 5 |
| Bombay | 5,100 | 2.1 | 2.2 | | |
| Delhi | 3,100 | 2.9 | 3.0 | | |
| Nepal | | | | | |
| Kathmandu | 440 | 5.4 | 7.9 | 7.9 | 80 |
| Pakistan | | | | | |
| Karachi | 3,246 | 5.7 | 5.6 | 5.6 | 18 |
| Lahore | 1,902 | 4.5 | 4.2 | | |
| Hyderabad | 854 | 5.1 | 4.9 | | |
| Philippines | | | | | |
| Manila | 4,100 | 4.3 | 4.3 | 4.3 | 46 |
| Cebu | 355 | 3.5 | 3.5 | | |
| Davao | 320 | 6.2 | 3.5 | | |
| Burma | | | | | |
| Rangoon | 1,200 | 1.0 | 4.1 | – | – |
| Mandalay | 300 | 1.0 | 4.8 | | |
| Moulmein | 175 | – | – | | |

Source: Kingsley Davis, *World Urbanization, 1950-1970*, Vol. 1, "Basic Data for Cities, Countries and Regions," Rev. Ed. (Berkeley: University of California, Institute of International Studies, 1969) and International Bank for Reconstruction and Development, *Urbanization Sector Working Paper*, (Washington: World Bank, 1972), Table 3.



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In many countries of Asia, the most modern facilities and infrastructure are concentrated in the primate city. Manilla, the Philippines.

5. *Rural to urban migration patterns have tended to reinforce the growth and dominance of primate cities in Asia.* Migration from rural areas and smaller towns has played the major role in expansion of primate cities and major metropolitan areas in Asia. In Thailand and the Philippines, for instance, the most frequent destination of rural migrants has been to the primate city. In Thailand rates of migration and growth vary positively with, and out-migration is inversely related to, city size. Similar migration patterns are found in the Philippines, where Manila has attracted nearly half of all rural migrants to the cities. The World Bank estimates that during the 1950s half of Bombay's growth could be attributed to migration as could 60 percent of Jakarta's during the 1960s, 63 percent of Seoul's from 1955 to 1965 and 43 percent of Taipei's from 1960 to 1967. The 1970 census indicates that nearly a third of those migrating from rural areas in Korea during the late 1960s went to Seoul and that 41 percent relocated in the Seoul metropolitan area. The International Labor Office calculates that more than 850,000 of Jakarta's 4.5 million people migrated to the Indonesian capital during the 1960s.[15]

6. *The city size distribution and hierarchy of settlements in most Asian countries are highly skewed; the "middle" level of the urban hierarchy is generally weak and secondary cities are few and poorly dispersed.* The growth and dominance of primate cities created polarized and dualistic spatial systems in much of Asia, which is seen most clearly in Thailand and the Philippines. In both countries, the distribution of urban population is highly skewed. Bangkok clearly dominates a spatial system in Thailand where only 23 other urban places have populations exceeding 30,000. The combined populations of the 118 municipalities in Thailand are smaller than the total population of its primate city. Moreover, few Asian countries have large secondary metropolitan centers. Aside from the primate city, Taiwan, Thailand, Burma and the Philippines had no cities larger than 750,000 population in 1970; Korea, Indonesia, Pakistan, and Bangladesh had only one or two each, and

only India and the People's Republic of China among developing nations of Asia, had more than three. Nor have intermediate size cities claimed much the population growth in Asian countries in the past; thus, the middle levels of the urban hierarchy remain consistently small. Less than one-half of one percent of all Indian towns had populations of between 20,000 and 100,000 in 1971 and less than 7 percent of India's total population lived in cities of that size. (See Table 4.) Mathur's observation of India applies as well to other Asian countries: "the distribution of urban population by size of urban centers is grossly uneven." He notes that ". . . 55.8% of the total urban population was concentrated in 100,000+ cities, and that those between 20,000 and 100,000 in the total urban population was only 27.6%, indicating a weak middle base to sustain the urban structure of the country." In 1971, over 80 percent of India's nearly 550 million people lived in villages and towns of less than 5,000 population. Nearly 93 percent lived in villages of less than 2,000 people. And in Thailand as well, nearly half of all urban places were smaller than 10,000 population in 1967 and no more than 5 percent had populations greater than 40,000.[16]

Thus, despite rapid urbanization and the consistent growth of larger cities, most Asian countries remain essentially rural, village-based economies. The high rates of urbanization are reflected in the expansion of the largest metropolitan centers or the primate city. But intermediate and smaller cities have not grown and proliferated as quickly, and in some countries the smaller cities and towns have lost population over the past two decades. Thus, large portions of the urban population are concentrated in one or a few metropolitan centers and a large majority of the remaining population are scattered widely in towns or villages of very small size.

### Investment Patterns and Spatial Polarization

Problems of economic dualism and spatial polarization in Asia are closely related. Previous patterns of investment and economic growth created polarized spatial systems that now inhibit the acceleration of development and its spread to underdeveloped areas. The causes of current problems are threefold: the past patterns of preferential and concentrated investment in primate cities, the failure of "trickle down" processes to spread the benefits of economic development from the primate city to rural areas, and the difficulties of overcoming the early effects of concentrated investment and primacy.

Table 4
DISTRIBUTION OF TOWNS, VILLAGES AND POPULATION BY SETTLEMENT SIZE CLASS, INDIA, 1971

| Towns | Number of Settlements | Percent | Population of Settlements | Percent |
|---|---|---|---|---|
| 100,000 + | 151 | | 53,380,841 | 9.7 |
| 50,000-99,999 | 219 | 0.2 | 14,712,382 | 2.7 |
| 20,000-49,999 | 652 | | 19,946,611 | 3.6 |
| 10,000-19.000 | 987 | | 13,961,297 | 2.5 |
| 5,000-9,999 | 820 | 0.4 | 6,197,427 | 1.1 |
| Less than 5000 | 290 | | 895,751 | 0.2 |
| | 3,119 | 0.6 | 109,094,309 | 19.9 |
| **Villages** | | | | |
| 10,000 + | 1,358 | 0.2 | | |
| 5,000-9,999 | 4,975 | 0.9 | | |
| 2,000-4,999 | 35,992 | 6.2 | 438,855,500 | 80.1 |
| 1,000-1,999 | 81,909 | 14.2 | | |
| 500-999 | 132,873 | 22.9 | | |
| Less than 500 | 318,611 | 55.0 | | |
| | 575,721 | 99.4 | | |
| Total | 578,840 | 100.0 | 547,949,809 | 100.0 |

Source: Government of India, Department of Statistics, *Statistical Abstract, India, 1974*, New Series, No. 20 (New Delhi: Ministry of Planning, 1975), Table 3; and Indian Oxygen Ltd., *India—A Statistical Outline*, 5th Ed. (New Delhi: Oxford and IBH Publishing Co., 1976), Tables A-10 and A-11.

1. *Preferential and Concentrated Investment.* The polarized spatial systems in Asian countries did not emerge spontaneously. In most cases the evolution of the spatial development patterns in Asia was the result of deliberate location decisions and consistent investment policies that resulted in a heavy concentration of national resources for production, physical infrastructure, social services and public facilities in a single city or a few large metropolitan centers. These centers now have concentrations of productive and social overhead assets vastly greater than their share of national population. For instance, although Manila has only about a quarter of the population of the Philippines, it accounts for more than 72 percent of the nation's manufacturing firms, 80 percent of all manufacturing employment and production, and 61 percent of the nation's hospital beds. It consumes 83 percent of the nation's electrical power, has more than 67 percent of the vehicles registered in the Philippines and generates 65 percent of total family income. Similarly, Romm points out that Bangkok absorbs 65 percent of the annual investment in construction in Thailand, has 72 percent of all commercial bank deposits, consumes 82 percent of the nation's electrical power and has 77 percent of the nation's telephones.[17]

Jakarta's growth is due in large measure to the overwhelming share of foreign and domestic investment it receives compared to other areas of Indonesia and to its share of national population. Between 1968 and 1972, more than 32 percent of domestic and 20 percent of foreign investments approved by the government were located in Jakarta, which had about 4 percent of Indonesia's population. In the Philippines, the relatively high levels of economic development in Central Luzon and Southern Tagalog regions, which encompass Metropolitan Manila, cannot be attributed solely to natural advantage. They are the result of sustained concentration of public and private investments in infrastructure, services and productive activities in these regions. In every aspect of economic and social development, these regions now have ad-

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In many rural regions the periodic market is the only outlet for agricultural surpluses and the only source of consumer goods for the poorer groups in society. The Calabanga market in the Bicol River Basin of the Philippines is typical of those scattered in small villages of the Southern Luzon region — they are usually not linked to larger urban centers.

vantages over all others in the Philippines. Agricultural production in Central Luzon outpaces that of other regions because 50 percent of its cultivated land has been irrigated as opposed to 13 percent of cultivated areas in the rest of the country. For over a quarter century these two regions have received preference in government allocations. In fiscal years 1959-1961, nearly 57 percent of infrastructure expenditures were made in these two regions, slightly more than 70 percent of expenditures on ports and harbors, 49 percent on waterworks, 61 percent on flood control and drainage, and almost 70 percent on buildings, schools and hospitals were made in and around Metropolitan Manila. From 1971 to 1973, these two most urbanized regions received 56 percent of all infrastructure investments, 64 percent of port projects, 91 percent of waterworks, 63 percent of irrigation, 67 percent of flood control and drainage projects and 60 percent of buildings, schools and hospital investments.[18]

2. *The failure of "trickle down" processes.* The concentration of investments in Asian countries resulted, ironically, from two somewhat inconsistent strategies. In countries with colonial governments, concentrated investment in the capital was intended to restrict development. In others, it resulted from the belief of development planners that primate cities could serve as "beach heads" of modernization, which would act as catalysts for economic growth that would spread outward to revitalize rural peripheries and stimulate the lagging agricultural sector. But experience demonstrated that the overconcentration of investments at one or a few of these "growth centers" did not trickle down; instead, the growth at these favored locations sometimes produced "backwash effects," and hinterlands were drained of capital, labor and raw materials to support the further development of the primate city. The failure of development to spread can be largely attributed to the lack of an adequate spatial system—a hierarchical network of urban centers of different sizes performing different functions, widely dispersed but linked to each other and to their hinterlands—capable of absorbing and spreading the benefits of growth at the center. In much of Asia, impluses from the center did not trickle down to the periphery; but as Berry notes "growth and stagnation polarize; the economic system remains unarticulated."[19]

3. *Difficulties of overcoming the early effects of concentrated investment and polarized spatial development.* Once polarization occurred, the effects reinforced each other to keep the primate city dominant and to make development of other cities and regions more difficult. In some cases, colonial governments established developing nations as raw material exporters to serve the needs of home industries. This made an entrepôt, usually a major port city, the only efficient location for investments in infrastructure and productive activities. Elsewhere, political influences shaped the pattern of spatial development; political elites designated the administrative capital as the center of social, economic and cultural activities and accorded it the highest priority for investment in public services and facilities. Regardless of initial pressures, however, once investment was highly concentrated in a single location, an inevitable and almost irreversible chain of events reinforced continued concentration and growth. Lower transportation costs, economies of scale and proximity, availability of capital, labor and entrepreneurial talent, all created multiplier effects that provided one place with competitive advantages over others and attracted still larger numbers of people in search of economic opportunities. Resource scarcities in developing countries, moreover, made creation of multiple centers difficult. The emphasis on foreign trade curtailed development of a domestic transportation and distribution system, obviating the need to build strong domestic markets. The effects of cumulative causation set forces in motion that were later difficult to reverse or mitigate.

## The Need for a Decentralized Urbanization Policy

If the growth with equity goals of Asian governments are to be taken seriously, however, they must be accompanied by policies for creating spatial systems capable of stimulating growth in rural areas, spreading development from the center and building productive capacity in lagging regions and marginal populations. A decentralized urbanization strategy seems essential to promote growth with equity in the two types of economies prevalent in Asia: in those countries where urbanization has been slow and where cities have not yet emerged as important points of nonagricultural production and exchange, and in those countries where urbanization has been rapid, but highly concentrated in primate cities. In the former case dispersed urbanization is needed to accelerate rural development and in the latter to create an articulated spatial system capable of absorbing and further promoting development impulses already strong in large urban enclaves.

A number of theorists argue that dominance of a primate city and the absence of an articulated hierarchy of central places seriously obstructs balanced and widespread development in Asia. E. A. J. Johnson, for instance, insists that devel-

oping nations have not benefited from the spread effects of urban industrialization as Western nations have, because the developing countries lack the very spatial system that provided the base for Western progress, where the "varied hierarchy of central places has not only made possible an almost complete commercialization of agriculture but facilitated a wide spatial diffusion of light manufacturing, processing and service industries . . . [and provided] employment of a differentiated variety." Without accessible markets offered by intermediate size cities and larger towns, farmers lack incentives to increase output, modernize their technology, or adapt products to consumer demand. Nor can they easily obtain services needed to make living in rural areas desirable. Historically, as Johnson notes, the key to internal economic development where it has occurred--in Japan and China as well as in Europe and North America--has been the relationship between urban centers and the countryside and in the emergence of market towns and small and intermediate-size cities that stimulated the commercialization of agriculture and facilitated the efficient production and exchange of goods throughout the space economy. As these lower levels of the spatial hierarchy were strengthened, many of the smaller centers grew and diversified and trade arrangements were established among them. These linkages among dispersed market centers and between lower order and larger places provided not only the basis for economic growth but the means by which a large majority of the population was drawn into economic activities and benefited from the development process. Citing as an example of such a process, Johnson observes of China during its period of expansion that "the product of thousands of years of cautious experimentation and slow pragmatic development, the Chinese marketing system has taken the form of 'interlocking networks.' since each standard market town is linked to two or three intermediate market systems, and since each intermediate market center is in turn functionally related to two or three central market systems, the whole complex serves not only particular territorial regions but an entire national area."[20]

Others argue for a decentralized urbanization policy along other lines. While little is known about the size of cities at which diseconomies of scale set in, and while the concept of optimal city size is somewhat dubious, it is clear that as primate cities grow their services, facilities and employment generating capacities become overstrained and produce visible and severe social and economic adversities. They draw unskilled and uneducated migrants from rural areas to live in overcrowded squatter settlements and the overcrowding in the primate city leads to greater physical deterioration, traffic congestion, proliferation of slums, and other problems. The ability to improve services usually lags behind population growth, and impacts of improvements are often outweighed by greater demands on services and facilities before they are completed.

Still others contend that continued growth of primate cities has twofold effect: any improvements made in the primate city simply attracts more migrants, and maintenance of primate cities requires vast amounts of capital investment that should be going to the hinterlands for sorely needed rural development projects. The primate city not only drains rural areas of capital and raw materials, but by attracting the most educated and talented segments of the rural population, makes effective rural development more difficult. As Rosser notes of the heavy concentration of professionals in Indonesia's capital, "whatever the complex reasons for the magnetic attractions of Jakarta for the remarkably small group of skilled professionals, one of the consequences is the progressive weakening of the provinces, and of the subnational levels of government and agencies of development, by the removal to Jakarta of a significant number of development leaders required to create the system of 'development in depth' that is so urgently needed . . . ."[21] Some Asian policy-makers are coming to realize that economic growth alone cannot generate the fundamental transformations required of traditional societies. Modernization and equitable development require strengthening the productive, administrative, commercial and technological capacities of public and private organizations outside of the national capital.

Finally, in the longer run, a decentralized urbanization strategy could help change the population growth and migration patterns in Asia. In most countries it is not necessarily the volume of migration that creates problems, but its pattern. Without a system of intermediate and small cities geographically dispersed, rural migrants have nowhere to go but to the primate city. Creation of other urban centers could allow migrants to move progressively from smaller towns and medium size cities to larger metropolitan areas, and the smaller cities might absorb large numbers of the migrants permanently.

### Policies for Balancing Urbanization, Integrating Spatial Development, and Accelerating Growth With Equity

Some theorists argue that as economic growth accelerates in developing nations equity problems are ameliorated and spatial polarization is reversed automatically without deliberate policy intervention, and that premature or poorly designed intervention

strategies will be costly and may produce adverse consequences. Scattered evidence from Taiwan and Korea indicates that the speed of urbanization does begin to decrease as the share of population living in urban areas reaches 50 percent and as advances are made in agricultural production. But those who argue for a non-intervention policy often overlook the fact that relatively less severe equity problems exist in Taiwan and Korea because strong land reform, population planning, agricultural and human development programs were undertaken in the 1950s and 1960s. Moreover, after a quarter century of intensive development, their spatial systems are still dominated by primate cities and secondary centers are only slowly beginning to emerge. As Richardson points out, even if primacy reversal (PR) "is bound to happen eventually, it may not happen for a very long time and the continued polarization in the meantime may conflict with national policy objectives." He and others argue that "a developing country concerned with interregional equity, national spatial integration and other spatial objectives will have a strong incentive to 'nudge' PR along with policy measures. The problems are when to intervene and how to intervene."[22]

Although the timing of intervention is crucial, little is known about processes of primacy reversal and the experience of Western industrial nations is not entirely relevant. Richardson suggest that policy intervention may be most effective after primacy reversal has already begun as the result of other social and economic changes:

> There is no one key signal, but some of the following changes may guide policymakers: (i) evolution of the industrial structure to the stage when branch plants seem feasible; (ii) emergence of scale diseconomies in the primate city . . .; (iii) when the capital constraint has been reached as a result of a strong recent growth record in respect to GNP and investment; (iv) when at least a skeletal national transportation network has been built; (v) when political and social pressures build up for interregional equity and similar spatial objectives; (vi) after the introduction of sound rural development and small scale industry programs that offer the prospect of demographic stability in peripheral regions; (vii) when per capita incomes in the periphery have risen to levels to justify industries catering for local demand; (viii) when stable export products have been subject to chronic instability; (ix) when the country's supply of administrators, planners, managers, and professional personnel reaches levels that permit decentralization of planning, economic and political functions; and (x) when some non-core cities begin to grow faster than the primate city.[23]

But these conditions may be less useful as signals that the time is ripe for spatial policies to accelerate primacy reversal than as potential components of a strategy to bring a country to a point when primacy reversal can begin. Some of the conditions clearly depend on others preceding them, and some require a degree of spatial articulation before they can occur.

In the past, problems of economic dualism, rapid urbanization and growth of the primate city have evoked two policy responses: one attempts to prevent further growth in the primate city by deconcentrating its economic activities and attempting to prevent its future development; the other seeks to slow rural out-migration by dispersing investments widely among rural villages in the hope of providing services and facilities that will make rural life more tolerable. Neither policy alone has been very effective. The first is only viable if a country already has other large metropolitan areas capable of supporting high threshold activities; the second scatters resources so widely that they have little impact on rural development.

Neither highly concentrated nor widely dispersed investment seems likely to achieve growth with equity goals. Large cities and small towns both play crucial roles in the development process and the functions of both must be strengthened through strategic investment policies. A strategy of "decentralized concentration" leading to integrated spatial development is a more appropriate alternative. Experience with three decades of development in Asia suggests that a broad spectrum of human settlements--rural villages, market towns, small cities, intermediate regional centers, and large metropolitan areas--are needed to build strong internal economies. Moreover, urban and rural development are not incompatible, and indeed, must be pursued together. Cities of various sizes must be integrated with rural settlements through physical, social, economic and political linkages that forge them into a mutually sustaining network of production, exchange and consumption centers. The features of a decentralized urbanization strategy aimed at integrated spatial development must include the following:

1. *Maintenance and improvement of critical services and facilities in metropolitan centers.* For whatever reasons they emerged in developing countries the largest metropolitan centers and primate cities now play a dominant role in national economic and social development. They provide economics of scale and agglomeration advantages for business and industry that cannot be rivaled by other places in the spatial system. Their advantages must be protected until other urban centers can be strengthened as alternative locations for high threshold activities. Moreover, the primate cities contain vast numbers of the urban poor whose economic and social needs must be met. Most will not return voluntarily to rural areas and attempts to relocate them have not been highly successful in most of Asia. Also, if important

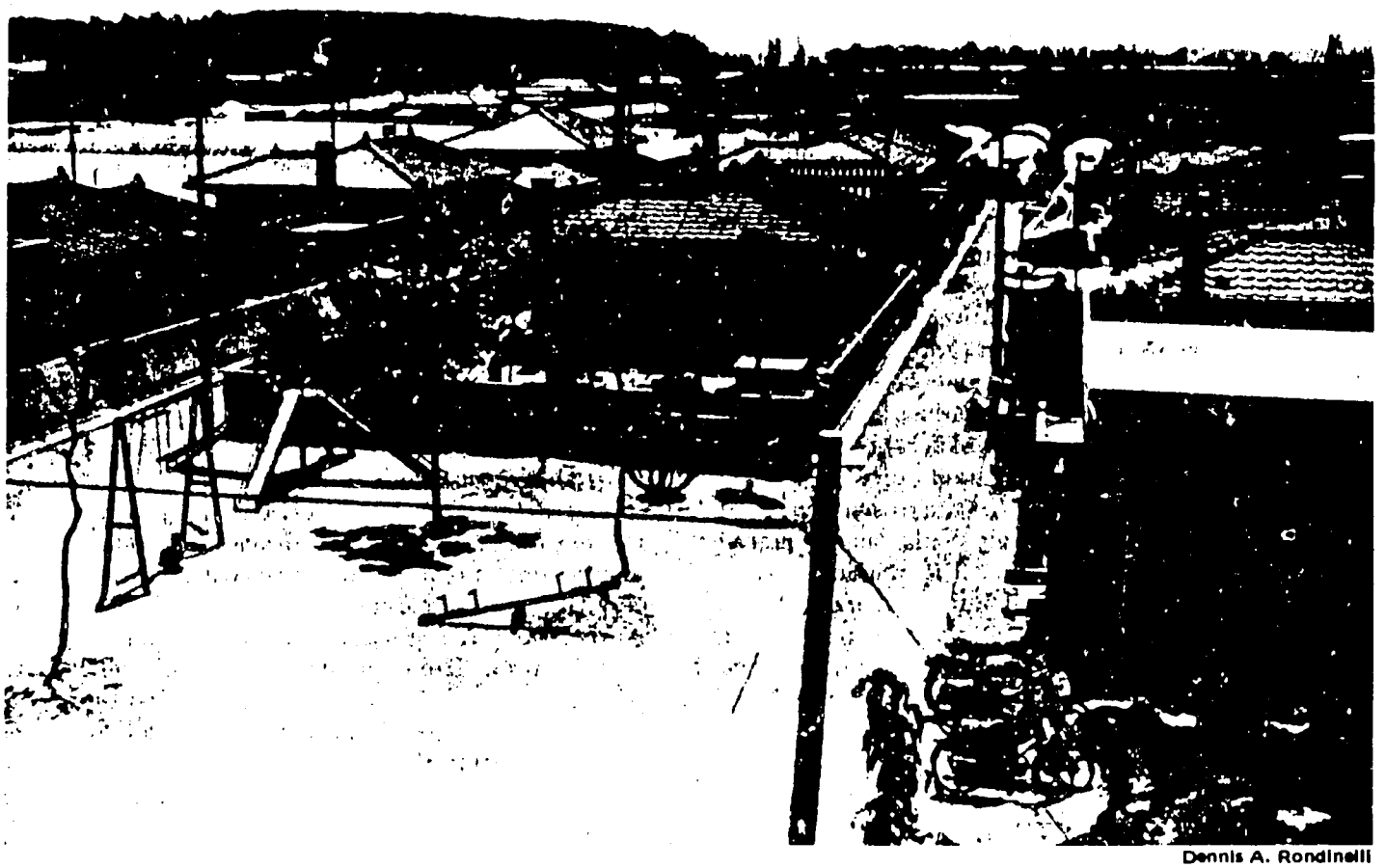
foreign trade and export industrial sectors are to be protected, then social services, public facilities and physical infrastructure in the metropolitan centers must be maintained and improved. Emphasis in this aspect of decentralized urbanization policy should be on improving urban transportation, extending public utilities, controlling adversities such as water and air pollution, assisting squatters to upgrade their housing, improving educational, health and social services for existing residents and generating employment for the urban poor.

2. *Controlling growth in the primate city.* At the same time, the overwhelming concentration of public investment in the primate city must be gradually reduced and the funds redistributed to other urban centers and rural regions. And although attempts to control primate city growth through regulation have not been highly successful in the past, a combination of regulation with strategic location of public services and facilities, tax penalties, location incentives and land use controls could have a greater impact when applied in conjunction with other elements of a decentralized urbanization policy. In Korea and Thailand special taxes are being levied in the capital to discourage large scale immigration. Industrial zones have been established in Korea and the Philippines outside of the capital city to prevent location of large industries within metropolitan boundaries in the future. Industrial estates are used in India and Malaysia to steer manufacturing firms to peripheral locations or secondary cities. Relocation of national administrative offices outside the capital is underway in Korea and the Philippines. A variety of regulations and locational decisions taken together may have a stronger impact on controlling primate city growth than in the past.

3. *Stimulating the growth of regional metropolitan centers and intermediate size cities as "countermagnets" to the capital.* If controls on the size of the primate city are to be effective, the growth and diversification of secondary metropolitan centers must be stimulated to accommodate high-threshold activities and larger industries, and to act as "countermagnets" to the capital for rural migrants. Aside from scattered attempts at creating regional "growth poles," development of secondary cities as part of an overall spatial strategy has not received high priority in Asian development plans. Yet, each Asian country, with perhaps the exception of those where urbanization has not yet emerged, has some secondary cities with the potential for development of specialized functions. Cities with populations of from 100,000 to 500,000 could be candidates for such development. Bangladesh has 3 and Malaysia has 4 cities with populations greater than 100,000 outside of the primate city; the Philippines has more than 10, Korea has 17, Indonesia has 26, Pakistan has 21 and India has 162. Even countries with relatively weak secondary levels of the urban hierarchy have incipient regional centers—such as Khon Kaen, Chiengmai, and Chonburi in Thailand's peripheral regions—in which concentrated investment in physical infrastructure, public facilities, transportation and communications, and social services could provide the preconditions for private investment and further urban expansion.

4. *Strengthening existing and incipient market towns and small cities as rural service centers.* Smaller cities can also play a strategic role in linking larger urban centers with rural hinterlands and act as commercial and administrative service centers for rural populations. Although these smaller central places are usually not well-developed in Asian countries, where they do exist they provide a wide range of commercial services to rural hinterlands. In India, Thailand and Malaysia these "district towns" provide convenient locations for extension services and subunits of provincial and national ministries, offer basic health care through small clinics and trained physicians, have a relatively wide range of retail shops providing basic consumer goods and agricultural supplies, and are important centers of small-scale industry and agro-processing plants. Plans for strengthening these centers should seek to facilitate marketing and to increase agricultural productivity. Physical facilities should be created for permanent marketplaces, supported by storage, grading and processing facilities and the necessary extension, commercial and financial services. The market centers should be district transportation nodes that link them with both lower order places and larger cities. A larger variety of social, health, educational, administrative and technical assistance services must be provided in market towns and small cities if they are to filter down to the masses of the rural population.

5. *Creating strategic villages as agricultural service centers.* In most of Asia the overwhelming majority of people live in rural villages with populations too small to support functions other than a periodic market, small retail stalls, basic grain processing facilities, and perhaps a dispensary and small primary school. The scarcity of resources in developing countries means that any improvements coming to most villages will be through self-help efforts aided perhaps by small amounts of project funds from the central government. Experiments in self-help through India's community development programs and in Korea through the Saemaeul Undong (New Community Movement) have made some progress in improving



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The Korean government has begun a massive "New Village" (Saemul Undong) program to mobilize the rural population in a self-help effort to rebuild rural settlements and create a productive economic base. This village about 40 km. from Seoul specializes in intensive agriculture, is linked to the Seoul markets by good transportation, and uses a cooperative organization to finance and manage village activities. New housing has completely replaced the traditional Korean farm houses.

living conditions in rural villages, but the overall impact has been weak. Integrated investment packages must be developed for strategically located villages that can provide isolated farms, hamlets and smaller rural villages with basic health and educational facilities, as well as ordinary household and agricultural goods, tools and fertilizers needed to increase agricultural production, cooperative organizations and extension services to help farmers market their crops, and "mobile" administrative services that move among village centers on market days.

6. *Tying decentralized urbanization policy to integrated rural development programs.* Ultimately, only limited progress can be made in articulating spatial systems in developing nations by redistributing resources from larger urban centers. Much of the development of lower order centers in a settlement hierarchy depends on the creation of internal markets in rural areas and on increased agricultural productivity. A quarter century of experience with agricultural planning in Asia yields an almost incontestable conclusion: that little progress can be made by single policy interventions.[24] A wide variety of complementary inputs and services must be combined in rural areas in order to increase agricultural production and income. Marketing assistance without credit services and technical assistance is usually not effective; land reform and improvement programs require the establishment of cooperatives and the introduction of new agricultural methods and technologies if production is to be increased. Appropriate technology, rural energy sources, nonformal education and training and appropriate institutions for services delivery in rural areas must also be included integrated rural development projects. But few integrated rural development plans have strategies for locating these services and facilities in such a way as to reinforce the growth of or create new market towns and small cities in rural regions that would contribute to articulating the spatial structure and accelerating rural development. Creation of smaller central place settlements are essential for

increasing the access of the rural poor to resources needed for agricultural development.

7. *Strengthening the linkages among settlements in regional and national spatial systems.* Finally, a decentralized urbanization strategy must consider means of using sectoral investments to strengthen the linkages among components of the spatial system. Settlements of various sizes, specializing in different economic and social functions must be linked to each other through a network of physical, economic, technological, social and administrative interaction. Such physical linkages as primary and feeder roads, rail and river transport, and energy and communications systems are essential for generating and spreading economic growth. Production linkages, market interaction patterns, capital and commodity flows and new service delivery linkages for the dissemination of health, education, commercial, credit and financial resources must be strengthened if regional spatial systems are to be integrated into a strong national space economy. Creating new linkages produces a multiplier effect of making other activities and transactions possible and promoting the growth of existing or new central places. New linkages introduced into rural market systems can trigger a set of "circular and cumulative changes" toward further growth and change. Simply improving transportation between villages and towns leads to reorganization and expansion of periodic and regular markets, displacing those that weak or unsuccessful and creating new ones. New market interactions change the flow of economic and social interaction and the movement of people and goods. Closer interaction among villages, towns, intermediate cities and major metropolitan centers makes it less expensive and more convenient to integrate technology at each level of the spatial hierarchy and to distribute services more widely to peripheral and rural areas.[25]

The development problems facing planners and policymakers in Asia are urgent and complex. If development patterns continue as in the past, by the middle of the 1980s Asia will contain many of the world's largest cities within countries with the highest concentrations of rural poor. Population estimates for 1970 already show 12 of Asia's metropolitan centers among the world's 35 largest cities.[26] The polarized spatial structures of Asian developing countries are simply not adequate to cope with growing rural populations, increasing pressures on land and resources, and the projected flows of rural migrants to the cities. These pressures, in turn, will lead to greater demands for more equitable distribution of development benefits. If these pressures and demands are to be met effectively, urbanization and rural growth must be planned in concert through integrated spatial development policies.

□

## FOOTNOTES

1. International Bank for Reconstruction and Development, *The Task Ahead for Cities of the Developing Countries*, (Washington: World Bank, 1975), p.3.

2. International Bank for Reconstruction and Development, *Rural Development Sector Policy Paper*, Washington: World Bank, 1975.

3. Government of Thailand, National Economic and Social Development Board, *The Fourth Five-Year National Economic and Social Development Plan, 1977-1981*, (Bangkok: Office of the Prime Minister, 1977), p. 1.

4. The argument is outlined in greater detail in Dennis A. Rondinelli and Kenneth Ruddle, *Urbanization and Rural Development: A Spatial Strategy for Equitab e Growth*, New York: Praeger, 1978.

5. IBRD, *The Task Ahead for Cities of the Developing Countries*, p. 11.

6. Government of Thailand, *The Fourth Five-Year National Economic and Social Development Plan, 1977-1981*, p. 392.

7. The arguments are reviewed in T. G. McGee, *The Southeast Asian City*, New York: Praeger, 1967; and N. V. Sovani, "The Analysis of Over-Urbanization," *Economic Development and Cultural Change*, Vol. 12 (January 1964), pp. 113-122. The contributions of urban centers of various sizes are reviewed in Rondinelli and Ruddle, *Urbanization and Rural Development*, Chapter 3.

8. International Bank for Reconstruction and Development, *Urbanization Sector Working Paper*, (Washington: World Bank, 1972), p. 81.

9. See G. C. Caldito and C. P. Parel, "A Survey on Filipino Family Households: Distribution of Income and Consumption Expenditure Patterns, 1974," *Social Science Information*, Vol. 1, No. 1 (May 1976), pp. 6-10; R. J. Cheetham and E. K. Hawkins, *The Philippines: Priorities and Prospects for Development*, (Washington: World Bank, 1976), Chpt. 5; and M. Abrera, "Philippine Poverty Thresholds," in M. Mangahas (ed.) *Measuring Philippine Development*, (Manila: Development Academy of the Philippines, pp. 223-273.

10. Sidney Goldstein, "Urbanization in Thailand, 1947-1967," *Demography*, Vol. 8, No. 2 (May 1971), pp. 205-223.

11. Goldstein, "Urbanization in Thailand, 1947-1967," pp. 205-223. See also John Slaboda, "Urbanization, Migration and Socio-Economic Development: Contemporary Patterns in Korea," *Korea Journal*, (November 1974), pp. 20-32.

12. Slaboda, "Urbanization, Migration and Socio-Economic Development," pp. 23-30.

13. Cited in U.S. Bureau of the Census, *Planning for Internal Migration: A Review of Issues and Policies in Developing Countries*, Report ISP-RD-4 (Washington: Government Printing Office, 1977), p. 36.

14. Details are reviewed in Brian J. Berry, "City Size and Economic Development," in L. Jakobson and V. Prakash (eds.), *Urbanization and National Development*, (Beverly Hills: Sage Publications, 1971), pp. 111-155. Goldstein, "Urbanization in Thailand," pp. 208-209. See also Kingsley Davis, *World Urbanization 1950-1970, Vol. I: Basic Data for Cities, Countries and Regions*, (Berkeley: University of California, Institute for International Studies, 1969), Table G. See also Ernesto Pernia, *Urbanization, Population Growth and Development in the Philippines*, Unpublished Ph.D. Dissertation; Ann Arbor: University Microfilms, 1976.

15. See Visid Prachuamob and Penporn Tirasawat, *Internal Migration in Thailand 1947-1972*, (Bangkok: Chulalonghorn University, 1974), pp. 36-39; and Ronald C. Y. Ng, "Recent Internal Population Movement in Thailand," *Annals of the Association of American Geographers*, Vol. 59 (December 1969), pp. 710-730. IBRD, *Urbanization Sector Working Paper*, p. 80. S. V. Sutharaman, *Jakarta: Urban Development and Employment*, (Geneva: International Labor Organization, 1976), p. 93.

16. See International Statistical Institute, *International Statistical Yearbook of Large Towns*, (The Hague: The Institue, 1972), Vol. 6, Table 1. Om Prakash Mathur, "The Problem of Regional Disparities: Analysis of the Indian Policies and Programmers," (Nagoya: United Nations Centre for Regional Development, 1975), p. 18. Goldstein, "Urbanization in Thailand, " p. 214.

17. Republic of the Philippines, National Economic and Development Authroity, *Manila Bay Region in the Philippines*, (Manila: NEDA, 1973), Interim Report No. 3. Jeff Romm, *Urbanization in Thailand*, (New York: Ford Foundation, 1975), p. 7.

18. Cited in International Bank for Reconstruction and Development, *A Framework for Regional Planning in Indonesia*, Vol. II (Washington: World Bank. 1974), pp. 33-34. E. P. Javier, "Economic, Demographic and Political Determinants of the Regional Allocation of Government Infrastructure Expenditure in the Philippines," *Journal of Philippine Development*, Vol. III, No. 2 (1976), pp. 281-312.

19. T. G. McGee, *The Urbanization Process in the Third World*, (London: G. Bell and Sons, 1971), p. 13. Brian J. Berry, "Policy Implications of an Urban Location Model for the Kanpur Region," in P. B. Desaei, et al. (eds.) *Regional Perspective of Industrial and Urban Growth: The Case of Kanpur*, (Bombay: McMillan, 1969), pp. 203-219; quotation at p. 207.

20. E. A. J. Johnson, *The Organization of Space in Developing Countries*, (Cambridge: Harvard University Press, 1970), pp. 28, 99, 171.

21. Colin Rosser, "Training in Regional Development in Indonesia," quoted in M. Rivkin, *Land Use Programming and the Intermediate-Sized City*, (Washington: U.S. Agency for International Development, 1974), mimeographed, p. 12.

22. See, for instance, Bertrand Renaud, "Economic Fluctuations and Speed of Urbanization: A Case Study of Korea, 1955-1975," World Bank Staff Working Paper No. 270, Washington: IBRD, 1977. See D. C. Rao, "Economic Growth and Equity in the Republic of Korea," *World Development*, Vol. 6, No. 3 (March 1978), pp. 383-396; and Gustav Ranis, "Equity with Growth in Taiwan: How 'Special' is the 'Special Case,' " *World Development*, Vol. 6, No. 3 (March 1978), pp. 397-410. Harry W. Richardson, *City Size and National Spatial Strategies in Developing Countries*, World Bank Staff Working Paper No. 252 (Washington: IBRD, 1977), p. 21.

23. Richardson, *City Size and National Spatial Strategies*, pp. 21-22.

24. Both historical and contemporary evidence for this conclusion is reviewed by Irma Adelman, Cynthia T. Morris and Sherman Robinson, "Policies for Equitable Growth," *World Development*, Vol. IV, No. 7 (July 1976), pp. 561-582.

25. See, for instance, R. Symanski and R. J. Bromley, "Market Development and the Ecological Complex," *Professional Geographer*, Vol. 26, No. 4 (November 1974) pp. 382-388; the argument is also made in further detail in Dennis A. Rondinelli and Kenneth Ruddle, "Integrating Spatial Development," *Ekistics*, Vol. 43, No. 257 (April 1977), pp. 185-194; and Kenneth Ruddle and Dennis A. Rondinelli, "Urban Functions in Rural Development: Integrating Spatial Systems for Equitable Growth," *Journal of Economic Development*, Vol. 4, No. 1 (July 1979), pp. 91-116.

A detailed discussion of spatial linkages can be found in Rondinelli and Ruddle, *Urbanization and Rural Development*, *op. cit.*, Chapter 7; a methodology for regional analysis to formulate investment strategies is discussed in Dennis A. Rondinelli, "Applied Policy Analysis for Integrated Development Planning in the Philippines," *Third World Planning Review*, Vol. 1, No. 2 (Autumn 1979), pp. 150-178; and the political and administrative implications of carrying out such a strategy are reviewed in Dennis A. Rondinelli, "Administration of Integrated Rural Development: The Politics of Agrarian Reform in Developing Countries," *World Politics*, Vol. XXXI, No. 3 (April 1979), pp. 389-416.

26. See Davis, *World Urbanization 1950-1970*, Vol. I, Table F, Part 3.