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THE EVOLUTION OF THE URBAN PATTERN OF SOUTHEAST ASIA DURING

THE NINETEENTH AND TWENTIETH CENTURIES

by

Yong-Lai Chong

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School of Oriental and African Studies,
University of London,
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ABSTRACT

This is the first attempt of its kind made to analyse the evolution of the urban pattern of Southeast Asia as a whole during the 19th and 20th centuries. The main objective of this study is to collect sufficient information and data to fill in the "gaps" in our knowledge of the development of Southeast Asian cities. It emphasizes the influence of political and socio-economic changes on the growth of urban centres both in space and time. The study brings out the essential character of the Southeast Asian cities, i.e. it shows their growth, their decay and the different stages reached in the process of urban evolution.

Chapter I outlines the general characteristics of the region which have direct or indirect influence upon urban development in the past as well as present. Chapter II addresses itself to the historical development of urban settlements in the early centuries. Emphasis is placed on the genesis of sacred-capital cities on mainland Southeast Asia as well as port-cities in the maritime part of the region. The development of early colonial cities in the Philippines and Indonesia is also examined.

Urban development in the last 160 years was largely the result of a long interplay of colonial economic forces. Chapter III is devoted to an analysis of the drastic political and socio-economic changes which took place in the 19th century and how they generated the new urban network in the region. The 20th century witnessed the rapid spread of towns and cities over the surface of Southeast Asia. Chapter IV examines the changing pattern and the factors which led to this unprecedented urban growth.

Chapter V focusses upon the development of metropolises in the region. With the aid of maps, their growth patterns are examined and characteristics described. Within the framework of the rank-size rule, the city-size distribution of each country is examined and its hierarchal characteristics analysed.

The future urban pattern is being formed by today's process of growth. The concluding chapter looks at the problems facing Southeast Asian cities. Some suggestions are raised for a national urban policy and for a more positive approach to urban and regional planning in the region.

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INTRODUCTION1. Aims and Scope of Study

One of the most striking features to emerge in Southeast Asia during the last two centuries has been the impressive growth of towns and cities, both in terms of number and of population. In no previous period in the history of Southeast Asia has there been such a rapid movement of population into urban localities. It is true that this tremendous increase of population in urban centres took place when the entire region was undergoing a period of drastic socio-economic changes, large-scale population movements and rapid population increase. Nevertheless, the fact remains that the rate of urban population increase for most countries in the region in recent decades has been many times greater than the rate of total population increase. This high rate of increase of urban population indicates that urbanization has been proceeding not only through the formation of new cities, but also through the expansion and suburbanization of existing cities. A new urban pattern and spatial organization has emerged in the region.

These facts and this progress is not of course peculiar to Southeast Asia: similar comments can be made about many parts of the world ¹ over the same period. But, in detail, the case of Southeast Asia is particularly interesting and, perhaps, significant. Yet to date there has been no substantial attempt to describe and analyse the evolution of the urban pattern in the region from about 1800 A.D. Several important and relevant works ² have, of course, been published.

1 See, for example, Hauser, P.M. (1957) ed., Urbanization in Asia and the Far East, Unesco, Calcutta; Hauser, P.M. (1961) ed., Urbanization in Latin America, Unesco, Paris; United Nations (1957) Urbanization in Africa South of the Sahara, Report on the World Social Situation, New York; Turner, R. (1962) ed., India's Urban Future, Berkeley.

2 Several oft-quoted works which bear specific reference to the cities in Southeast Asia are: Fryer, D.W. (1953) The 'Million City' in Southeast Asia, Geographical Review, Vol.43, pp.474-94; Ginsburg, N.S. (1955) The Great City in Southeast Asia, American Journal of Sociology, Vol. 60, pp.455-62; Dwyer, D.J. (1968) The City in the Developing World and the Example of Southeast Asia: An Inaugural Lecture, Hongkong; Reed, R.R. (1972) The Primate City in Southeast Asia, Asian Studies, Vol.10, pp. 283-320.

McGee's work³ represents probably the most comprehensive study of the region in the field of urban geography. However, his theme is mainly concerned with the socio-economic aspects of the large cities. The reason for the general lack of research for Southeast Asian cities, may, in part, be due to the traditional negligence of urban research in non-Western countries, especially in a region like Southeast Asia with limited resources, organizations and manpower for urban research. Perhaps more important, however, the negligence has stemmed from a general lack of essential comparative urban data for research covering a substantial period of time.

Certainly the problem of source material for a descriptive analysis of Southeast Asia's changing urban patterns over time is serious. Yet an attempt to make such a study has seemed worthwhile, making the best use of such sources as are available. Broadly speaking, three sources have provided the bulk of information on towns and cities in the region. The first source is the urban population data collected in the population censuses of each individual country. The second source of information consists of published works, notably statistical yearbooks, reports of various government departments, municipal council reports, and articles from various journals. Thirdly there are the maps, both old and new, as well as city and town plans.

This thesis is devoted to the study of the evolution of the urban pattern in Southeast Asia from about 1800 A.D. to 1960 A.D. The major features of the modern urban pattern in Southeast Asia are shown to be mainly rooted in colonial legacies⁴; the present pattern is the result of a long and complex interplay of colonial economic and political forces. The origins of large-scale urban development in the region must, therefore, be sought not only in the action of internal factors of the region but also in that of external factors. Indeed, Southeast Asian cities

3 McGee, T.G. (1967) The Southeast Asia City: A Social Geography of the Primate Cities of Southeast Asia, London.

4 Murphey, R. (1969) Traditionalism and Colonialism: Changing Urban Roles in Asia, The Journal of Asian Studies, Vol. 29, pp. 67-84.

have characteristics that have derived from the mixture of indigenous, European-colonial as well as Asian migrant group cultures and activities⁵.

Moreover, despite the continuity of urban development during the colonial period, economic and social policies since independence have also brought about a variety of changes in the pattern of urban development. With the aid of maps, attempts are made to relate the changing pattern of distribution of towns and cities to other social, economic and political phenomena in the post-war years in order to show how large-scale citywards migration came into being, and how it has affected post-war urban development. The tempo of change has increased in recent years and will, undoubtedly, have a marked effect on the future growth of cities in Southeast Asia.

This study also deals with the forms of urban settlements, their growth patterns and their spread over the surface of Southeast Asia. It includes an investigation into the origins and evolution of the urban pattern of the largest cities - the metropolises of Southeast Asia - viewed within urban theoretical frameworks.

2. Definition of 'Urban Areas' in Southeast Asia.

Despite the efforts of many social scientists, there is still little agreement about the definition of 'urban'⁶. The distinction between rural and urban settlements appears at first sight to be simple but is in fact an immensely complex matter. This is not the place to summarise the literature on this point. The selection of any cut-off point in the definition of urban centres is bound to be somewhat arbitrary. And this is especially true of the Southeast Asian environment. There is here, as elsewhere, a continuous gradation from rural to urban rather than a simple rural-urban dichotomy. Another kind of statistical limitation

5 See Fisher, C.A. (1964) Southeast Asia: A Social, Economic and Political Geography, London, pp. 126-94; McGee, T.G. (1967) *op. cit.*; Fryer, D.W. (1970) Emerging Southeast Asia: A Study in Growth and Stagnation, London, pp. 79-98.

6 As raised by Wheatley that 'this particular problem of definition is inherent in all studies of urban life, and no formula so far proposed is entirely satisfactory'. See Wheatley, P. (1963) What the Greatness of a City is said to be, Pacific Viewpoint, Vol. 4, p. 166.

which inhibits comparative analysis is that, in terms of the kinds of information published, not all urban centres have been treated similarly in succeeding censuses. Another unresolvable problem concerns the reliability of different enumerations.

Generally, we may understand that urban settlements differ from rural communities in their distribution, number of inhabitants, demographic density, proportion of non-agricultural inhabitants, morphology and modes of living. In other words, a variety of criteria are used together. In his oft-quoted paper, Wirth⁷ defines an urban centre as a 'relatively large, dense and permanent settlement of socially heterogeneous individuals'. Sjoberg⁸, on the other hand, has stated that an 'urban community is characterized by larger size, greater density and heterogeneity, and the presence of a significant number of full-time specialists including a literate group engaged in a relatively wide range of non-agricultural activities'. R.E. Dickinson⁹ has noted that 'an urban area is a compact settlement engaged in non-agricultural occupations'.

Some countries do indeed use a combination of criteria. Japan¹⁰, for example, defines an urban place as an area delineated within the municipal boundary which consists of contiguous districts with high population density and with a population of 5,000 inhabitants or more.

7 Wirth, L. (1938) Urbanism as a Way of Life, The American Journal of Sociology, Vol. 44, p.8.

8 Sjoberg, G. (1960) The Pre-Industrial City: Past and Present, Glencoe, Illinois, p.11.

9 Dickinson, R.E. (1947) City Region and Regionalism, London, p. 25.

10 Bureau of Statistics, Japan (1961) 1960 Population Census of Japan, Total Population, Tokyo, Vol. 1, p. 21.

India ¹¹ also designates urban area on combined criteria. The census of India (1951) states that, if a place has a municipality with a population of 5,000 or more, a demographic density of not less than 1,000 persons per square mile and over 75 per cent of its male population engaged in non-agricultural pursuits, then that place should be called a town. But could such a combination of criteria be applied to Southeast Asian countries? To determine this, some of the individual criteria and their related problems need examination.

The municipality as a form of local self-government is still the most important criterion for the recognition of urban character in any settlement. But the use of administrative or legal status as the criterion for defining urban areas in Southeast Asia confronts certain problems. Among them is the fact that statistics of urban and rural population become particularly confusing when a country changes its definitions of rural and urban ¹². Not only are ordinances or decrees for municipality and city status adopted by most countries different, but differences also occur among municipalities of cities within the same country.

In countries like Burma and Malaysia, which followed the British legal traditions, the term 'municipality' has been restricted to the gazetted administrative areas only, but in the Philippines 'municipality' is used to designate both a town and its surrounding rural areas. Consequently, all parts of the Philippines lie in one municipality or another. Again, the legal term 'city' used in the Philippines does not refer to a city in the Western sense. Some of her 'charter cities' are not cities at all. Except for a few large cities, most of her charter cities include substantial rural areas and rural populations ¹³. Thus, the charter city of Davao, comprising an area of 854 square miles with a population of

11 Bureau of Census, New Delhi, India, Census of India, 1951, Vol. 1, Part IIA.

12 For an extended discussion of this topic, see United Nations (1950) Population Studies No. 8, Data on Urban and Rural Population in Recent Censuses, New York, pp. 1-10.

13 Owsley, R.H. (1956) Philippine City Charters, Manila.

82,720 in 1960, can be described as one of the largest cities in terms of land area. But only a small portion of its land area is considered as being urbanized. Again, the 'urban' data for Pasigian includes the population of the whole island. The extent to which the statistics exaggerate the truly urban population is suggested by the fact that most male workers in areas classified as urban in the Philippines are to be found employed in agriculture and related activities. For the purpose of understanding how some Philippine 'charter cities' were created, indeed, one may quote some of the words from the enactments for 'charter cities'. It is interesting to note that a city is, in fact, what the state is prepared to call it :

' the legislators who proposed the enactment of the charters of the municipalities of Cabanatuan, Dagupan, Davao, etc. believed that the benefits derived from city status would bring forth further development and progress in the above-mentioned developed and progressive municipalities. Enactment of the charters of Palayan and Trece Martires stressed the fact that such new areas with their vast tracts of land could ideally accommodate any increase in population as well as new enterprises in the provinces. Enactment of the charter of Dapitan anticipated that the charter would make possible the emergence and progress of the city as a tourist spot of national significance. Enactment of the charter of Canlaon claimed that they were merely verbalizing the long-felt need for a summer capital in the Visayas'¹⁴

If we accept the population figures of these 'charter cities' as urban without any critical examination, then the urban population of the country is of course grossly exaggerated.

The tendency to define an urban area by administrative status may also produce a situation unrelated to reality. Since municipal boundaries are created for administrative purposes, they may or may not accord with the actual urbanized areas¹⁵. In general, most municipal boundaries are larger than the built-up or urbanized areas; and this is

14 For fuller details, see Bernabe, D.G. (1969) Philippine City Charter, A Formal Comparison, Manila, pp. 5-6.

15 See Gibbs, J.P. and K. Davis (1958) Conventional versus Metropolitan Data in the International Study of Urbanization, American Sociological Review, Vol. 23, p. 505; and also Institute of International Studies (1959) The World's Metropolitan Areas, Berkeley, pp. 6-9.

especially true among the smaller and medium-sized cities. But some large cities where their municipal boundaries have recently been extended also fall into this category, the population of rural suburbs falling within the territorial limits of a city being considered a part of the city's population. Greater Djakarta in Indonesia is a typical example. According to Milone¹⁶, in 1961 only 34.5 per cent of its 222.8 square miles had been built up and about 87.2 per cent of her 2.9 million inhabitants were urban dwellers.

On the other hand, in many cases urban sprawl outstrips the necessary administrative adjustments, resulting in the so-called 'under-bounded' cities. Census figures for rapidly expanding cities like Singapore, Manila, Bangkok, Rangoon and Saigon-Cholon often underestimate the true urban population since suburbs beyond the city boundaries are not included. The census figure for the city of Singapore, for example, recorded only 63.1 per cent of her population as urban dwellers in 1957. But actual urban population of Singapore at that time was estimated at not less than 75.0 per cent. In Manila city only 1.1 million people lived within the municipal boundaries of city but the actual urban population of the metropolitan area was estimated at not less than two million in 1960.

The most commonly used criteria for distinguishing urban status are population density and size. In urban places, where land is scarce and more expensive, people are gathered together in a rather compact area. The town is a locality in which a large number of people live and work in close proximity. High density, therefore, is one of the main characteristics of the city. Demographic density is thus often used as a yardstick for differentiating an urban community from a rural one¹⁷.

16 For an extended discussion of Indonesian urban areas, see Milone, P.D. (1966) Urban Areas in Indonesia: Administrative and Census Concept, Berkeley.

17 See Willcox, W.F. (1926) A Definition of 'City' in Terms of Density, in E.W. Burgess ed. The Urban Community, Chicago, p. 119.

Rural areas, by contrast, commonly have low population densities or only small numbers of people in dense clusters. But using the criterion of density alone creates certain difficulties. In some regions, villages are so close to one another and settlements are so highly concentrated that the average demographic density over large areas is sometimes greater than found elsewhere in urban areas. Sometimes it is difficult to distinguish between a small town and a large village. There is not much difference, even in compactness. In Java, for instance, villages have a tendency, owing to the overcrowding in the rural areas, to assume a high degree of compactness. The density is sufficiently high to meet the density level chosen to designate cities, but these settlements functionally lack distinctive urban traits¹⁸.

The true urban centres are, indeed, those where people are employed largely in non-agricultural pursuits. Urban functions serve to identify an urban settlement and to measure its economic size. The pattern of employment has thus been used in numerous studies as a yardstick for measuring and differentiating urban areas by function¹⁹. Despite the increasing amount of information available on the urban geography of Southeast Asia in the form of government publication, books and articles, there is as yet insufficient detailed information to attempt a functional classification of the towns of Southeast Asia. As a result, it is not possible to utilize functional criteria to define categories of settlements in the region. Even the relatively simple distinction between basic and non-basic functions²⁰ is not readily applicable. Sometimes when detailed material on occupational figures is available in certain countries, the figure is published for the largest cities and not for the great majority of towns. It is likely to be many years before sufficient data are available to permit a comparative assessment of Southeast Asian cities on the basis of functional classification and employment pattern.

18 Milone, P.D. (1966) op. cit., p.4.

19 See, for example, Smiles, A.E. (1944) *The Urban Hierarchy in England and Wales*, *Geography*, Vol. 29, pp. 41-51; Dickinson, R.E. (1932) *The Distribution and Functions of Smaller Urban Settlements of East Anglia*, *Geography*, Vol. 17, pp. 19-31.

20 Alexander, J.W. (1954) *The Basic-Nonbasic Concepts of Urban Economic Functions*, *Economic Geography*, Vol. 30, pp. 246-61.

Urban data are not perfectly comparable even if the same definition of urban is used on the basis of specific city-size limits. Generally, a specific 'threshold' figure is chosen and all settlements with a population number greater than that figure are classified as urban. But what numerical figure should one set to call a settlement 'urban'? There is no general agreement among Southeast Asian countries, for different countries use different threshold figures to represent the various status of settlements in the census. Some countries may include places having several thousands while others may comprise settlements with only a few hundreds. Sometimes varying threshold figures are also adopted in different censal periods even within the same country. In Malaya, for example, the minimum size of population considered as urban was originally 1,000 but in the 1911 and the 1947 censuses a higher figure of 2,000 was chosen. Meanwhile, various figures were also used in Burma. In the First Stage Census of Burma in 1953, some settlements with population less than 1,000 were also considered as urban. Of the 253 urban places cited in the census, 25 localities, in fact, had a population of a few hundred inhabitants. In Thailand, no attempt has been made to tabulate the population on a rural-urban basis but the 1960 population census cited 127 municipalities with a population of 2,000 or more which have 'some characteristics generally recognized as urban'²¹.

Furthermore, census were conducted at different time intervals. In Indonesia, for instance, the time intervals for the first census in the present century and the 1961 census were 15, 10 and 31 years respectively. The time intervals for the Philippines were 15, 21, 9 and 12 years for the period between 1903 and 1960. Except for Burma and Malaya, none of the Southeast Asian countries carried out a regular population survey in the early decades of the present century. But after the war, in both Burma and Malaya, censal period have also varied greatly. This irregular time interval poses some thorny problems of a systematic comparison of levels of urbanization among Southeast Asian countries.

21 Central Statistical Office, Thailand (1962), Thailand Population Census, 1960, Whole Kingdom, Bangkok, pp. II-III.

Clearly population size alone means very little, but with the combination with other criteria it is considered as a convenient way for compiling urban population figures. Although it is not ideal, the use of population size as a criterion has the great advantage of eliminating effects of differences in the definition of urban areas applied in the census of different countries in Southeast Asia. The present study utilizes government census enumerations and official estimates of urban population because the characteristics necessary for analysis are frequently reported only for officially recognized urban areas. Of course, the population figure of 5,000 used here as the bottom limit for urban localities must, to a certain extent, be an arbitrary one because a figure considered to be applicable in one country may not be practicable in another.

In his study of the developing countries, P.M. Hauser²² has suggested a 'threshold' figure of 20,000 inhabitants as urban. But this figure on the whole is probably to be high for certain countries on Southeast Asia for it would tend to conceal the true rate of urban growth and would exclude a considerable number of smaller towns which effectively function as local trading. On the other hand, the adoption of figures of 1,000 or 2,000 as the bottom limit by some countries is also considered to be too low, for it would include a large section of 'rur-urban' settlements where a large part of their population is engaged in agricultural pursuits.

Because of the large number of socio-economic variables, international comparison of urban data is made more difficult. As in many parts of the developing world, there is as yet no agreed figure for systematic application among the Southeast Asian countries. For initial working purposes in this study, however, the urban population of each country is based on the persons residing within localities with municipal status reported in the census and with threshold figure of 5,000 or more. In the case of the Philippines only those who dwell in the centrally located barrier known as the 'pablacion' where the municipal buildings and government are located and where its inhabitants are 5,000 or more, are considered as urban. This approach is closer to the real urbanized sector of the population of the country. Although this figure of 5,000 is as arbitrary as any other figure, it is higher than that used by many Southeast Asian

22 Hauser, P.M. (1957) op. cit., p.97; and also Hauser, P.M. (1961) op. cit., p. 22.

countries. The advantage of this 'standardization' of urban definition is that the higher the population limit terms as urban, the greater the possibility that other urban socio-economic characteristics will be found in the localities. Nevertheless, it must be conceded that not all towns covered by this study are fully urbanized in the Western sense. In a predominantly agrarian region like Southeast Asia, their roles and functions as service centres should not be overlooked. Although many of these towns have a portion of their residents involved directly or indirectly in non-urban occupations, a large portion of their inhabitants are actually engaged in urban services. Indeed, Southeast Asian cities embrace a variety of categories. They are large and small market-towns, trading and administrative centres. They are as heterogeneous as the people who inhabit them.

RELEVANT CHARACTERISTICS OF SOUTHEAST ASIA

It is only since the creation of the Allied Southeast Asia Command (SEAC) during the Second World War that this collective name, Southeast Asia, has come into common use. Pre-war terms used by Europeans included 'Further India' and 'Far Eastern Tropics'. The Chinese, however, had seen a unity in the region for centuries and had called it 'Nanyang'¹, of 'Nan Yo' by the Japanese: it is a region which lies to the south of China. The region as understood in this thesis is taken to include the present-day countries of Burma, Thailand, Laos, Cambodia, Vietnam, Malaysia (with Sabah and Sarawak), Brunei, Singapore, Indonesia, the Philippines, and the Portuguese colony of Timor.

The region lies between the Asian land-mass and Australia, and between the Indian and Pacific oceans. Though it was a land far more remote than either India or China from the ancient centres of human dispersal in the continental interior, it is positioned at a great maritime crossroads. A convergence of main sea-routes has invited both trade and cultural invasions² since time immemorial. Though each of the Southeast Asian countries possesses its own individual character, yet taken together they have much in common: in physical environments and socio-economic backgrounds, in colonial heritage as well as in ways of life. It expresses unity in diversity³. During the 1500 years which preceded the advent of Europeans, many changes took place in the political geography of Southeast Asia, but the physical factors have remained relatively stable.

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- 1 'Nanyang', literally 'the southern seas', is the term used by the Chinese to describe all settlements in Southeast Asia.
 - 2 Fisher, C.A. (1964), *op. cit.*, p. 5; Harrison, B. (1964) Southeast Asia: A Short History, London pp. 1-8.
 - 3 See Broek, J.O.M. (1944) Diversity and Unity in Southeast Asia, The Geographical Review, Vol. 34 pp.175-95; Buchanan, K. (1967) The Southeast Asian World, London, pp. 25-39.

The Physical Milieu

Diversity and complexity are the keynotes of Southeast Asia's physical geography⁴. Within its boundaries sea exceeds land area in the ratio of roughly four to one. The land area falls into two main realms, namely the mainland territories and the insular parts. The former is the peninsular mainland which covers some 0.74 million square miles of the 1.73 million square miles of land area; the remaining 0.99 million square miles of the insular realm are divided among the several thousand islands which comprise the two archipelagos of Indonesia and the Philippines with which the Malay Peninsula should also be included. It is a region more accessible by sea than by overland transport. The broken terrain and the dense forest further impede movement by land.

The region's physique is dominated by the jungle-covered mountains, valleys and coastal plains. The main structural trend lines of the mainland region run roughly north to south. Here the great axes of Cretaceous-Tertiary foldings, the approximately latitudinal Tethys and the predominantly longitudinal circum-Pacific series come into conflict and this, in turn, has given distinctive alignment to major relief features of the region as a whole. Contrast between the older Indo-Malayan core and the peripheral structures is reflected in the generally more subdued and characteristically erosional relief of the former and the bolder, more markedly tectonic lineaments associated with the latter.

Throughout most of the mainland part of Southeast Asia the prevailing pattern of relief is one of alternate ridge and furrow. This is particularly marked in the area north of 13°30' where the great rivers of Irrawaddy, Salween, Menam Chao Phraya, Mekong and Songkoi occupy roughly parallel structural depressions which they have widened and deepened; in their lower courses these rivers are flooded with great thicknesses of alluvium to produce the richest and most extensive lowlands of Southeast Asia. Most of the population of the mainland lives

4 For a fuller account of the physical environments of Southeast Asia see, among others, Fisher, C.A. (1964) *op. cit.*, pp. 11-62; Dobby, E.H.G. (1966) Southeast Asia, London, pp. 17-30; Hall, D.G.E. Atlas of Southeast Asia, London, pp. 63-64.

near the rivers. South of $13^{\circ}30'$, however, the peninsula is too narrow to engender large rivers and even in Malaya the extent of alluvial land is relatively small. Likewise, along both east and west margins of the mainland, the alignment of the main ranges parallel to the shore has been accompanied by a restricted development of coastal plains in Annam in the east and in Arakan in the west. These mountain ranges present serious barriers to both human movement and settlement.

The maritime realm includes the main island masses of Sumatra, Java, Kalimantan in the southwest and south, Irian in the southeast and the Philippine archipelago in the east. These archipelagic groups stand like breakwaters between the Indian and the Pacific oceans and form the southeastern margin of Asia. Geologically, all but the smallest islands take their alignment from one or more of the major arcs which traverse the insular part⁵. In most cases, relief is dominated by the rugged mountain backbones, out of which flow short rivers which cross the often narrow coastal plains. In the volcanic zone, the mountains are capped by cones.

Besides topographical constraints, territorial fragmentation is also of course a key feature of the insular realm. Here lands are separated by a series of inland seas - the Java, the Benda and the Celebes as well as by the South China Sea. The enclosed waters of the region have always been a unifying factor rather than an obstacle to trade and communication⁶. The great coral reefs off the west coast of Sumatra and the southern edge of the Sunda Shelf, on the other hand, have played an important part in deflecting shipping and trading. Along these coasts there are only narrow and discontinuous coastal plains and few settlements.

Physical relief, land-sea fragmentation and geological structure are fundamental to an understanding of the economic potentialities as well as the human activities of this region. In both structure and its related peculiarities of topography and mineral resources, Southeast Asia differs fundamentally from all other regions in similar latitudes.

5 See Fisher, C.A. (1964) op. cit., 11-14; Dobby, E.G.H. (1966) op. cit., pp. 20-21.

6 Fisher, C.A. (1971) Southeast Asia, in W.G. East, O.H.K. Spate and C.A. Fisher, eds., The Changing Map of Asia, London, p. 232.

Southeast Asia lies in the tropics and its climate is dominated by the monsoons. Air which circulates over the region is drawn from many different quarters, including the continents of Asia and Australia and the Indian and Pacific oceans. It is also affected by the nature of air flows in low latitudes⁷. During the winter season of the northern hemisphere, part of Southeast Asia comes under the influence of the strong north air flow, which develops on the east flank of the intense though shallow anticyclone formed over Siberia and Mongolia as a result of the excessive radiational cooling of the Asian land mass. Thus northern Vietnam is the only part of Southeast Asia to have a winter temperature appreciably below average for its latitude.

With the onset of spring, heating of the Asian continent dispels the Siberian anticyclone and the related monsoonal flow. Thus the inter-monsoon period is one of weak circulation over Southeast Asia. Meanwhile, the continuing northwards advance of pressure systems brings Indonesia under the influence of southern hemisphere wind systems during May and the months that follow. It appears that an appreciable proportion of the vast mass of air carried by the southwest monsoon must originate in the northern hemisphere. The pattern of wind-systems and the pattern of currents which has had such strong influences upon navigation, long fostered a system of trade during the sailing era.

The great influence that relief exerts upon climate must also not be overlooked. Monsoonal air reaching Southeast Asia after its long trajectory over warm seas is extremely moist in its lower layers and convectionally unstable. Consequently forces ascent of even slight elevations produces heavy rainfall. During the hot season, typhoons periodically affect the Philippines and the Vietnamese coast. Following the reappearance of the Asian anticyclone, the northeast monsoon becomes established over the northeastern part of the China Sea late in September or early October. Its arrival initiates a period of extremely heavy rainfall in the central portion of the Vietnamese coast and on the east coast of the Malay Peninsular.

7 For a detailed analysis of wind systems in Southeast Asia, see Dale, W.L. (1956) Wind and Drift Currents in the South China Sea, The Malayan Journal of Tropical Geography, Vol. 8, pp. 1-31.

Despite the intricacy of air movement over the region and the significance of local variations induced by their impact on an area of intricate outline and rugged relief, broader features of the climatic pattern are relatively simple⁸. Two major and two minor sub-divisions may be distinguished: first, the equatorial monsoon type climate, having uniform monthly temperatures of about 80°F and rain at all seasons; this is found throughout those lowlands which lie approximately 5°N and 5°S of the equator. Beyond these limits, the remaining lowlands of Southeast Asia belong to the tropical monsoon type, which has greater seasonal variety in temperature and rainfall. There are also relatively small rain-shadow areas where the total annual rainfall is below 50 inches. All the dry zones of the mainland and several lesser areas in eastern Indonesia belong to this category. Lastly, there are the cool mountainous areas which often become the highland resorts. On the whole, Southeast Asia's land and climate provides some of the world's best conditions for growing rubber, size and other cash crops.

Early Waves of Migration

Southeast Asia was, and still is, a region of transition and migration. For thousands of years until recent times, successive waves of people moved across its face⁹. The general movement of population was southwards from the Asian land mass. Some perhaps were drawn by the warmth and luxuriance of the tropics; others were driven by the hostility of nature in their original homelands or by their neighbours. Some stayed in parts of the region while others moved on or were forced to move on by other newcomers. To those early men, penetration into mainland Southeast Asia must have been difficult and the processes must have been slow. To get into mainland Southeast Asia from the north meant that they must travel overland across the mountains or along the narrow river valleys.

8 Dobby, E.H.G. op. cit., pp. 31-46.

9 For a good summary of the early migration in the region, see Coedes, G. (1962) The Making of Southeast Asia, London, pp. 22-26; Tarling, N. (1968) A Concise History of Southeast Asia, New York, pp. 9-18.

As southward drifts continued, some made their way along the island chain or even to Australia and the Pacific Islands. However, the great migrations of Neolithic peoples are believed to have come to an end by about the beginning of the Christian era.

The new waves of large-scale migration in historical times began with the pressures set up by the extension of Chinese power from China proper to the southwest and south¹⁰. This caused the people who were settled there to move in order to avoid conflicts with the Chinese. These new waves or southward drifts occurred at several times and by different routes. One wave moved into Burma, a second wave followed the valley to the Menam, while a third wave moved into the Mekong region. The dominant peoples of mainland Southeast Asia today were mostly later comers¹¹. The Burmese, for instance, did not enter Burma until the 3th century; the Thais did not reach Thailand until the 13th century; while the Vietnamese did not occupy the Mekong region until fairly recently. The previous inhabitants, the Mons in lower Burma and the Menam Valley, the Pyus in the Irrawaddy, the Khmers in the Mekong and the Chams in southern Vietnam, were either driven out or were substantially absorbed or overwhelmed by the later comers. These waves of migration into or through Southeast Asia have left their mark in the enormous variety of racial, linguistic and religious differences.

Trade and Cultural Influences

Due to its proximity to the two great Asian civilizations, Southeast Asia has long been a zone of convergence for Indian and Chinese cultural influence¹². Geography laid Southeast Asia open to Indian and

10 Fisher, C.A. (1971) op. cit., p. 238.

11 Pearn, B.R. (1963) An Introduction to the History of Southeast Asia, New York, pp. 5-6.

12 For summary accounts of the historical impact of the Indian and Chinese cultural influences in Southeast Asia, see, among others, Hall, D.G.E. (1968) A History of Southeast Asia, London, pp. 12-24; Bekker, K. (1951) Historical Patterns of Cultural Contact in Southeast Asia, The Far Eastern Quarterly, Vol. II pp. 3-15; Coedes, G. (1962) op. cit., pp. 218-30; Harrison, B. (1964) op. cit., pp. 9-20.

Chinese contacts. The region's seaward contacts with the outside world had, indeed, been amplified by expansions of trade that occurred in the early centuries of the Christian era. Trade links with India and China were well established.

The Indian seafarers touched not only the west coast of Burma and Malaya, but also certainly reached the Gulf of Siam as well as Sumatra and Java. In those early period there was no large immigration of Indian settlers; rather there was the influence of traders and missionaries¹³. The result of such contacts was Indian culture, religious and political ideas spreading throughout most parts of Southeast Asia. Indianized states emerged modelled on Indian political and religious systems. The influence of China in Southeast Asia was different, for its own political structure differed essentially from that of India. Nevertheless, the 'Indianized' region was very much larger than the 'Sinicized' area. Whereas the former covered the major part of Southeast Asia, the latter was restricted to Tonkin and Annam which bordered on China. For more than a thousand years, the majority of the Southeast Asian peoples owed much of their civilization to the Indians.

The presence of tropical spices and minerals in Southeast Asia lured further waves of foreign traders to venture into the region. Following the Indians and Chinese were the Arabs, later to be joined by the Europeans. Each new wave of intruders brought with it its own religious and cultural influences. In the late 13th century, a new religion, Islam, introduced by the Indian and Arab merchants, gained a foothold in Southeast Asia on the northern coast of Sumatra and at Malacca on the Malay Peninsula. Islam eventually spread throughout the Malay Peninsula, the Indonesian archipelago and the southern part of the Philippines¹⁴.

13 For further details see Wolters, O.W. (1967) Early Indonesian Commerce, Ithaca, pp. 63-70; Bekker, K. (1951) *Ibid.*, pp. 4-5.

14 For a summary on the spread and influence of Islam in the insular part of Southeast Asia see Legge, J.D. (1964) Indonesia, New Jersey; Missen, G.J. (1972) Viewpoint in Indonesia, Melbourne, pp. 120-29; Harrison, B. (1964) *op. cit.*, pp. 50-60; Schrieke, B. (1955) Indonesian Sociological Studies, The Hague, pp. 7-36.

After the 16th century the coming of the Europeans brought another wave of cultural and political invasions. Christianity and spices were the two main things which lured the early Portuguese and Spaniards into Southeast Asia. The Spaniards were more successful in converting the indigenous people to Christianity and their own political systems. As waves of culture and new faiths penetrated into the region, Southeast Asia became a meeting ground for the world's major religions¹⁵ and cultures as well as for peoples of many lands.

Since Southeast Asia is a land where different races of people have long converged, a form of indigenous plural society has existed for a long time. Various groups of people moved in over different lengths of time with the result that their rate of absorption into the Southeast Asian setting varied. In some places the absorption has been more or less complete, in others it has not been so successful. As a result, several racial groups lived side by side in a society without integration¹⁶.

The situation was even more complicated by the new influx of peoples from the neighbouring countries. From the second half of the 19th century to the first few decades of the present century, the region has undergone what may be the greatest inflow of population from abroad in its modern history - the large-scale immigration of the Chinese and Indians. This immigration has significantly affected the indigenous society. It was primarily through the establishment of plantation and mining operations, both of which require a large labour force with the expansion of a colonial economy, that the great influx of Chinese and Indian migrants began. Modern pluralism was thus created.

15 See Warshaw, S. (1975) Southeast Asia Emerges, San Francisco, pp. 2-10.

16 For a fine description on plural society, see for example, Furnivall, J.S. (1956) Colonial Policy and Practice, New York, pp. 503-06; Hunter, G. (1966) Southeast Asia: Race, Culture and Nation, London, pp. 36-57; Hodder, B.W. (1959) Man in Malaya, London, pp. 84-90.

For each colony, a society was composed of two or more ethnic groups living side by side but without a common culture, religious faith, language and ways of life. A further cultural and economic pluralism is reflected in occupation and economic pursuits, and each performs specialized functions in society¹⁷. This is particularly the case in countries where the proportion of immigrants is relatively high. Indeed, for each country in the region, there are three major components. They are the indigenous people, the Chinese and/or Indians and other minorities, including the Europeans. For some countries, the plural society also include the indigenous minority groups. It created certain conflicts and at times it exploded into revolts.

Economic Structure

The structure of the Southeast Asian economy is basically agrarian¹⁸, in the sense that agriculture has remained its foremost sector. Agriculture is far more important than any other aspect of primary production despite important contributions from mining, forestry and fishing. For most countries, agriculture provides over half of the total employment opportunities, indirectly supports about two-thirds of the population of the region, and accounts for about three quarters of total exports by value. It is the largest single contributor of national income for all countries with the exception of Singapore and Brunei.

For most countries on mainland Southeast Asia the major economic activity is concentrated on the production and distribution of rice. Rice is the main staple food as well as export crop. Wet rice is grown on more than two-thirds of the cultivated land and rice plays such an important role in their national economy that it has made Burma, Thailand and Indo-China a region of virtual monoculture. The degree of self-sufficiency of rural communities among these countries is high. Individual families produce for themselves a large part of the food they consume, but most of them are dependent on some cash incomes for the purchase of a number of articles of daily use and especially for a growing list of small luxuries.

17 Furnivall, J.S. (1956) op. cit., pp. 308-312.

18 See Myint, H. (1972) Southeast Asia's Economy, Harmondsworth, pp. 23-41.

In Indonesia, the Malay Peninsula and the Philippines, on the other hand, the economy depends in large part on the export of primary products including plantation crops and minerals. Agricultural production is on large plantation estates which grow commercial crops mainly for export¹⁹. The principal items of production are rubber, palm oil, sugar, tobacco and coconut. Their economic structure has been oriented towards the world trade system, and is heavily dependent upon world commodity markets. Their economy is, thus, very vulnerable to the fluctuations of prices of raw materials.

Indeed, Southeast Asia presents a typical former colonial economy in that exports are dominated by a few products, primarily agricultural and mineral raw materials. Instead of producing many different crops as well as attempting to be self-sufficient in food, most countries were guided to produce those commodities for which favourable environmental conditions exist and for which there was a large world market. Concentration on such export crops has necessitated the importation of a large percentage of manufactured goods from abroad, and thus created a large service sector to serve the economy. This includes trade, government, transportation and other services. In the past, the region was economically dependent on trade with the colonial powers. Since independence, most countries have continued to retain close economic ties with the metropolitan countries.

The manufacturing sector in the Southeast Asian economy has been characterized by a large number of small establishments. Industry is in the infant stage and mainly concerned with the processing and assembly operations²⁰. The processing operation is concentrated on the primary products such as rice-milling, saw-milling, rubber and palm-oil processing as well as tin-smelting. Production is concentrated on foods, beverages, textiles, rubber products, and the assembly of automobiles.

19 See Courtenay, p.p. (1965) Plantation Agriculture, London; Symons, L. (1968) Agricultural Geography, London, pp. 138-147.

20 See United Nations (1962) Department of Economic and Social Affairs, Industrial Estates in Asia and the Far East, New York, pp. 230-248; United Nations (1966) Industrial Development News No. 1, Industrial Developments in Asia and the Far East, New York, pp. 63-85.

It is primarily in non-durable goods directed towards the domestic market. The effect of industry so far has been felt mainly in the few large cities where most of the industrial establishments of the respective countries are concentrated. The planning of industrial estates with all main services to attract industry are recent engagements by individual governments.

The colonial heritage of the region thus produces a dual form of economic structure ²¹ among Southeast Asian countries: the peasant economy of the indigenous population and the export economy of the western enterprises. On the one hand, there are widespread agricultural practices characterized by low levels of productivity, subsistence in character and conservative in techniques. The subsistence sector is organized to cater for the needs of the local rural communities. On the other hand, there is a 'modern' highly organized sector with capital in conjunction with skilled manpower and management. The Europeans and, to a lesser extent, the Asian migrant groups almost monopolise the large-scale plantation enterprise and mining activities. The produce is destined for foreign markets. The bulk of the indigenous peoples participated only marginally in the activity of this export sector. Indeed, the Southeast Asian economy exhibits a broad dualism: the development of a commercial and export-oriented economy superimposed on an agrarian-subsistence economy.

Economic dualism also reflects spatially the fact that the unequal development from one region to another was partly a colonial heritage. The past colonial development tended to create an extremely patchy development since regions developed were those possessing mineral resources and those suited to the production of cash crops. Essentially, economic growth has been experienced in the more accessible parts of the lowlands, the coastal regions and the deltaic zones. The result has been increased regional differentiation between the developed and less developed regions. This unequal development is clearly reflected in the present-day population distribution and the location of human settlements.

21 For accounts of 'dual economy' see, for example, Furnivall, J.S. (1944) Netherlands India: A Study of Plural Economy, Cambridge, pp. 446-69; Geertz, C. (1963) Agricultural Involution: The Processes of Ecological Change, Berkeley, pp. 48-48; Higgins, B. (1956) 'The 'Dualistic Theory' of Underdeveloped Areas, Economic Development & Cultural Change, Vol. 4 pp. 99-115.

Pattern of Population Increase and Distribution

Very little is known about the early population trends of Southeast Asia. Vital statistics of fertility and mortality did not become available until fairly recently. Even today, reports of births and deaths for some countries are still incomplete. For centuries, most countries in Southeast Asia tended to have a fairly stable population. Although there were periods when population increased, sometimes population actually decreased. In general, high birth-rates were accompanied by high death-rates, especially high infant mortality.

The growth of population was often inhibited by natural as well as human factors²². The general environment was hostile to human settlement. Various fatal diseases, over which the native people had no control, claimed thousands of victims each year. Periodic crop failures or epidemics also caused numerous deaths. Communications as well as over-land transport were poor. Often when famines occurred in one part of the country or region food could not be brought to save lives from nearby areas in times of need. Again, conflicts and wars between the feudal kingdoms and principalities were frequent and provided a check on population growth. Wars and disorders often disrupted cultivation and famine often followed.

However, the pattern changed with the establishment of effective colonial government in the region. Colonial rule marked the end of internal warfare among petty kingdoms. Meanwhile, improved production of crops through irrigation and better agricultural practices contributed substantially to the food supply which in turn encouraged further population increase. The cultivation and export of cash crops enabled people in the region to import both foods and other necessities. The building of modern transport and communication networks which helped to bring food to all regions eliminated local famines which occurred intermittently in the past. Meanwhile, the spread of public health measures and medical facilities helped to control epidemics and various diseases. Some were eliminated, others lost much of their severity. The introduction of preventive medicines, particularly those aimed at diseases such as malaria, yellow fever, cholera and smallpox benefited millions of people in the region. It thus reduced death-rates substantially.

22 See Fisher, C.A. (1964) Some Comments on Population Growth in Southeast Asia, in C.D. Cowan, ed., The Economic Development of Southeast Asia, London, pp. 48-71.

Nonetheless, birth-rates were also related to traditional values and other social factors. The high fertility, for instance, was partly due to the general desire of a family for as many children as possible²³. This desire was understandable for many felt the need to offset the high death-rate by having enough children to ensure that some would survive to carry on the family line and to look after the senior members of the family. Another social factor which had influenced the high birth-rate was the young age of marriage. Furthermore, high illiteracy and no knowledge of birth control encouraged a high rate of reproduction. Mortality, on the other hand, responded directly to hygienic improvements and medical advances.

The main feature of Southeast Asia's demographic situation in recent years has been the exceptionally high rate of natural increase of population. The birth-rate hovers around 40-45 per thousand while the death-rate is down to 10-15 per thousand per year. Infant mortality in particular has been cut drastically while modern medicine has prolonged many lives. Whereas the birth rate in Southeast Asia is among the highest in developing countries, its death rate has gradually declined as a result of economic development and consequent improvement in living conditions. Thus, the region's population increase has been caused by a fall in the death-rate rather than by an increase in the birth-rate. For some countries, birth-rates have in fact fallen, even if only slightly.

The wide disparity in population density is one of the main features of the population of Southeast Asia²⁴. Looking at the regional map, one finds that vast areas of land in the region are still largely thinly populated or uninhabited while some districts are heavily populated. There are fundamental contrasts between the upland areas and the lowlands, the coastal plains and the uninhabited rain forest of swampy lands. It is estimated that more than six-sevenths of Southeast Asia's inhabitants today are concentrated in approximately one-sixth of the total land area.

23 United Nations (1958) Population Studies No. 30, The Population of Southeast Asia, (including Ceylon and Taiwan) 1950-1980, New York, p. 95; Fisher, C.A. (1964) op. cit., p. 173.

24 See Withington, W.A. (1965) The Density of Population in Southeast Asia, The Journal of Geography, Vol. 64, pp. 14-23.

The most densely populated areas are the Tonkin delta of northern Vietnam, Java and Madura of Indonesia, and the central plain of Luzon in the Philippines. Other densely inhabited districts are the deltaic zones of the Irrawaddy in Burma, the Menam of Thailand and the Mekong of Southern Vietnam. The western coastal zone of the Malay Peninsular, including the off-shore islands of Singapore and Penang, are also relatively densely settled.

Marked regional variations in population distribution also prevail in each respective country. In Indonesia, the island of Java with less than one-tenth of land area, contains about two-thirds of the total population of the country while the rest is spread among the Outer Islands which contain over nine-tenths of the land area. In Burma, 45 per cent of the population lives in the lower valleys and deltas of the Irrawaddy and the Sittang rivers which occupy 15 per cent of the total land area, while the Shan Plateaus, the Western Mountain Belt and the rugged northern hilly area which contain nearly half of the land area have less than 15 per cent of the national population. Again, about 40 percent of Thailand's population live in the Menam delta, in a space smaller than one-quarter of the country's total land area.

The traditional pattern of population distribution in Southeast Asia is, in large measure, the product of the distribution of arable land throughout the region. Within this overall pattern, some specialized production areas like plantation areas and mineral fields and the activity of foreign trade are factors which help to account for the spatial pattern of population. Indeed, the population distribution pattern is closely related to the physical environment and to the type of dominant economy prevailing in the region, since economy is the epitome of the physical and cultural conditions of its areas. Some areas have benefited far more than other areas from economic development, such as the early establishment of successful rice planting, plantation agriculture, the growth of processing industries and the establishment of a network of roads, railways, or canals.

During the last 150 years, the distribution pattern of population in Southeast Asia has been repeatedly modified, notably by the moving of peoples into the Irrawaddy, the Menam, the Mekong valleys and deltaic zones.

For most countries on mainland Southeast Asia, the shift of population traditionally was from north to the south. Large-scale population movements also occurred in Malaya. External inflows of population involved the influx of peoples from China, India and Indonesia. Within the Philippines and Indonesia, population diffusions also took place from the more densely populated islands towards the lesser settled outer islands²⁵.

Conclusion

This short introduction has referred, necessarily very briefly, to what are believed to be some of the main relevant characteristics of Southeast Asia in any study of the region's history of urbanisation. As nuclei of social, economic and political activity, towns in the region epitomise many of the forces and changes which have occurred in the region's human geography. As we shall see, too, it is impossible fully to understand the history of urbanisation in the region without reference to many physical and positional or locational factors. And this is particularly true of the indigenous and early colonial urban settlements, to the study of which we now turn.

25 See, for example, Heeren, H.J. (1967) Internal Migration in Indonesia, in Contributed Papers, International Union for the Scientific Study of Population; Simkins, P.D. and F.L. Wernstedt, (1963) Growth and Internal Migrations of the Philippine Population, 1948-1960, Journal of Tropical Geography, Vol. 17, pp. 197-202. Simkins, P.D. and F.L. Wernstedt, (1965), Migration and Settlement of Mindanao, Journal of Asian Studies, Vol. 25, pp. 83-103.

INDIGENOUS AND EARLY COLONIAL URBAN SETTLEMENTS: HISTORICAL TRENDS

The historical and cultural tradition of urban development in some form or another has existed in Southeast Asia for centuries¹. The emergence of the city here as a form of settlement dates back to the early centuries of the Christian era. Although the theme of this study is to examine the progressive changing urban pattern of the 19th and 20th centuries, nevertheless, for a better understanding of the recent process of urban growth, it requires a brief survey of the evolution, distribution and prosperity of the early urban centres prior to the 19th century. The present chapter attempts to provide the necessary background for understanding Southeast Asian cities as they emerged into the modern era. Throughout her stormy history, powerful states in the region rose and fell. Indeed, Southeast Asia prior to the advent of the European was covered by a patchwork quilt of kingdoms, maritime empires, city-states and principalities². Cities of considerable importance had also risen and fallen within the region. In this chapter attention will be paid more to the general pattern of urban growth and to the development of urban centres rather than to the history of kingdoms or empires.

Compared with modern urban settlements the early 'cities' were not particularly impressive either in size or number. Strictly speaking, they were not cities in one sense in that many of them included substantial agricultural-based settlers. They resembled, in fact, some of the Yoruba

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- 1 See for instance, Wheatley, P. (1969) City as Symbol: An Inaugural Lecture, London, P. 12; Wheatley, P. (1971) The Pivot of the Four Quarters, Edinburgh, pp. 341-47; Tinker, H. (1964) The City in the Asian Polity: An Inaugural Lecture, London, pp. 8-11, Tinker, H. (1965) Reorientations: Studies on Asia in Transition, London, pp. 31-34; Sjoberg, G. (1960) op. cit., p. 60
 - 2 For a brief survey of the political geography of Southeast Asia of the pre-European period, see Fisher, C.A. (1964) op. cit., pp. 102-25.

cities in Western Nigeria where one can find many agricultural settlers living in urban centres³. However, these early 'urban centres' of Southeast Asia, especially the capital cities of the various kingdoms, were often the centres of religion, culture, politics and administration. The majority of them did serve some special functions and were different from the ordinary agricultural settlements. They were certainly nodal points of some significance as far as the local people were concerned. Besides, there were protective fortresses and walls around them. Thus, spatially, they were separated from the villages. For the port-cities in the maritime Southeast Asia, on the other hand, the majority of them were also administrative nerve-centres with important trading functions. It is obvious that they were important in their societies. In discussing Yoruba cities A.L. Mabogunje⁴ had noted that 'urban centres are the products of their time and culture, and must be seen and appreciated within that context'. The same is true of Southeast Asian indigenous centres.

In examining the pre-19th century urban development in Southeast Asia, two main periods are distinguished, the indigenous period and the early colonial period. The indigenous period can be further subdivided into two periods: the first sub-period extends from the establishment of the 'first empire' of Southeast Asia, Funan, to the 6th century when the Funan empire declined. During this period, the centre of gravity of political, social and economic activities of Southeast Asia was on the mainland. The second sub-period extends from the rise of the maritime empire of Sri Vijaya in the 7th century to the end of the 15th century when the Malacca Empire declined. During this period, the centre of gravity

3 See Bascom, W. (1955) Urbanization among the Yoruba, American Journal of Sociology, Vol. 60, pp. 446-54; also Bascom, W. (1962) Some Aspects of Yoruba Urbanism, American Anthropologist, Vol. 64, pp. 699-709.

4 Mabogunje, A.L. (1962) The Pre-Colonial Development of Yoruba Towns, Ibadan, p. 26.

of trading and political activities shifted to the insular part of Southeast Asia. This was the 'Isthmian Age'⁵ of the early maritime trade of Southeast Asia, and there arose a series of international trading ports. The early colonial period began with the occupation of Malacca by the Portuguese in 1511 A.D. and lasted until the end of the 18th century. During this period, European influence on the region was still restricted to the insular part of Southeast Asia, and large-scale colonial economic and political expansion had not yet begun.

Background Factors

The emergence of the urban settlements and their spatial pattern in any region is partly a reflection of its physical, socio-economic and political environments and of the stages of technological innovation⁶. Certainly the conditions and environment for the development of indigenous urban centres in Southeast Asia were very different from those of the present time. As Southeast Asia is situated in the tropical rainforest zone, where there is thick and luxurious vegetation, economic development was difficult. Besides, population was sparse and technology primitive. Much of the land was covered by dense forest, which for the most part was too impenetrable for people in those days to clear or to cultivate. Natural conditions proved to be a real constraint on the establishment of human settlements. Only patches of land were cleared and inhabited. Meanwhile, overland transportation was difficult, if not impossible, and little development took place in land transport. Consequently, rivers and seas provided the major routes of convenience and the main means of cultural and commercial contact. Thus, human activities were concentrated mainly on the estuarine, coastal areas or the inland fertile plains. It was inevitable that human settlements,

5 See Wheatley, P. (1961) The Golden Khersonese: Studies in the Historical Geography of the Malay Peninsular before A.D. 1500, Kuala Lumpur, pp. 294-97.

6 Turner, R.L. (1941) The Great Cultural Traditions, Vol. 1, The Ancient Cities, New York, p. 279; also Trigger, B. (1972) Determinants of Urban Growth in Pre-Industrial Societies, in P.J. Ucko, R. Tringham and G.W. Dimbleby eds., Man, Settlement and Urbanism, London, pp.575-99.

including the major indigenous cities, only appeared in the broader river valleys on the mainland and in the more open and accessible parts of the coastal area. On mainland Southeast Asia the main rivers flow from north to south. Several successive generations of colonization often followed these waterways, giving rise to a series of new settlements. In the maritime part, trade and communication depended on the seas. The inner seas of the region, instead of becoming physical obstacles, formed a communication network: where land divides, sea unites⁷.

Another important influence of the physical environment on early urban settlement in the region was provided by the monsoonal wind system, which varies with the seasons. As Southeast Asia lies in both the tropics and sub-tropics, it is under the influence of the monsoons. In the early sailing era, this system of interchanging wind directions was very helpful to vessels sailing in the South China Sea as well as in the inner seas of the Indonesian archipelago⁸. Ships sailing eastwards from India also followed the monsoons and reached Southeast Asia. Monsoons thus became an important flux of early trade in Southeast Asia. Much of the expansion of the sea-borne trade was as much a consequence as a cause of the growth of port-cities.

The geographical location of Southeast Asia was clearly an important background influence on early urban settlement. Since time immemorable, the region was played an important role as a 'transitional zone'⁹. It was not only the pathway of colonization from the mainland of Asia to the oceanic parts, but the meeting ground of people, trade and cultures of eastern and western Asia. It lies between the two great regions of India and China. These two neighbouring regions, the two great ancient civilizations of Asia, were more advanced in their social, economic and cultural developments. Geography dictated that the early contacts of the region should be with India and China.

7 Fisher, C.A. (1971) op. cit., p. 232.

8

Wang, S.H. (1959) Ancient Trading Ports in Southeast Asia, Ti-li Chi-k'ian, Vol. 2, pp. 51-83. (Text in Chinese).

9 See Cady, J.F. (1964) Southeast Asia: Its Historical Development, New York, pp. 21-48.

Sailors and traders for centuries had explored the seas between the two regions, with commerce as the driving force. Yet it was not until the beginning of the Christian era that more frequent Indian contacts began; these includes traders, priests and missionaries. Earliest contacts probably touched the coastal fringes but later extended to the inland areas. Interplay between Indian and the indigenous people gradually led to some absorption of Indian culture, religion and agricultural techniques which speeded up the socio-economic change of the indigenous societies. Moreover, the early Southeast Asian agrarian civilizations derived their politico-religious organizational framework from India¹⁰. As time went by, Indian influence came to bear upon much of the mainland as well as upon maritime Southeast Asia.

Chinese influence was brought to Southeast Asia early, but the areas under her influence were limited only to those areas neighbouring on China. Chinese influence was especially powerful in Tonkin and Annam which was directly under Chinese rule for nearly one thousand years from 111 B.C. to A.D. 939; and from time to time they were partly within the Chinese Empire under the more powerful of the dynasties which ruled in China. Indian and Chinese contacts, taken together, brought along a pattern of culture and social organization superior to that of the indigenous population and had a powerful impact on state formation in the early kingdoms and principalities. Indian influence also laid the foundations of early city life in Southeast Asia¹¹. The rise of the politico-religious centres and port-cities represented the primary urban development in the region.

It is important not to ignore the contemporary economic development of Southeast Asia. In those early centuries Southeast Asia was a region composed almost entirely of self-sufficient villagers. Their main economic activities were farming, the collection of fruits and forest products. Fishing was another important occupation for those living near lakes or rivers. However, the unit of production was small, and with each village devoted to virtually identical pursuits, bartering and the overall level of socio-economic interaction were relatively insignificant.

10 Coedes, G. (1962) op. cit., p. 22; Bekker, K. (1951) op. cit., pp. 3-5; Majumdar, R.C. (1973) Hindu Colonies in the Far East, Calcutta.

11 Coedes, G. (1962) op. cit., pp. 57-63; Fisher, C.A. (1964) op. cit., p. 86.

Furthermore, socio-economic activities were conditioned by the difficulty of communication and transport. On land, transport was largely dependent on ox-drawn carts, elephants or portage. Each village - largely self-contained - was the basic unit of social and economic life, and was usually isolated from other villages and from the outside world.

However, some areas had better facilities and the degrees of socio-economic development varied from place to place. As time went by, with the gradual improvement in agriculture in favourable environments, some settlements grew substantially larger. At the beginning of the Christian era, several lowland areas allowed people to develop the socio-economic strength and cultural force for the building of cities¹². Nevertheless, the initiation of any form of urban life must depend on several pre-determined conditions. The fundamental requirement was a surplus of food and the capacity to support a segment of its population in activities other than those concerned with the production of the basic subsistence needs of food, clothing and shelter. Technical innovations leading to a more efficient agricultural economy made possible the production of surplus agricultural produce beyond the needs of the cultivators. The use of the plough and the domestication of plants and animals was a further step forward. Improvement in agricultural methods and the increase per capita in agricultural productivity also released a section of the population from the care of land and enabled them to follow other pursuits¹³.

A large population and food surplus, though necessary conditions, were not by themselves sufficient to produce urban life. Although the farmers produced excess food, under an inefficient and inadequate social and economic organization they did not automatically supply the surplus to urban dwellers. A greater possibility was that they might use these surpluses to increase the population of the village itself. Thus another condition for the rise of urban life was that there had to be some basic political, social and economic organizations¹⁴, however inadequate, which would control both the rural and urban sectors, either by way of taxation

12 See Coe, M.D. (1961) Social Typology and the Tropical Forest Civilizations, Comparative Studies in Society and History, Vol. 4, pp. 65-85.

13 Eldridge, H.T. (1956) The Process of Urbanization, in J.J. Spengler and O.D. Duncan, eds., Demographic Analysis, Glencoe, pp. 335-43.

14 See, for example, Davis, K. (1955) The Origin and Growth of Urbanization in the World, The American Journal of Sociology, Vol. 60, pp. 429-39; Adams, R.M. (1960) The Origin of Cities, Scientific American, Vol. 203, pp. 153-68; Trigger, B. (1972) op. cit., pp. 587-89.

or as contributions. At that time, the most powerful and influential elite in the society was undoubtedly provided by the religious sector. It was probably the priests who thought out a system of government and created the land and property ownerships, making it possible for the ruling classes to extort the villagers, and claim the surplus of foods. The priests, very often, also assumed the role of socio-economic administrations, besides carrying out their religious function. Meanwhile, they made use of working people to support the ruling elite, artisans, craftsmen, soldiers and people in towns. Thus, the initiation of urban life depended not only upon organized agriculture but also upon religion¹⁵.

Indigenous Urban Centres

When agricultural production, social and political organizations reached a satisfactory level, states based upon capital cities emerged. At this stage, 'initiation of primary processes of urbanization is associated with the development of centralized social, religious and political controls in previously non-urbanized societies'¹⁶. The first cities in Southeast Asia are believed to have emerged on the mainland parts where fertile agricultural lands were more abundant and where socio-economic developments were more advanced. In the maritime region, a series of principalities or city-states arose where the main Asian trade routes existed. When conditions prompted, urban growth also proceeded. There emerged a series of port-cities.

The appearance of early cities in Southeast Asia, like the early history of the region, is rather obscure. No data or records were kept and for the early cities one has to depend on fragmentary accounts from Chinese and Indian sources and other travel accounts. According to some accounts, the most advanced regions in Southeast Asia in those early centuries occurred in the Mekong-Tonle Sap region of present day Cambodia, the Tonkin delta of North Vietnam, the Irrawaddy valley of Central Burma, the Menam valley of Thailand and the coastal area of Annam.

15 Trigger, B. (1972) op. cit., pp. 590-91.

16 See Berry, B.J.L. (1962) Urban Growth and the Economic Development of Ashanti, in R.F. Pitts, ed., Urban Systems and Economic Development, Oregon, p. 53.

These areas had the combined advantages of superior agricultural and aquatic resources. They provided water for irrigation, fish for food and rivers and canals for transportation. Not surprisingly, the earliest kingdoms and cities including both the capitals and the port-cities also emerged in those regions. Notable among them were Funan capital, Vyadhapura, and her outpost, Oc-Eo in Mekong region; Indrapura, capital of Champa, in central Vietnam, some distance south of the present Hue; An-nan in the Tonkin region; Nakon Pathom in Menam delta, capital of Dvarati kingdom; and Prome and Thaton in Lower Burma. They represented the first generation of the early cities on the mainland part of Southeast Asia. (Fig. II.1).

The exact founding dates for those early cities remains shrouded in mystery. Vyadhapura, capital of Funan, and its port, Oc-Eo, for example, were generally believed to be founded not later than the 2nd century A.D. for Chinese records in the 3rd century had already mentioned the kingdom and its port. Other cities were probably established later than the Funan's cities. Chinese records also mentioned Funan's trading connections with China and other countries. Its port, Oc-Eo¹⁷, provided a vital anchorage for ships sailing between India and China. Funan, indeed, was a powerful state at that time. It not only occupied the fertile Mekon-Tonle Sap area, its power also extended to the Menam Valley and the Malay Peninsular. Besides having abundant agrarian resources, it was also a maritime power.

The reasons for Funan and its cities rising to prominence were that, it had, besides the rich hinterland of the Mekong, a geographical location close to the main international trade routes. In those early periods, ship-building and the skill of navigation were not very well-developed; vessels were too small to withstand rough seas. Thus junks generally sailed along the coasts. Furthermore, the main sea-route between India and China at that time did not make use of the Straits of Malacca but was by way of the Kra Isthmus¹⁸. The Straits of Malacca were pirate-infested. By using the Isthmus route this put Oc-Eo in a favourable position. This kept Oc-Eo an important link in China-India trade, via a series of way-stations in the northern part of Malay Peninsular.

17 For a fine description of the early maritime trades in Southeast Asia see, for example, Wang, G. (1959) *The Nanhai Trade: A Study of the early History of Chinese in the South China Sea*, Journal of the Malayan Branch of the Royal Asiatic Society, Vol. 31, pp. 31-45; Wang, S.H. (1959) *op. cit.*, p.6.

18 See, for example, Hall, D.G.E. (1968) *op. cit.*, p.38; Tarling, N. (1968) *op. cit.*, p.11.

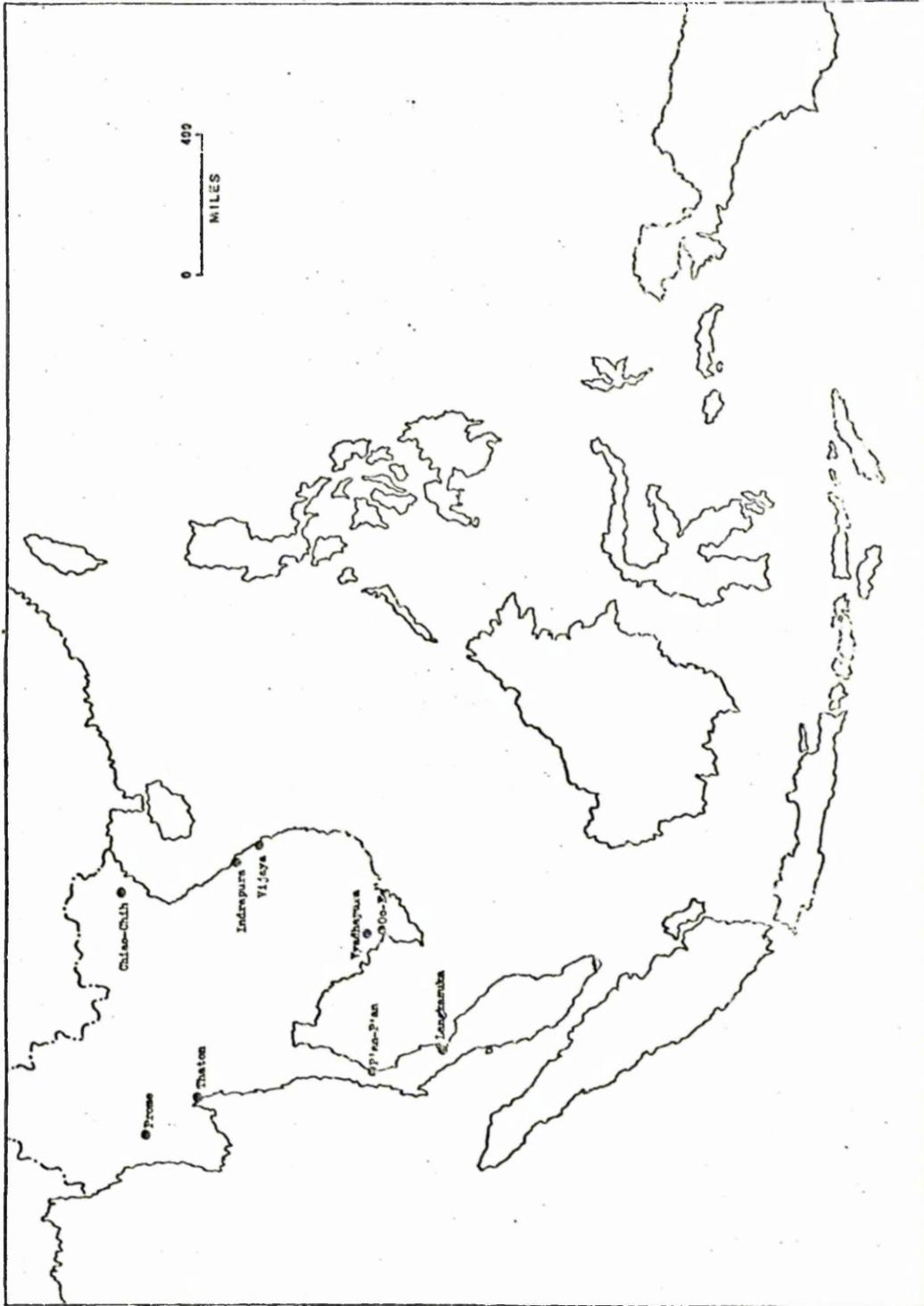


Fig. II.1 Location of the main Southeast Asian cities, 1st - 6th centuries.

Products from its own hinterland and the neighbouring countries gathered there, thus attracting more traders to the port. It became a major trading port of Southeast Asia before the rise of port-cities in the insular part of the region.

In the period between 1st and 6th century, a series of Indianized city-states, together with their trading ports also rose to the northern part of the Malay Peninsula, especially in the vicinity of the Kra Isthmus. This is what Wheatley has termed 'the age of the city-states'¹⁹. Geographically, the Malay Peninsular extends from north-west to south-east towards the equator. Ships sailing from India via the Bay of Bengal could reach Burma and the Malay Peninsula. That was the traditional route for early Indian contacts. Merchants could proceed further through the Straits of Malacca to Sumatra and Java or through the Isthmus of Kra to Thailand, Cambodia and China. Many preferred the trans-isthmus route (Fig. II.2).

Before the rise of the maritime empire of Sri Vijaya, the centre of gravity of trading activity in Southeast Asia lay to the north, where social, economic and political development was more advanced. In those days, the rate at which ships travelled was slow. It might take months to travel through the Straits of Malacca and then sail northwards to the Gulf of Siam. On the other hand, it required only weeks via the isthmus. It was indeed a short cut. Furthermore, the merchandise goods in those days were mostly the more precious and luxurious items²⁰ like silk, gold, rare woods and spices. They were light and not bulky and so not difficult to transport across the narrow isthms. Besides, the early rise of local piracy in the southern Malay Peninsula and Sumatra interfered with communication through the straits. All these contributed to the status of the Kra Isthmus as a 'mid-way' for trade of early Southeast Asia²¹. Slowly, trade stations grew into small centres. The presence of traders also stimulated economic production of tradeable raw materials in the neighbouring regions. Gradually, small trading ports grew into port-cities and city-states arose dotted along the isthmus zone of the peninsula. Notable among them were Langkasuka, Tan-Tan and Takala.

19 Wheatley, P. (1961) op. cit., p. 326.

20 Wang, G. (1958) op. cit., pp. 113-17; Wheatley, P. (1961) op.cit.,p.28.

21 See Coedes, G. (1962) op. cit., p. 5.

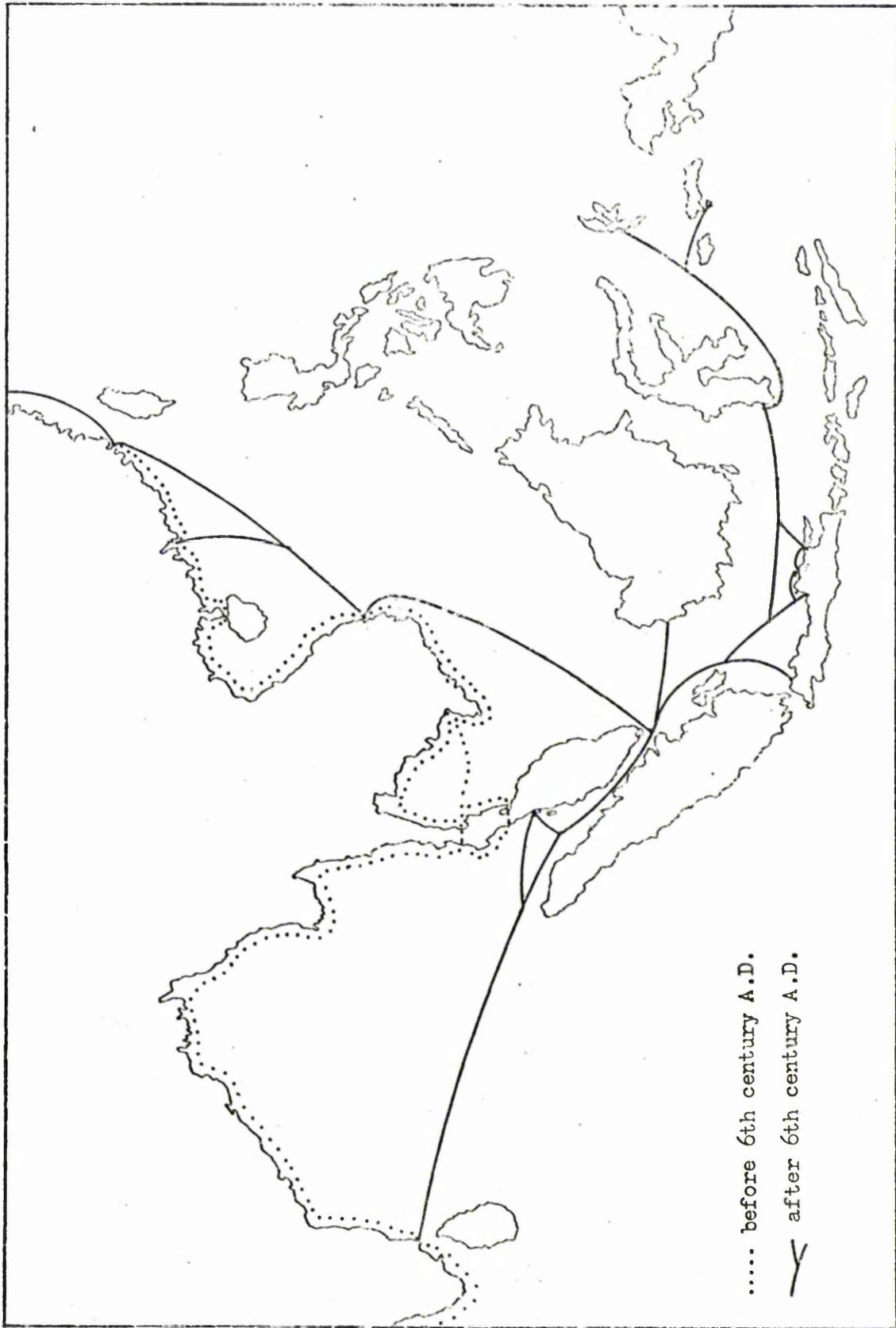


Fig. II.2 The maritime routes of Southeast Asia, 1st - 15th centuries.

The rise and prosperity of these city-states largely depended upon external sea-borne traffic and not on their own resources and economic strength. Almost all of them came into existence by virtue of their favourable geographical location as breakwater ports of the sea-borne trade. The majority lacked rational hinterlands and thus stable economic bases. The physical terrain in this part of the peninsular was not entirely favourable for the emergence of a great state. There is no record that at any time in those early centuries any one state had brought the whole terrain under its control²². Politically, each was independent and spatially isolated. The density of population was low in a period termed by Fisher as 'demographic immaturity'²³. Although many city-states emerged in the isthmian zone, none attained great size or regional importance. Indeed, the majority were short-lived. As the external trading pattern altered and certain favourable conditions ceased to exist, so the fortunes of these city-states also shifted. Some towns reverted to small coastal settlements while others died out altogether.

From the beginning of the 7th century, a new pattern of political and economic activities emerged, this time in maritime Southeast Asia. In the period between the 7th and 15th centuries, successive powerful maritime empires rose one after another. A series of port-cities began to form a new urban pattern. It was a period of active sea-borne trade and many of the cities were created specifically for trade. Indeed, following the decline of the Funan empire and with the current economic and political immaturity of Thailand, the centre of gravity of trading and economic activities shifted to the insular part of Southeast Asia, succeeding the maritime sovereignty of sea-borne trade.

In the period between the 7th and 15th centuries the international situation further facilitated the development of East-West sea-borne trade²⁴. It is interesting to note that the growth of cities in maritime Southeast Asia coincided with the general improved situation of international trades. In the west, the Indian merchants continued to

22 See Fisher, C.A. (1964) op. cit., p. 86; Wheatley, P. (1961) op. cit., p. xxi.

23 Fisher, C.A. (1953) op. cit., p. 205.

24 See Wolters, O.W. (1967) op. cit., pp. 63-70; Also Wang, G. (1958) op. cit., pp. 3-135.

trade in Southeast Asia. Further westwards, in the mid-7th century, there arose the powerful kingdom of Arabia, with her interest in trade. Arab merchants, who were skilful tradesmen and mariners, were very active along the coasts of the Indian Ocean and the Persian Gulf. They also had trade connections with the Mediterranean countries. Through the Indian and Arab traders, Southeast Asia was, indirectly, also related in trade with European countries. In the East, China was under the powerful Tang Dynasty (618 A.D. - 906 A.D.) when social and economic developments were at their heights. Later, the Sung Dynasty (960-1137 A.D.) and the Southern Sung (1138-1279 A.D.) placed great importance on international trade²⁵. During the early years of the Ming Dynasty (1405-1431 A.D.) too, several expeditions were sent overseas. Although these expeditions were not economic or trading in character, they encouraged more Chinese traders to trade with Southeast Asia. Before the advent of the European in the 16th century, the international trade of Southeast Asia reached great heights, with merchants from India, China and many other parts of Asia.

Meanwhile, the socio-economic and political conditions of Southeast Asia were also changing. Following the decline of Funan, the main centre of political and trading activities shifted to the insular part of Southeast Asia. The old sea-borne route via the Kra Isthmus declined and was replaced by the new route via the Straits of Malacca. With the rise of Sri Vijaya²⁶, the previously pirate infested straits had become an important shipping lane. The improvement of ship-building technology and knowledge of sea-faring also helped to bring a change of trade routes. Vessels, generally, were larger and more sea-worthy. Ships no longer had to sail along the coasts, thus shortening sailing times. Better knowledge about the sequence of the monsoons had also been acquired²⁷. Traders could sail with one season and return with the other. Later, with the use of the compass, enabling ships to recognize directions in the open sea, off-short navigation became even easier. And these new trade routes gave birth to a new series of port-cities.

25 Wheatley, P. (1959) Geographical Notes on some Commodities involved in Sung Maritime Trade, Journal of the Malayan Branch of the Royal Asiatic Society, Vol. 32, pp. 5-140.

26 For more details on the rise of Sri Vijaya, see Coedes, G. (1968) The Indianized States of Southeast Asia, Honolulu, particularly pp. 81-85; also Wolters, O.W. (1967) op. cit., pp. 229-53.

27 Wang, S.H. (1959) op. cit., pp. 64-66.

The establishment of the port-cities and empires depended less on their agricultural base and religious functions than was the case with the cities of mainland Southeast Asia. Instead, their power and prosperity depended on trade and upon the effective control over major sea-lanes, thereby forcing or attracting foreign commercial vessels to trade at their ports to pay tributes. The rise of Palembang, capital of Sri Vijaya, and later the city of Malacca in the Malay Peninsula, were examples of cities in this category.

Sri Vijaya first grew to a dominant position in the late 7th century. The empire was based upon the south-eastern part of Sumatra and exercised control over part of the Malay Peninsula and western section of Java which put her on a strong footing for controlling both the Straits of Malacca and the Sunda Straits²⁸. All ships sailing in these waters had to pass these two sea-lanes which were the only practicable waterways connecting the Indian Ocean and the South China Sea. Indeed, the Empire's real strength lay in its possession of both sides of the above mentioned straits. It often made use of its effective naval power to force or threaten ships sailing along these waters to trade at its ports or to pay tribute. Thus, Palembang became a great shipping centre by forcing ships to enter its ports.

Palembang was not only an international port with important economic function; it was also an important administrative centre. As capital of the great empire, tributes from its various dependencies were all collected there: gold and tin from the Malay Peninsula; pepper and spices from Java and the Moluccas islands; camphor, gold and rare woods from Sumatra itself. These contributed further to the development of its trade. Great numbers of foreign traders called at Palembang bringing to the port varieties of goods and products from their own countries: textiles from India and silk and porcelain from China. This, invisibly, attracted local traders to trade at Palembang. Thus, its prosperity was assured. It is true that Palembang was an inland river port, but due to the small tonnage of the ships at that time, they could reach the port without much difficulty. Due also to its position as an international port, not only merchants and traders but also scholars, priests and adventurers concentrated there. Palembang was later developed as a centre of Buddhist learning in Southeast Asia.

28 Hall, D.G.E. (1968) op. cit., p. 43.

Like Palembang, the city of Malacca rose mainly due to sea-borne trade. The precise date of Malacca's foundation cannot be ascertained, but there is reason to believe that this event took place around 1252 A.D. The settlement was founded by a Malay prince who fled from Johore. 'It was a city that was created for merchandise'²⁹ and established itself as the chief emporium in the East. The kingdom as well as the city flourished during the 15th century and depended not so much on its control of the land as on its control of the seas. Under the protection from China, it established its political status in Southeast Asia and got rid of the threat of the powerful Thai kingdom of Ayuthia. When its power was at its height, it extended its authority to Sumatra, and thus took over control of the entire Straits of Malacca. The port itself was strategically situated at the narrowest part of the Straits. It was free from the worst storms and was accessible in any season. The Northeast monsoon from the South China Sea and the Southwest monsoon from the Indian Ocean converged here. Thus it was a port that linked the commercial world of the Indian Ocean with that of the Java and South China Seas³⁰. Many merchants made it the terminus for trade in these waters. It not only became commercially important as a centre for exchange, but also functioned as an entrepot for maritime Southeast Asia. Close economic ties also developed between the city of Malacca and the seaports of Java and Sumatra which supplied the city with foodstuffs. At its port were concentrated the various products of Asian countries like textiles, porcelain, spices, pepper, cloves, nutmegs, sandalwoods, pearls, camphor, gold, tin and many other tropical products. For more than a century, Malacca enjoyed unparalleled prosperity. Although Malays remained the majority, from the very earliest years foreign traders were also numerous. It was the most cosmopolitan city in Southeast Asia³¹.

29 For an excellent description of Malacca in that period, see Cortesao, A. (1944) The Suma Oriental of Tome Pires, London, p. 286.

30 For fuller details of Asian trade at that time, see Meilink-Roelofs, M.A.P. (1962) Asian Trade and European Influence in the Indonesian Archipelago between 1500 and 1630, The Hague, pp. 27-35.

31 Meilink-Roelofs, M.A.P. (1962) op. cit., p. 36.

In the period between the 7th and 15th centuries, several other ports also occupied strategic positions on the routes of maritime trading. They also sought to control, participate in and develop the coastal and sea-borne trade and to live off them by taxes or monopolies. Notable among them were Jambi, Siak, Pedir and Passi in Sumatra; Demak, Tuban, Grise and Bantam in Java; Brunei in North Borneo; Kelantan, Kedah on the Malay Peninsular; and Tomasik in Singapore (Fig. II.3). These port-towns were mainly river-mouth settlements or near the lower course of navigable rivers which enabled easy control of trade passing through South-east Asian waters as well as of trade from their immediate hinterlands. Indeed, sites were chosen with the advantage of both coastal and international trade. Their prosperity depended on trade.

Besides the port-towns, some capital cities of the inland principalities also emerged in maritime Southeast Asia, especially in Java. The rise of these towns mainly depended on their agricultural base and agrarian civilization. The physical environment of Java is well-endowed, facilitated with rich fertile volcanic soils and plentiful water supply. With the effective use of agricultural land, socio-economic organization advanced and populations prospered. Urban development also advanced. There was on the whole no question of large surpluses, though the rice surplus in the fertile regions was usually sufficient to support a governing super-structure of native princes, with their seats in the 'kraton towns'³². From the 7th to 15th centuries, Java contained several principalities. There were times when the power of one principality in West Java overrode that of the east and vice versa, and there were times when the whole island was under the rule of one powerful kingdom. The two most powerful kingdoms originating in Java were Sailandra (8th century) and Madjapahit (13th-14th centuries). Both were land-based powers but later also developed into maritime powers. Inland towns which rose during this period included Kediri, Mataram and Madjapahit in central and eastern Java. They originated in the neighbourhood of the centres of empire which offered them protection. Their main functions were as administrative centres but they also served as cultural and trading centres.

32 Keyfitz, N. (1961) *The Ecology of Indonesian Cities*, The American Journal of Sociology, Vol. 66, p. 348.

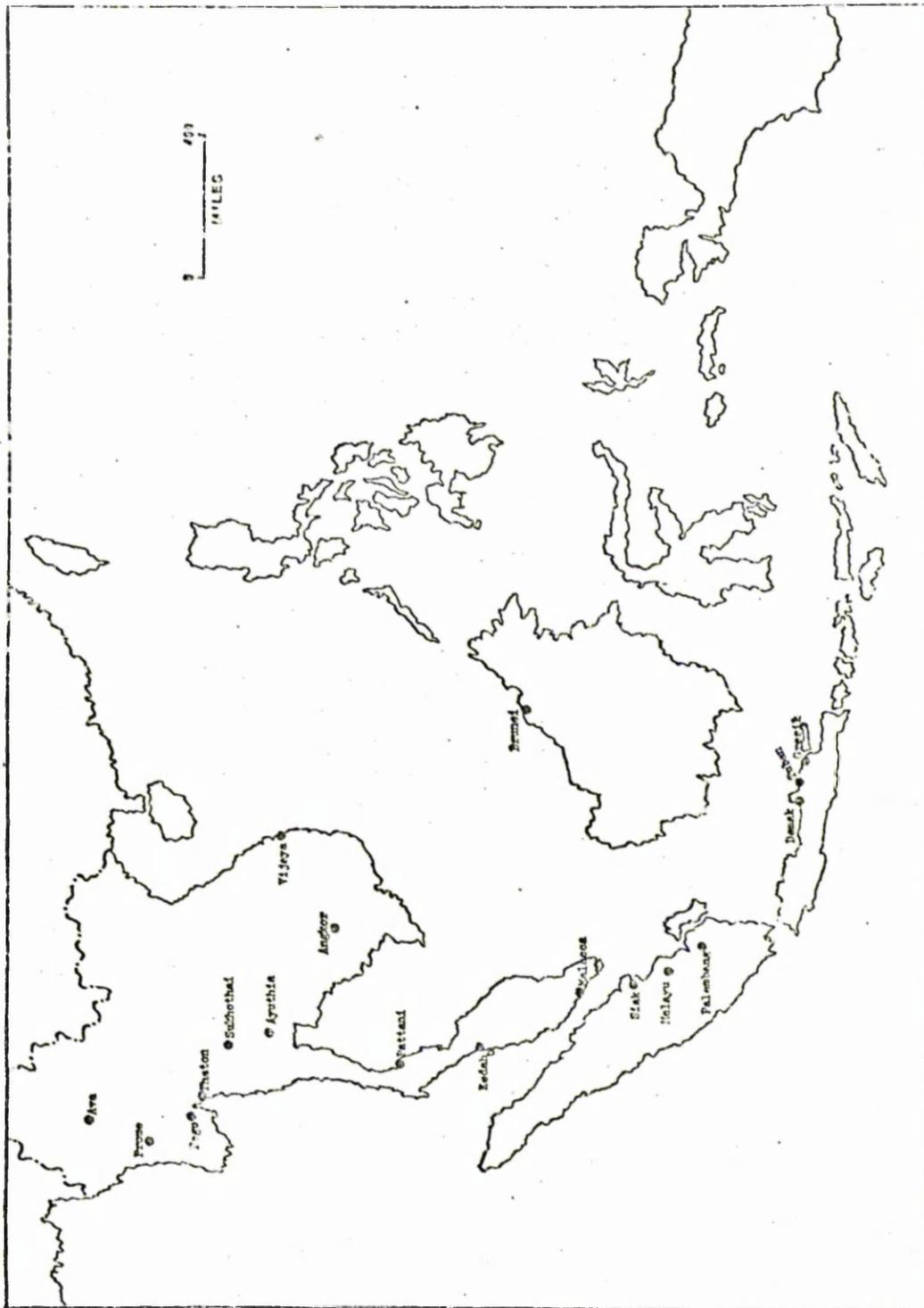


Fig. II.3 Location of the main Southeast Asian cities, 7th - 15th centuries.

The period of the 7th to the 15th centuries also witnessed the rise and fall of cities on mainland Southeast Asia. The changing of political powers brought along not only new empires but also a series of new capital cities. The southwards advances of the Thais and the Burmans were marked by the rise of new kingdoms which helped to establish a series of frontier-towns and each in turn became a forward capital.³³ The Thais originated in the southwestern part of China where they founded the kingdom of Nan Chao in the 7th century. Under pressure from China they drifted south and eventually established themselves in the Menam valley in present-day Thailand. The Burmans originated from Tibet but came to establish themselves in the Dry Zone of Central Burma in the 7th century. Later, they extended their power to the lowlands. During southward drives, a series of capital cities were founded. Notable among these were Sukhothai and Ayuthia in Thailand; and Pagan, Pegu and Ava in Burma. All these cities were confined to inland locations from which they could best administer and control their respective territories. Their economic strength derived largely from their own agricultural base, supplemented by political and religious functions and by a small amount of interregional exchange.

However, the most spectacular city-building during the period occurred in Cambodia - the building of Angkor Thom. Its religious ruins, the Angkor Wat, still remain. It symbolizes the wisdom and advancement of early Southeast Asian civilization. The Khmer people reached a high level of social, cultural and economic achievement based on large-scale rice production and early Indian cultural influences. Though Angkor Thom was a cult city or temple-city rather than a true city³⁴, it did serve some urban functions and was the focus of a considerable local population. It was a centre of agrarian civilization. For its time and place it no doubt functioned as a city. In the early 13th century Chcu Fa-Kuan, the Chinese envoy, visited this settlement and mentioned it as a town. It flourished for about three centuries, but was abandoned in the middle of the 15th century.

33 Hall, D.G.E. (1968) op. cit., pp. 169-84.

34 See Coe, M.D. (1961) op. cit., pp. 70-73; Wheatley, P. (1969) op. cit., p. 10.

From the above discussion, one can sum up certain common characteristics of urban development in Southeast Asia in the period between the 1st and 15th centuries. First of all, urban centres indubitably existed in Southeast Asia prior to the coming of the Europeans. During the region's long and stormy history, an intermittent series of powerful kingdoms, principalities, maritime empires and city-states rose, flourished and collapsed as time went by. For each moderately large kingdom or maritime empire contained at least one or a few politico-religious capitals or port-cities. They were either the foci of agrarian society or the nerve centres of trading empire³⁵. They functioned as 'cities' in the sense of bringing people together and providing them some form of occupation away from the land. They also functioned as 'central places' as far as administrative, religious and cultural activities were concerned. However, they did not form a continuing and correlated process of urban development. Each, indeed, was an isolated unitary settlement.

The number of cities and the size of population concentrations reflected the technological capacity of people of that society and period. Size was restricted by the amount of food surplus or by the capacity of importing foods to support the urban community. In an agrarian society like Southeast Asia with low levels of technology for transportation and production, it is not surprising that cities were comparatively small in size and few in number³⁶. Furthermore, the untamed physical environment and the high degree of political instability were also hostile to the development of large urban settlements. No population statistics are available, but generally it is believed that except for a few royal cities most urban settlements were extremely moderate in size. At no time did those early cities contain more than a small fraction of the total population of each respective territory. Moreover, the process of development of each city was slow and fluctuated considerably in size over time.

35 Tinker, H. (1964) op. cit., p. 12.

36 Stolper, W. (1954) Spatial Order and the Economic Growth of Cities, Economic Development and Cultural Change, Vol. 3, p. 142.

The cities, especially inland, were largely isolated from one another. They relapsed easily into village following the collapse of the empire or changes in political stability³⁷. They waxed and waned, and few now count among the present cities in the region.

Historically, the early cities fell into two main groups. They were (i) the politico-religious centres of the land-based kingdoms and (ii) the commercial nerve centres of the trading empires. The former were mainly located on mainland Southeast Asia while the latter spread along the coasts of the maritime part.

(i) Those land-based cities on the mainland were actually the product of politics, religion and culture rather than of economic forces³⁸. Despite the importance of politico-religious functions, in latter years they also functioned as market towns. Their sites were very often based on geomancy, and religious beliefs rather than on views of commercial advantage. Their economic base and wealth depended mainly on food and grains collected from land and from exploiting the serfs. Periods of prosperity and decline were very often closely connected with the fortune and power of their respective kingdoms. When the kingdom was prosperous, cities would subsequently develop. On the other hand, when a nation declined, the cities would accordingly lose some of their glory. Some were completely destroyed following the extinction of their respective states. Others often reverted to villages. Moreover, their rise or fall sometimes lay in the hands of the God-kings or the high-priests who made the decision on the selection of the site³⁹. Cities could be abandoned or sited elsewhere if they so desired. Following the death or deposition of a king, the new ruler would often found a new capital. Sometimes, cities were abandoned because of their insecurity or due to health hazards or epidemics.

Like many urban centres in other parts of the world, these early land-based cities in Southeast Asia were generally walled cities. At that time, wars were frequent. Thus the protection of life was of vital concern. However, due to the limit of the walls, the internal urban

37 Tinker, H. (1965) op. cit., p. 34.

38 Murphey, R. (1969) op. cit., p. 68.

39 See Wheatley, P. (1969) op. cit., footnote No. 90; Tinker, H. (1965) op. cit., p. 34.

structure of these cities was generally very compact and streets were usually arranged in rectilinear pattern. Their morphology, on the whole, was based on the image of Hindu-Buddhist celestial cosmology. The streets, religious buildings, monuments and other urban structures conformed to the heavenly models of Hindu and Buddhist tradition. Indeed, they were built to symbolize a joining of macro and micro-cosmic realms ⁴⁰.

Their major functions were those of religion and administration. The God-kings made use of these politico-sacred cities to rule their lands and peoples. They also assumed the role of military bases for the rulers. The internal spatial structure of these cities also reflected the social organization and class differences ⁴¹ of that period. Within the cities, palaces, important religious and public buildings occupied a central place; then came the residences of the priest, the nobles and officers. Near to the market places were to be found the craftsmen, artisans, merchants and traders. The poor and lower-classes dwelt near the walls and farmers lived near or beyond the walls. Most of them had a homogenous population that was made up almost entirely of indigenous peoples. They represented the orthogenetic cities ⁴² and carried with them an established local culture and tradition.

(ii) In contrast, the port-cities were more heterogeneous and cosmopolitan ⁴³. They were the meeting place of cultures and peoples from many lands. Each racial group usually resided in segregated districts or quarters. Unlike the inland sacred cities, all these port-cities were sea-oriented and trade-oriented. The majority owed their origins to the fact that they served as transshipment centres and intermediate stations on the long sea-route between India and China.

40 For some commentaries on parallelism between the macrocosmos and the microcosmos, as well as discussion pertaining to the symbolic role of city in the traditional kingdoms of Southeast Asia see, for instance, Heine-Geldern, R. (1942) *Conceptions of State and Kingship in Southeast-Asia*, The Far Eastern Quarterly, Vol. 2, pp. 15-30; Alkire, W.H. (1972) *Concepts of Order in Southeast Asia and Micronesia*, Comparative Studies in Society and History, Vol. 14, pp. 484-93; Wheatley, P. (1969) *op. cit.*, p. 12; Tinker, H. (1965) *op. cit.*, p. 31.

41 Murphey, R. (1969) *op. cit.*, p. 69; Wheatley, P. (1969) *op. cit.*, p.24.

42 See Redfield, R. and M.B. Singer, (1954) *The Cultural Role of Cities, Economic Development and Cultural Change*, Vol. 3, pp. 53-75.

43 *Ibid.*, p. 59.

They generally lacked good interior hinterlands and thus stable economic bases. Their rise and prosperity depended less on their own resources, products and peoples than on external trade⁴⁴. Trade was their main function and their life-lines depended on trade. Some of them even had to rely heavily on other regions for their food supplies. For many of them, even trade was largely in the hands of foreign merchants. Thus, with external factors like the decline of international trade, the shifting of shipping lanes or changes in trade patterns, the fortunes of these port-cities would change accordingly. Some would decline temporarily, but probably the majority never even regained their former glory.

Undoubtedly, many of the port-cities were busy international trading ports. However, they were generally small and did not possess any great buildings or harbour facilities. The tonnage of ships was small and they could anchor easily along the coasts or estuaries. Besides, the total amount of trade was not very large in quantity. The population at or near the port was never very great. Hence there were many port-cities and ^{no} very large towns, with the exception of cities like Palembang and Malacca, which were of considerable size.

The distribution pattern of the early cities reflected the general political, economic and social conditions and trading activities of their time. Prior to the rise of Sri Vijaya in the 7th century, almost all the cities, including both the land-based capital cities and other main trading ports were located on the mainland part of Southeast Asia where political, socio-economic conditions were in a more advanced stage of development and where the main sea-borne trading lanes lay. The mainland Southeast Asia with its broad river valleys and irrigation works made it possible to establish larger agrarian societies capable of supporting a few traditional cities. In contrast, the maritime part of Southeast Asia at that time contained few settlements which could be termed urban localities. However, in later years, with the successive rise of sea-borne empires in the insular part of Southeast Asia, new political and trading patterns emerged. Countries in the insular part of the region began to play an increasingly important role in international trade. A series of new port-cities appeared on the scene. During the 14th and

44 Keyfitz, N. (1961) op. cit., p. 349.

15th centuries, the increased spice trade brought about a further southwards shift in the trading centres. More port-cities emerged on the islands of Java and the Moluccas.

Unlike mainland Southeast Asia and Java, the Malay Peninsula has no great rivers, large coastal plains or fertile soils capable of producing enough food to support very large populations. The land was covered with intractable rainforest and the population density was thin. Thus it inhibited any one state in achieving superior political and economic control of the whole peninsula. There thus emerged a series of 'city-states' through the early centuries, but none was powerful enough to put the peninsula under any unified hegemony⁴⁵. Thus the growth of port-towns in several parts of the peninsula was an isolated phenomenon rather than a correlated process of urban development.

The only region which lacked an urban tradition before the coming of the Europeans was the Philippines⁴⁶. Due to its isolated and peripheral location in Southeast Asia, contacts with other Asian civilizations were less frequent. The Indian influence, which formed such an influential force in other parts of Southeast Asia, did not reach the Philippines in sufficient strength to change the relatively backward society. The archipelago was also little touched by the Chinese civilization. Thus its history stood apart from that of the rest of Southeast Asia. As a result, its social, economic and cultural development were more limited. Up to the end of the 15th century, the archipelago still lacked a single united political organization and contained no significant urban centre. Not even the simple city-states, such as existed in the Malay Peninsula in the early centuries were to be found there. Indeed, the archipelago remained a backwater prior to the coming of the Spaniards in the 16th century.

45 Wheatley, P. (1961) op. cit., pp. 326-27.

46 See Reed, R.R. (1967) Hispanic Urbanism in the Philippines: A Study of the Impact of Church and States, Journal of East Asiatic Studies, Vol. II, p. 198; Reed, R.R. (1972) op. cit., p. 300; and also Doeppers, D.F. (1972) The Development of Philippine Cities before 1900, The Journal of Asian Studies, Vol. 31, p. 769.

Early Colonial Urban Settlements (16th to 18th Centuries)

The beginning of the 16th century was a turning point in Southeast Asian history. It was the start of an era of European domination of Southeast Asia which was to endure for the next four hundred years. In the early 15th century, after the arrival of the Portugese in India via the Cape of Good Hope, the Portugese soon came to appreciate the importance of the port of Malacca, and its relations with the Spice Islands. The aim of the Portugese for opening a new shipping route to the East was to search for spices and, in order to gain a monopoly of the spice trade, the occupation of Malacca became a necessity for the Portugese. It was also spices that lured other Europeans to Southeast Asia in later years. In 1511, Malacca was captured by the Portugese who became the fore-runners of European economic penetration in Southeast Asia. Following the Portugese came the Spaniards, the Dutch, and, finally, the British and French.

The early Europeans objectives were, then, to acquire spices and other wealth to be found in the region and they devoted themselves to commerce and trade⁴⁷ rather than to territorial expansion⁴⁸. They obtained certain outposts or seaports here and there for the supply of food and water and as bases for protecting their ships and shipping routes. The chief reasons for their lack of interest in territorial expansion were: (i) the majority of the early Europeans who came to Southeast Asia were merchants or private commerical associations lacking the support of their governments; (ii) before the Industrial Revolution there was no great necessity to search for raw materials and overseas markets. At that time, there was only a small portion of the nobles and merchants of European society who were interested in Eastern luxuries; thus, markets were limited. The commercial merchandise needed could generally be obtained in the Asian markets⁴⁹. Subsequently, the need to monopolize the markets did not arise as long as the supply of merchandise was not cut off and as long as they were safe to trade there. As long as there were profits, few European traders wanted to see the existing trade pattern change;

47 For a fine description of Asian trade at this time, see Van Leur, J.C. (1955) Indonesian Trade and Society: Essays in Asian Social and Economic History, the Hague.

48 Fisher, C.A. (1971) op. cit., p. 238.

49 Van Leur, J.C. (1955) op. cit., pp. 122-30.

(iii) in occupying such a vast land area, the maintenance of its administrative and transport development would have been enormously expensive ⁵⁰ - certainly too expensive for the early commercial organizations or private firms to bear; (iv) a small country like Portugal was not able to expand due to lack of manpower and other necessary resources.

Thus in the period between 16th and 18th centuries, only a small portion of Southeast Asia was seized by the Europeans. Some areas came under Dutch rule, but generally the indigenous society was undisturbed and traditional life maintained. European influence on local social and economic life was only superficial and marginal, and the rise of cities was relatively slow. This was very different from the drastic social and economic development which was to occur in the 19th and 20th centuries.

Although the Portugese were the earliest to arrive on the Southeast Asian scene, they established only a few widely scattered fortress towns ⁵¹. It was from these outposts that the Portugese merchants extended their field of operation. After capturing Malacca in 1511, they continued to advance to the Spice Islands and managed to occupy a few. For the remainder of the century the Portugese were able to sustain and develop their monopoly of trade. Their expansion placed a great strain on the resources of that tiny country and their supremacy could not be maintained. By the mid-17th century their power was gradually taken over by the Dutch. The power of the Portugese in Southeast Asia remained felt only in the Timor Island of the southeastern corner of the Indonesian archipelago.

The arrival of the Portugese was followed by the Spanish. They, too, aimed at capturing the Spice Islands. However, they failed, due to powerful competition from the Portugese and the Dutch. The Spanish then turned their attention towards the Philippines and occupied the archipelago.

50 Warsaw, S. (1975) op. cit., pp. 41-43 and pp. 47-50.

51 See Meilink-Roelofs, M.A.P. (1962) op. cit., pp. 116-35; Hall, D.G.E. (1968) op. cit., pp. 239-47.

The earliest Spaniards, unlike all other Europeans, sailed across the Pacific to reach Southeast Asia. Though the Philippines were under Spanish rule for a long time, the Spanish merely emphasized the early entrepôt trade of Manila⁵², preaching religion and did little for the general economic development of the archipelago. During the first two centuries of Spanish rule, the economy of the Philippines was still in a stage of backwardness.

Although the Dutch arrived in Southeast Asia later than the Portuguese and Spaniards, they soon became the most powerful European colonial power in the region, occupying the widest areas of lands. The territories under the Dutch rule were mainly in the Indonesian archipelago. They captured Djakarta in 1619 and renamed it as Batavia and made it their base for further expansion into Java. At the same time they also occupied places like Padang and Palembang on Sumatra island, and the Moluccas Islands from the gradually declining Portuguese. By the end of the 18th century, the Dutch extended their rule throughout almost the whole of Java Island. After the collapse of the Majapahit empire, there was no strong indigenous power in Sumatra or Java to resist the Dutch advance. Yet although the Dutch occupied many parts of the archipelago, they did not become directly involved in the local administration. Indeed, they employed indirect rule⁵³. As long as the indigenous rulers could maintain the public safety of their traders and keep trade moving, they were allowed to govern on a regional basis⁵⁴.

The British moved into Southeast Asia at about the same time as the Dutch. The British, at that time, paid more attention to India than to Southeast Asia where they established only a few trading ports, and did not carry out any expansionist policy. But, by the end of the 18th century, for the purpose of seeking an anchor point in the Straits of Malacca, they took over Penang. The French came too, but their early activities were mainly confined to trade and the spreading of religion;

52 Reed, R.R. (1967) op. cit., pp. 110-17, 174-75; Doeppers, D.F. (1972) op. cit., p. 782.

53 For an excellent commentary on direct and indirect rule, see Emerson, R. (1937) Malaysia: A Study in Direct and Indirect Rule; New York.

54 Van Leur, J.C. (1955) op. cit., pp. 149-65.

the expansion of their territories did not begin until the 19th century. In the period between the 16th and 18th centuries, the Europeans who controlled most territory and became most influential in the region were the Spaniards in the Philippines and the Dutch in Indonesia, though their economic colonization was still largely restricted and their impact indirect.

It is obvious that as European powers had not yet extended to the mainland part of Southeast Asia, the indigenous kingdoms there still preserved their traditional political and social organizations. Hence they could still maintain the traditional urban development, with little or no changes in the urban functions and patterns⁵⁵. Traditional sacred cities continued to thrive. In the later period, though there were some European traders or adventurers who travelled inland to trade and set up some factories, they did not affect these orthogenetic urban centres, for the Europeans were very small in numbers and politically insignificant. The original indigenous urban pattern remained essentially intact.

However, in the maritime part of Southeast Asia, Malacca became the first European-controlled city in the region. Strictly speaking, Malacca was not a colonial city. Firstly, before the coming of the Portugese, Malacca was already an important international trading port in the East, having her own political and social basis. Its occupation by the Portugese was merely a replacement of rulers, merchants and trading partners. The social and economic organization of the city itself did not show much change. Malacca still functioned as an entrepot⁵⁶. Besides, under Portugese rule the Portugese did not carry on developing Malacca's hinterland to make it the political, economic and cultural centre of the newly-gained territories in Southeast Asia. Under the Portugese, trading activities in Malacca were moderate. Due to the fact that other Asian dependencies of the Portugese were far from Malacca, being in India, China and at the southeast corner of the Indonesian archipelago, it was not able to form a single colonial economic and political network with Malacca as headquarters. Malacca thus could not qualify as a true colonial city.

55 See Sternstein, L. (1965) 'Krung Kao': The Old Capital of Ayutthaya, The Journal of the Siam Society, Vol. 53, pp. 85-121.

56 See Kennedy, J. (1970) A History of Malaya, London, pp. 20-43; also Winstedt, R. (1966) Malaya and its History, London, pp. 40-46.

On the other hand, the conditions for the rise and growth of urban centres in the Philippines and Indonesia were different. A new urban pattern resulted from the establishment of colonial power. Cities like Manila in the Philippines and Batavia in Java were constructed as images of the typical Spanish and Dutch cities respectively. These cities were actually alien transplants on Southeast Asian soil⁵⁷. They were created to serve the needs of European interests. They functioned as early 'head-links'⁵⁸ between the colonial powers and the colonial territories.

From the very beginning, Manila, for instance, was the administrative, economic, cultural, religious, military and trading centre for the Spanish in the archipelago. The prosperity of Manila depended on its entrepot trade for China and Mexico. This was the famous Galleon Trade⁵⁹ which formed a link between China and the Philippines at one end and Mexico and Spain at the other end. Manila's economically dominant position in the Philippine urban network began from the establishment of this Galleon Trade. This was also the cause of the abnormal development of towns and cities in later years - the creation of Manila as an extreme case of a primate city and the hindrance of the development of other secondary cities.

After the occupation of the islands of Cebu and Luzon, the Spaniards initiated a programme of systematic territorial expansion for fear of penetration by other European powers into the archipelago. Eventually, they took over control of the whole archipelago except for a small part of the southwest corner which was under the Moslem control. Under Spanish rule, a new urban network was established. These centres were essentially a system of regional control points which were strategically located throughout the Spanish part of the archipelago⁶⁰.

57 Murphey, R. (1969) op. cit., p. 67.

58 See Spate, O.H.K. (1942) *Factors in the Development of Capital Cities*, Geographical Review, Vol. 32, pp. 622-31.

59 For fuller accounts of the Manila's galleon trade see, for example, Schurz, W.L. (1959) The Manila Galleon, New York; Hill, P.A. (1958) The Old Manila Galleons, Journal of East Asiatic Studies, Vol. 7, pp. 280-84; Cruz, L.J. (1969) The Golden Galleons, The Asian Magazine, Hongkong.

60 Doeppers, D.F. (1972) op. cit., p. 774.

They were also centres of diffusion for the Christian faith. They were erected for the needs of administration and for the spreading of religion. The majority lacked a sound economic base and were unable to develop in later years. Many flourished briefly but then declined.

During the 16th and 17th centuries, the colonial economy of the Philippines was based on the transshipment of goods from China, an activity which came to be mainly concentrated in the capital city of Manila. Thus the capital city completely dominated the national economy and hampered the development of other secondary port-cities and inland-towns. This also explains why urban development in other parts of the Philippines was stagnant for almost two-and-a-half centuries⁶¹. The rejuvenated and sustained urban development only began in the late 18th century with the development of commercial agriculture and the development of inter-island trade as a result of the readjustment of the island colonial economy. Although the growth of towns and cities was sluggish, an embryonic urban network of the Philippines was formed in the period between the 16th and the 18th centuries⁶².

The main feature of those early urban localities created under the Spanish colonial-Catholic complex was that of a walled city with a grid pattern of streets. The church or cathedral was located at the most prominent place and was the focus of town or city life. Most urban settlements were, indeed, of a combined sacred and political function⁶³, rather similar to those early politico-religious cities of the mainland. The only difference lies in the fact that one came from the influence of European Catholicism while the other derived from Indian Hinduism and Buddhism.

In Indonesia, the establishment of cities and the formation of an urban network was different from that in the Philippines. Under the Dutch, cities and ports were established not to facilitate administration or the spreading of religion but entirely as economic and trading bases⁶⁴.

61 See Reed, R.R. (1967) op. cit., p. 133; Doeppers, D.F. (1972) op. cit., pp. 781-82.

62 Reed (1967) Ibid.

63 Reed (1967) Ibid., pp. 13-14.

64 Keyfitz, N. (1961) op. cit., p. 350.

The locations of the port-cities had been envisaged in commercial rather than in administrative or political terms, even though many of these port-cities also served as regional or provincial capitals in the later years. In the period between the 16th and 18th centuries, although the Dutch did not go all out for territorial expansion, they successively occupied large parts of Java and controlled several important bases all over the Indonesian Archipelago and formed a colonial economic network.

From the very start Batavia was a multi-functional city. It was also the nerve centre of the Dutch commercial empire. In addition, the Dutch also set up factories and minor ports in all the important bases, establishing the basis for the subsequent rise of a series of ports and towns. The establishment of port-cities mainly depended on a stable economic base. During this period, important Indonesian port-cities besides Batavia were Surabaya, Semarang and Cheribon in Java; Djambi, Palembang and Bencoolen in Sumatra; Makassar and Menado in the Celebes; and Ambon in the Moluccas (Fig. II. 4).

Conclusion

In the period between the 16th and 18th centuries, the activities of European were mainly confined to maritime Southeast Asia. Even in the maritime portion, with the exception of Java and the Philippines, European powers did not penetrate into the inland areas. Their activities were restricted to the coastal territories. Within such a context of limited territorial and administrative involvement, the various European powers were not inclined to establish numerous towns and cities. The Philippines, for instances, were affected by Spanish rule from an early date, but the Spaniards paid little attention to the economic development of the archipelago. As a result, their introduction of the formation of a new hierarchy of settlements in the Philippines, though unique in Southeast Asia, was not successful. As economic and commercial activities were insignificant and towns lacked a sound economic base, urban development was slow. Only in Java did the Dutch form new economic activities. This, in turn, resulted in the development of a new urban network. On the mainland where there was no European penetration as yet, indigenous urbanism still prevailed.

Changes in the urban pattern proceeded slowly before the 19th century. After the beginning of the 19th century, however, development was rapid. The formation of cities in Southeast Asia entered a new phase. This will be discussed in the next chapter.

CHAPTER IIIThe Impact of Colonialism: Urban Development in the Nineteenth Century

The nineteenth century was of formative importance in Southeast Asian urban history for it was in that century that the foundation of the modern urban pattern of the region was actually laid down. As shown in the previous chapter, urbanism as a way of life was not an entirely new phenomenon. Indeed, some Southeast Asian cities were very old. Southeast Asia has seen the rise and fall of many of her cities. Many were important urban settlements in their times; a few were great trading ports of international reputation during the sailing era. Yet important as they were in their time, they were few in number, comparatively moderate in size and spatially scattered. These early cities, nevertheless, constituted a vital element in the landscape of the region.

In those early centuries, the whole process of social and economic development as well as the pace of settlement development was slow. Moreover, the economic base of each kingdom or city was also less developed. Although the rise of powerful empires had produced occasional important cities, the growth of each settlement, in general, was more of an isolated phenomenon than a continuous and correlated process of urban development. The majority of early settlements were impermanent in nature. The general isolation of the settlements and the difficulty of overland transport other than by waterways prevented them having close contact with one another or engaging in any large-scale process of economic exchange. The social life of the population of most parts of Southeast Asia at that time was characterized by the lack of extensive markets, an absence of whole-time specialists and a developed class of middlemen. The limited range of economic and social activities, simple technology, slow transport, and limited functional differentiation thus produced few cities. Few countries in those early days had any integrated network of towns and cities. It was individual city growth rather than a process of urbanization.

The advent of the Europeans after 1511 brought the region into direct contact with Europe and European culture. However, with the probable exception of the Philippines and the Island of Java, European influence was comparatively limited and spatially restricted to a few coastal outposts. Although a new series of port-towns or fortresses were established, their numbers were small and located almost entirely in the insular part of Southeast Asia. The mainland Southeast Asia remained largely untouched by the European culture and trading activities. Due to the nature of the early colonial economic activities, with the exception of Java, European contact, up to the end of the mid-19th century, did not touch off any large-scale urban-building process in the region. Indeed, there were only a few port-cities dotted along the Southeast Asian coast plus a few more important inland cities.

However, a change came during the 19th century, especially the second half of the 19th century, with the massive transformation of Southeast Asian society and witnessed the mushrooming of towns and cities throughout the whole region. Unlike its predecessors, the emergence of a new set of urban settlements in the 19th century was an integrative and inter-related process of urban development. Within the colonial-economic framework, towns and cities grew to serve new economic and political functions. A more complex nodal system of economy developed and Southeast Asia experienced a major urban transformation. The region has seen few changes so drastic and so pervasive in their effects: they signalled a true break with the past pattern of growth. The slow pace of urban development was substituted by the rapid growth of urban centres both in number and in size. The connectivity of towns with one another within the colonial-economic framework also increased, as modern transport networks developed.

Inasmuch as the Southeast Asian urban network was closely bound to development in the space economy¹ of the region, it is necessary to view

1 This term is meant to encompass 'the total spatial array of economic activities and their interrelations' within a region or a country, see Isard, W. (1956) Location and Space Economy, New York; also Lösch, A. (1954) The Economics of Location, New Haven.

the growth of towns and cities in the 19th century as an integral part of the changing socio-economic situation in Southeast Asia. The development of modern urban network of Southeast Asia in the 19th century was a typical example of the inter-relationship between the stages of colonial and economic expansion on the one hand and the growth of towns and cities on the other. Throughout the century, especially the second half of the 19th century, the tempo of urban development seemed to have been synchronized with the pace of economic progress and commercial expansion of the region as a whole. Most cities developed as a result of the role they played within the colonial-economic framework and enterprise.²

Though forces that shaped the economic development of the region in the 19th century were complex, of vital importance was the stabilization of the society and the prevalence of peace and security under the colonial rule that led to development on a scale unseen in previous periods of Southeast Asian history. The rights or wrongs of colonialism³ are of no concern here. The fact remains that colonial rule of the region in the 19th century did provide the necessary peaceful conditions and established the basic structure of civil administration which were conducive for economic development. The colonial policies of the Dutch, the British, the French and, later, the Americans differed in some important aspects, but they all united in their aim of economic enterprise. Though that might not necessarily be to the benefit of the indigenous people, it did create wealth and development by exploiting the natural resources of their respective colonies. These activities were motivated primarily by colonial interests, but represented a measure of spread of economic development without which the rapid development of the region would not have taken place.⁴

2 See, for example, Hauser, P.M. (1957) op. cit., pp.86-88; Dwyer, D.J. (1968) op. cit., p.2; Murphey, R. (1969) op. cit., pp.74-76.

3 For assessment of colonialism in the region see, for instance, Pluvier, J. (1974) Southeast Asia from Colonialism to Independence, Kuala Lumpur, pp.3-21; Emerson, R. (1964) op. cit.; Higgins, B. (1953) Western Enterprise and the Economic Development of Southeast Asia, Pacific Affairs, Vol. 31, pp.74-87; Landes, D.S. (1961) Some Thoughts on the Economic Imperialism, The Journal of Economic History, Vol. 21, pp.496-512.

4 Allen, G.C. and Donnithorne, A.G. (1957) Western Enterprise in Indonesia and Malaya, London, pp.22-34 and 38-44; Cowan, C.D. (1964) ed., The Economic Development of Southeast Asia, London.

Colonial links brought the region into the world trade system and established closer contact with the outside world. The effect was profound and far-reaching. It touched off a drastic chain-reaction of socio-economic transformation in the Southeast Asian society. The increased demand for tropical products in the world market provided the impetus for the large-scale development of plantation and cash crops and the widespread exploitation of minerals. The development of export-import trade, meanwhile, required the construction of an adequate transport and communication network in the form of roads, railways and waterways. This spearheaded the development of a modern transport system in the region and the general improvement of the related infrastructure. New transport media also meant the opening up of inland areas to a new form of traffic and created a new economic order and trading pattern. A new spatial system of economic nodes began to emerge which formed the new growth centres and performed functions required by the colonial economic activities.

The process of economic growth also generated certain demographic responses which attracted a large-scale influx of migrants to Southeast Asia. The opening of new economic opportunity brought to the region not only prosperity but also immigrants. As evident throughout Southeast Asia, this new demographic element with its hard-working tradition soon became one of the main driving forces for economic development and urban growth. Immigrants also supplied the finance and entrepreneurial skill necessary to sustain the rising level of trade and economic activities.

The development of towns and cities throughout the region reflected the impact of these immigrant groups. Though their numbers, compared with the total population of the region, was small, they had an economic significance out of all proportion to their actual numbers. They formed a vital economic link between the trade-oriented Europeans and the subsistence-oriented indigenous peoples.

However, it is necessary to begin with a brief discussion of the social, economic conditions in Europe and the factors behind the great colonial expansion during the 19th century, especially in the second-half of the 19th century. The Industrial Revolution which began in England in the second half of the 18th century and later swept across Western Europe

and North America created a great demand for both raw materials and markets.⁵ In the search for a large and more constant supply of raw materials for use in their factories, the importance of Southeast Asia for both sources of raw materials and as a potential market for their products soon became apparent to the European powers. Meanwhile, the rapid population increase in Europe also resulted in a great demand for tropical products like coffee, tea, sugar, tobacco and spices. For years, their main supplies came from the West Indies but this source alone was no longer enough to provide their increasing demands. A further blow came with the abolition of slave trade which greatly reduced the importance of the West Indies as the main supplier of tropical products. As a result, greater attention was given to Southeast Asia where several European powers already had some footholds or territories.

Equally important was the opening of Suez Canal in 1869 which drew Southeast Asia even closer to Europe. The distance between Singapore and London, for example, was shortened by more than three thousand miles and saved a considerable amount of sailing time. Formerly the long-haul route round the Cape of Good Hope restricted the amount of goods which vessels could carry; steam-ships could not carry enough fuel and cargo to make a trip profitable. Another advantage of the shortened route was the speed with which goods could be sent to and from Europe, giving greater profits. Initially, then, economic incentive was largely responsible for European colonial expansion in Southeast Asia, though political rivalry was also becoming increasingly important.⁶ Indeed, international rivalry and commercial interests were the main factors behind the great territorial acquisitions throughout the region in the 19th century.

Prior to the 19th century, except for the Spaniards in the Philippines and the Dutch in Java, other European powers controlled only a string of outposts or restricted coastal areas and had little desire for territorial expansion. At least up to the 1870's even the Dutch and the British, who together already possessed Java, Lower-Burma and the Straits

5 See Ashton, T.S. (1948) The Industrial Revolution, 1760-1830, London; Knowles, L.C.A. (1936) Economic Development in the Nineteenth Century, London, pp.105-208.

6 See McGee, T.G. (1960) Aspects of the Political Geography of Southeast Asia, Pacific Viewpoint, Vol. 1, pp.39-58; Fisher, C.A. (1971) op. cit., 238-43.

Settlements, were reluctant to acquire any further territories, if only for the reason that they would cost money to defend and maintain. At that time their main interest was in trade. So far as trade and peaceful conditions could be maintained and trading continued, they did not interfere with the indigenous traditional rules .

However, with the increasing demand for tropical raw materials in the European market, the opening of the Suez Canal, and discovery of large quantities of mineral resources and the presence of plantation agricultural potentials, European interest in acquiring more lands in Southeast Asia developed. European began to play with the thought that trade would not flourish without peaceful conditions and that these peaceful conditions could not be guaranteed or maintained without some form of political control. In order to secure a steady supply of raw materials and goods, the control of inland area was essential. Armed with this imperial design plus modern technology and weapons, none of the Southeast Asian countries could resist their advance. Colonialization thus ensured raw materials to feed European factories and markets for their manufactured products.

The process of colonial expansion began in the first half of the 19th century and reached its peak by the end of the century. Eventually, the whole of Southeast Asia, with the exception of Thailand, passed under direct or indirect colonial rule. The Dutch gradually gained control of the Outer Islands of the Indonesian archipelago. The countries of Burma, Malaya and the North Borneo Territories became British possessions. The territories occupied by the North and South Vietnams, Cambodia and Laos passed under the French rule. The Philippines was occupied by the Spaniards until 1898 and was then taken over by the Americans. Thailand was the only country in Southeast Asia that was able to maintain political independence. Yet though Thailand remained independent, its growth and prosperity was closely linked the the colonial economic system and trading activities in the region.⁷

Although the impact of colonial rule and local response might differ from one country to another, on the whole the consolidation of colonial rule brought about a fundamental change in both governmental

7 See, for instance, Ingram, J.C. (1955) Economic Change in Thailand since 1850, Stanford, particularly pp.36-74, 203-19; also Ginsburg, N.S. (1961) Atlas of Economic Development, Chicago, p.36.

organization and in the functions of the states. Fundamental changes also occurred in both social and economic life in Southeast Asia. Meanwhile, the population of the region was greatly increased through better health and medical facilities, more stable political conditions and administration. As medical services improved more tropical diseases were brought under control or lost much of their severity. Population increased also through large-scale immigration from abroad encouraged by the opening up of the region.

For some countries, the development of mineral industry and plantation agriculture brought along not only economic prosperity but also altered the physical landscape.⁸ For others, the development of cash crops led to rapid economic growth and to the increase of exchange, both in export and in domestic trade. The subsistence economy began to be eroded and was substituted by a new commercial economy which had important repercussions upon subsequent developments. As general economic growth proceeded and as internal exchange increased, considerable growth of inland cities began. All these combined to set the stage for the formation of modern urban development in Southeast Asia.

Economic development and urban growth are interrelated in a most complex way. The exploitation of mineral resources and the development of plantation agriculture led not only to general economic growth but also encouraged the growth of a modern transport network. The development of large-scale export-import trade led not only to the growth of major port-cities but also to the growth of inland towns. Each main development should be examined in turn and the specific conditions of urban growth and sources of regional variation analysed.

Expansion of the Mining Industry

Mineral ores such as gold, tin and iron had been exploited in many parts of Southeast Asia from time immemorial. However, large-scale mining operations did not begin until the later part of the 19th century. For centuries, the mining activities in a simple form had been worked by the indigenous people but they were more of ore-collectors rather than exploiters. Although traders from India and Arab countries in the past

⁸ Pelzer, K.J. (1968) Man's Role in Changing the Landscape of Southeast Asia, The Journal of Asian Studies, Vol. 27, pp.269-79.

were attracted to the region for tin, among other things, production and trade of mineral ores on the whole was on a fairly small scale. It formed only part of the lucrative trade of the sailing era.

It was not until the Chinese ventured into the mining industry that mining exploitation on any considerable scale actually began. The Chinese, with their improved techniques and hard-working traditions, became more successful in mining operations than did the native miners. Their enterprise opened up mining on a large scale and brought with it economic prosperity and wealth to the countries concerned. In the case of Malaya, to a certain extent, it was the Chinese success in mining industry that drew the British attention to the Malay Peninsula and so began territorial expansion and the whole process of political, economic and social transformation of the peninsula.⁹

As in many other parts of the tropics, mining provided the initial impetus for the development of colonies. In the case of the Malay Peninsula, mining had been the chief source of wealth in its earlier period of economic development.¹⁰ In fact, the effects of the development of the mining industry covered a wide range of activities. First of all, revenue derived from the tin mining industry provided the cost of colonial administration and the investment in infrastructure which provided the subsequent economic growth. The growth of mineral production for export required the construction of roads and railways which laid the foundation of the modern transportation network. The development of transport networks not only reduced the cost of mineral transportation; they also made it economically possible to open up new lands for the plantation agriculture in the later years. The development of the mining industry was also responsible for a very large portion of the continuous influx of migrants from abroad.

9 See, for example, Winstedt, R. (1966) Malaya and its History, London, pp.62-77; Gullick, J.M. (1963) Malaya, London, pp.50-52; Cowan, C.D. (1961) Nineteenth Century Malaya: The Origins of British Political Control, London.

10 See, for example, Yip, Y.H. (1969) The Development of the Tin Mining Industry of Malaya, Kuala Lumpur, p.297; Ryan, N.J. (1963) The Making of Modern Malaya, Kuala Lumpur, pp.148-49; Ooi, J.B. (1963) Land, People and Economy in Malaya, London, pp.294-317.

The mining industry involved not only milling and transporting crude mineral but also the metallurgical processes of smelting and refining which gave rise to an increased volume of employment. The growth of the mining industry and related activities thereby created a large population which relied on others for its food supply. Besides the increased production in surrounding districts, a substantial quantity of foodstuffs and other necessities had also to be imported. The export of mineral ores also increased the country's ability to import manufactured products and capital goods which were needed for further economic development.

Towns were established in or around the mining districts serving as supply centres for the mining communities and providing outlets for their products. In Malaya tin became the major support of the early urban growth, though administrative and commercial functions helped to enlarge their economic base later. Other towns, however, did not owe their existence to mining, though mining in the interior may have contributed to their growth. Indeed, many thrived on the mining boom. Ports were created or expanded as the export of mineral ores increased. In the case of the Malay Peninsula in the early parts of the 19th century, the mining industry was directly responsible for the development of urban centres and the spread of economic 'growth poles'.¹¹ The growth of the first generation of inland cities on the peninsula was either originated as mining settlement or as centre serving the mining communities nearby.

Development of Plantation Agriculture

Apart from the expansion of the mining industry, agriculture was also energetically pursued in the newly acquired territories. The trend was towards the growth of commercial agriculture and plantation crops.¹² Prior to the second-half of the 19th century, the prevailing form of agriculture in Southeast Asia was subsistence agriculture. Even at the beginning of the 19th century there was only a small part of the region that was affected by the growth of plantation crops. The Island of Java was the only area to have a considerable large-scale production of plantation crops for export. Coffee, along with tea, indigo and cinchona, were the chief exports from Java. But in other parts of Southeast Asia, the cultivation of plantation crops for export was still negligible.

11 Lasuen, J.R. (1969) On Growth Poles, Urban Studies, Vol. 6, pp.137-61.

12 Jackson, J.C. (1968) Planters and Speculators, Kuala Lumpur, pp.211-45; Courtenay, P.P. (1965) op. cit., pp.42-48, 148-58; Allen, G.C. and Donnithorne, A.G. (1957) op. cit., pp.106-38.

However, the consolidation of colonial rule in the second half of the century witnessed the great expansion of plantation agriculture. Plantation cultivation, in contrast to traditional farming, is primarily market-oriented and as such is closely related to extreme market demand. The industry requires heavy capital investments to cover the cost of clearing and planting and it also requires efficient and modern management. The crops are mainly for export and processing factories have also to be built. The indigenous populations as well as the Asian migrant-groups were unable to provide adequate financial investment and lacked efficient management. Not surprisingly, therefore, the development of large-scale plantation cultivation in the region had to wait until the second half of the 19th century. The expansion of the industry was made possible by the steady inflows of European capital and by the large-scale influx of Asian migrants in the later part of the 19th century, since when hundred of thousands of acres of new land formerly covered with forests or jungles have been cleared and brought under cultivation. Planting was greatly facilitated by the ease with which land could be obtained. The vast virgin land offered extensive tracts for large-scale plantation cultivation. Crops native to the land were planted and new crops from other tropical lands were introduced. The introduction of rubber to the region in the last quarter of the century, for instance, was a successful story of the development of plantation agriculture in Southeast Asia. Rubber was first planted in Malaya and then spread to the neighbouring countries, and it became the major foreign-exchange earners¹³ for several countries in later years.

The growth of the plantation industry brought not only prosperity to many countries in the region but also transformed both the physical and economic landscape. It also provided a means of livelihood for a substantial portion of the population of Southeast Asia. A new set of economic activities based on plantation agriculture developed which led to the expansion of an important export-import trade. And such an exchange economy required among other things an urban base. In lands where there were few traditional cities, new centres sprang up in the newly developed lands to function as nodes for the new economy. The growth of the plantation industry provided agricultural as well as non-agricultural jobs

13 Boeke, J.H. (1946) The Evolution of the Netherlands Indies Economy, New York, pp.47-55; Symons, L. (1968) op.cit., pp. 138-47; Ooi, J.B. (1963) op. cit., pp.199-224.

as trade and processing operations followed. Directly or indirectly it led to the growth of ports and cities as well as to improved communication facilities.

Immigration and Urban Growth

The expansion of colonial rule and economic development also brought about tremendous changes in the pattern and magnitude of population movements. Mineral exploitation and the growth of plantation agriculture created great demands for labour, and migrants, mainly Chinese and Indians, moved in to fill the gap. The study of economic as well as urban development in Southeast Asia in the 19th century would not be complete without mentioning this large-scale influx of migrants. Their commercial and economic drive played an important role in the development of the region which, in turn, helped to quicken the pace of urban growth. Many of the major cities in Southeast Asia today were either originally founded or assisted in their foundation by the migrant groups or their growth was closely related to these migrants' influences. For some countries, urban development was largely the product of the 'colonial-immigrant complex' ¹⁴.

Although Chinese and Indians had established themselves in Southeast Asia long before the coming of the Europeans, a large-scale influx did not begin until the second half of the 19th century when Southeast Asia came under colonial rule. With the establishment of law and order, in addition to opportunities brought about by economic development, favourable conditions were created which attracted large-scale in-migration of peoples. Commercial development of the Irrawaddy, the Menam, and the Mekong delta; the planting of cash crops and rubber; and the large-scale exploitation of mineral resources, especially tin ore in Malaya: all created a great demand for labour as well as for traders.

However, prior to the mid-19th century, except for the Island of Java and the Tonkin delta in North Vietnam, most countries in the region were sparsely populated. This was especially true of regions like the Malay Peninsula, the Borneo Territories and the Outer Islands of the Dutch East Indies. Most colonial governments realized that development would be slow unless more hard-working foreign labourers could be attracted. As a

14 Lim, H.K. (1974) The Evolution of the Urban System in Malaya, Ph.D. Thesis, London, pp.22-25.

result, a laissez-faire policy was adopted and migrants from China or India were encouraged or little restriction was placed on the movements of the population. This was especially so among the British colonies and protectorates like Malaya, Singapore, the Borneo Territories and Burma. Other regions like the Dutch East Indies, French Indo-China, Thailand and the Philippines also had their share of the influx of migrants, but on a smaller scale. Indians were mainly concentrated in Burma and other British colonies,¹⁵ while the Chinese were to be found in most parts of Southeast Asia.¹⁶

Emigration from China depended to a certain extent on conditions in Southeast Asia as well as on the situation in China itself. China even at that time, was relatively densely populated, and unemployment or under-employment were common. Many people found it hard to earn a decent living. They turned to other alternative areas and took up the opportunities of moving to Southeast Asia. Another factor which encouraged Chinese to migrate to 'Nanyang' was the changed attitude of the Manchu régime towards emigration at that time. Effective prohibition against emigration began to be relaxed from the mid-19th century. Besides, political disturbances, social unrest and the ravaging of Southern China during the Taiping Rebellion (1850-1864) prompted many to leave their homelands. From the mid-19th century, therefore, the Chinese population in Southeast Asia began to grow steadily and penetrated into most parts of the region. The Indians, on the other hand, were recruited through agents and an indenture system or through a system of assisted passages.

In those early days, the majority of migrants came as manual workers without their womenfolk. Their original intention was not to settle permanently but to work hard with the hope of acquiring sufficient wealth

15 See Hatley, R. (1967) The Overseas Indian in Southeast Asia: Burma, Malaysia and Singapore, in R.O. Tilman ed., Man, State and Society in Contemporary Southeast Asia, London, pp.450-66; Andrew, E.J.L. (1934) Indian Labour in Rangoon, London; Sandhu, K.S. (1969) Indians in Malaya, Cambridge; Arasaratnam, S. (1970) Indians in Malaysia and Singapore, London.

16 For some literature on 'Nanyang' Chinese see, among others, Purcell, V. (1965) The Chinese in Southeast Asia, London; Wang, G. (1959) A Short History of the Nanyang Chinese, Singapore; Skinner, G.W. (1959) Overseas Chinese in Southeast Asia, The Annals of the American Academy of Social and Political Science, Vol. 321, pp.136-47; Unger, L. (1944) The Chinese in Southeast Asia, Geographical Review, Vol. 34, pp.196-217.

to return home. With some saving, many soon became shopkeepers and traders. Others aspired to become rich and chances of amassing wealth were greater in commerce and trade than in primary pursuits. Rice-farming was least profitable and so was shunned by many migrants. They instead took to producing cash crops such as spices and rubber. Others engaged themselves in the more lucrative forms of occupation, such as craftsmen. Indeed, they provided the essential labour force in mines and plantation estates as well as in many professional and trading activities.

The local land systems and laws also affected the occupations of migrants. In some countries, the local agrarian laws actually forbade the Chinese migrants to acquire land for cultivation; in others, they were discouraged from being farmhands.¹⁷ They were also barred from entering the government and public services of the colonial regimes.¹⁸ Business - retail or wholesale - was thus the easy way out. The colonial economic system also needed the retailers and middlemen operating between the Europeans and the indigenous people (See Fig. III.1). Since these migrants had a better knowledge of local trade and languages compared with the Europeans it was much easier for them to try their hand at trading. The local cultivators and plantation workers looked to them for markets and for necessities. As a result, the Chinese took over much of the inter-regional and domestic trade of most countries in the region, with the exception of Burma where Indian influence was much more profound.

Although Europeans dominated the major export trade, they depended on the Chinese or Indians for the preliminary handling of local produce and for the marketing of the imported goods. As the 19th century went on, these migrant groups became the dominant

17 See, for instance, Caldwell, J.C. (1963) *Urban Growth in Malaya: Trends and Implications*, *Population Review*, Vol. 7, pp.39-50; Rosen, G. (1975) *Peasant Society in a Changing Economy: Comparative Development in Southeast Asia and India*, Urbana, p.151

18 Mills, L.A. (1942) *British Rule in Eastern Asia*, London p.65

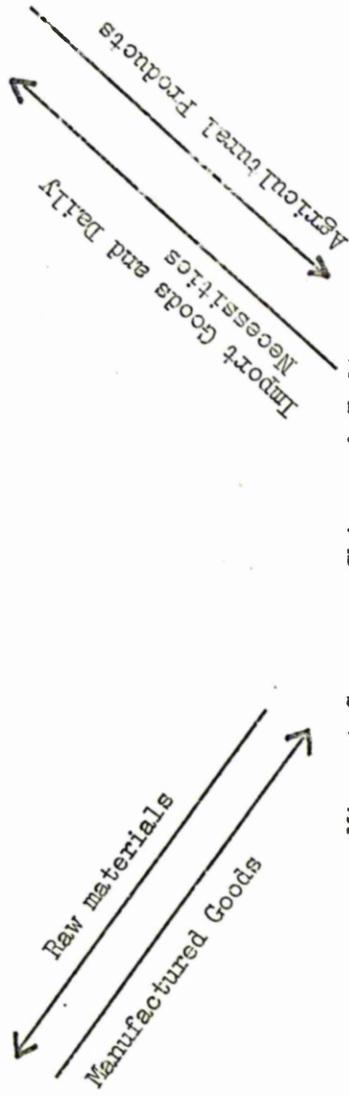
FIG. III. 1

Economic Relationship Among the Migrant, Indigenous and European
Groups Within the Colonial-Economic Framework

European Groups ← - - - - - → Indigenous Groups

(Traders and administrators)
Modern, export-import, capital-intensive,
firm-centred economy

(Labourers, workers and petty traders)
Labour-intensive, bazaar economy



Migrant Groups: Chinese & Indians
Middle-men, traders, shopkeepers,
professionals, labourers

→ major contact
- - - → minor contact

element in retail trade making headway in the wholesale trade and in industry as well. These kinds of occupation and economic activities naturally kept them in towns. The consequence was that the majority of the Chinese in Southeast Asia became urban dwellers. In some countries, they provided the chief element of population in towns. By origin, the great bulk of migrants were peasants from often overcrowded agricultural districts of China or India but they soon settled down in large numbers in Southeast Asian cities, especially the Chinese in larger cities. This was one of the early forms of rural-urban migration in Southeast Asia although the migration involved long journeys from overseas.

The Expansion of Cash Crop Cultivation on the Mainland

The expansion of the mining industry and plantation agriculture in the insular part of Southeast Asia was paralleled by the large-scale cultivation of cash crops for export in the mainland states. Among the major cash crops, rice was the most important produce on the mainland part of Southeast Asia. Wet paddy had been cultivated in the region from pre-historic times, and rice cultivation, as mentioned in the last chapter, was the main base of early Southeast Asian agrarian civilizations. However, the production of rice as a cash crop for export in large quantities only began in the second half of the 19th century.¹⁹ Up to about the 1850's rice production for most countries was principally for domestic consumption. There had never been a regular foreign market; thus farmers had had no incentive to extend their production much beyond their family needs.

However, a change came about during the second half of the 19th century when economic activities grew and foreign trade developed. Although the expansion of the domestic market created a new demand, the most spectacular demand for the commodity came from foreign market. The opening-up of rice-deficient countries like Malaya, Singapore, Hongkong, Sumatra and the Borneo Territories meant that a regular foreign market was ensured. This powerful external economic force soon began to exert its influence on the structure of rice production and

19) Cheng, S.H. (1953) The Rice Industry of Burma, 1852-1940, Kuala Lumpur, p.3; Ingram, J.C. (1955) op. cit., pp.1-35

general economic development of the mainland states.

With the ready foreign market, farmers in Burma, Thailand and the states of Indo-China began to clear new land for paddy as well as for other cash crop cultivation. Paddy cultivation for most countries at ~~once~~ expanded at a remarkable pace. In Lower Burma, for example, the rice acreage increased from less than one million acres in 1855 to nearly six million acres by the end of the century. Other states also had a fast rate of increase in the acreage of rice-lands. Within a few decades rice in Burma, Thailand and Indo-China became the major export crop. Burma, Thailand and Vietnam were transformed from lands with little agricultural surplus and only a small amount of foreign trade to the world's leading exporters of rice. And the major deltas and river valleys on the mainland became the rice-bowls of Southeast Asia.

Under colonial rule the previous restrictive policy for certain commodities for export by the indigenous courts was abolished and replaced by a free-trade policy.²⁰ The many irrigation projects also helped to increase both agricultural productivity and to extend the land under cultivation. The introduction of modern transport, both internal and external, made possible the mass export of bulky commodity like rice. As trade flourished, port-cities were developed or expanded. Meanwhile, a series of towns also developed in these states in the delta zones and in the river valleys which provided sales and distribution services and regulated the flow of goods exchanged within the export-import economy. These market-towns were products of the economic development of their hinterlands, though in some cases their growth was also partly due to their choice as provincial administrative centres.

The Development of Transport Networks

Another important development which had a profound impact

20 See, for example, Adas, M. (1974) The Burma Delta: Economic development and Social Change on an Asian Rice Frontier, 1852-1941, Madison, pp.28-38; Ennis, T.E. (1964) French Policy and Development in Indo-China, New York, pp.111-48; also Ingram, J.C. (1955) *op. cit.*, pp.36-74

on both economic and urban development during the 19th century involved the expansion of transportation. For most countries, it was the growth of mining, and plantation industries as well as cash crop production which led to the growth of modern transport networks in the region. Like many other colonial territories, the construction of railways and roads in Southeast Asian countries took place largely in response to, rather than prior to, the large-scale export of mineral and plantation products.²¹ The development of railways and roads meant the opening up of inland areas to new forms of transportation where rivers had previously formed almost the sole means of transport. Transportation thus played a key role in the development of the region's economy and in its subsequent urban growth.

However, the construction of transport lines was largely conditioned by the needs of an export economy. A line was laid in an area where mineral deposits were abundant or where lands for commercial cultivation were available. Thus the new transport lines tended to simply link the mining and plantation areas with the ports. Railways and roads provided transport capable of carrying the bulk of commodities and moving relatively rapidly. Modern transport thus greatly reduced the cost of freight and its effects on inland production and on trade generally was spectacular.²² Meanwhile, the arrival of the steamships revolutionized the coastal and inter-island trade in the archipelago.²³ The increase of the carrying power and the reliability

21 Fisher, C.A. (1948) The Railway Geography of British Malaya, Scottish Geographical Magazine, Vol. 64, pp.123-36; McGee, T.G. (1960) op. cit., p.48

22 Hodder, B.W. (1968) Economic Development in the Tropics, London pp.192-99

23 See, for example, Hyde, F.E. (1964) British Shipping Companies and East and Southeast Asia, 1860-1939, in C.D. Cowan ed., The Economic Development of Southeast Asia, London, pp.27-47; Allen, G.C. and Donnithorne, A.G. (1957) op. cit., pp.210-24

of the steamers also led to a considerable reduction in sea-freight costs. It not only encouraged inter-island trade and population movements, but also fostered the growth of minor port-cities.

Indeed, the development of modern transport systems and of exchange and trading activities, permitted many cities to come into existence by tapping hinterlands, sometimes even from other countries, to supply them with food and raw materials for which they provided services in return. Modern transportation networks thus imposed a new pattern of spatial integration for each individual country and generated a new system of cities.²⁴ Towns emerged in places where there was a change in transportation such as the transfer from one form of conveyance to another or the re-grouping of goods that required handling and storage or a transfer of ownership. People and organizations that performed these activities added to the size of existing centres or formed new ones. Modern transport served both as a cause and effect of subsequent economic and urban development. It brought towns and cities into closer contact with one another as well as with the outside world.

The Spread of the Money Economy

Prior to the large-scale development of plantation agriculture and mineral ores for export, Southeast Asia was of minor importance in world trade, apart from its early spice trade. The means of livelihood depended largely on an agricultural economy of rice and fish for household consumption. The region's economy was organised primarily on a self-contained basis with villagers providing most of their own needs. But a change came in the 19th century with the continuous development of a mining industry and the expansion of commercial agriculture. To a considerable extent, the change was the result of opportunities provided by wider markets and better transport. Under the laissez-faire economic policy and

²⁴ See Taaffe, E.D., Morrill, R.I. and Gould, P.R. (1963) Transport Expansion in Underdeveloped Countries: A Comparative Analysis, Geographical Review, Vol. 53, pp.503-29

the increase of export-import trade, the region was gradually transformed from a locally-orientated economy to a more specialized and externally-orientated commercial economy.²⁵

There was great contrast between the market-orientated and the subsistent economies. The latter, due to their self-sufficiency and lack of specialized production, carried on a small volume of trade and inter-change between regions and countries was insignificant. Modern transport and communication infrastructure were also not required. A market-orientated economy, as its name implies, is geared to the world trade systems. It specializes in producing a few plantation cash crops destined for foreign markets or in exporting mineral resources in exchange for manufactured goods. The export-import trade required a modern transport network and commercial organizations. And trade became the most important economic activity. Tertiary activities were important for most cities. Thus the increase in service and trading activities greatly stimulated urban development.

Southeast Asia's export trade was composed of a few primary agricultural products and minerals. The high degree of specialization in the production of a few export crops led to the import not only of manufactured goods but also of a considerable amount of foodstuffs and other necessities. The marked increase in the volume and value of exports was accompanied by a roughly comparable amount in total imports. Under the colonial economic framework, people were encouraged to produce cash crops for money. Other things conspired also to increase the peasant's need for cash: to meet the government's tax demands and to buy the imported goods which were gradually introduced into the rural areas. Meanwhile, the colonial economy penetrated into the village life and hastened the destruction of the indigenous cottage industry.

Before the large-scale importation of relatively cheap manufactured goods, a substantial cottage industry flourished in

25 Myint, H. (1967) The Economics of Developing Countries, London, pp.38-52; McGee, T.C. (1960), op. cit., p.45

Southeast Asia.²⁶ The native craftsmen supplied the villagers with a large part of their needs but, under competition from imported consumer goods, the cottage industry was undermined and eventually declined. More and more people had to rely on imports, even for textiles and household utensils. As the amount of money which they had to spend increased, money became a widely sought-after medium of exchange. Crops were grown for sale and increasing numbers of people worked for pay. Money, thus, came to play an increasingly important role in the Southeast Asian economy.²⁷ The economy was no longer self-sufficient and became meshed with that of the world market. The Southeast Asian economy was thus built around the export-import trade.

The 'Colonial Trade Circuit' and the Growth of Major Port-Cities

Following the expansion of the export-import trade, a new form of trade pattern took shape, termed the 'colonial trade circuit'.²⁸ The development of this trade circuit not only furthered the growth of the major port-cities but also fostered the development of a chain of minor port-towns and the inland cities. This pattern of trade was based on the distinction between the rice-surplus and rice-shortage countries on the one hand, and the European manufacturing powers on the other. The rice exporters were those countries, like Burma, Thailand and Vietnam, which developed large-scale commercial rice production, while the rice-importing countries were those with the largest concentration of plantation agriculture and minerals for export. The Malay Peninsula and Indonesia belong to the second group.

Trade between Malaya, the United Kingdom and other neigh-

26 Resnick, S.A. (1970) The Decline of Rural Industry under Export Expansion: A Comparison among Burma, Philippines and Thailand 1870-1939, The Journal of Economic History, Vol. 30, pp.51-73

27 Boeke, J.H. (1942) The Structure of Netherlands Indian Economy, New York, pp.57-67; Mills, L.A. (1964) Southeast Asia, Minneapolis, pp. 188-203

28 See Keyfitz, N. (1965) Political-Economic Aspects of Urbanization in South and Southeast Asia, in P.M. Hauser and L.F. Schnore eds., The Study of Urbanization, New York, pp.272-74.

bouring countries may be taken as an example to illustrate the relationship between the expansion of colonial trade and the growth of port and inland cities of the peninsula. Since its early foundation the port-city of Singapore functioned as an entrepot, in which produce from Malaya and other neighbouring countries passed into the world market, while goods from the metropolitan countries passed through Singapore and entered the Malayan market or were re-distributed to other neighbouring countries like Indonesia, Thailand, Burma and Indo-China. Meanwhile, the Siamese rice, along with that from the Irrawaddy and the Mekong, was imported through the port to provide food for the city's population as well as for the plantation workers, tin-miners and shopkeepers of Malaya. As a result, Singapore and to a lesser extent, Penang, established themselves as the main commercial and service centres for the Malay Peninsula as well as for the neighbouring countries. Meanwhile, as commercial activity increased, inland towns serving as collecting and distribution points flourished.

The development of Bangkok is another typical example to illustrate how the growth of import-export trade under the influence of the colonial economic network affected the growth of the city, though politically Thailand was not a colony. Thai's rice and other primary products went through the port of Bangkok and was sold to rice-deficient countries like Malaya, Sumatra, the Borneo Territories and Hongkong. Manufacturing goods and other necessities were imported directly from Europe or through Singapore or Hongkong to Thailand. As trade increased, Bangkok grew apace. The same pattern of colonial trade circuit evolved around other major port-cities like Manila, Djakarta, Rangoon and Saigon-Cholon. The only difference was the major partners of trade, the export commodities and the volume of trade involved. Economically the development of the major port-cities in the region became subordinated to the needs of the colonial trade.²⁹

29 See, for instance, Murphey, R. (1969) *op. cit.*, pp.79-80; Fryer, D.W. (1953) *op. cit.*, pp. 488-90; Ginsburg, N.S. (1955) *op. cit.*, 458-60

Meanwhile, the expansion of international trade brought considerable changes in Southeast Asia's internal trade pattern, both wholesale and retail. Merchants purchased local products and shipped them to the port-cities. In return, they ordered imported manufactured goods and sold them to people in the country. Portions of the population in each country, especially the Asian migrant groups, were drawn into urban centres to act as traders to serve the growing populations. Indeed, the new social economic conditions permitted and encouraged the concentration of population in towns. The collecting, sorting, loading and transporting of internal commerce, as well as retail trading, constituted the bulk of new non-agricultural employment opportunities in towns. Thus tertiary activities were found in towns of all sizes throughout Southeast Asia.

The commercial economy, indeed, helped to facilitate a broad marketing system and to increase market-orientated productions. Meanwhile, new forms of commercial organizations and institutions such as banks, insurance firms and trading houses were brought in. The local demand created by the new mercantile establishments called into being additional job opportunities for the urban dwellers. When the export of an urban locality grew, the local economy of the centre increased also. Each additional job created by a town's trading activities added other jobs in the local economy, to supply and serve the growing number of merchants, shopkeepers, workers and their families. In later years, the kinds of works performed in towns also multiplied. Much agricultural produce that at the beginning was merely collected for export might later be processed in local factories. Favourably situated urban localities grew in response to the growth of trade and the development of resources.

CHAPTER IVURBAN SYSTEMS AND CHANGES OF THE TWENTIETH CENTURY: NATIONAL
ADJUSTMENT AND VARIATIONS

Since the beginning of the twentieth century, Southeast Asia has witnessed an accelerated pace of urban growth. That the population of Southeast Asia in the present century is being urbanized more rapidly is evident from a comparison of the rate of urban population increase with that of the total population growth. Meanwhile, the rise of new towns and the expansion of the existing ones are another indication of the accelerated urban development. Not only is the total urban population of the region increasing, but its percentage in the total population is also continuously rising, which is an expression of the process of urbanization in terms of numbers.

If one considers the figure of 5,000 or more inhabitants as 'urban', then about 4.9 per cent of the population of Southeast Asia was living in urban areas in 1901. The percentage went up to 7.8 in 1930 and reached 15.4 per cent in 1960. However, if a higher figure of 20,000 or more is used, then the urban percentage of Southeast Asia as a whole was about 3.0 per cent in 1901, 5.5 per cent in 1930 and 13.0 per cent in 1960. Compared with the economically advanced countries, the degree of urbanization of Southeast Asia is still relatively low. But like many developing regions in other parts of the world¹, the region has begun to experience rapid urban expansion, particularly since the end of the Second World War.

1 Comparative statistical data concerning the urban population of the World's major regions can be found in Davis, K. (1969) World Urbanization 1950-1970: Analysis of Trends, Relationships and Development, Berkeley; also United Nations (1968) World Urbanization Trends 1920-1960, International Social Development Review, Vol. 4, pp. 9-20.

Table IV. 1Total and urban population growth in Southeast Asia, 1901-1960

<u>Year</u>	<u>Total population</u> (in millions)	<u>Urban population</u>			
		<u>With 5,000 or more</u>		<u>With 20,000 or more</u>	
		<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>
1901	97.3	4.8	4.9	2.9	3.0
1930	168.9	10.3	7.8	7.3	5.5
1960	216.7	33.1	15.4	27.9	13.0

In terms of absolute numbers of population increase, there were in 1901 only 4.8 million Southeast Asian people living in towns and cities with populations of 5,000 or more. In 1930 the number went up to 10.3 million, an increase of 114.6 per cent whereas the total population of the region went up from 97.3 million to 168.9 million, an increase of only 34.7 per cent. A greater rate of increase occurred in the later period. From 1930 to 1960 the urban population more than trebled, a rise from 10.3 millions to 33.1 million, or an increase of 221.4 per cent whereas the total population of the region went up to 216.7 million, an increase of just 65.3 per cent. Since the early decades of the present century, the rate of urban population increase has begun to outstrip the rate of total population growth. The process of urbanization of Southeast Asia has apparently accelerated.

Urban development is a continuous process. As illustrated in the last chapter, the growth of towns and cities in Southeast Asia was largely the end-product of the 'colonial-immigrant complex'. That momentum of urban growth began in the second half of the 19th century and was continued into the 20th century. The advent of the European colonial administration in Southeast Asia had brought with it new forms of political and financial institutions which became part of the urban scene of the 20th century. The establishment of peace and security stimulated a large-scale influx of migrants and these movements were closely associated with the economic development of the region. The development of mining and plantation industries as well as cash crop cultivation led to the construction of modern transport systems and the growth of export-import trade. This trend of development continued into the present century and at a quicker pace.

Following in the wake of accelerated economic development in the early decades of the present century, and more particularly between the two World Wars, the increased rate of urban growth and the spread of urbanization² have become major features of the changing urban scene of the region. The growth of large cities has been paralleled by an equally rapid increase in the population of the medium-sized cities as well as a host of the smaller towns. Indeed, the early decades witnessed both economic expansion and urban development of the region and was only briefly interrupted by the Great Depression in the early 1930's. Economic and urban expansions, again, stepped up in the latter part of the 1930's and early 1940's, in consequence of heavy world demand and good prices for most Southeast Asian commodities which had been increasingly efficiently carried by improved rail and road transport, bulk handling and better port facilities. As economic growth and trading activities proceeded, more people were engaged in transportation, financial, personal and entertainment services. Indeed, it was the commercial and administrative activities which drew an increasing number of people to live in towns. Urbanization thus further increased.

However, before discussing the changing pattern of urban growth in Southeast Asia in the 20th century, it is essential to look at the character of urban development in the region. Urbanization is a vastly different process in Southeast Asia from in the West. In contrast to the Western experience, the rapid pace of urban growth in Southeast Asia has not been related to any significant scale of industrial growth, whereas in most Western countries urban growth has always been accompanied by large-scale industrialization³. In Europe and North America, the rapid growth of towns and cities in the 19th century had been the direct result of the industrial revolution and modern technology, spurred on by the industrial development which began around the early 18th century.

2 Urbanization as a process of population concentration see, for example, Eldridge, H.T. (1956) op. cit., pp. 338-43.

3 Lampard, E.E. (1955) The History of Cities in Economically Advanced Areas, Economic Development and Cultural Change, Vol. 3, pp. 36ff.

Traditionally, industrial growth has not only led to an increase of the population of cities, but has also increased the productivity of the city⁴. It has involved an increase in employment opportunities in the cities due to the clustering of manufacturing establishments in response to the economic growth. Jobs were plentiful in the industrial cities. Industrial growth, therefore, provided the motive element of urban development by draining the rural population towards the cities. This citywards movement was made possible only by the improvement of farming and new crops which gave rise to agricultural productivity sufficient to create an excess of labour supply in rural areas. In short, the economic development in the West has consisted very largely of transferring population from low productivity agriculture to much higher productivity industrial occupations, thus at the same time reducing population pressure on the land and permitting agricultural improvement in the form of conversion to large-scale mechanized agriculture.

Meanwhile, industrial and economic developments multiplied their effects by providing additional jobs for professional, public and domestic service personnel. New migrants have quickly been absorbed into the new expanding industrial and economic activities. Under such favourable environments, towns grew to be cities, and cities became very large settlements indeed. Industrialization led to an accelerated rate of urban development, and urban growth in turn created new conditions which demanded an increase of industrialization.

In Southeast Asia, in contrast, the recent rapid urban growth is neither a consequence nor a cause of the process of industrial development⁵. Cities in Southeast Asia show less development in urban industry.

4 For further reading on this topic see, Deane, P. (1957) The Industrial Revolution and Economic Growth, Economic Development and Cultural Change, Vol. 5, pp. 159-74; Hoselitz, B.F. (1955) The City, the Factory and Economic Growth, American Economic Review, Vol. 45, pp. 166-84.

5 See, for example, Hauser, P.M. (1963) The Social, Economic and Technological Problems of Rapid Urbanization, in B.F. Hoselitz and W. Moore eds., Industrialization and Society, Mouton, pp. 202-03; also Hauser, P.M. (1957) op. cit., pp. 3-32.

Even today, the proportion of persons engaged in manufacturing activities in most Southeast Asian countries is much smaller than the case in Western countries when they were at the same stage of urban growth. When Europe, America or Japan had a level of urbanization equal to that of Southeast Asia at the present day, modernization and industrialization was already well advanced as was evidenced by a broad range of flourishing industrial establishments and a high proportion of work force engaged in secondary industry. Outside the processing and mining sectors, industry in Southeast Asia is currently confined to petroleum refining, car assembly, foodstuffs and textile manufacturing.

The reasons for the slow process of industrial development in Southeast Asia are many and varied. During the colonial period, the only possible way in which industry could be established was by capital investment and technical know-how from the European colonial powers. Industrial development in Southeast Asia depends on the same factors as elsewhere, i.e. the availability of source energies, raw materials, skilled labour, capital and adequate transport. But in those days, all of these save the necessary raw materials were often lacking. The indigenous people of the region were largely unable to provide the capital and management. In addition to this, the prevailing poverty and widespread illiteracy of the population was also one of the main handicaps. The whole energy of the working group was spent in producing food and cash crops for export. There was not much scope for surplus production and capital formation. Other Asian immigrant groups, like the Chinese and Indians, did erect some factories and provided some skilled manpower and management, but on the whole their investment in the industrial sector was small in scale.

Unfortunately, most of the colonial powers at that time had not taken any initiative or interest in encouraging the establishment of industries in their colonies. Their economic policies, in fact, were guided by two major principles: the exploitation of those natural resources in the colonies which provided raw materials for their hungry factories and the reservation of these markets for their manufactured products ⁶.

6 See Landes, D.S. (1961) op. cit.,; Higgins, B. (1958) op. cit., p.83.

Indeed, as noted in the last chapter, the flooding of local markets by imported but cheaper manufactured goods undermined local crafts and cottage industries and rendered jobless a sizeable proportion of the population previously required to provide for the needs of the rural population in the traditional system. As far as they were concerned, colonies were seen as the place to dispose of the manufactures of the 'mother country' rather than set up competing industries.

Indeed, as long as the agricultural and mineral supplies in Southeast Asia were substantial, there was little incentive for those who had capital to invest in the colonies to look beyond plantations and the mines as sources of profit. Even when some factories were erected, they were mainly for the processing of agricultural commodities and mining products and the fabrication of some consumer goods. Rubber, sugar, paddy were processed; coconut and palm nuts were extracted; logs were sawn into boards; or tin-ores were smelted into ingots of the metal. This reduced the shipping space needed, thereby lowering transport costs. As a result, early industries of Southeast Asia were either of the primary type or else were devoted merely to the preliminary processing of materials for export.

Other major handicaps to the progress of industrialization were the traditional attitude of the local people and, to a large extent, the limitation of internal market due to low money incomes. In a low-income region like Southeast Asia, people spent the bulk of their income on food and had not much to spare for manufactured goods. A limited market hampered industrial growth, and entrepreneurs - both Europeans and the Asian migrant groups - were naturally reluctant to invest in such conditions. Local owners of capital found that urban real estate was a most lucrative investment, providing higher returns over shorter periods than almost any other avenue of investment.

Since the attainment of independence, the majority of the national governments in Southeast Asia have embarked on schemes to encourage industrial investment⁷ to meet the constantly rising demand for consumer goods and in an attempt to curtail the import of foreign manufactures, but until now, probably with the exception of one or two countries, industrialization has made little progress. The number of workers in the manufacturing sector is still very low indeed. Even in the relatively more advanced countries like Malaysia and the Philippines, there exist only a small percentage of the working population engaged in secondary industries. The number of people employed in the secondary sector is far below the corresponding figure of the urban population growth. For most countries in the region, the recent rapid urban expansion is neither a consequence nor a cause of the process of industrial development.

Rapid reproduction of city populations undoubtedly contributed to a substantial percentage of urban population increase. The continuous improvement in health and medical facilities has led to a further drop in crude death-rates as well as in infant mortality. Both total and urban populations increased in size. Meanwhile, the changes of administrative status - the reclassification of settlements that have reached urban size by virtue of population growth and the annexation of adjoining previously non-urban territories and their inhabitants - also helped to inflate figures of urban population increase. Nonetheless, the largest single factor of urban population growth for many Southeast Asian countries in the post-war years was largely due to the city-wards migrations. That is, cities were not only having a net reproduction of population as the rural sector had, but also were the recipients of an increasing flow of people from the rural areas.

After the war, the previous in-migration from abroad, mainly China and India, which contributed a substantial part of urban population increase for some countries, became insignificant. The increase was mainly due to the influx of local rural population into urban areas in almost every country in

⁷ See, for example, United Nations (1966) Industrial Development in Asia and the Far East, Selected Documents presented to the Asian Conference on Industrialization, Manila.

the region. Migration was the process in space through which the re-distribution of population in Southeast Asia took place. To understand why this large-scale movement of population occurred in the post-war years, one must look to the socio-economic as well as political environment of the region, which produced the so-called 'push and pull' factors⁸ in the regional context.

As can be easily proved the 'push' factor related chiefly to the conditions in rural areas such as the high population pressure on the arable land, rural poverty and indebtedness, unsatisfactory living conditions, lack of social and economic opportunities as well as rural unrest or civil conflict. And 'pull' factors, on the other hand, related to the attraction of city life, better economic opportunities, real or imaginary, better educational facilities and amenities. All these have operated as indirect or direct influences upon the population from the rural sector which have taken place all over the region in the last few decades. The following paragraphs are aimed at identifying factors which are relevant to the process of this migration.

Rural poverty and rural 'congestion', which are common in many of the developing countries today, were the main factors in Southeast Asia that drove people out of their villages⁹. Rural congestion is measured in terms of 'nutritional density', i.e. the density of inhabitants per unit area of cultivated land. As mentioned before, people tend to gather on the productive farmlands. Although vast areas in Southeast Asia are still sparsely populated, the average density of fertile cultivated land is about 600 to 800 persons per square mile. In some more populous regions like the Songkai delta of North Vietnam, the central and eastern parts of Java and the central plain

8 See Ravenstein, E.G. (1955) The Laws of Migration, Journal of the Royal Statistical Society, Vol. 48, pp. 167-227 and Vol. 52, pp. 241-301; also Hauser, F.M. (1957) op. cit., pp. 86-88.

9 See, for example, Textor, R.B. (1956) The Northeastern Samlor Driver in Bangkok, pp. 17-19; also Heeren, H.J. (1956) Djakarta, a Study of Urbanization, pp. 231-44, in The Social Implications of Industrialization and Urbanization; Five Studies of Urban Population of Recent Rural Origin in Cities of Southern Asia, Unesco, Calcutta.

of Luzon of the Philippines, ratios reached a high level with 2,000 to 3,000 persons per square mile. Shortage of cultivated land is acute in those congested areas, especially in areas where land has been under cultivation for centuries. Thus, the pressure of population on existing agricultural resources is great. Meanwhile, indigenous methods of cultivation have been practised continuously for generations which would inevitably reduce the soil fertility and would bring about an overall decrease in the marginal subsistence.

Besides the fertility and congestion problems, subdivision or fragmentation of lands also play an important role in rendering lands less productive¹⁰. Even in relatively thinly populated countries of mainland Southeast Asia, the size of farmland was reduced through fragmentation of land-holding when population increased faster than the cultivated area expanded. However, in countries where there is a high percentage of Muslims, the practice of subdivision of land is common¹¹. According to the Muslim traditions, lands were shared by the widow and their children after the owner's death. A steady subdivision of lands after a few generations eventually leads to a stage when the unit holding of farmland cannot yield enough food to support the farmer and his family.

Again, some individual holdings may consist of several small plots widely scattered over the village area. That makes it difficult in the use of labour on an economic scale and for a significant wastage of land in the shape of dividing paths and balks. This small plot of land also means that his family often had not enough work to do throughout the year. In spite of double cropping and extremely intensive land-use practice, many families find themselves facing the alternatives of seeking jobs elsewhere. As a result, seasonal or permanent migration follows.

10 Goi, J.B. (1959) Rural Development in Tropical Areas, Journal of Tropical Geography, Vol. 12, pp. 12-204.

11 See, for example, Maxwell, W.E. (1885) The Law and Customs of the Malays with Reference to the Tenure of Land, Singapore, pp. 50-58; also Mat, M. (1962) Land Subdivision and Fragmentation, Intisari, Vol. 1, pp. 11-17.

Meanwhile, the rural poverty and congestion in the region is considerably aggravated by factors such as land-tenure systems and wide-spread tenancy¹². Unlike the West, the proportion of landless peasants is very high in Southeast Asia. Tenure system is common in countries like the Philippines, South Vietnam and pre-independent Burma. In certain provinces in Central Luzon of the Philippines, one half to two-thirds of the total farm population are tenants. Full ownership of land is represented by less than one-third of the total farmlands. In South Vietnam, on the other hand, about 3 per cent of the landowners of the country held roughly half of the cultivated land in the Mekong delta and more than four-fifths of the land was cultivated by peasants owning no land at all. In Burma, landlordism also prevailed. At least before independence, about half of the paddy-land in Lower Burma was controlled by landlords and the majority of the landlords were non-Burmese. In Thailand, the tenant systems are mostly found in the Central Plain and approximately one-third of the paddy is tenant-operated.

The most frequent form of tenancy arrangement is share-cropping between landlord and tenant¹³. Another common form is that it has to be borne by both partners at the rent at a fixed ratio. In most cases the farmer had to offer an amount equivalent to more than half the harvest. Sometimes, the situation becomes more complicated when tenancy and subtenancy prevails. This creates a greater number of people to claim a small portion of the products. Furthermore, the majority of tenants are often in a state of insecurity under such a tenancy system. Although there are legal regulations concerning tenancy in most countries which fix a maximum rent for the tenants, these regulations have often been neglected by the landlords as well as by local law-enforcement officers. The tenants are often obliged to borrow but the rate of interest is so high that eventually debts easily accumulate. In Java, despite the absence of landlord problems, large number of farmers are also being squeezed out from the lands, mainly due to the age-old high density.

12 Pelzer, K.J. (1945) Pioneer Settlement in the Asiatic Tropics, New York, pp. 85-88; Carroll, J.J. (1970) Land Reform in the Philippines, Washington D.C., pp. 9-10.

13 See, for example, Jacoby, E.H. (1949) Agrarian Unrest in Southeast Asia, New York, pp. 78-79, 142-45, 178-86; Dwyer, D.J. (1964) Irrigation and Land Problems in the Central Plains of Luzon, Geography, Vol. 49, pp. 236-46.

Another typical unsettling factor affecting the farmers and the plantation workers in Southeast Asia is the fluctuating price of agricultural products. For some countries, their economy is dominated by a few export crops for which the market is entirely out of their control. And the profits made by middle-men bring the price to the producer down to a very low level. Meanwhile, the substitution of synthetic for natural product such as rubber makes the situation even more unpleasant.

However, these rural problems have been further aggravated in recent years by the rapid growth of population in most countries. Population increase is reflected in the cumulative subdivision and fragmentation of acreages already under cultivation. In the congested areas, scope for the extension of agricultural land is very limited. Thus the growth of population makes a further pressure on the limited land resources of the rural areas. Farmers who are already employed are more than enough to cultivate the land by traditional methods. And due to the absence of inanimate energy and machines in agriculture and other economic activities, agrarian productivity is incredibly low. Those who are added each year find it hard to be absorbed in the farming pursuits. For many of them there is only one solution, namely exodus to the nearby towns where the prospect of employment, even if only temporary, is not entirely excluded.

Of course, some may argue that there exist large virgin lands which could be developed by the surplus rural population. The exploitation of new land, at least to start with, could help to provide new employment opportunities. However, the fact is that this problem is handicapped by the physical conditions. It requires expensive operations and large-scale investment. The poor individual farmer has neither the technical know-how nor the investment to carry out such huge operations¹⁴. Although agrarian reform and rural development have been introduced in some countries, they are either on a very small scale or poorly handled by the inexperienced authorities who lack the ability to tackle the complex physical and social problems.

14 In the case of Malaya see, for example, Silcock, T.H. (1956) The Economy of Malaya, Singapore, p. 31.

Some 'push' factors of rural-urban migration were also due to the civil disorder and rural unrest ¹⁵. The phenomenal growth in population of urban areas in the post-war years has been stimulated primarily by the lack of security in the countryside. During the war-years period, militant anti-Japanese activities emerged in several countries. And after the war, the movement was carried on by the anti-colonialist groups. The break-down of effective administration following the defeat of the Japanese gave the local anti-colonialist groups the best chance to strengthen their organizations. Violence broke out in many parts of Southeast Asia when the colonists tried to regain their former control. This followed the struggle for independence which marked a period of bitter fighting and terrorism. This was particularly serious in the rural areas where most anti-colonialist strongholds were located. Lack of security made life in the rural areas highly dangerous if not impossible. The devastation of the countryside and the rural economy led thousands of the rural population to migrate to cities.

Even after independence, many countries still suffered constant political unrest and local insurrection. In some countries, where much of the country's farmland was controlled by a small number of wealthy landlords or privileged groups, ordinary farmers were on a subsistence level. As a result, many of the discontented farmers joined the rebellious groups against their conservative governments. Meanwhile, many of the present political boundaries between nations or peoples were established by the former colonial governments who simply lumped together the lands they possessed, regardless of the races, languages, cultures and traditions. When the countries gained their independence, some groups felt that they were not being fairly treated by the newly independent governments and had no feeling of loyalty to the central governments. Some rebelled and tried to set up their own governments. As the subversive activities and insurrections flared up, it created turmoil and unsettled conditions in the countryside. The lawlessness and social disturbance drove many people out of their villages and they took asylum in the in the urban areas.

15 Osborne, M. (1970) Region in Revolt: Focus on Southeast Asia, Harmondsworth, pp. 88-110; McGee, T.G. (1960) *op. cit.*, pp. 49-51.

Apart from the 'push' factors, some 'pull' factors were also at work, though with less importance. Although the push factors in rural areas were strong, they did not, in the absence of certain pull factors, suffice to cause such a massive growth of population in cities. In short, the dual character of the Southeast Asian economic structure, i.e. on the one hand a 'modern' highly organised sector with capital in conjunction with skilled manpower and on the other hand, a widespread agricultural complex characterized by low level of productivity and conservatism in technique, has been responsible for the shifts of population away from the less attractive agricultural ways of life towards the major cities. The city, as a symbol of modernization and progress, always acts as a magnet to the rural population.

However limited the industrialization of the region be, the building of some factories in a few of the largest cities, especially the capital city in each respective country, made the capital city an attractive place for the rural migrants for whom rural unemployment and underemployment are not uncommon. The expansion of industrial enterprises in a few large cities also attracted people from other provincial towns where the range of economic opportunities and other facilities were less attractive compared with the capital city. Such was the growth of the largest cities. These cities, also with most governmental departments and other facilities, make them a 'mecca' in the eyes of the intended migrants.

Although the general per capita income of the city population is still low, they are almost universally found to be higher than that of their rural counterpart¹⁶. Incomes in agriculture, in fact, are lower than in other sectors of the economy. Economic necessity and hope of improvement in economic conditions is the primary motivation to move to the cities. People required cash to pay taxes, to buy clothing, manufactured goods, to educate their children, and so on. Looking for a job or 'to obtain a better wage' were the motives to move. But whether the real income of the urban residents is higher than rural real income is still in question because the cost of living is much higher in the cities than in the villages.

16 See, for example, Papanek, G.F. (1975) The Poor of Djakarta, Economic Development and Cultural Change, Vol. 24, pp. 1-27; Anderson, D.A. (1970) Marketing and Development: The Thailand Experience, East Lansing, pp. 43-47; Hauser, P.M. (1957) *op. cit.*, p. 36.

There is no doubt that many of the migrants have over-estimated the real economic conditions in the cities. More often they hear of opportunities for employment and the success stories in the cities among the more fortunate ones. Others who fail and live in the slums often do not return and never tell their stories. Nevertheless, compared with the hardships of farm labour under the conditions of backward technology, life in the city still has appeal for the village youths. More often people migrate not because they have already secured a job but because they are in search of a job. Perhaps a relative or former villager living in the urban centres has been urging him to make the trip, even helping finance the journey. Once migratory channels are laid, the subsequent flow of people is much easier.

Sometimes the 'pull' factor tends to be social rather than economic¹⁷. Cities as centres for education, health, recreation and entertainments, where cinemas, large departmental stores and shops are concentrated, help to strengthen the attraction of urban communities which appeal to village youths. Meanwhile, the isolation of the village has often been lessened by the building of a new road which provides direct transportation to the urban centres. More and more villagers get the image of urban life from newspapers, magazines and radio which now reach many parts of the countryside. The horizons of the villagers are broadened by the wider dissemination of this information. Modern means of communication also create a new appeal of urban life. The large cities, in particular, lure many people from the countryside.

The other important social factor is the desire to seek education for oneself or one's children. The opportunities to rise in the social, educational and cultural status are still the privilege of people in cities. Many parents send their children to schools or colleges hoping that their offspring would rise to a higher social level through education and have opportunities of earning a good income. The distribution of the educational institutions, especially those of the higher level, are biased towards the large cities. Only few secondary schools or facilities for technical training exist outside the large cities. The spread of primary education in the rural areas in recent years has certainly speeded up the rate of migration.

17 Papanek, G.F. (1975) op. cit., p. 9

Migration also produces the basis for further migration, for the move of rural residents to the urban areas affects not only those who migrated but also those who remain in the villages. By retaining links with their families and neighbours, the new urban dwellers not only familiarize rural residents with the 'urban way of life', but also foster further movement of people to the urban localities.

Post-war years also witnessed the rise to political independence for most countries in the region. Independence not only diversified the government and administrative functions, but also has some psychological effects. To many indigenous people, with the establishment of national government, the city was no longer an alien world¹⁸. More people, therefore, moved towards the cities. Meanwhile, government services have also been expanded. The number of administrative offices and government employees in each country multiplied. And government always proves to be a great employer. As government functions expanded, so did the people serving in them. Indeed, the rapid growth of the capital cities was due to the highly concentrated nature of the modern governmental bureaucracy.

If the above mentioned 'push-pull' framework of motivation for migration is accepted, it seems clear that the 'push' factors of decreasing opportunities for employment and rural unrest were far more important than 'pull' factors by the employment opportunities in the urban area¹⁹. While there is ample evidence in Southeast Asia of people being pushed from the countryside; there is also evidence that cities in the region are also attracting rural population, especially the youthful generation for jobs, education and city-life, though their relative importance is at present still not known. This 'push-pull' model may be over-simplified, nevertheless, it does explain part of the reason for the post-war urban population explosion.

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- 18 McGee, T.G. (1964) An Aspect of Urbanization in Southeast Asia, Proceedings of the Fourth New Zealand Geography Conference, Dunedin, pp. 207-18; also McGee, T.G. (1965) Aspects of the Urban Geography of Malaysia; The Movement of Malays to Kuala Lumpur City, New Zealand Geographical Society Record, Vol. 39, pp. 7-9.
- 19 See, for example, Ng, R.C.Y. (1975) Internal Migration in Southeast Asian Countries, in L.A. Kosinski and R.M. Prothero, eds., People on the Move: Studies on Internal Migration, London, pp.181-92; Textor, R.B. (1961) From Peasant to Pedicab Driver: A Social Study of Northeastern Thai Farmers who periodically migrated to Bangkok and became Pedicab Drivers, Yale University Cultural Report Series No. 9, New Haven, pp.11-12; Myrdal, G. (1968) Asian Drama: An Inquiry into the Poverty of Nations, Harmondsworth, pp. 2139-49; Hoselitz, B.F. (1957) op. cit., p. 44.

Over a region as large as Southeast Asia and with such wide variations in the social, economic and political pattern, the nature of urban development also varies from country to country. Moreover, the urbanization of a population is a selective process and city-wards migration as well as urban reproduction contributes differentially to urban growth from one country to another. Besides, censuses of each respective country were conducted at different times and the time intervals between censuses also varies. Thus the urban system and changes in each country are treated separately and wherever possible comparisons made among them.

In the following paragraphs an attempt is made to utilize the limited materials available to provide an analysis of the changes of urban pattern, to explore the regional variations and their relation to selected indicators of social and economic development of Southeast Asia in the present century. However, not all cities were growing at a constant rate. An analysis of urban development by size categories can answer the questions like which sizes of cities have contributed most to total urban growth and how has the distribution of Southeast Asian urban population been affected by size class growth differentials. It is interesting to observe how the urban pattern has developed and changes have taken place.

Urban System and Changes in Malaya, 1901-1957

By Southeast Asia's standards, Malaya²⁰ is the most urbanized country in the region. Even in the early decades of the twentieth century, the percentage of urban population in Malaya was relatively high for a country where economic foundations were closely associated with primary production. Except for the islands of Singapore and Penang, agriculture was the mainstay of the national economy. Indeed, economic growth of the country was closely linked with the entrepôt trade of Singapore and Penang and the growth of tin and rubber industries on the peninsula.

Rapid urban growth and population increase of the country can be seen from Table IV.1. which shows both the urban population and the percentage of change in the period between 1911 and 1957. Within a period of forty-six years, the total urban population of Malaya grew from 0.6 million to 2.9

20 Malaya is used here as a geographical term, covering both the Malay Peninsula and the islands of Penang and Singapore.

TABLE IV. 1

Urban Population increase of Malaya by size category, 1911-1957

<u>Size category</u>	<u>Urban Population</u> (in thousands)				<u>Percentage of Increase</u>				
	1957	1947	1931	1911	1947	1931	1911	1931	1911
					<u>Annual Rate</u>	<u>Annual Rate</u>	<u>Annual Rate</u>	<u>Percentage</u>	<u>Percentage</u>
Large Cities (over 100,000)	1589.2	1044.7	716.5	360.8	4.3	2.4	3.4	45.8	98.6
Medium-sized cities (20,000-100,000)	747.8	471.6	205.0	91.9	4.7	4.2	4.1	129.5	123.6
Small cities (under 20,000)	548.6	256.8	189.7	96.6	7.9	2.0	3.4	35.4	96.4
All sizes	2885.6	1773.1	1101.7	549.3	5.0	3.0	3.5	60.9	100.6
Total Population Of Malaya	7722.8	5846.2	4385.3	2984.7	2.9	1.9	2.0	33.3	46.9

Sources: Marriott, H. (1912); Pountney, A.M. (1912); Vlieland, C.A. (1932); Del Tufo, M.V. (1949);
Fell, M.V. (1949); Fell, H. (1960); Chua, S.C. (1960).

million, an increase of 2.3 million or 425.3 per cent; whereas the total population went up from 3.0 million to 7.7 million, an increase of 4.7 million or 158.9 per cent. The rate of urban population increase was more than twice as fast as the rate of total population growth. Rapid urban growth is also reflected by the increase of the level of urbanization. The percentage of urban population grew from 18.4 per cent in 1911 to 25.1 per cent in 1931, and then rose to 30.3 per cent in 1947 and reached 37.4 per cent in 1957.

However, the process of urban growth varied from one period to another. On the whole, the pre-War period showed a steady growth but a greater rate of increase occurred in the post-war years. The country experienced a fairly rapid growth in the period 1911-1931, an increase of 100.6 per cent within two decades. The rate of increase slowed down a bit in the period between 1931 and 1947. It was partly due to the Depression of the 1930's and the great damage caused by the Japanese Occupation during the Second World War. Within a period of sixteen years, urban population only grew by 60.9 per cent. The rate of increase speeded up again in the post-war years. Within a decade from 1947 to 1957, urban population rose by 62.7 per cent and reached a new high in Malaya's urban history.

Another significant aspect of urban development in Malaya is the continuing increase of the number of urban centres. As can be seen from Fig.IV.1 to Fig.IV.4, the number of urban settlements has not only increased but passed from the lower size categories to the higher size groups. In 1911 there were only two cities, Singapore and George Town, with populations of more than 100,000, but the number increased to four with Kuala Lumpur and Ipoh joining in by 1957. Singapore almost reached the million mark with Kuala Lumpur passed the number of 350,000. Meanwhile, George Town rose to over the 200,000 mark and Ipoh grew to over the 100,000 mark. The growth of the medium-sized cities was also impressive. There were eighteen cities with populations in the 20,000 to 100,000 range in 1957 whereas there were only three in 1911. However, the most impressive growth was the increase in the number of small towns. In 1911 there were only nine towns with populations of between 5,000 and 20,000 ; but the number surged to sixty-three in 1957.

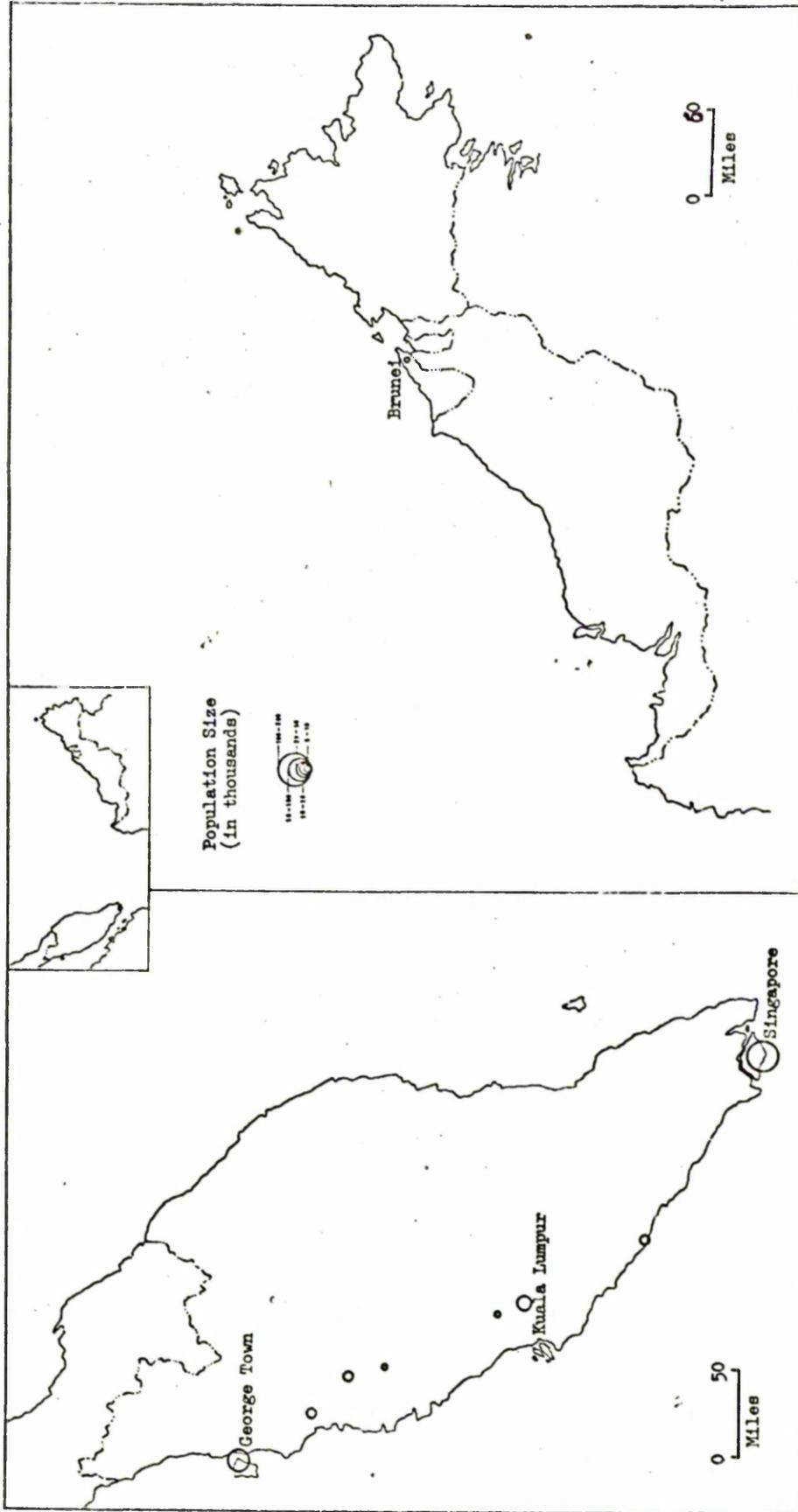


FIG. IV.1 Malaya and the Borneo Territories: urban places with 5,000 inhabitants and over, 1911.

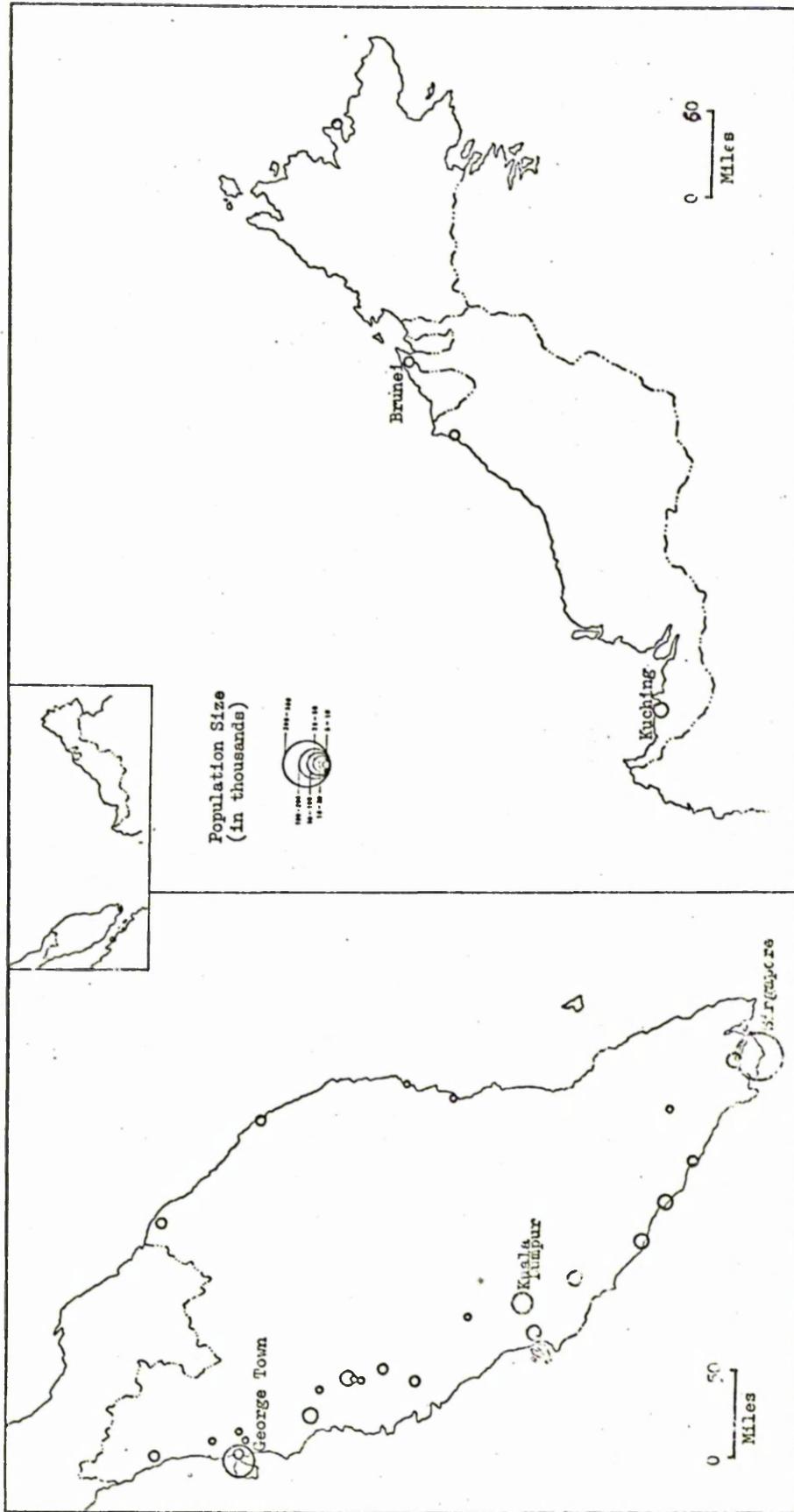


Fig. IV.2 Malaya and the Borneo Territories: urban places with 5,000 inhabitants and over, 1931.

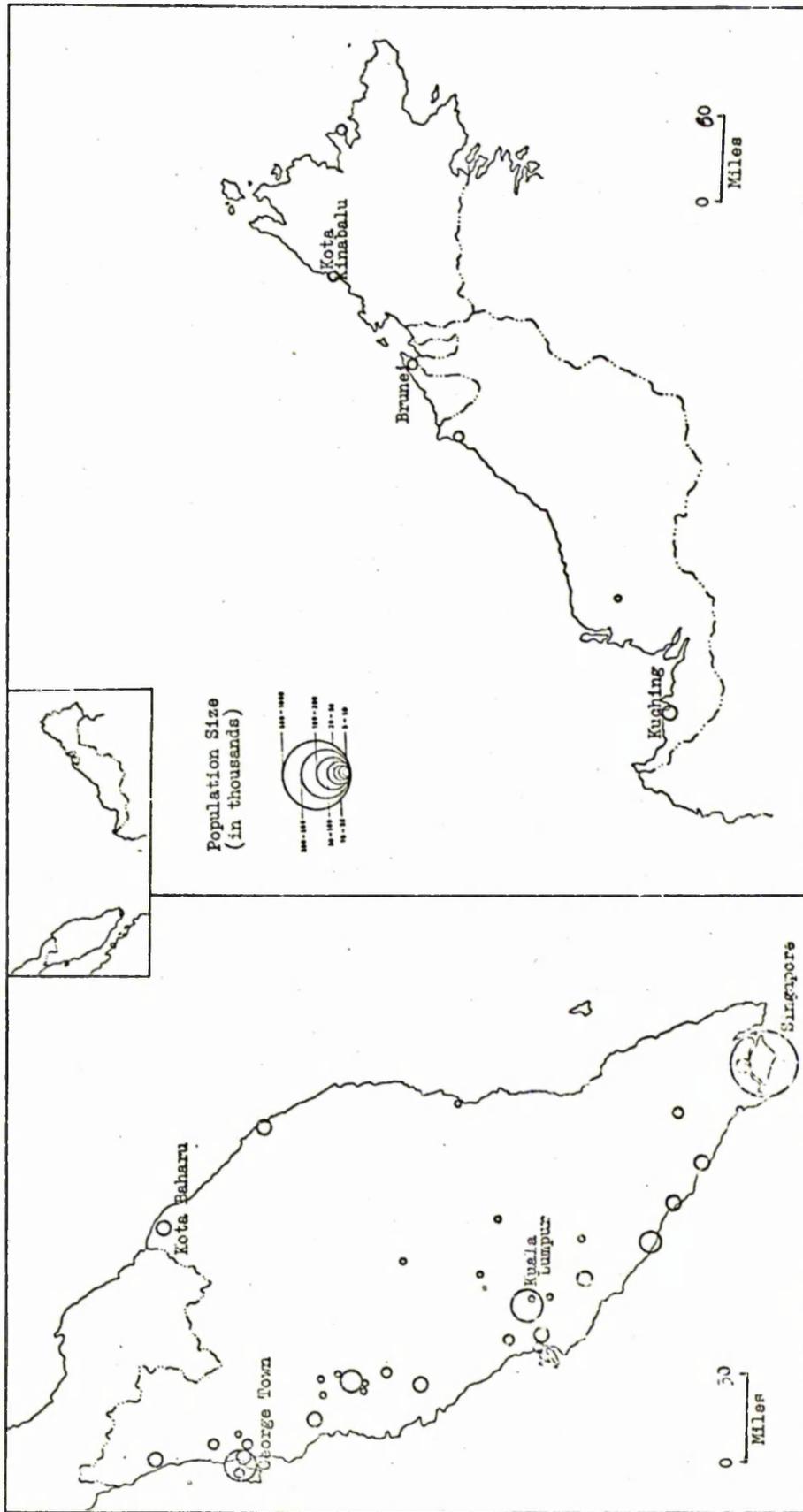


Fig. IV.3 Malaya and the Borneo Territories: urban places with 5,000 inhabitants and over, 1947.

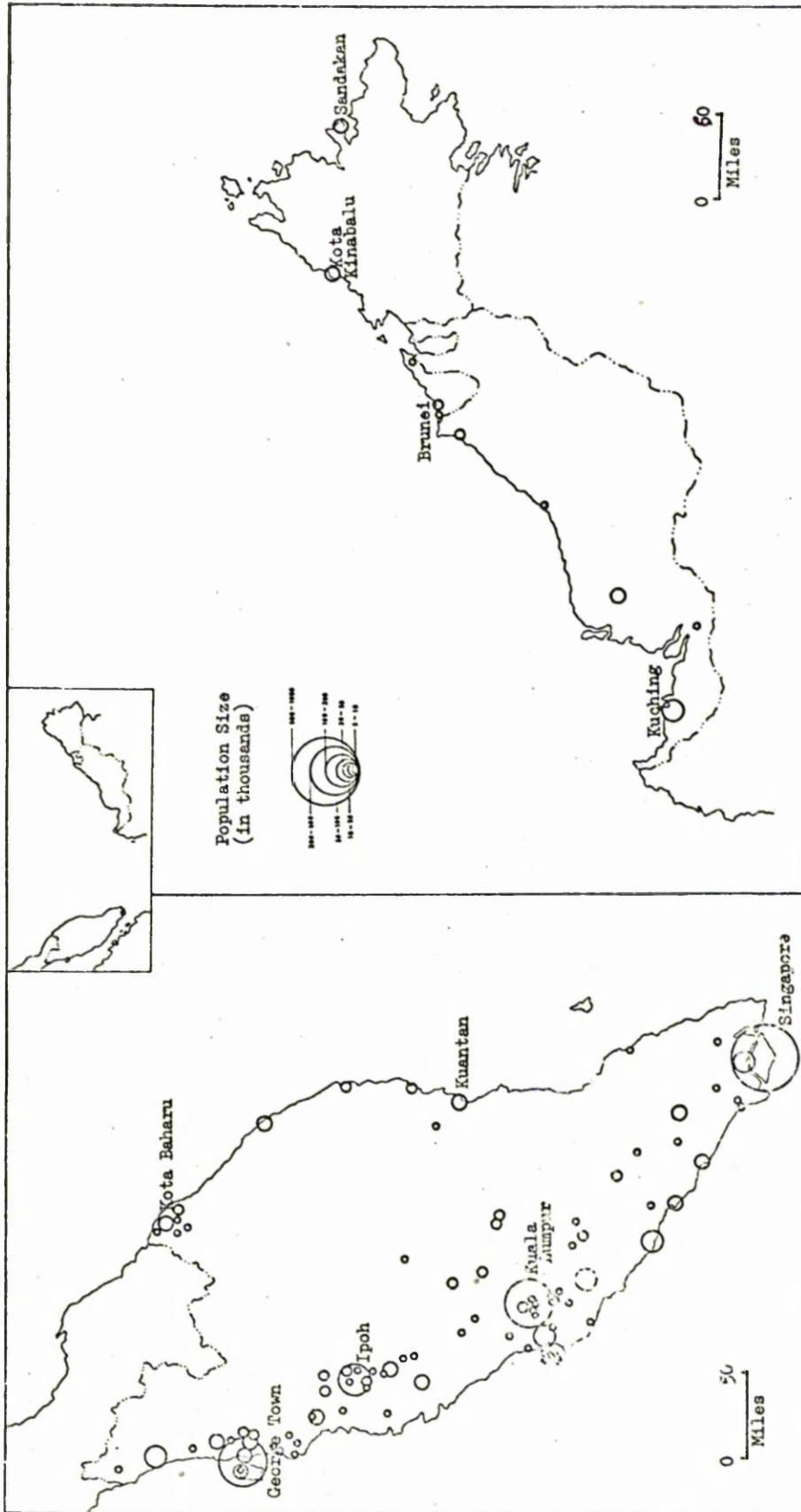


Fig. IV.4 Malaya and the Borneo Territories: urban places with 5,000 inhabitants and over, 1957 (60).

The modern urban history of Malaya shows the interaction of two demographic movements: immigration and natural increase. Immigrants, including Chinese, Indians and Europeans, at least before the 1930's, were the main sources of population growth²¹. The great influx of these migrants began in the latter part of the last century and continued into the 20th century. Between the 1870's and early 1930's it was estimated that not less than 11 million immigrants entered Malaya, though large numbers of them also left the country subsequently. In those days, natural increase was low because of high mortality among the indigenous groups and the extreme imbalance of sex ratio among the migrant-groups, especially among the Chinese and Indians. These immigrants would usually leave their families behind and come to Malaya not as permanent settlers but as 'temporary dwellers'. Thus, sometimes, there was an excess of deaths over births and only the flood of fresh immigrants caused a general population increase.

However, from the 1930's onwards, when the world's economic depression crippled the whole economic progress of the country, immigration was drastically curtailed by the colonial government which imposed severe restrictions on male immigrants but allowed females to enter. This discriminatory policy favouring the entry of female migrant. Meanwhile, the changing attitudes to female migration among the migrant groups helped to narrow the gaps of sex ratio among the migrant groups. A more balanced sex ratio and greater stability came gradually as the migrants began to settle in the country in large numbers. The migrational factor which previously played a significant role in population growth gradually gave way in importance to domestic natural reproduction. As a more balanced sex ratio came into being, the birth-rate would have been expected to rise.

After the war, external migration ceased to be a significant factor in population growth²². The main boom came from domestic increase. The general rising standards of public health and medical technology caused the death-rate to fall sharply while the birth-rate remained high. In the

21 See, for example, McGee, T.G. (1964) *Population: A Preliminary Analysis*, in G. Wang ed., *Malaysia*, London, pp. 67-71; Vlieland, C.A. (1934) *The Population of the Malay Peninsula*, *Geographical Review*, Vol. 24, pp. 61-78.

22 Smith, T.E. (1952) *Population Growth in Malaya: An Analysis of Recent Trends*, Oxford, p.2; McGee, T.G. (1964) *op. cit.*, p. 71.

years between 1947 and 1957 the crude birth-rate was never below 40 per thousand whereas the crude death-rate fell from 15.6 per thousand to 7.4 per thousand. The country thus had one of the highest rates of population increase in Southeast Asia. As the general population of the country increased, so the urban population also grew.

However, the post-war phenomenal urban population increase, apart from natural reproduction of city population, was largely due to the movement of rural population to cities²³. Prominent immediately after the war as the outbreak of communal conflict among the indigenous and the immigrant groups. As a result, many rural Chinese left for the urban localities. Again, pressures generated by the 'Emergency' since 1948 caused large numbers of the rural population, mainly Chinese, voluntarily or compulsorily to move to the nucleated settlements, which were usually established near the existing towns or cities. Thus, cities swelled their population considerably. The resettlement involved some 10 per cent of the Malayan population²⁴, or about half a million people in Malaya, at that time.

Analysis in terms of rates of growth by 'size-group' of towns within the inter-census periods shows a clear pattern of change. In contrast to the general belief that the larger cities in the Southeast Asia have the fastest rate of growth, Malaya has recorded a higher rate of growth in the populations of the smaller towns in recent years, though both large and intermediate-sized cities continued to grow fairly rapidly. As can be seen from Table IV.1, even in the early decades, localities in the class of 20,000-100,000 experienced a higher rate of growth than the large cities. The percentage increase for the medium-sized cities was 123.6 per cent in the period 1911-1931, compared with 98.6 per cent for the large cities and 96.4 per cent for the smaller towns. Cities like Kuala Lumpur and Ipoh were growing at a very rapid rate.

23 See, for example, Sendut, H. (1961) Problems of Rural-Urban Migration in Malaya, Community Development Bulletin, Vol. 16, pp.86-91; also Sendut, H. (1962) Patterns of Urbanization in Malaya, Journal of Tropical Geography, Vol. 16, pp. 114-30.

24 Dobby, E.H.G. (1952) Resettlement transforms Malaya, Economic Development and Cultural Change, Vol. 3, pp. 163-89; Sendut, H. (1962) The Resettlement Village in Malaya, Geography, Vol. 47, pp.41-46.

In the period between 1931 and 1947, medium-sized cities again showed the fastest rate of growth, 129.5 per cent compared with 45.8 per cent for the large cities and 35.4 per cent for the smaller cities within the same period. Again, medium-sized cities like Ipoh, Taiping, Johore Bahru, Klang and Seremban were booming.

In the post-war period, though both large and medium-sized cities experienced accelerating growth, the most spectacular growth was observed in the smaller cities. In the years between 1947 and 1957, smaller cities rose by 113.6 per cent compared with 58.6 per cent for the medium-sized cities and 52.1 per cent for the large cities. The growth of new centres of distribution and the compulsory urban-wards migration during the emergency period created many new towns in the class of 5,000-20,000 and helped to swell the rate of urban population among the small cities. Meanwhile, the appearance of additional localities qualified as urban in the lower groups also favoured the smaller cities.

Spatially, there was also a great variation of urban growth among each individual state on the peninsula. On the whole, the rate of urban growth was faster in the west coast states than among the east coast states. This was partly due to the nature of the two economies and was also the cumulative result of an historical development process²⁵. On the west coast states were found the mining and plantation economies as well as the mercantile economies of Singapore and Penang. In contrast, the peasant economy was mainly found in the east coast states, i.e. the predominance of rural paddy culture and agrarian resources. Although rubber is cultivated throughout the Malay Peninsula, the heaviest concentration are found in the states of Perak, Selangor, Negri Sembilan and Johore on the west coast. Tin is also largely found in the west coast states, especially in Perak and Selangor.

Another interesting aspect of urban development of Malaya is the distributive pattern of its urban population in spatial terms and the location of urban centres. Fig. IV.4 showing the distribution of towns and cities in Malaya illustrates clearly their concentration on the western zone of the peninsula. Within a zone of fifty to seventy miles, stretching

25 Hodder, B.W. (1959) op. cit., pp. 21-31.

from Penang in the north to Singapore in the south, lies three-quarters of her total population and more than four-fifths of her urban population. Within this zone, one also finds the great majority of the important urban centres. In fact, the major cities in the country with populations of more than 50,000 in 1957 were all located there.

The concentration of population as well as cities on the west coast states of the peninsula reflected the interplay of colonial economy and the historical stages of development. Perhaps the most important factor that has influenced the pattern of population distribution and the distribution of cities in Malaya was the creation of the major port-cities in the last century and the development of the tin and later rubber industries along the west coast zone. This economically more advanced zone with the better rail, road, sea and air transport systems helped to create new settlements and attract population, especially the immigrant groups. The success of both tin and rubber industries was directly or indirectly for the development of trade which provided the favourable conditions for urban growth. Consequently, most of the major cities are found within this tin and rubber belt. The economic life and population of Malaya are, indeed, concentrated largely in this belt. Settlement on the east coast, however, is limited to a few scattered pockets. Vast territories are still virtually uninhabited.

Besides its spatial distributive feature, another noteworthy feature is the racial component of its urban population. As noted earlier, there is a two-way relationship between the type of economic activities and the concentration of population in towns or rural areas. The bulk of the urban population in Malaya is Chinese and Malays are predominantly living in the rural areas whereas the Indians are either towns dwellers or workers on rubber plantations. The high proportion of the Chinese in towns in Malaya was partly due to the nature of their economic activities²⁶ and in part the heritage of colonial policy which discouraged them to own agricultural land.

26 Lim, C.Y. (1967) Economic Development in Modern Malaya, Kuala Lumpur, pp. 215-20; Cooper, E. (1951) Urbanization in Malaya, Population Studies, Vol. 5, p. 117.

Thus they assumed the role of middlemen and shopkeepers and stay in towns. Meanwhile, the recent voluntary or enforced population transfers associated with the emergency have resulted in a very large number of Chinese leaving the rural areas and flocking into cities which further increased their urban proportion²⁷. Since the creation and expansion of cities in Malaya were largely the efforts of the migrant groups and the Chinese constituted the larger component of these migrant groups, it is not surprising to find that they are the majority in most towns.

According to the 1957 population figure, Chinese comprised more than two-thirds of the total urban population and the Malays about one-fifth. Furthermore, the Malays are proportionately even less numerous in the large cities than in the smaller towns. In Singapore, for example, Chinese constitute about 77.8 per cent of the urban population whereas Malays only 11.0 per cent. Indians and other minority groups, about 11.2 per cent. In Kuala Lumpur, due to its position as a federal capital, the percentage of Malays has greatly increased since independence²⁸, but in 1957 Malays constituted only 15.1 per cent.

The pattern shown by percentage analysis of the urban population by ethnic groups also indicates the division between the west coast cities and the east coast cities of the peninsula. In the west coast states, especially Penang, Perak, Selangor and Johore, the urban population is dominantly Chinese. They are more numerous in the cities than all other ethnic groups put together. The same is true of Negri Sembilan and even in Kedah and Malacca, the predominant Malay states, the Chinese still comprise the largest component of the urban population, though here they just fail to equal in numbers the people of all other races in the country combined. In the east coast cities, Malays are more numerous in towns. The Chinese, in spite of being numerically small in those states, are also highly 'urban' concentrated.

Returning now to the Borneo Territories, which include the states of Sabah, Sarawak and Brunei, all have a relative low level of urbanization, Sabah and Sarawak are territories which are still sparsely populated with

27 Dobby, E.H.G. (1952) op. cit., p. 169.

28 Sendut, H. (1966) Contemporary Urbanization in Malaysia, Asian Survey, Vol. 6, pp. 484-91.

exceedingly inaccessible hinterlands and mountainous terrains²⁹. At the beginning of the present century only Brunei town attained a population of more than 5,000. In around 1930, the numbers of towns in the territories were increased to four, Kuching and Sibul in Sarawak, Brunei Town in the state of Brunei, and Sandakan in Sabah. Kuching was the large centre with a population of around 25,000,

However, a greater rate of urban growth occurred in the post-war years. Most towns in the territories increased in size. Within a period of ten to thirteen years, Kuching grew by 33.3 per cent, while Sibul rose by 196.8 per cent, Sandakan by 98.7 per cent and Jesselton (renamed Kota Kinabalu) by 85.6 per cent. The total number of urban centres with populations of more than 5,000 in the territories increased to eleven. Brunei Town was the only urban locality in the region which showed a slight decrease in population.

Urban System and Changes in Indonesia, 1905-1961

Urban growth in Indonesia in the period between 1905 and 1961 was one of the most spectacular phenomena in Southeast Asia. The trend of urban development has been accelerated in the early decades of the present century and was given further impetus in the post-war years. In absolute as well as in percentage increases, the expansion of Indonesian cities in the recent decades was unparalleled by most countries in Southeast Asia. Today, Indonesia contains not only most of the largest and medium-sized cities but has one of the highest rates of urban increase in the region. Although the level of urbanization of the country is still relatively low, the trend of urban growth is marked and visible.

Urban population is clearly indicated by a comparison of the number of people living in urban localities with populations of 5,000 or more in each census year. The years chosen of 1905, 1930 and 1961, are of course, fixed by the data available. As can be seen from Table IV.2 the size of the urban population increased from less than 2.0 million in 1905 to 4.3 million in 1930. Greater increase occurred in the post-war years and the number

29 See, for instance, Jackson, J.C. (1968) Sarawak: A Geographical Survey of a Developing State, London, pp. 15-37; Jones, L.W. (1966) The Population of Borneo, London, pp. 1-16.

TABLE IV. 2

Urban Population Increase of Indonesia by size category, 1905-1961

<u>Size Category</u>	<u>Urban Population</u> (in thousands)				<u>Percentage of Increase</u>	
	1961	1930	1905	1961 - 30	1930 - 05	1930 - 05
<u>Large Cities</u> (over 100,000)	9638.3	1571.7	375.9	6.0	5.8	513.2
<u>Medium-Sized Cities</u> (20,000 -100,000)	4313.6	1756.8	796.3	3.0	3.2	145.5
<u>Small Cities</u> (under 20,000)	1018.9	973.5	808.3	0.2	0.7	4.7
<u>All Sizes</u>	14970.8	4302.0	1980.5	4.2	3.1	248.0
<u>Total Population</u> <u>Of Indonesia</u>	97085.3	60731.0	37020.5	1.6	2.1	59.9
						64.0

Sources: Regeerings Almanak voor Nederlandsch-Indie, Batavia, 1905; Census of 1930 in the Netherlands Indies, Batavia, 1933; Indonesia: Population Census 1961, Djakarta, 1963; Perencanaan Penduduk Indonesia 1963, Djakarta, 1965.

reached 15.0 million in 1961. The number of towns and cities in the archipelago also went up from 99 in 1905 to 149 in 1930 and rose to the number of 211 in 1961. As shown from Fig. IV. 5 to Fig. IV. 7, cities grew both in number and sizes.

In common with other Southeast Asian countries, the growth of towns and cities in Indonesia in the early decades of the 20th century was mainly produced by centralization of administrative, supply and transport services required by rural population and by organization for the marketing of raw materials produced by farmers, plantation workers and miners. Since the beginning of the present century, there has been more new development and exploitation of resources in the archipelago, especially in the Outer Islands³⁰. Commercial crops like rubber, tea, coffee, tobacco and oil palm have been expanded with the continuous inflow of European capital and investments. Many towns have originated as commercial, trading and distributing centres and their early growth has largely been influenced by the success of the plantation agriculture, mining industry and export-import trade. The urban population increased steadily.

However, the rate of urban growth rose steeply from 1930 to 1961, especially in the post-war years. The size of the total population in the country increased from about 60.7 million to 97.1 million whereas the total urban population soared from 4.3 million to nearly 15.0 million. If we convert it into percentages, the population of Indonesia rose by 59.9 per cent, while the urban growth rate soared by 235.3 per cent within the period. Thus, the rate of urban population increase was about three times faster than the total population's rate of increase.

The cause of this tremendous post-war urban explosion are familiar. In addition to the reproduction of the urban population itself, much of the growth came from rural-urban migration. Had there been no transfers of population from rural to urban sectors, the urban population in Indonesia would have gained only about 2.6 million, while the rural population would have grown by 33.8 million instead of only 25.7 million. Hence a net transfer of 8.1 million persons in the period between 1930 and 1961 appears to have occurred.

³⁰ Broek, J.O.M. (1940) The Economic Development of the Outer Provinces of the Netherlands Indies, The Geographical Review, Vol. 30, pp. 187-20.

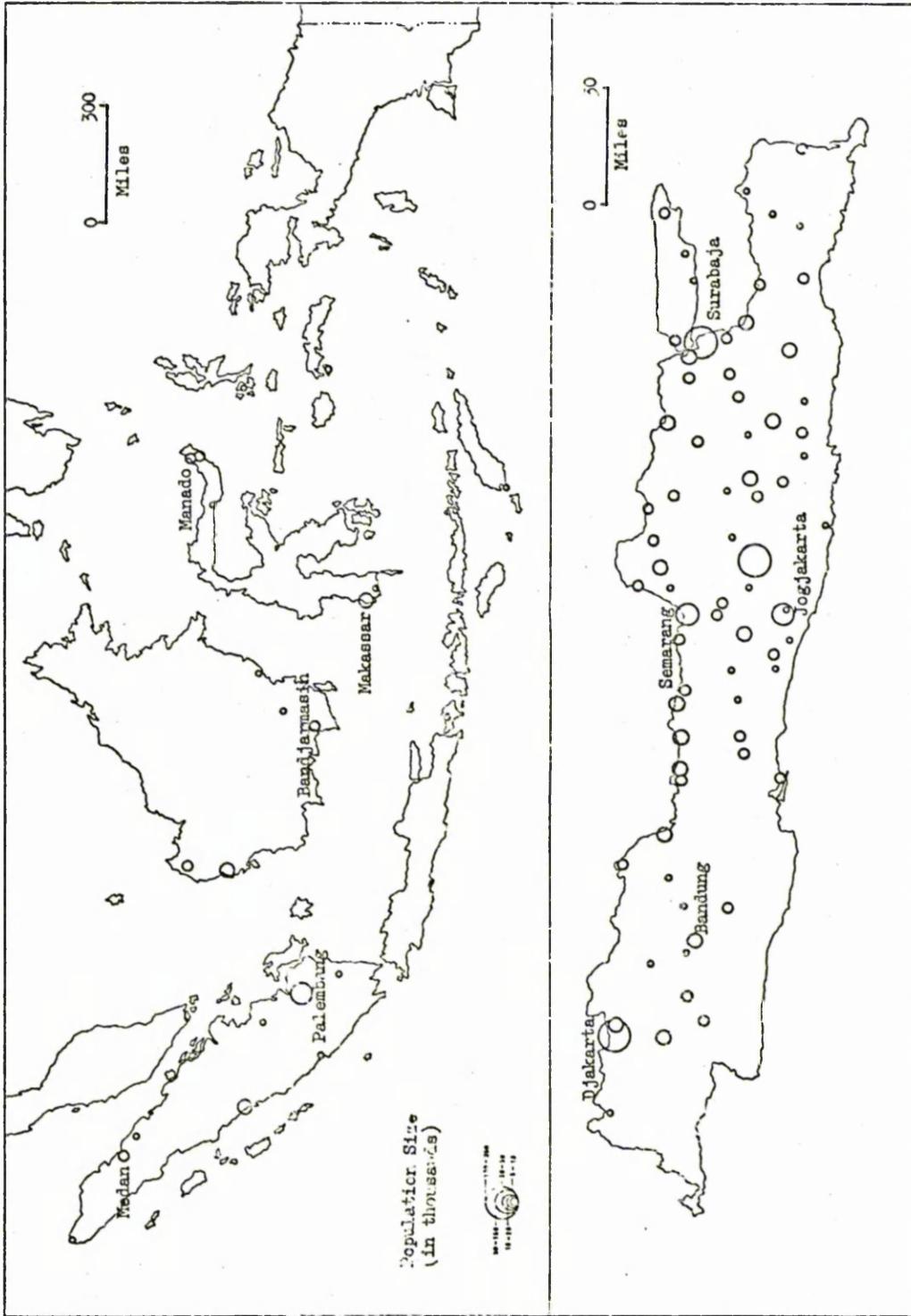


Fig. IV.5 Indonesia: pattern of town distribution, 1905.

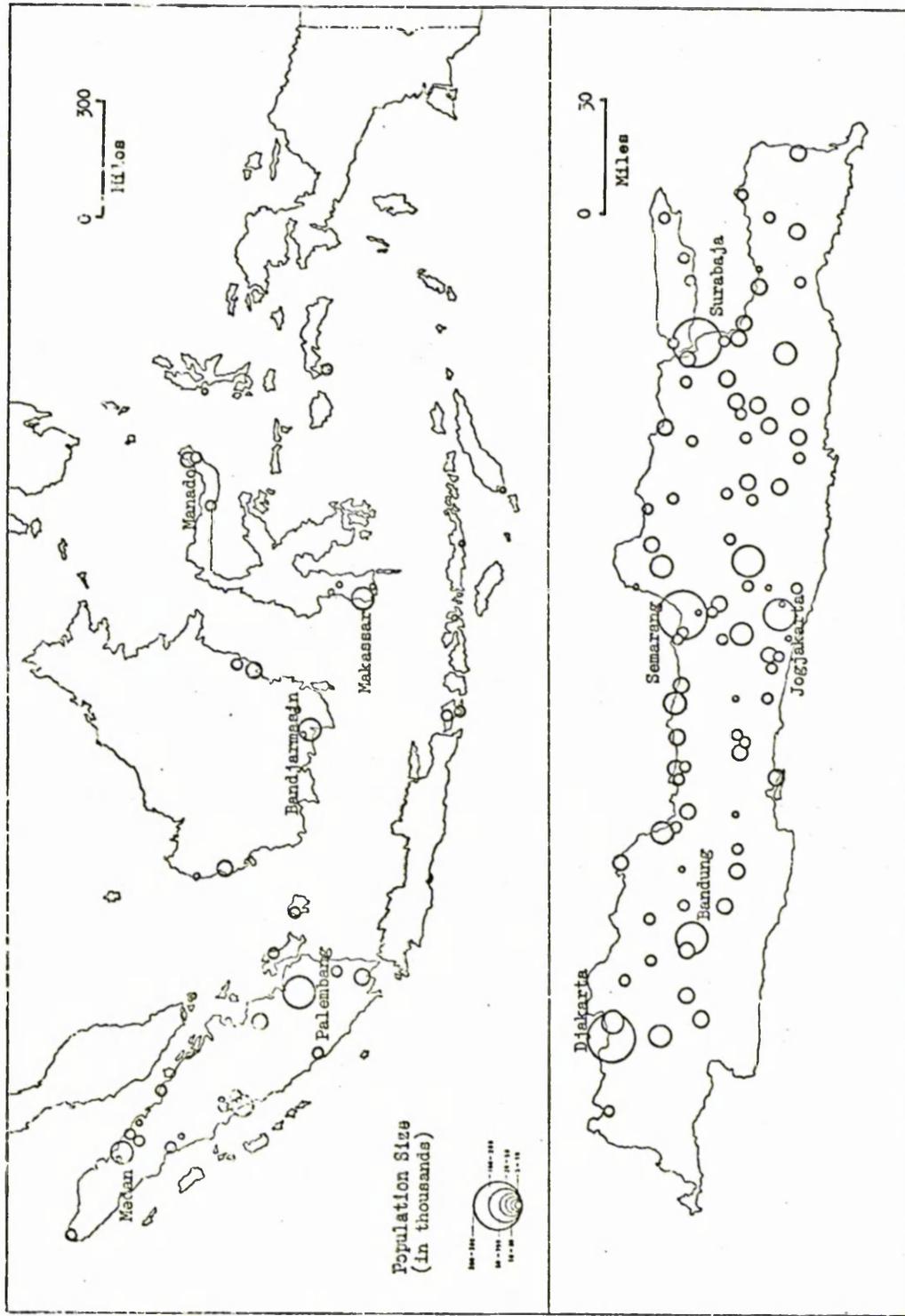


Fig. IV.6 Indonesia: pattern of town distribution, 1930.

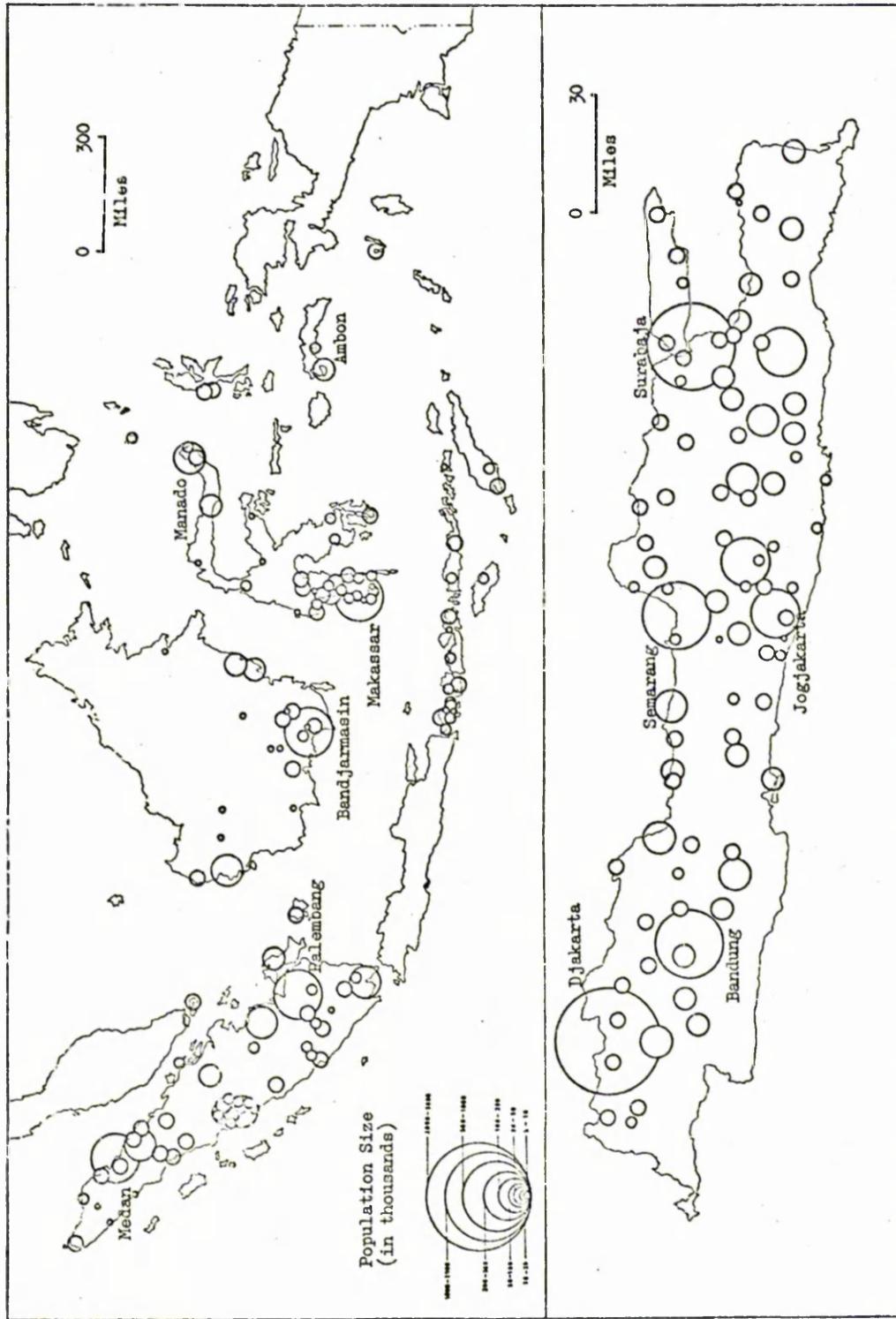


Fig. IV.7 Indonesia: pattern of town distribution, 1961.

A rural exodus of this magnitude would amount for 76.1 per cent of the period's gain of some 10.5 million in Indonesia's urban population. This volume of rural out-migration also means that the rural population lost an amount equal to one-third of its natural increase.

Actually the transfer may have been somewhat larger and rising over the years in relation to the general growth of population. In practice, because of higher rural birth rates, natural increase tends to be higher in the rural sector. On the other hand, some previously 'rural' localities must have also entered the 'urban' category. It is probable that the numerical effect of the first phenomenon has been greater than the offsetting effect of the second. Accordingly, the roughly calculated transfer of 8.1 million persons represents a minimum estimate for the period between 1930-1961.

The balance of rural-urban migration is not entirely due to the economic attraction offered by the cities, but partly results from adversity in the rural areas. In rural Java, for example, the high pressure of rural population on land, the generally decreasing acreage of cultivated land per head of the rural population, subdivision and fragmentation of holdings and inefficient means of cultivation were the contributing factors toward rural outmigration. Urban growth is the result of people moving away from the congested rural areas where the traditional farming can no longer be able to support the rapidly growing population. Thus, the sheer rural poverty is by far the stronger reason for people to leave their villages.

Other factors like rural unrest and armed rebellion were also affecting the drift of people from the countryside to the cities³¹. The struggle for independence generated social unrest and political instability which had contributed to large influx of rural population to the urban centres in order to avoid casualties resulting from the fighting. When the Republic was formed, the establishment of a national bureaucracy further contributed to the increase of a large body of officials, civil servants and their dependents in cities. Many people moved in in the hope of having a share in jobs or opportunities. With the inflated official employment, the

31 The Dur'ul Islam uprising in Java, for instance, was probably a major force behind the city-wards migration in Java in the 1950's.

government became the largest employer of both professional and clerical workers.

After independence, some sections of the population, especially those in the Outer Island, felt they were not being fairly treated by the central government. Thus unsatisfactory political as well as economic reasons led to the anti-government revolt³². Fighting broke out in both Java and the Outer Islands and warfare brought many people to take refuge in the urban areas. When the fighting was over, few went back to their villages. Meanwhile, the post-war anti-Chinese action also drove many rural Chinese into larger cities seeking for better protection. Urban growth has thus been largely a result of city-wards migration which has contributed at times a far greater number than the natural increase in the cities alone could ever contribute.

An analysis of Indonesia cities by size categories shows the varied pattern of growth. The rate of urban increase throughout the period of 1905-1961 has not been evenly shared by cities of all sizes. Greater increase occurred among the large and medium-sized cities while the rate of growth in the population of small towns was relatively lower than the national average. Some of the small cities in Java, in fact, have been virtually frozen in their development. Others have even lost their past importance. As can be seen from Table IV. 2 throughout the period under analysis, the larger the size categories, the faster the average rate of growth. In the years between 1905-1930, the percentage of increase for the large cities which includes the capital city, Djakarta, and many of the regional capitals among the major islands, was 318.1 per cent as against 120.6 per cent for the medium-sized cities and 20.4 per cent for the small cities. Greater rates of growth, again, favoured the large cities in the post-war decades. Between 1930 and 1961, large cities showed an extremely rapid rate of increase, 513.2 per cent compared with 145.5 per cent for the medium-sized cities and only 4.7 per cent for towns in the lower categories.

The explanation lies in the fact that those major cities attracted a much higher proportion of migrants from both rural communities and from small cities. Since the large cities were more than the main commercial and

32 McGee, T.G. (1960) op. cit., p. 52.

transport nodes, they naturally tended to grow more rapidly than lesser centres. Meanwhile, the rise of some market-oriented industries in the large cities attracted more people to them. The absence of a firm basis of development for the small cities, their narrow and less diversified economy, their inadequate urban amenities, on the other hand, determines their slow growth rate. As more of their functions are assigned to the more widely spaced but now more accessible large towns, small towns find it more difficult to compete. For some small centres, the slow growth may be the result of their out-flows of population to the larger-cities. The sluggish rate of increase of the small towns in Java was also due to the reclassification where many of those towns included in the earlier census were omitted in the later census figure.

However, the increasingly weakened position of the small cities in Indonesia reveals some interesting features concerning the pattern of migration. A prevalent theory is that migration occurs by stages³³, from village to small town and finally to the large city. If so, we might expect a more vigorous growth in the small towns which served as an intermediate point. At least in the case of Java, step-migration seems to have been negative. Although Djakarta's greatly enlarged post-war population included in-migrants from all parts of Indonesia, the majority of the newcomers were drawn from Java, especially West Java. Many moved into this large city directly from the nearby villages.

Indeed, the increasingly weakened position of the small cities in Indonesia took place not only vis-a-vis the larger cities, but also in relation to the overall population growth of the island as well. Between 1905 and 1930 the total population of the country increased by 64.0 per cent, but the percentage increase for the small towns was 20.4 per cent. Many of the small urban communities failed to grow as fast as the natural increase of the country as a whole. Six towns actually suffered a net decrease in population. However, this situation had deteriorated even further by 1961. Between 1930 and 1961, cities having less than 20,000 inhabitants failed, on the average, to keep pace with the rapid growth of total population. During that interval, dozens of small cities in Indonesia either had been omitted in the later census or failed to grow at rates equal to or better than the national average.

33 Ravenstein, E.G. (1855) op. cit., Steward, C.T. Jr. (1960) Migration as a Function of Population and Distance, American Sociological Review, Vol. 25, pp. 347-56.

There were three cities that had not grown at all, or had actually experienced a real decrease in population, despite the fact that the country's population had increased by over 59.9 per cent during the interval. It is clear that post-war urban growth in Java was primarily the growth of the large and medium-sized cities. In the Outer Islands, in contrast, there was the growth of cities of all size categories, both large and small and medium-sized cities.

Marked regional contrasts both in rate of urban growth and in increase in degrees of urbanization have characterized both pre-war and post-war period in the archipelago. Historical and economic development largely accounted for regional differences in urban development. In terms of the rate of urban population growth, there is a good deal of variation among the major islands or group of islands. Some islands have greater rate of percentage increase, while others have increased in greater absolute numbers.

As compared with other major islands in the archipelago, Java experienced a smaller percentage of increase in both pre-war and post-war periods, but the absolute number of urban population increase was greater in Java than the Outer Islands combined. As can be seen from Table IV. 3 in the period between 1905 and 1930, the rate of urban population increase for Java was 111.6 per cent compared with 200.6 per cent of the Outer Islands as a whole, though West Java was growing faster than all the Outer Islands group. During the same period the absolute number of increase in Java was 1.7 million compared with only 0.6 million for the Outer Islands as a whole.

In the period between 1930 and 1961, Java as a whole again had a slower rate of growth: 185.7 per cent as against 371.4 per cent for Sumatra; 350.1 per cent for Kalimantan, 596.2 per cent for Sulawesi and 608.5 per cent for the Sunda and Moluku Groups, but in absolute terms Java still had a larger increase, 6.7 million as compared with only 4.0 million for the Outer Islands group. However, within the Island of Java, West Java again showed a higher rate of increase: 366.9 per cent as against 74.5 per cent for Mid-Java, and 155.8 per cent for East Java. The higher rate for West Java was due to the rapid expansion of the large cities like Djakarta, the capital, Bandung, Tjirebon, Bogor and Tasikmalaja. Djakarta alone increased by 457.6 per cent within the same period and contained 58.6 per cent of the urban population of West Java.

TABLE IV. 3

Urban Population Increase of Indonesia by Region, 1905-1961

Region	Urban Population (in thousands)				Percentage of Increase		
	1961	1930	1905	1961 -30	Annual Rate	1961 -30	1930 -05
<u>Java & Madura</u>	10120.0	3405.7	1673.6	3.5	3.0	185.7	111.6
West Java	5074.8	1112.6	358.6	5.1	4.0	366.9	233.9
Mid-Java	2240.6	1230.6	688.9	1.8	2.0	74.5	86.3
East Java	2804.6	1062.5	626.0	3.1	1.9	155.8	75.1
<u>Outer Islands</u>	4850.8	897.4	307.0	5.4	4.5	425.7	200.6
Sumatra	2349.1	484.5	151.9	5.1	4.9	371.4	228.1
Kalimantan	846.2	176.4	64.6	5.0	4.3	350.1	190.8
Sulawesi	1126.8	161.8	60.3	6.4	4.0	596.2	168.2
Sunda, Molucu & other islaric	528.7	74.6	30.1	6.6	3.7	608.5	147.8
<u>Indonesia</u>	14970.8	4302.0	1930.5	4.0	3.3	235.3	125.4

Sources: See Table IV. 2

Before the war, most of the fastest growing cities were located in Java and Madura, but in the post-war years many of the more recent established cities in the Outer Islands appeared to be growing faster than those found in Java and Madura. The changing pattern is also reflected in the growth of the number of cities in the Outer Islands. In 1905, there were only 22 cities with populations of 5,000 or more in the Outer Islands, but the number had increased to 123 in 1961. In 1905, none of the cities in the Outer Islands had a population of more than 100,000, but the numbers went up to 10 in 1961. Among them two, Medan and Palembang, with populations close to half a million. Although the absolute number of urban population in both Java and the Outer Islands has been constantly upward in the intercensal years, Java has shown an increasing decline in its position as containing the great majority of the urban population. In contrast, the Outer Islands have shown a constant upsurge of its urban proportion. In 1905, more than four-fifths of the total urban population of about two million in Indonesia dwelt in the islands of Java and Madura. In 1961, Java and Madura retained only about two-thirds of the 15.0 million urban inhabitants.

Regarding the rate of growth, cities like Medan, Palembang, Djambi, Telukbetung in Sumatra; Bandjarmasin, Balikpapan, Pontianak in Kalimantan; Makasar, Manado, Pare-pare in Sulawesi; Ambon in Maluku; and Denpasar in Bali were all growing at a tremendous rapid rate. All of them had more than doubled or even trebled in population in the years between 1930 and 1961, though cities like Djakarta, Bandung, Melang in Java were also growing at a very rapid rate. In fact, the 'Kotapradja'³⁴, a special type of city which has been granted autonomous political status, tend to be among the fastest growing cities. Many of them are actually the regional headquarters.

Urban System and Changes in the Philippines, 1903-1960.

The twentieth century also witnessed the change in the urban pattern of the Philippines. Urban growth in the Philippines in the early decades of the present century coincided with the expansion of American investment as

³⁴ See Withington, W.A. (1963) The Kotapradja of 'King Cities' of Indonesia, Pacific Viewpoint, Vol. 4, pp. 75-86.

well as the growth of inter-island trade and the export-import trades³⁵. Prominent among them was the development of the American owned plantation estates and American business concerns began to develop the natural resources of the archipelago. The increment in the production of export crops was caused mainly by the impetus given by free trade agreements that existed between the Philippines and the United States; these resulted in the great expansion of plantation agriculture in the archipelago. Cash crops like sugar, copra, tobacco and abaca (Manila hemp) became the chief export commodities. Economic growth encouraged trade and commerce and they in turn promoted urban development. Cities thus grew in sympathy with the economic development of the archipelago.

Towns in the Philippines, like other urban places in Southeast Asia, act as collecting and marketing points for the products of the surrounding areas, and as distributing centres for goods from outside. These are the primary economic functions and their growth has been largely influenced by the success of agriculture and the mining industry. In addition to their economic functions, most cities also act as the centre of education and administration as well as of communication. Cities grew both as their hinterland in Luzon and other major islands developed and as trading between America, Europe and other Southeast Asian countries intensified. The island of Luzon, for example, reached a high level of export crop production during the early decades of the present century. New communication lines, improved harbour facilities and larger ships all led to greater trade and hence to general urban development.

Under American rule, public health was greatly improved and epidemics were brought under control. Meanwhile, a rise in the standard of living followed economic growth and an all-round improvement of medical facilities and educational provision reduced the death-rate considerably³⁶. This falling death-rate caused a dramatic subsequent rise in population for the Catholic faith and traditional attitudes kept the birth-rate at an extremely high level. A sustained high fertility combined with a rapidly declining mortality largely accounted for the rapid rate of natural increase. In the urban areas, the lowering of mortality levels and the raising of those of natural increase had led to rapid urban growth. Thus, natural reproduction was the main factor in the increase of population in towns in the pre-war years.

35 See, for example, Lightfoot, K. (1973) The Philippines, London, pp. 141-42; Angoncillo, T.A. (1969) A Short History of the Philippines, New York, pp. 209-10.

36 Benitez, C. (1954) History of the Philippines, Manila, pp. 348-50; also Angoncillo, T.A. (1969) *op. cit.*, pp. 207-08.

Since 1903, the population of the Philippines is being urbanized more rapidly as is evident from a comparison of the rate of the urban population with that of the total population. As illustrated in Table IV. 4, the urban ratio showed an increase of 69.6 per cent between the period 1903 and 1918, whilst the total population went up by 35.1 per cent. In the next three decades from 1918 to 1948, the urban population rose by 326.6 per cent compared with only 86.6 per cent of the total population of the country. The rate of urban population growth again rose fairly rapidly in the post-war period. In the years between 1948 and 1960, the urban growth rate was 70.1 per cent as against 40.8 per cent of the total population. However, within a period of 57 years the urban population of the archipelago grew from 387.3 thousand to 4.6 million.

Natural increase has constituted the largest component of the increase of population in towns during the pre-war decades; in the post-war years, though natural increase has been very substantial, it has been matched by rural-urban migration. If there was no transfer of population from the countryside to the urban areas, urban population would have increased by only 1.1 million, while the rural sectors would have grown by 8.7 million. The actual total rural population of the country in 1960 was 7.8 million, while the numbers of urban population was 4.6 million, and a net transfer of 0.8 million persons in the post-war period of 1948-60 seems to have occurred. This represents 43.0 per cent of the total urban population's gain of the Philippines in the period between 1948-60.

The cause of the post-war city-wards migration was both economic and political. With tenant farming prevalent in the major islands, associated with indebtedness and fragmentation of holdings as a result of population pressures, many people went away from the land. The Huk Rebellion³⁷ from 1948 to 1953 also sent many people in Central Luzon to take refuge in the cities. Meanwhile, economic necessity and the general lack of balance between the conditions of employment in the provinces and rural areas and those in the large cities like Manila-Quezon and the fundamental causes of the large-scale citywards migration. Another contributory factor on the economic side has been the rapid extension of government administrative and other tertiary activities, concentrated heavily in the capital and other provincial headquarters.

37 See, for example, Lachica, E. (1971) The Huks: Philippine Agrarian Society in Revolt, New York; Mitchell, E.J. (1969) The Huk Rebellion in the Philippines: An Econometric Study, Santa Monica; also Kerkvliet, B.J. (1972) Pleasant Rebellion in the Philippines: The Origins and Growth of the HMB, High Wycomb.

Regarding the rate of increase, the process of urban growth did not take place alike among the size-categories. In the period between 1903 and 1918 it was the smaller cities which had the more impressive rate of growth, 78.1 per cent as against 69.6 per cent of the national urban average and 29.7 per cent of the large cities. During that period, there were no cities in the medium-size category with populations between 20,000 and 100,000. But in the years 1918-1948, it was the medium-sized cities which showed the fastest rates of increase, though both the large and the smaller cities also had fairly rapid rates of increase. The relatively high rate of growth for the medium-sized cities was caused mainly by the phenomenal growth of such cities as Bacolod, Cavite, Pasay and Davao which became almost three to four times larger than before. However, during post-war period (1948- 60) small towns, again, experienced the fastest rates of increase, 95.2 per cent as against 84.3 per cent of the medium-sized cities and 50.4 per cent of the large cities. Both the absolute number of urban population of the small cities and their number had doubled themselves within a period of 12 years. (See Fig. IV.8 to Fig. IV. 11).

Table IV. 5 reveals a markedly uneven rate of growth of each individual region. Between the years of 1948-1960, the urban growth rates are characteristically growing at a rate substantially more rapid than the national average. Those regions which had a relatively smaller percentage of urban population in the previous years appear to be growing at particularly rapid rates. The rate of urban population increase in the islands of Panay and Mindanao were faster than in other islands. This rapid growth was partly due to the recent economic development of the islands and to a considerable extent to in-migration. Table IV. 5 gives the percentage of urban population increase of each region. However, the rates of growth do not mean much unless also compared with the starting point of their urban population.

Contrast is also the keynote to the distribution of urban population in the Philippines both by size-category and spatially. According to the 1960 census, more than 33.1 per cent of the 5.6 million urban population in the country lived in the metropolis of Manila-Quezon, and the rest was distributed among a host of smaller cities. An examination of the earlier statistical

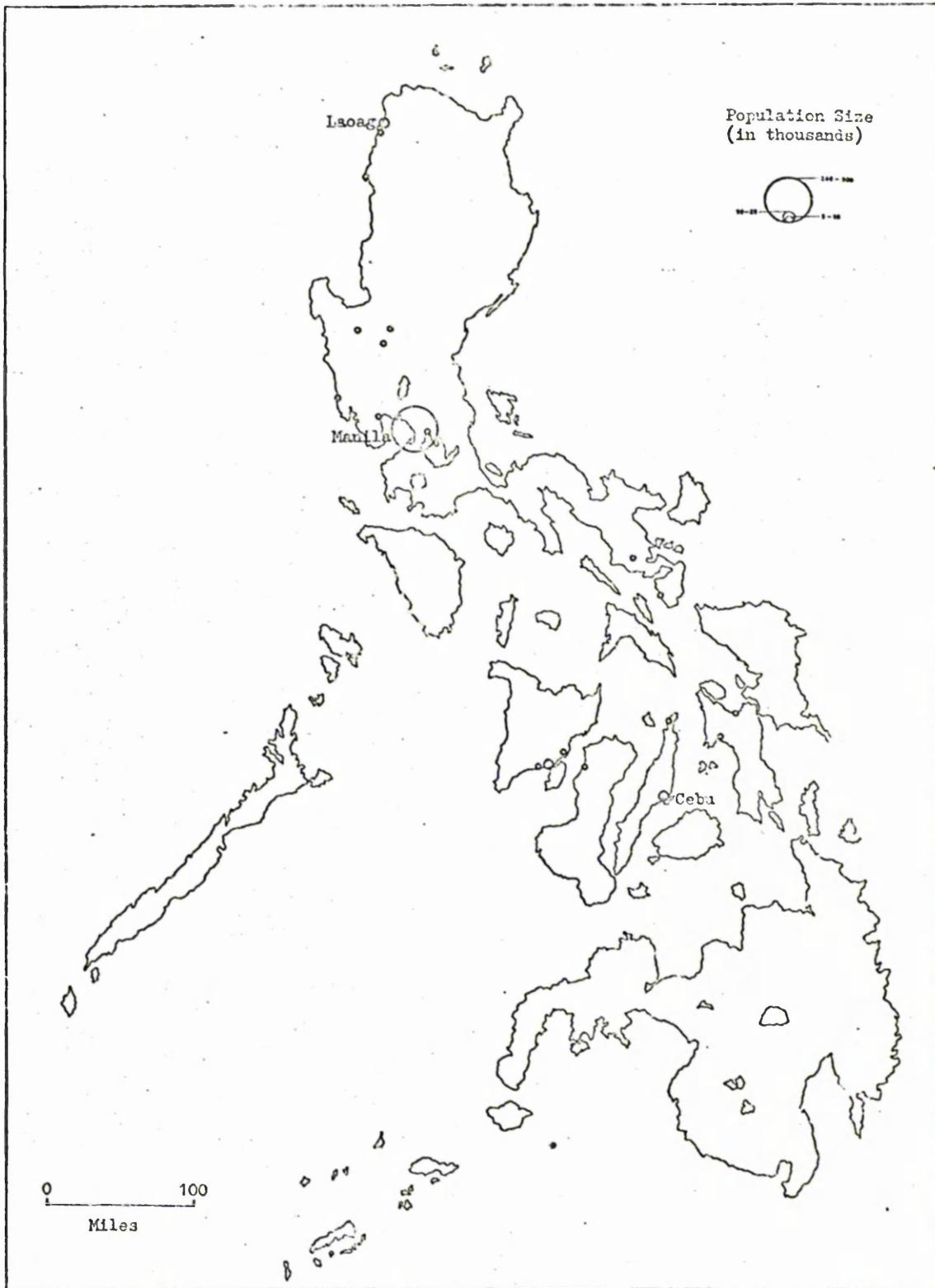


Fig. IV.8 The Philippines: distribution of towns and cities, 1903.

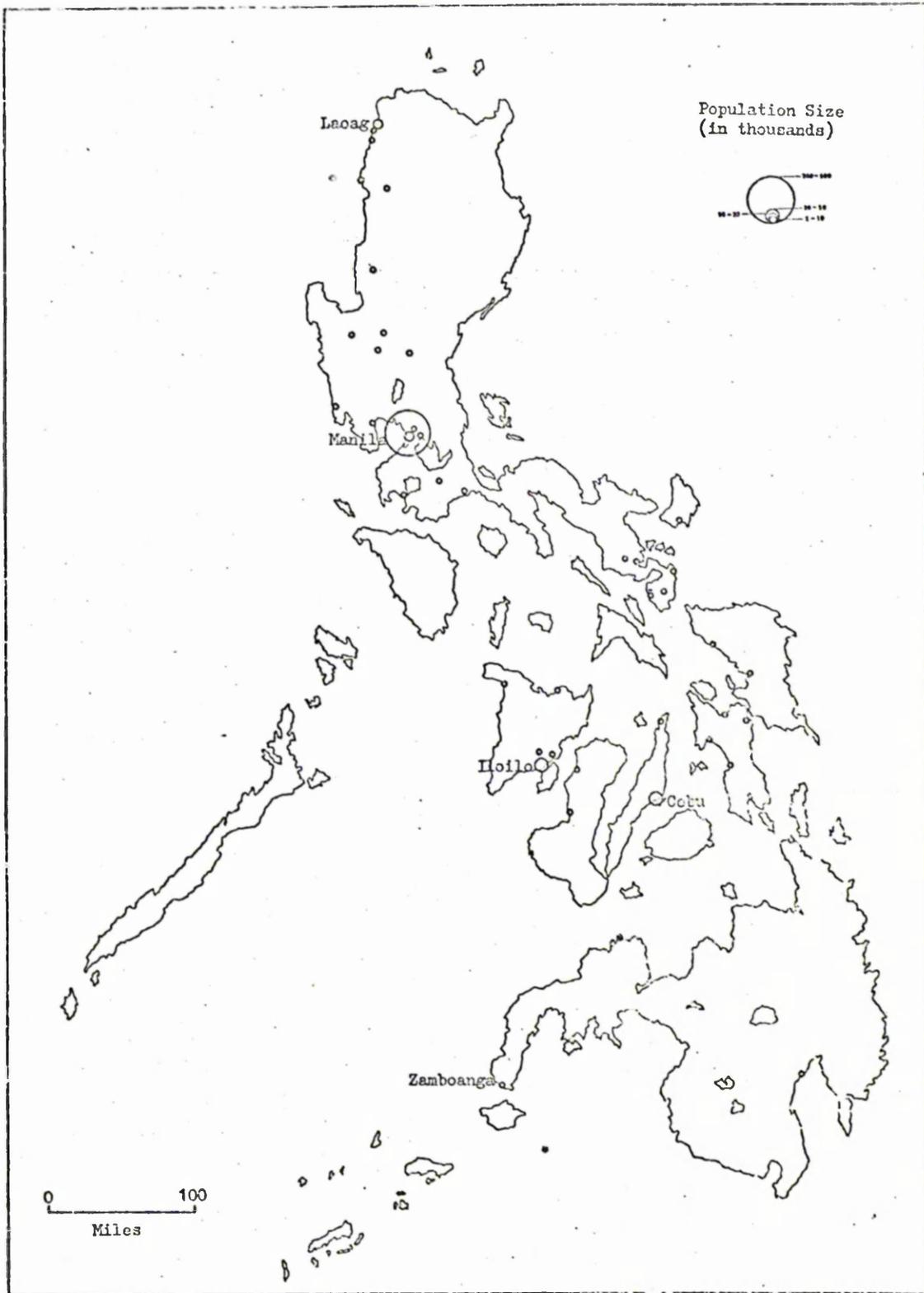


Fig. IV.9 The Philippines: distribution of towns and cities, 1912.

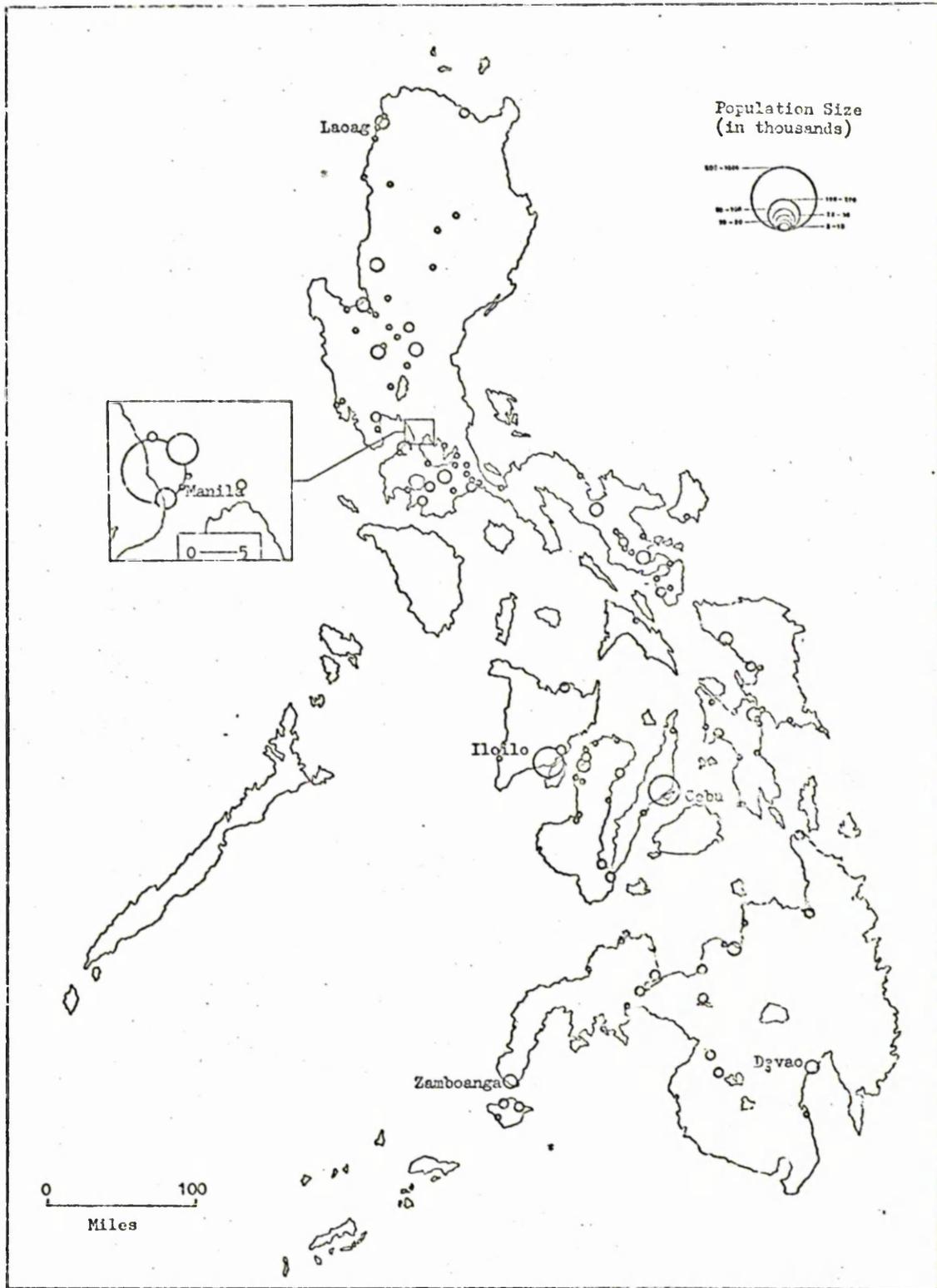


Fig. IV.10 The Philippines: distribution of towns and cities, 1942.

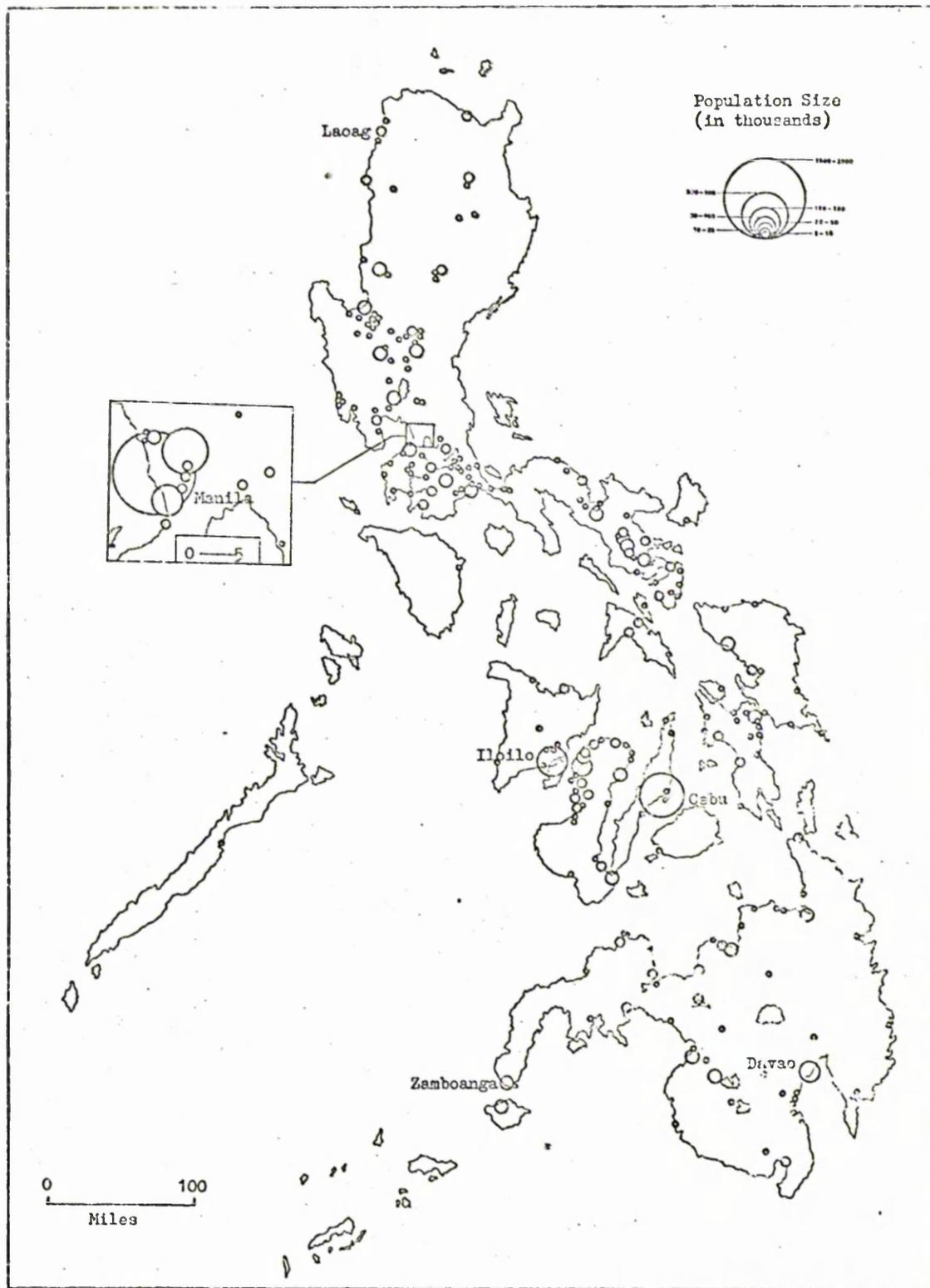


Fig. IV.11 The Philippines: distribution of towns and cities, 1960.

TABLE IV. 5

Urban Population Growth of the Philippines by Region, 1903-1960

Region	Total Urban Population (in thousands)						Annual Rate		Percentage of Increase Percentage	
	1960	1948	1918	1903	1960 -48	1948 -18	1918 -03	1960 -48	1948 -16	1918 -03
Central Luzon	2481.2	1567.1	371.7	258.3	3.9	3.3	2.5	58.5	321.9	43.8
Northern Luzon	184.1	115.4	60.3	39.7	4.0	2.4	2.8	59.5	91.5	51.6
Southeast Luzon	314.3	159.0	36.9	11.2	5.8	5.0	8.5	97.8	350.2	229.4
Mindanao Island	555.4	254.5	53.6	6.0	6.6	5.3	15.8	118.3	375.1	797.4
Panay Island	210.0	132.1	41.5	38.5	3.9	2.6	0.5	63.1	92.1	9.0
Cebu Island	202.0	168.8	41.7	23.6	1.6	4.7	3.3	19.7	304.8	76.9
Negros Island	344.5	169.0	10.8	-	6.0	8.9	-	103.9	1473.4	-
Samar Island	99.0	68.9	10.6	-	3.1	6.5	-	43.8	608.3	-
Leyte Islands	139.6	89.2	24.5	10.8	3.8	4.4	5.7	56.5	263.6	128.0
Outer Islands	49.2	11.8	-	-	13.8	-	-	318.3	-	-
Total Urban Population of the Philippines	4648.1	2716.5	656.7	387.3	4.6	5.0	3.6	71.1	383.7	69.6

Sources: Various national censuses, see Table IV. 4

records indicates that this over-concentration of urban population in the capital has a rather long history³⁸. Manila has always contained most of the urbanites of the country. In fact, over-concentration seems to have been more extreme in the past.

The spatial distribution of urban population also shows a great contrast. Of the total of 4.6 million people living in towns and cities in the Philippines in 1960, about 65.0 per cent were living in the Island of Luzon. Central Luzon alone accounted for 51.2 per cent of the national urban population, the remainder being scattered widely over the rest of the archipelago. Of the 35.0 per cent living outside Luzon, 12.1 per cent lived in Mindanao, 7.5 per cent in Negros, 4.6 per cent in Panay, 4.4 per cent in Cebu, 3.0 per cent in Leyte, 2.2 per cent in Samar and the rest in other smaller island groups.

The reasons for the striking unbalance of urban population distribution are to be found in the difference in historical as well as economic development of the archipelago. Islands like Luzon and Negros have benefited far more than others from the many economic developments such as the establishment of the successful plantation agriculture, the exploitation of minerals, the growth of processing industries and the construction of a network of roads and railways. For as far back as records are available, the island of Luzon, especially the central part of Luzon, always has had the largest share of urban population of the country. It is partly because the region was more highly developed and also because the largest city of the country, Manila, is located there. Central Luzon, in fact, contained more than 60.0 per cent of the urbanite Philipinos in 1903, the corresponding figure for 1960 being reduced to 54.2 per cent. The decline was due to the relative increase of other newly developed regions. In Mindanao, for instance, the percentage of urban share increased from 3.1 per cent in 1903 to 12.1 per cent in 1960.

Another interesting feature of urban development of the Philippines is that the country always contains a host of small cities with populations of less than 20,000. Of the 244 towns and cities in the Philippines in 1960, 211 were in the lowest categories. The reason for the Philippines containing

38 Reed, R.R. (1967) op. cit., pp. 110-11 and 132-33.

a larger proportion of smaller cities is partly due to its insular characteristic as an archipelago and the nature of its economic base. With more than 7,000 islands in the archipelago, the country is rather fragmented. Except for a few large islands such as Luzon and Mindanao, most cities in other smaller islands have a relatively limited hinterland. Their hinterland generally is well-defined by topographical feature and, in consequence, inter-communication between one town and another or between the major regional centres is handicapped. And each minor city serves a restricted agricultural hinterland, thus restricting its potential expansion in size and attracting more people coming in.

Urban System and Changes in Burma, 1901-1953

Urban development proceeds in two ways, both by the multiplication of urban localities and by the growth in size of individual urban places. As mentioned in the last chapter, the period following the consolidation of the British rule in the 19th century witnessed a large-scale development of commercial agriculture in the country. Later, the development of the teak industry and the discovery of mineral resources, especially oil, accompanied by the steady expansion of rice cultivation contributed to the economic prosperity of Burma³⁹ in the early decades of the present century. The expansion of Burma's export and import trade led to an equally rapid development of its wholesale and retail trade. Many towns owed their growth and importance to trade, though many also served as administrative centres.

As the economic prosperity of the country continued, urban growth proceeded. The number of towns and cities as well as population in towns increased steadily. The total urban figure increased from 0.9 million in 1901 to 1.2 million in 1921, and went up to 1.5 million in 1931. However, greater increase is noted in the later period. From 1931 to 1953, the total population of Burma increased from 14.7 million to 19.3 million, an increase of 31.4 per cent. During the same period, the urban population went up from 1.5 million to 2.6 million, an increase of 76.3 per cent. The number of towns rose from 40 in 1901 to 107 in 1953, (see Fig. IV. 12 to Fig IV. 15). Similar to other countries in the region, the growth of urban population is attributed to both natural population increase as well as migration of rural population to urban localities.

39 See Andrus, J.R. (1948) Burmese Economic Life, Stanford, pp. 14-21; Cady, J.F. (1958) A History of Modern Burma, Ithaca, pp. 155-61.

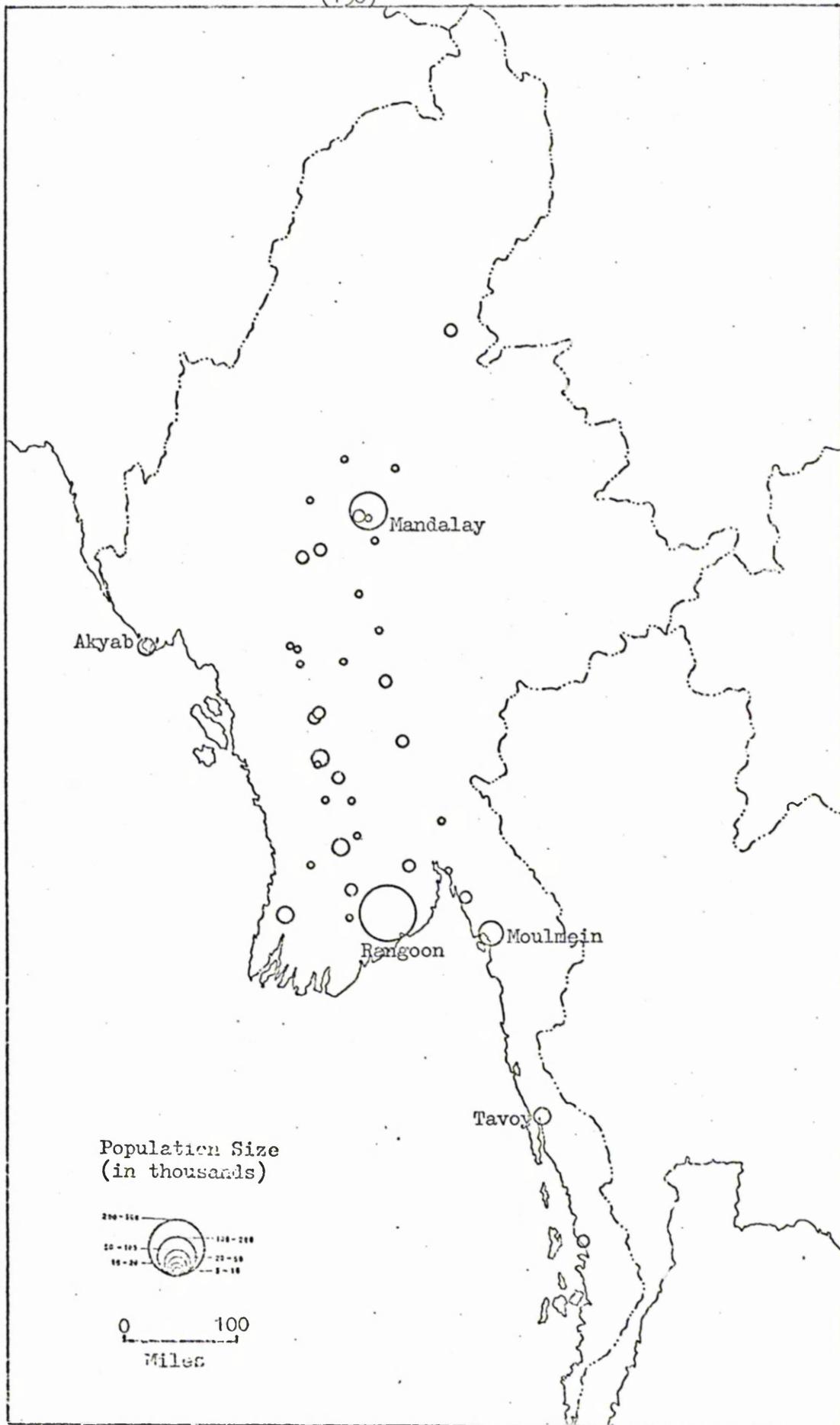


Fig. IV.12 Burma: urban centres with a population of 5,000 and over, 1901.

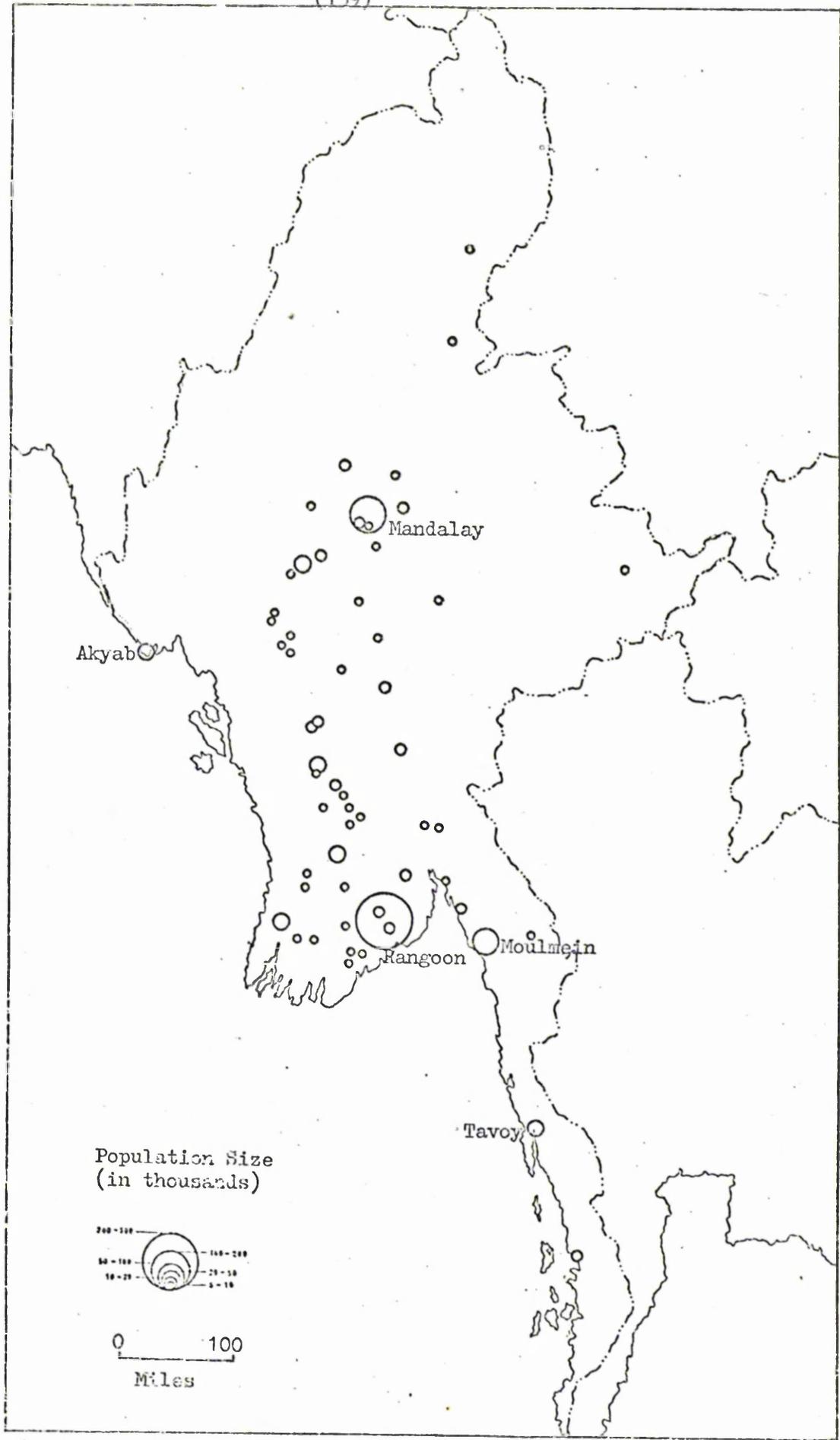


Fig. IV.13 Burma: urban centres with a population of 5,000 and over, 1921.

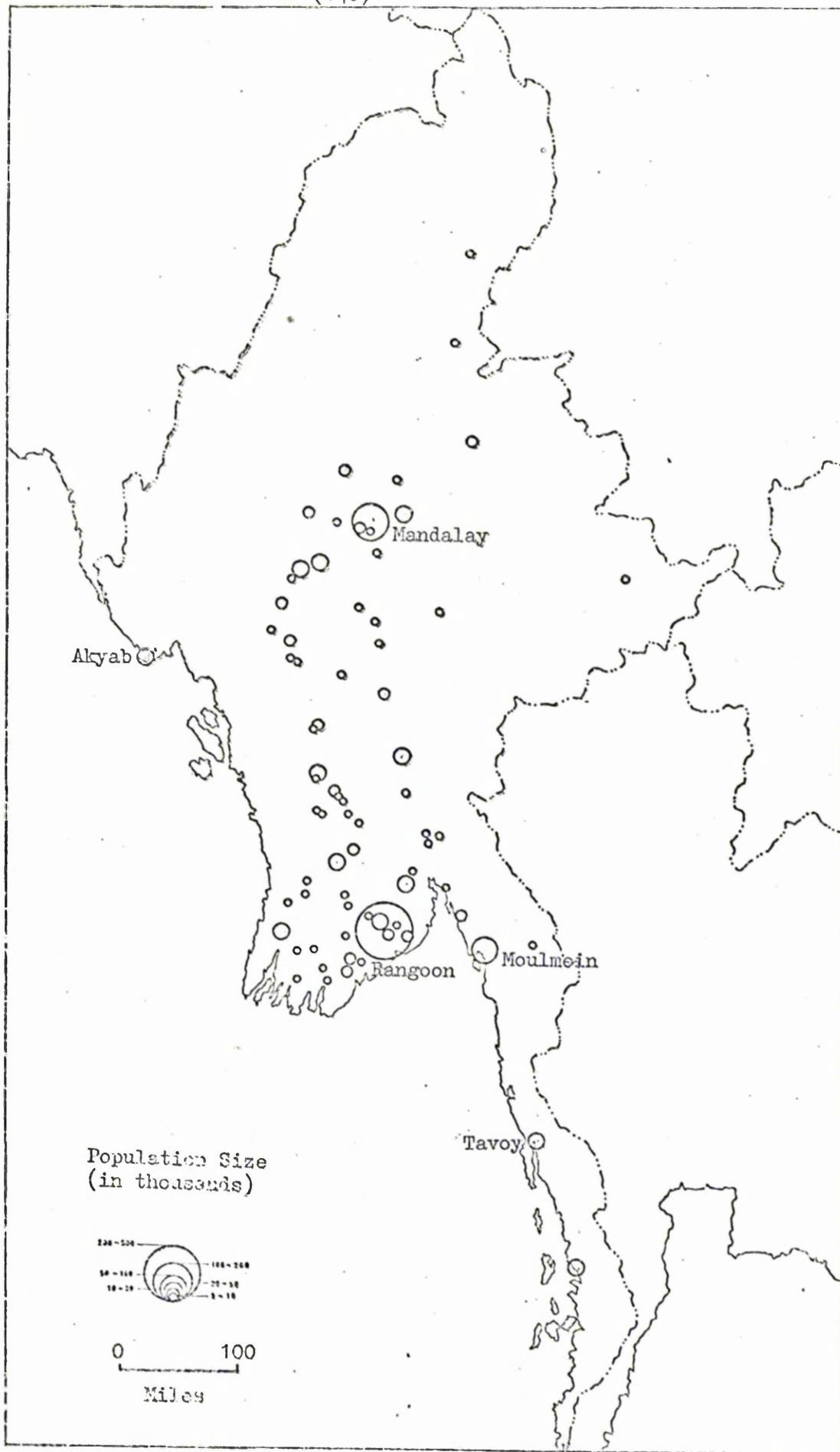


Fig. IV.14 Burma: urban centres with a population of 5,000 and over, 1931.

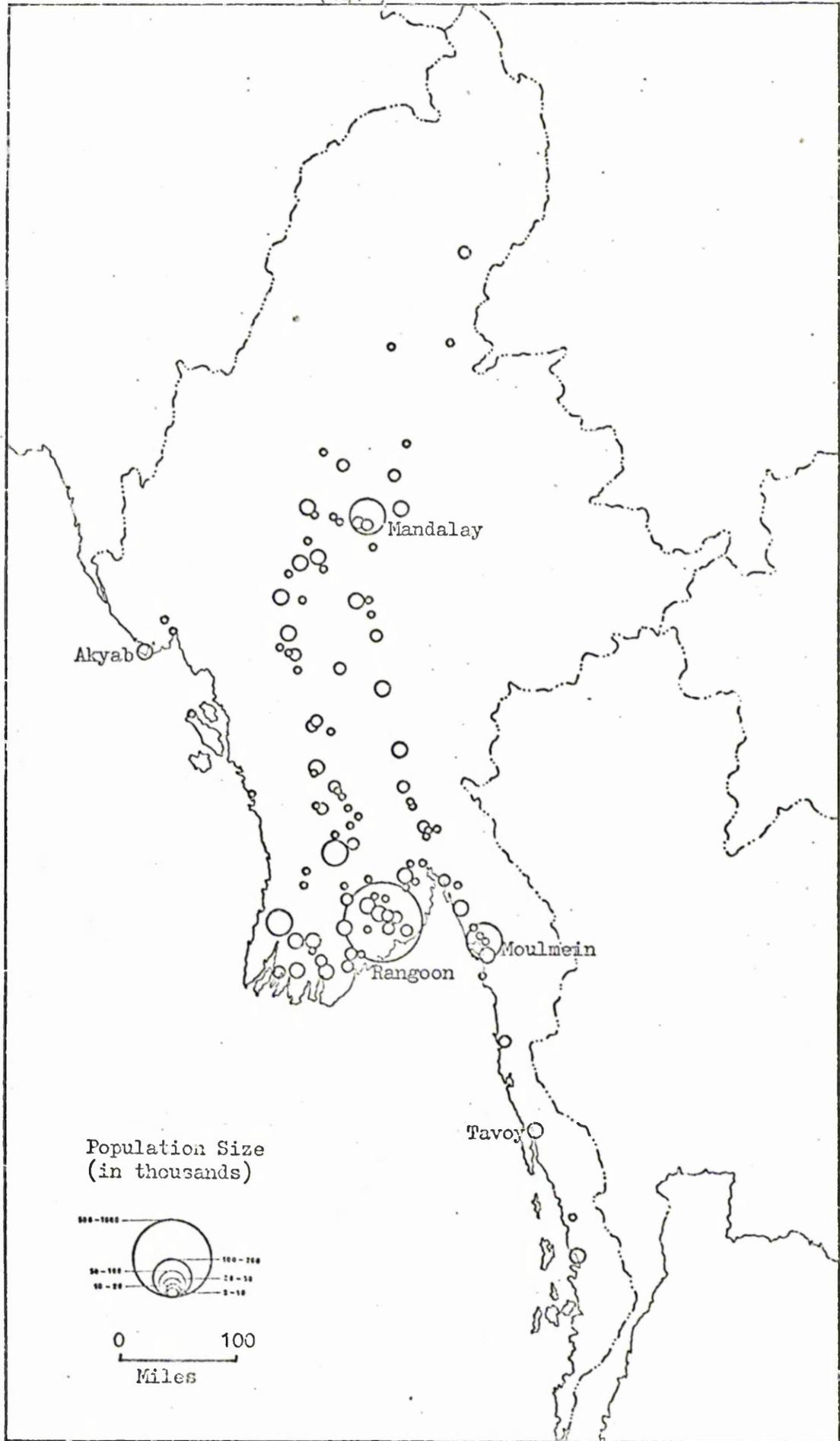


Fig. IV.15 Burma: urban centres with a population of 5,000 and over, 1953.

Natural increase was the main factor in urban population growth although the rate of urban population was low compared with other Southeast Asian countries. In the period between 1901 and 1921, urban growth rate was only slightly above the average natural growth rate - 30.7 per cent as against 25.9 per cent of the national population increase. Sometimes it was the influx of migrant from India that made up the population growth. The comparatively low rate of population growth was due to a high rate of mortality. The sanitary conditions in towns left much to be desired and plague was responsible for a large number of deaths, especially among the younger age group, during the early decades of the present century.

In the later period, although natural increase still made up a substantial part of urban increase, migration from the rural areas became increasingly important. Had there been no rural-urban migration, in the years between 1931 and 1953, urban population in Burma would have increased by only 0.5 million, while the rural population would have grown by 4.1 million. Thus, 0.7 rural inhabitants seem to have moved into urban localities. This represents 59.2 per cent of the total urban gains in the period of 1931-53. While the country's total population increased by 31.4 per cent, the urban population increase was twice as fast as the total national average.

The causes of the rural-urban migration in Burma appears to be both social and economic. On the one hand, the countryside lacks adequate facilities, and rural education is generally considered inferior and where schools exist they are often ill-equipped. On the other hand, the cities generally have available such facilities as schools, shopping areas, entertainment and hospitals. It also became evident that the very diminution of the productive power of the countryside under the ill-fated 'socialism' drove people to leave the rural areas.

Rural out-migration has also been stimulated by the lack of security in the rural areas of Burma⁴⁰. Between 1945-1948 was a chaotic time in Burma. After independence, insecurity in the countryside resulted

40 Cady, J.F. (1958) op. cit., pp. 579-88.

from subversive activities by anti-government forces. The hills and parts of the delta provide an almost inaccessible refuge for insurgents. The ethnic minorities have persistently resisted the Central government. In the 1950's, certain divisions were threatened by the insurgent forces. Rural unrest and insurrection prevailed in the countryside, which sent large numbers of refugees to the cities.

An analysis of the pattern of growth by size category shows the unevenness of urban expansion. As presented in Table IV. 6, in the period between 1901 and 1921, cities in the lower categories showed the fastest rate of increase. It was twice as fast as the total urban national average, 62.4 per cent as against 30.7 per cent. Meanwhile, the large and the medium-sized cities had a rate much lower than the national average. Cities like Moulmein and Akyab were stagnant whereas cities like Mandalay and Prome were actually losing population. However, a shifting pattern occurred in the period between 1921 and 1931. The most noteworthy increase in the period was in the medium sized cities. Cities with populations between 20,000 and 100,000 rose by 79.6 per cent compared with only 11.7 per cent of the large cities and only 1.5 per cent of the small cities.

The increase in the number of towns and cities in every size group has been considerable in the period between 1931-1953. Again, the medium-sized cities showed the most impressive rate of increase, followed by the large cities and least among the small towns. Towns have been growing into the medium size more rapidly than population has added to the small cities, resulting in the lower rate of growth among the small cities. Since 1921, the pattern of growth among Burmese cities has remained relatively stable in spite of a significant increase in total urban population. While the percentage of urban population concentrated in Rangoon has not changed appreciably since the beginning of the present century, the absolute number of population of the capital has increased more than three-folds. The shifting of towns from the lower categories to higher orders created variations in the rates from time to time.

TABLE IV. 6

Urban Population Increase of Burma by Size Category, 1901-1953

<u>Size Category</u>	<u>Urban Population</u> (in thousands)					<u>Percentage of Increase</u>							
	1953	1931	1921	1901	1953	1931	1921	1953	1931	1921	1953	1931	1921
Large Cities (over 100,000)	1025.7	548.3	490.0	418.7	3.0	1.1	0.8	87.1	11.7	17.2	1921	1931	1953
Medium-Sized Cities (20,000 - 100,000)	805.2	390.9	217.6	200.5	3.4	5.4	0.4	106.0	79.6	6.5	1921	1931	1953
Small Cities (under 20,000)	748.2	523.9	515.9	317.6	1.5	0.2	2.5	42.3	1.5	62.4	1921	1931	1953
All Sizes	2579.1	1463.1	1224.4	936.8	2.7	1.8	1.3	76.3	19.5	30.7	1921	1931	1953
Total Population of Burma	19272.0	14667.1	13212.2	10490.6	1.3	1.1	1.1	31.4	11.0	25.9	1921	1931	1953

Sources: Lewis, C.C. (1950) Census of India 1901, Vol. 7, Burma, Rangoon; Grantham, S.G. (1923) Census of India 1921, Vol. 10, Burma, Rangoon; Bennison, J.J. (1933) Census of India, 1931, Vol. 11, Burma, Rangoon; Burma: The First Stage Census 1953, Rangoon, 1957.

The rate of urban growth, however, varies considerably with the component of division of the country too. In the early decades of the present century, it was the divisions in the deltaic region which had grown faster than the rest of the country. As can be seen from Table IV. 7, in the early decades of the present century the steepest rises in percentage of urban population occurred in Irrawaddy and Pegu divisions. The former was twice as fast as the national average. Among the ten fastest growing cities in the period, six of them were found in these two divisions. Other divisions like Sagaing, Magwe, Shan States and Tenasserim were also growing fairly rapidly, but were falling below the national average. There was relatively little urban growth in the divisions of Arakan and Mandalay.

As illustrated from the same figure, there were changes in the growth rate and among the geographical regions. In the period between 1931 and 1953, all divisions showed a faster growth rate than in the previous decades. Although the percentage of urban population increase in Irrawaddy and Pegu continued to grow fairly rapidly the divisions of Tenasserim, Sagaing Irrawaddy and Pegu had shown a greater rate of increase. The rapid expansion of urban population in Sagaing division was due to the rapid growth of towns like Shwebo and Mongwa. The continued rapid growth of Pegu and Irrawaddy divisions emphasizes their importance as the chief productive areas of Burmese export crops and their being active in commercial activities. The lowest growth rates appeared in the Mandalay division and the Shan States which show a rate below the national average. The stagnant position of the Shan States and Arakan region was partly due to their general isolation from the rest of the country. The growth of urban localities has also been impeded by the mountainous terrain and the undeveloped interior or restricted hinterland as in the case of Akyab city.

Spatial distribution of urban population among the divisions also shows some interesting feature. The heaviest concentration of urban population in the country was recorded in the divisions of Pegu and Mandalay. Pegu division alone contained 46.3 per cent of the total urban population of the country whereas 14.5 per cent was founded in the division of Mandalay. Again, the importance of both Rangoon and Mandalay cities are obvious. Two-thirds of the Pegu's 1.2 million urban population in 1953 were living in the capital city, Rangoon. And more than half of the Mandalay division's of urban residents were living in the Mandalay city. Throughout the last few decades, the dominant position of these two cities in their respective divisions remained unchanged. On the whole, the deltaic divisions contained a higher proportion of urban

TABLE IV. 7

Urban Population Increase of Burma by Division, 1901-1953

<u>Division</u>	<u>Urban Population</u> (in thousands)				<u>Percentage of Increase</u>					
	1953	1931	1921	1901	1953 -31	1931 -21	1921 -01	1953 -31	1931 -21	1921 -01
Arakan	67.2	38.1	36.6	35.7	2.6	0.4	0.1	76.4	4.2	2.5
Pegu	1194.5	643.0	523.2	349.7	2.9	2.1	2.1	85.8	22.9	49.6
Irrawaddy	369.0	194.9	159.6	89.6	3.0	2.1	2.9	89.3	22.1	78.3
Tenasserim	290.5	145.0	129.6	113.8	3.2	1.1	0.6	100.3	11.9	13.9
Magwe	159.1	91.4	71.1	63.4	2.5	2.6	0.6	74.1	28.6	12.2
Mandalay	372.9	275.8	251.5	244.9	1.4	1.0	0.1	35.2	9.7	2.7
Sagaing	103.2	54.2	39.4	29.0	3.0	3.1	1.6	90.4	37.6	35.9
Kachin and Shan States	22.7	20.7	13.4	10.7	0.4	4.3	1.1	9.7	54.5	25.2
Total Urban population of Burma	2579.7	1463.1	1224.4	936.8	2.7	1.8	1.3	76.5	19.5	30.7

(146)

Sources: See Table IV. 6

population as compared with the periphery provinces. This also reflects the imbalance of economic development. The deltaic region has had the advantage of an early start in large-scale economic development⁴¹. The region is the focus of transport networks and economic activities of the country.

Urban System and Changes in Thailand, 1901-1960

Like its neighbours on mainland Southeast Asia, urban growth in Thailand since the early decades of the present century was mainly produced by centralization of supply and transport services required by the rural population and by organization for marketing of the raw materials produced by that rural population⁴². Its towns also function as distribution centres of manufactured goods from Bangkok or imported through Bangkok. Many also owed their initial growth and importance primarily to the fact that they were established as administrative headquarters of a 'changwat' or province. The economy of the early Thai's cities was based on trade and administrative functions but later some also assumed the role of processing of rice or other raw materials produced in their hinterlands. Their social functions were as centres for the provision of educational, health and cultural services.

Since the early decades, a great deal of economic conditions of the country has been improved. With the diking and draining of the Menam delta achieved during the early decades of the present century, the expansion of rice agriculture has further taken place. Considerable effort has also been made to develop commercial plantation agriculture, especially rubber, in the peninsular part of the country. Meanwhile, the provision of railways helped to stimulate export and internal trade. Exploitation of mineral resources and teak forests in the later years also helped to increase national wealth. Cities grew both as their hinterland developed and as the trading between foreign countries and Thailand was intensified. As cities grew in size and multiplied in number, urban development proceeded (see Fig. IV. 16 to Fig. IV. 18).

41 Adas, M. (1974) op. cit., pp. 28-38.

42 See Anderson, D.A. (1970) op. cit., pp. 73-82 and 112-29.

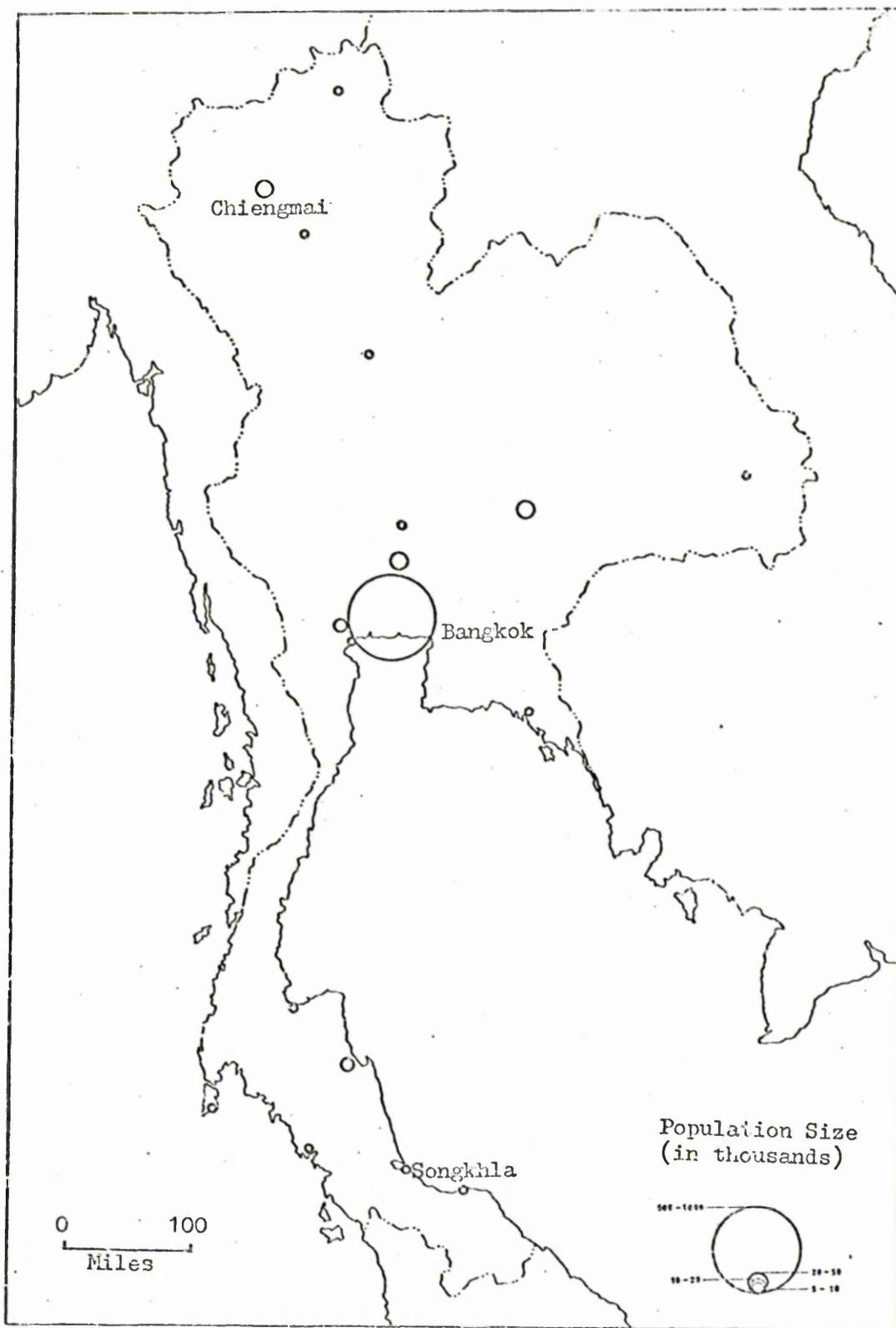


Fig. IV.16 Thailand: pattern of town distribution, 1930.

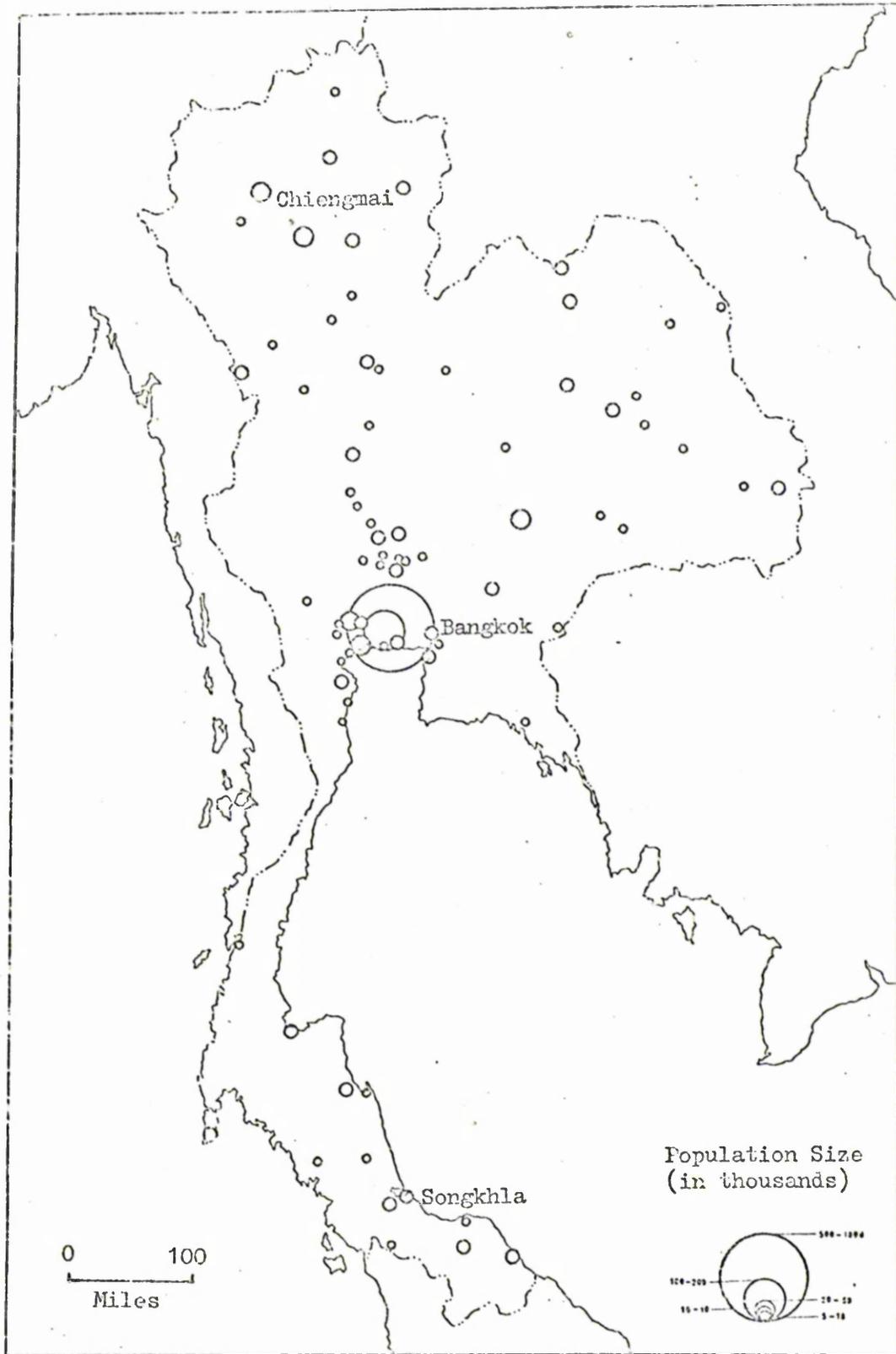


Fig. IV.17 Thailand: pattern of town distribution, 1947.

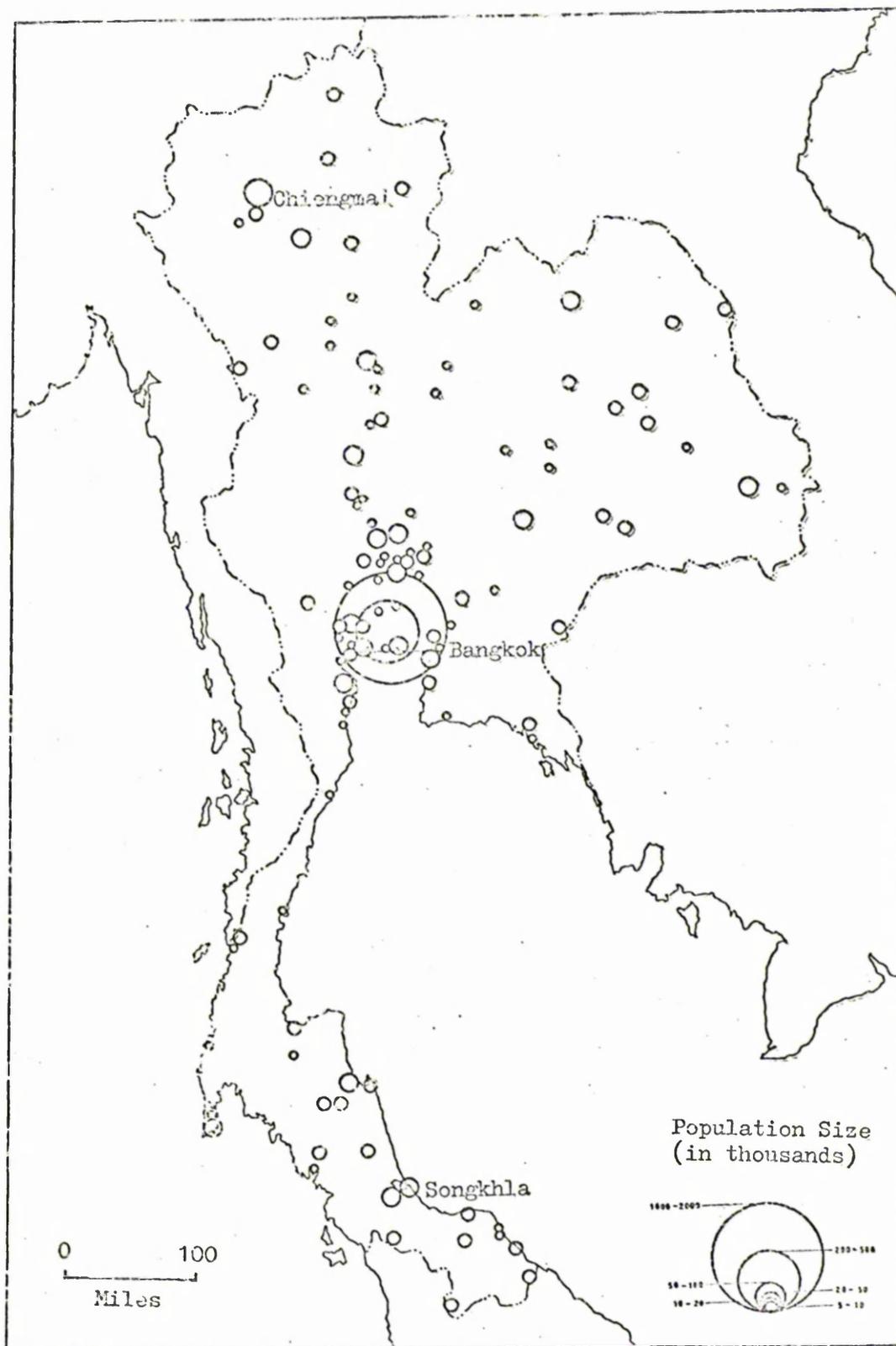


Fig. IV.13 Thailand: pattern of town distribution, 1960.

However, due to the lack of urban population data, the growth trend for early decades cannot be illustrated fully here. Statistical data of the country are not sufficiently complete to allow one to judge the changes that have taken place in individual urban growth. Nevertheless, since the turn of the present century, Thailand was experiencing both a steady growth of urban population and a proliferation of towns and cities though the pace was less impressive.

However, a steady growth of urban population was observed in 1930. In the spatial context, some definite changes can be discerned in the pattern of urban growth. Apart from an intensification of the earlier distribution pattern, there had been an expansion into new areas, especially along the major transport lines linking Bangkok with the regional headquarters like Chiangmai in the north, Nakhon Ratchasima, Udonthani in the northeast and Songkhla in the south. In 1930, the number of urban population in the country reached the 0.7 million mark, but further increase was recorded in the year of 1947. The number of urban inhabitants of the kingdom went up to about 1.5 million. As can be seen from Table IV. 8, greater increases occurred during the post-war years. Within the period of 1947 to 1960, the urban population of Thailand rose by another 1.5 million and reached 3.0 million in 1960, an increase of 106.8 per cent as against 50.5 per cent of the national population increase as a whole. Such a high rate of growth was only possible by the demographic process of both the rapid natural reproduction of urban population and considerable influx of migration from the country-side. Part of the increase was also due to the inclusion of the population of towns that in former census did not have 5,000 inhabitants.

In the early decades, there was also the inflow of considerable amount of Chinese migrants from abroad⁴³. Although their number in proportion to the total Thai population was relatively small, they made up a high percentage of the urban population themselves. In those early decades, Bangkok-Thonburi alone contained not less than 40 per cent Chinese among its urban population. However, since the 1930's immigration has become insignificant. Natural reproduction thus became the most important factor of urban population growth.

43 Skinner, G.W. (1957) Chinese Society in Thailand, Ithaca

TABLE IV. 2

Urban Population Growth of Thailand by Size Category, 1947-1960

<u>Size Category</u>	<u>Urban Population</u> (in thousands)		<u>Percentage Increase</u>	
	1960	1947	<u>Annual Rate</u> 1960-1947	<u>Percentage</u> 1960-1947
Large Cities (over 100,000)	1704.3	781.7	6.2	117.9
Medium-Sized Cities (20,000-100,000)	629.4	126.3	15.3	398.5
Small Cities (under 20,000)	672.5	545.3	1.6	23.3
All Sizes	3005.3	1453.2	5.7	106.8
Total Population of Thailand	26257.3	17442.7	3.2	50.5

Sources: Thailand Population Census 1947, Bangkok; Thailand Population Census 1960, Changwad Series, Bangkok, 1961; Sternstein, I. (1965).

The post-war trend has shown a gradual widening gap between fertility and mortality. The fall of Thailand's mortality was slow even till the World War period, but in the post-war years, there was an unprecedented fall of mortality which caused an increasing imbalance between births and deaths. Thus, there was a sharp acceleration in population growth in both urban and rural areas. Some of the great killers of the past, notably malaria and the pestilential diseases, have virtually disappeared as causes of death in Thailand and the incidence of many others has also been reduced.

Undoubtedly both rural and urban areas have benefitted from the improved health conditions, disease control and the spread of medical services. The rural areas have gained most from anti-malaria campaigns, whereas the urban centres have been the chief recipients of investments in medical facilities. Indeed, the improved living conditions have been brought about by the availability of more and better medicine and the diffusion of better health education.

The birth-rate has remained almost steady for the last few decades, but the death-rate and infant mortality have declined noticeably. A sustained high birth-rate combined with a rapidly declining death-rate principally accounted for the accelerated growth rate. In most of the early decades in the pre-war Thailand the death-rate remained fairly constant at about 30 per thousand, but post-war years witnessed a dramatic change as the death rate dropped below 20 per thousand by the mid-1950's and to a low of 10 by the 1960's. Meanwhile, the number of births has remained around 45 per thousand up to 1960. Compared with other neighbouring countries Thailand possessed one of the highest population growth rates, 3.2 per cent per annum in the period between 1947 and 1960.

In the post-war years, though natural increase remained the main factor of urban growth, rural-urban migration also contributed a substantial part of urban population increase⁴⁴. Variations in the component of urban population growth due to natural, migratory and reclassificational increase in the urban localities are measured by percentage. In the period between 1947-60, 47.3 per cent of the urban population increase in Thailand was due to the reproduction of population in the urban localities, 42.9 per cent was the result of rural-urban migration and 9.8 per cent was due to additions to

44 Ng, R.C.Y. (1969) Recent Internal Population Movement in Thailand, Annals of the Association of American Geographers, Vol. 59, pp. 701-30.

list of localities qualifying as urban which in former censuses did not have as yet 5,000 inhabitants.

Though urban growth in Thailand has shown a trend of constant increase, there have been significant variations in the rates of increase among size categories. Two noteworthy trends are indicated in Table IV. 8. First the high growth rate of population in towns of 20,000 - 100,000 and, second, a relatively slow rate of growth of population in smaller towns. Population of the medium-sized cities grew on average by 398.5 per cent during the 1947-1960 period while the smaller towns grew by only 23.3 per cent. Cities like Hadyai, Phitsnulok, Udonthani, Ubonratch-thani and Samutprakan registered an average growth rate that exceeded the national urban growth rate. The rapid rate of growth among the medium-sized cities was attributable more to the shifting of cities from the lower categories to the medium-sized categories rather than to the natural reproduction of their own population. Communities of small magnitude, meanwhile, had not shared the growth trend. In fact, many of these smaller urban localities had grown slower than the average rate of natural increase, suggesting that in essence they had experienced a net population loss in that period.

Though the medium-sized cities had a faster rate of increase than the large cities, it was the larger cities which accounted for a sizeable proportion of the numerical increase in urban Thailand as the most characteristic feature of Thailand's urban development. While the percentage of the urban population concentrated in the larger cities had increased, the proportion of the total population of the country found in the larger cities had also been increasing quite rapidly, from 3.5 per cent in 1947 to 6.5 per cent in 1960. With the urban development of the country as a whole, the larger cities had been called upon to absorb a substantial proportion of the population increase. Upon closer examination one finds that much of Thailand's urbanization can be traced directly to the growth of Bangkok-Thonburi. Thailand's urban pattern presents two distinct features, the high degree of metropolitanization of Bangkok-Thonburi and the relatively low level growth of the small cities. Anyone who travels in the kingdom could observe the marked contrast between urban life in Bangkok-Thonburi and life in the provincial, quasi-urban communities of secondary size ⁴⁵.

45 Barton, T.F. (1965) Rural and Urban Dwellers of Southeast Asia, The Journal of Geography, Vol. 64, pp. 113-22.

One way to gain a more detailed pattern of urban growth can be acquired by studying the varying proportions of the total urban population found in the various categories. More people were staying in the large cities, namely Bangkok-Thonburi, than the medium-sized and the smaller cities combined. In the years 1947, 53.8 per cent of the urban population of the country lived in cities with a population of more than 100,000 inhabitants, as against 8.7 per cent which resided in the medium-sized cities and 37.5 per cent in centres with a population of less than 20,000 inhabitants. In 1960, an even greater proportion of residents were staying in the large cities, 56.6 per cent as against 20.9 per cent of the medium-sized cities and 22.4 per cent of small cities. The post-war change in the number of persons living in Bangkok-Thonburi was much more impressive than the related percentage of the total urban population change. The basic distribution of Thai urban population - that is, the extent of its over-concentration - has not altered significantly in recent decades.

In terms of the rate of growth, there was also variation among the regions. Cities in the Central and Southern Regions, on average, were growing at a faster rate than those on the Northeast and Northern Regions. In the period between 1947 and 1960, the rate of urban population increase for the Central Region was 115.8 per cent as against 91.3 per cent for the Southern Region, 80.5 per cent for the Northeast Region and 73.9 per cent for the Northern Region. Central Region's highest rate mirrors the relative high level of economic development and the concentration of commercial and infant industry in the region, especially in the twin-city of Bangkok-Thonburi. Central region is an advanced area economically by Thai standards and the region is quite strategically located. Within this region is found a well-developed waterway network, other communication systems which are reasonably well developed and the best cultivated land. The location of Bangkok-Thonburi in the Central Region also accounts for the relatively higher percentage of urbanization, and a larger proportion of the national urban population. Of the total of 3.0 million people living in towns and cities in Thailand in 1960, about 70.8 per cent were living in the Central Region, and Bangkok-Thonburi alone accounted for not less than 56.7 per cent. In fact, since urban data have been available, the Central Region always has had the largest share of national urban population.

Spatially, the distribution of towns and cities, in general, produces a north-south linear pattern, either along the major waterways or the main railway lines. Traditionally, the typical Siamese town has grown up on a location close to the navigable rivers or canals which facilitated trade as well as communication. The Menam and its tributaries are the principal waterways in the country. Many settlements emerged along the main rivers including several major cities. The Menam valley and the deltaic zone is the geographical and economic nerve centre of the country. It produces most of the country's rice and supports the greatest concentration of population. Thus it is not surprising to find a larger number of towns and cities located there. Outside the Menam delta, towns are more randomly distributed. In the Northeast Region, dominating the populous areas are many small market towns. The majority are located either along the tributaries of the Mekong river or along the major transport lines. In the peninsular part of the country, towns are found along the coast as well as in the inland tin and rubber zone.

Urban System and Changes in the States of Indo-China, 1901-1960

Economic and urban development of the States of Indo-China⁴⁶ in the early decades of the present century bears a striking resemblance to that of Burma and Thailand. Since the turn of the 20th century; the French further developed their economic interests in the region and Indo-China became an important exporter of raw materials for processing abroad. The French investments played a major part in Indo-China's economic growth⁴⁷. The French expanded the roads and railway systems, constructed and enlarged port facilities and initiated the construction of irrigation works. Cities emerged as trading centres of market-towns for the exchange, storage or export of raw materials, mainly rice and plantation agriculture. Towns and cities had grown both in number and in size as a result of the social and economic development that took place in the early 20th century. Urban growth may also be attributed to a large extent to the subsequent expansion of the public and private investments and administrative and other services in towns.

46 Indo-China is used as a convenient term for the present states of Cambodia, Laos, North Vietnam and South Vietnam.

47 Robequain, C. (1944) The Economic Development of French Indo-China, London, pp. 181-213; Ennis, T.E. (1964) *op. cit.*, pp. 111-48.

Since the end of the Second World War, the tempo of growth has increased further. There was a marked increase in the number of urban centres, together with an increase in size (see Fig. IV. 19 to Fig. IV. 21). In South Vietnam, for example, the size of the urban population rose from about 0.5 million in 1937 to 2.5 million in 1963. While the total population of South Vietnam grew by 101.9 per cent, the urban population was increasing by the astonishing figure of 442.8 per cent. Meanwhile, in North Vietnam, the total population between 1936 and 1960 grew up by 45.2 per cent whereas the percentage of urban population increase was as much as 259.6 per cent. The corresponding figure for Cambodia in the period of 1936-1962 was 284.6 per cent for the urban population as against 88.4 per cent for the total population (see Table IV. 9). Indeed, the general population of the whole Indo-China was growing at an exceedingly fast pace, yet the urban population was growing even faster. For most countries, the rate of urban population increase was three to four times faster than the respective national growth rate. In broad terms, about half of the Indo-China's cities doubled their population between 1936-1960; a quarter trebled or more; while the other quarter failed to double. Not only have cities increased in size but they have also absorbed a substantial proportion of the population increase of each respective country.

During the period of 1936-1960, the urban population in each country has grown through natural increase of city population as well as through the expansion of municipal boundaries and the reclassification of urban centres. Nevertheless, such rapid post-war urban population expansion has not been sustained merely by the reproduction of the existing urban population and by the reclassification of centres as towns when the enumerated inhabitants first exceeded 5,000. It has meant a very considerable movement of people from rural areas to the cities, not only to the large cities but also to medium-sized as well as small cities. City-wards migration was important because it accounted for most of the variation in growth rates between urban and rural areas.

As in other Southeast Asian countries, the study of city-wards migration in the States of Indo-China has always been seriously handicapped by the inadequacy of data on the volume, origin and direction of the migration.

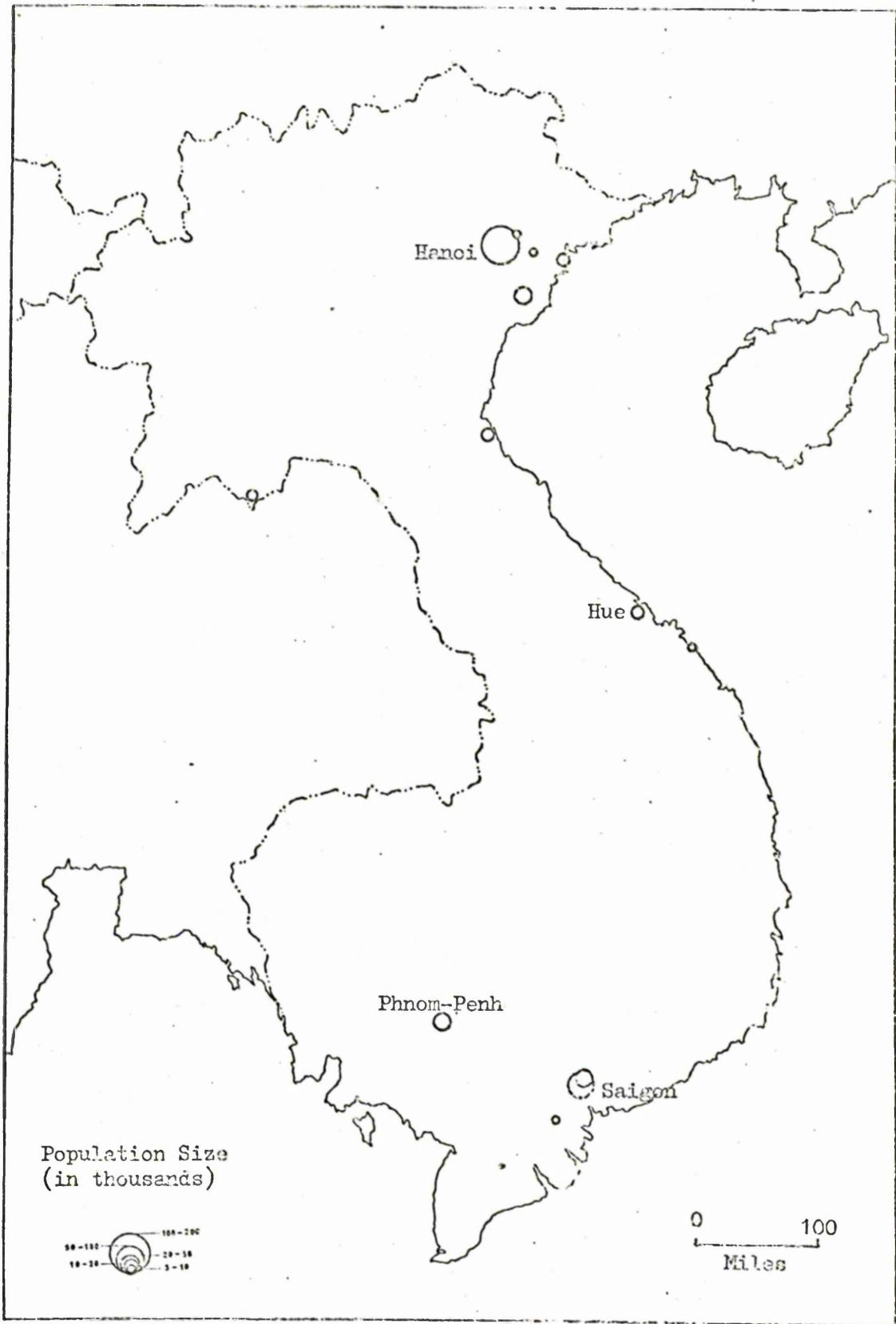


Fig. IV.19 Indo-China: towns and cities, 1901.

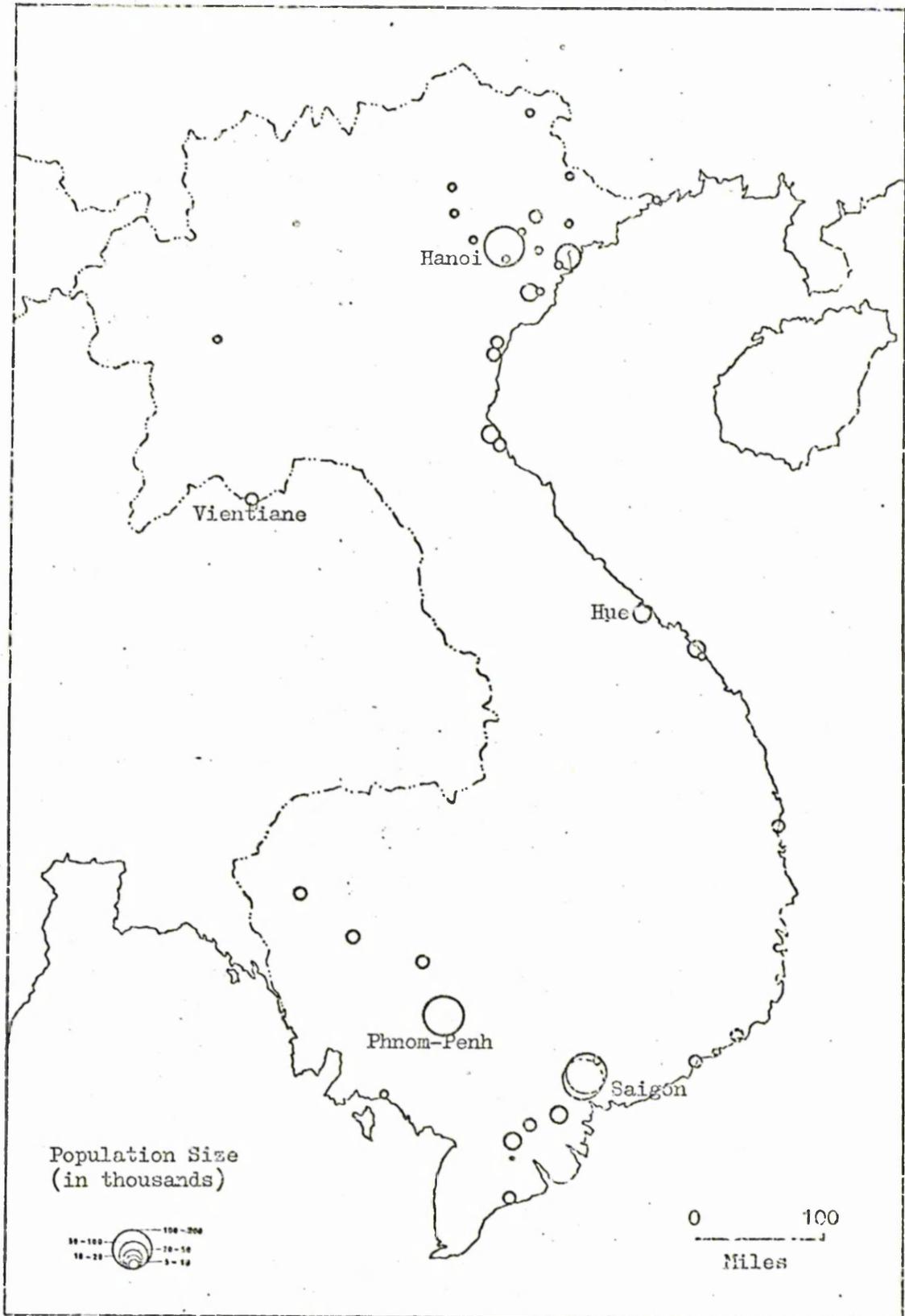


Fig. IV.20 Indo-China: towns and cities, 1936.

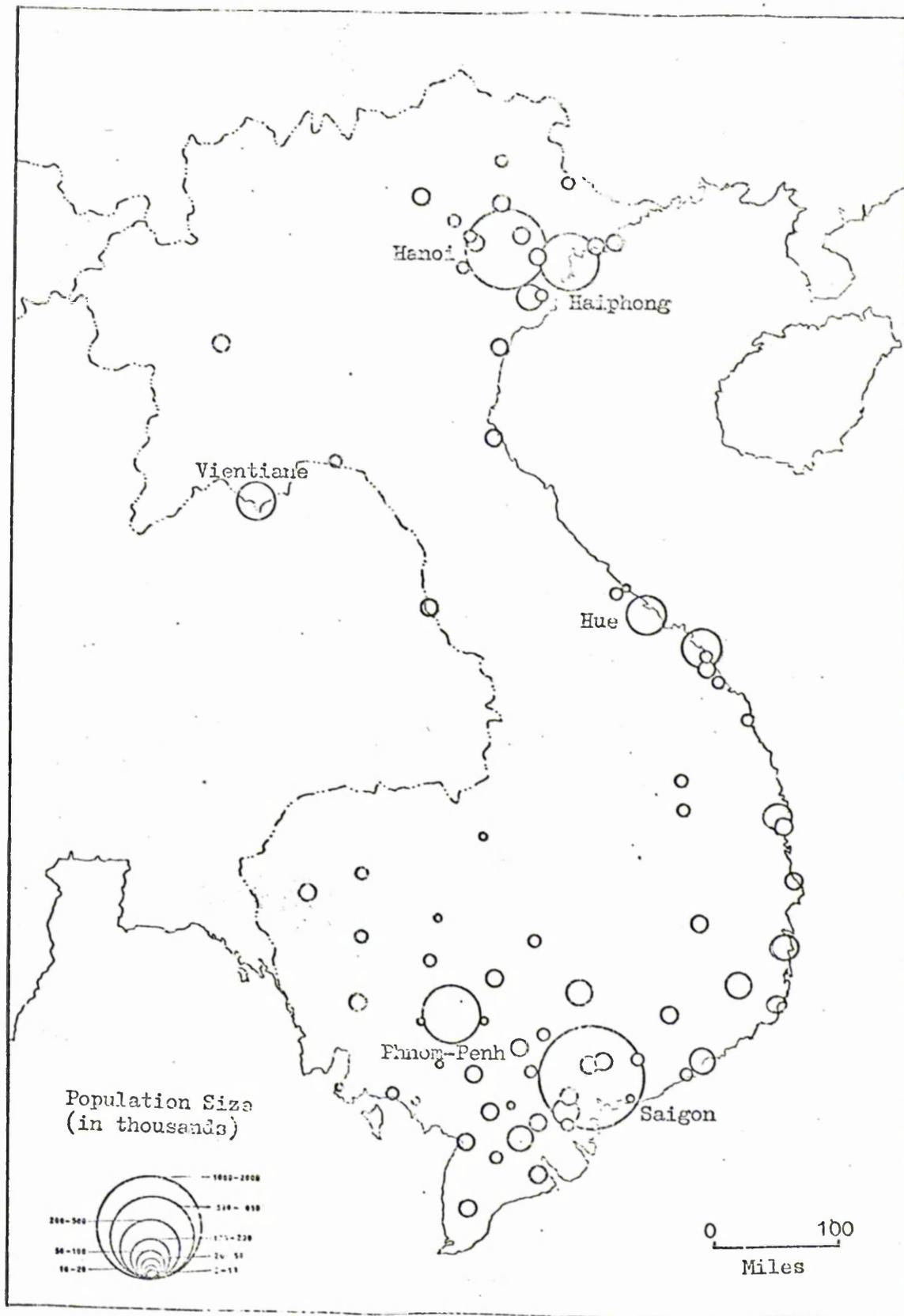


Fig. IV.21 Indo-China: towns and cities, 1960 (63).

TABLE IV. 9

Urban Population Increase in the States of Indo-China, 1936-1960 (63)

	<u>Large Cities</u>		<u>Medium-Sized Cities</u>	
	<u>Population</u> ('000s)	<u>Annual</u> <u>Rate</u>	<u>Population</u> ('000s)	<u>Annual</u> <u>Rate</u>
	<u>1960</u>		<u>1960</u>	
	<u>1936</u>		<u>1936</u>	
South Vietnam (1936-1963)	1588.1	256.0	6.9	520.4
North Vietnam (1936-1960)	1012.8	145.4	8.3	596.4
Cambodia (1936-1962)	403.5	103.0	5.4	291.7
Laos (1936-1962)	125.0	-	-	-
Indo-China	3129.4	504.4	7.0	520.4
		1259.7	282.3	5.6
				346.2

Percent-
ageAnnual
RatePopulation
('000s)Percent-
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RatePopulation
('000s)Percent-
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Rate

TABLE IV. 3 (Cont'd)

	<u>Small Cities</u>			<u>All Sizes</u>				
	<u>Population</u> ('000s)	<u>Annual</u> <u>Rate</u>	<u>Percent-</u> <u>age</u>	<u>Population</u> ('000s)	<u>Annual</u> <u>Rate</u>	<u>Percent-</u> <u>age</u>		
	<u>1960</u>	<u>1936</u>		<u>1960</u>	<u>1936</u>			
South Vietnam (1936-1963)	186.5	93.7	2.8	99.0	2542.7	468.4	6.5	442.8
North Vietnam (1936-1960)	92.2	134.0	-1.1	-45.3	1449.5	403.1	5.4	259.6
Cambodia (1936-1962)	119.0	15.5	8.0	667.7	609.6	158.5	5.3	284.6
Laos (1936-1962)	37.5	27.0	2.5	38.9	204.0	27.1	8.0	653.1
Indo-China	435.2	270.2	3.6	61.1	4805.8	1057.1	5.9	354.6

(162)

- Sources:
1. Annuaire Statistique de l'Indochine, 1936-1937, Hanoi, 1938
 2. Vietnam Statistical Yearbook, 1964-1965, Saigon, 1966
 3. Allgemaine Statistik des Auslander Landesbesichte, North Vietnam, 1963, Stuttgart, 1963
 4. Annuaire Statistique du Cambodge, 1963-1964, Phnom-Penh, 1964
 5. Annuaire Statistique du Laos, 1963, Vientaine, 1964

However, the great differences in intercensal growth rates between the urban and rural population for each country provide the basis for illustrating the rough order of magnitude of the city-wards migration that occurred in the years between 1936 and 1960.

The total population of South Vietnam, for instance, increased by 7.1 million or 101.9 per cent between 1936 and 1963. The urban component increased by 2.1 million or 442.9 per cent whereas the rural population went up by 5.1 million or only 77.5 per cent. If we assume that in the absence of out-migration the rural population would have increased by the same percentage as the total population, the 1963 rural population would have been larger by 6.7 million than in 1936, instead of by only 5.1 million, a deficit of 1.6 million that flowed to the cities. A rural exodus of this magnitude would have accounted for 76.9 per cent of the period's gain of 2.1 million in the urban population of South Vietnam.

If the same arithmetic is applied to other states in the region, one would arrive at substantially the same result. In the absence of out-migration, the rural population of North Vietnam would probably have been 4.8 million greater in 1960 than in 1936, instead of being only 3.9 million greater, a deficit of 0.9 million that flowed to the urban localities. A rural out-migration of this magnitude would account for 82.7 per cent of the period's gain of some 1.0 million in North Vietnam's urban population. This volume of rural out-migration also means that the rural population lost an amount just over one-fifth of its natural increase within the period.

For Cambodia, the 1936-1962 trend is not too dissimilar from those of its neighbours. The urban population of the country rose by 284.6 per cent, the rural population by 77.7 per cent, and the national increase was 88.4 per cent. The urban population growth of 0.5 million may have been swelled by some 0.3 million migrants from the countryside which contributed about 68.5 per cent of the total urban population growth during the period.

Although Laos was the least urbanized country in the region with only 8.9 per cent of its population living in a few cities, rural-urban migration to the capital cities was also marked⁴⁸. In the period between 1936 and 1962, not less than half of the urban population increase was due to the influx of rural migrants. Vientiane, the first-ranking city in the

48 Halpern, J.M. (1964) Economy and the Society of Laos, New Haven, p. 19.

country, was the largest recipient of the rural migrants. Thus, in Laos, urban population was heavily concentrated in Vientiane which in 1962 accounted for nearly two-thirds of the Laotian urban inhabitants. The second largest city of Luang Prabang the royal capital. It has a long history as an administrative centre.

Like other countries in Southeast Asia, the post-war rapid rate of urban population growth in the States of Indo-China has not occurred in response to an economic need for large urban concentrations, that is, from employment opportunities in industrial development within urban localities. It has primarily been the result of the 'push' arising from the low level of rural development. The growth of rural population was more rapid than the rural economy could easily absorb. More has been due to the wars and lack of security in the countryside. Large numbers of people fled because of political or religious reasons, like those people moved from north to south after the partition of North and South Vietnams in 1954⁴⁹.

In fact, since 1939, Indo-China has been the scene of warfare and civil strife. Furthermore, the continued rural unrest and the struggle for independence from 1946 to 1954 marked a period of extensive conflicts and wars between the French and the anticolonialist forces. Violence reigned in Indo-China for nearly a decade before France finally gave up after its defeat at Dien Bien Phu. Again, internal conflicts did not end when the countries were granted independence. New struggles broke out between rival groups or anti-government organizations. The fighting brought chaos and insecurity to the people in the countryside and the threat of slaughter sent villagers to the city by the thousands. The partition of North and South Vietnams as mentioned earlier had also been one of the stimuli for the movement of population. Influx of rural migrants has been chiefly responsible for the soaring rate of urban growth among the States of Indo-China.

For most states, migration has favoured the major cities, including both the large and medium-sized cities, by-passing those of the small cities. Consequently, there has been a tendency for the larger cities to have a higher rate of increase. Large cities, especially the capital cities like

49 Joiner, C.A. (1965) Public Administration in the Saigon Metropolitan Area, East Lansing, p. 125.

Saigon-Cholon of South Vietnam, Hanoi of North Vietnam, Phnom-Penh of Cambodia, and Vientiane of Laos, all have sustained average rates of growth which are several times faster than the natural population increase of each respective country while small cities with populations less than 20,000 have just kept pace with or are slightly below the rates of natural growth. The only exception was Cambodia where its small cities had the fastest rate of growth in the country. Its high rate is partly explained by the increase in number and size of cities in the lower categories where there were few in the earlier period. But in other countries, it was primarily the larger cities that have gained more.

Spatially, many of the coastal cities in South Vietnam appear to be growing faster than the inland towns. The more rugged and inhibiting topographic features of the upland areas provide a limited economic base for population growth so that the inland towns tend to remain small in size. Coastal cities, on the other hand, with the large-scale influx of rural migrants, tend to have the higher rates of expansion. In Cambodia, urban localities in the Mekon-Tonle Sap region still have the most impressive rates of growth, though the southern new port-city, Sihanoukville, grew by leaps and bounds.

C H A P T E R VTHE RESULTANT PARADIGM: PRESENT-DAY URBAN PATTERN IN SOUTHEAST ASIA1. The Domination of the Metropolis

The most important feature of Southeast Asia in the present day is the existence of a few dominating urban agglomerations. They are not only large in size and dense in population, but they also constitute the most important administrative, economic, commercial as well as transport and communication centres of the countries in which they are located (Table V.I). All, except one, are the first-ranking city as well as the political capitals in their respective countries. This has led to the concentration of colonial, economic and administrative functions in the past. The concentration of power in the post-independence period intensified the increase in the size and functions of these cities. To an unusual degree they all are the centres of modernization, social and intellectual life, and of cultural activity. As a result, they tend to further attract resources, both natural and human, from rural areas and other urban centres of the country.

Since their early foundations all of them served as the major ports of their respective countries. In each country the importance of this first-ranking port-city is greater than all the other ports put together, in terms of import-export value and tonnage. Some, in fact, served as entrepot for the whole of Southeast Asia. The multiplication of port activities and the addition of manufacturing industry in the later years served to strengthen existing trade functions and encouraged the evolution of many auxiliary services. For most of them, the economic and commercial functions had already become powerful agents of urban growth and later were to be reinforced by social forces. The volume of employment in foreign trade placed them in a position of unique importance in the region.

Table V.I

Measures of Importance of the Southeast Asian Metropolises

	<u>Bangkok- Thonburi</u>	<u>Djakarta</u>	<u>Manila- Quezon</u>	<u>Rangoon</u>	<u>Saigon- Cao Lon</u>	<u>Singapore</u>
First-ranking City and National Capital	X	X	X	X	X	X
Only major City with Population over one Million	X	X	X	X	X	X
(Major Port	X	X	X	X	X	X
Transport(Major Airport	X	X	X	X	X	X
(Main Rail Headquarter	X	X	X	X	X	X
Main Financial and Banking Headquarters	X	X	X	X	X	X
Main Manufacturing Centre	X	X	X	X	X	X
Cultural Centre and Site of National University	X	X	X	X	X	X
<u>TOTAL CHECKED</u>	(3)	(7)	(8)	(8)	(8)	(7)

The rate of their population increase was relatively fast, but the post-war years witnessed an unprecedented growth of city population and the expansion of built-up areas on a really significant scale. As might be expected, those cities whose population grew most rapidly have had the highest rates of population increase resulting partly from immigration. In recent years, these cities have not only enlarged in size but have undergone some qualitative change as well. They are no longer merely a larger version of the traditional cities, but a new form of urban agglomerations in the region. The trend towards metropolitanization has been the consequence of the increased concentration of national population as well as private and public investments in them. They are the true metropolises of Southeast Asia.

The metropolises chosen to be discussed here are Bangkok-Thonburi in Thailand, Djakarta in Indonesia, Manila-Quezon in the Philippines, Rangoon in Burma, Saigon-Cholon in South Vietnam and Singapore. The choice serves to demonstrate their special position within the Southeast Asian urban framework.

The development of metropolitan areas is one of the most dramatic forms of urban growth in Southeast Asian urban history today. All these metropolises have a relatively recent origin¹. Their history goes back mostly to the establishment of the colonial rules. Their sites, which were little more than local centres, had been largely neglected before the advent of the European traders and the colonialists. Even at the beginning of the 19th century, most of them were no more than native towns. Rangoon as well as Saigon were merely small indigenous settlements; Bangkok, though serving as the capital of the kingdom of Siam, was still relatively small; Singapore had not been founded; Manila and Djakarta (then called Batavia), though they had been established for more than two centuries, were merely small coastal cities. Few of them had an urban population of more than 50,000, in the early 19th century.

1 To cite just three: Murphey, R. (1957) *The Capital of Asia, Economic Development and Cultural Change*, Vol. 5, pp. 216-43; Fryer, D.W. (1953) *op. cit.*, pp. 475-76; Ginsburg, N.S. (1955) *op. cit.*, p. 458.

Broadly speaking, the growth of these cities could be divided into three main periods. The first was a period of relatively slow rate of growth, dating from their origins to about the end of the 19th century. The second period was the pre-war years that witnessed the rise of new types of economic activities and the diversification of the urban functions. The third is the post-independence period. The effect of further political and economic changes in the post-colonial period gave rise to an 'urban explosion'. The growth pattern of these metropolises were tied strongly to historical factors, as for example, their early foundings and subsequent developments.

The accompanying maps show the growth pattern of the six metropolises. Nevertheless, these growth maps do not indicate ages of existing buildings but only the period in which land first became built-up. During the period covered by these maps much reconstruction also took place, especially in the oldest sections of the metropolises. Physically, all have undergone changes in their morphology. Dramatic changes in the inner-city areas are evident in some cases. Expansion of residential areas in the outer parts was common to all. The maps also show the different stages of concentric growth.

(i) Manila is the oldest settlement among the metropolises under discussion. The town was founded in 1571 by Miguel Lopez de Legaspi and made capital of the Philippines three years later. Under Spanish rule a walled city known as Intramuros was constructed on the southern bank of the Pasig River. This was the oldest section of Manila. The site of Intramuros was chosen largely because of its easy access to the sea and control of the traffic to the Pasig River.

Manila was originally a planned city. The walled city covered an area of about half a square mile with features of the early gridiron arrangement². Streets crossed one another at right angles.

2 For more detail on early street pattern of Manila, see Back, C.D.J. (1929) The Evolution of the City of Manila and its Strategic Significance, The Australian Geographer, Vol. 1, p.77; Reed, R.R. (1957) *op. cit.*, p.59.

Within the town were found the cathedral, public buildings, schools, stores and houses. The oldest section of Manila was indeed the first European planned city in Southeast Asia.

Almost from the beginning of its establishment Manila became the port of call for merchants from many countries. The Chinese traders, among others, brought to Manila each year a large quantity of silks, industrial products and raw materials as well as various provisions. The Sino-Filipino trade, indirectly, also made the Filipino-Mexican trade develop rapidly. That was the beginning of the rich and flourishing galleon trade which lasted for about two centuries from the 16th to the 17th centuries. With the best harbour, Manila was ideally situated for this role. Between the mid-16th and the 18th centuries, Manila was the centre of the richest trade in the newly discovered world ³.

At the beginning of the 18th century, the city began to spread beyond the walled city, following an irregular development or, at least, a development less regular than its early growth. New settlements were set up at the opposite site of the Pasig River. Districts like Binondo and San Nicolas were built-up which form the present-day C.B.D. of Manila. As the population of Manila continued to increase in the 19th century, the built-up areas extended further to the north (Fig. V.1). By mid-19th century, districts like Binondo, Tondo had largely been filled up by shops and houses. At least before the mid-19th century the main direction of urban development occurred north of the river, only some patchy development appearing in the district of Paco in the south. The early plans showed much land still not built-up on the southern side of the river.

After the opening of the Suez Canal, trade with Europe increased. As a consequence of these new development, the population of Manila increased rapidly with the extension of building in districts like Sta. Cruz, Dulumbayan and Quapo. In the second half of the 19th century, the main

³ Reed, R.R. (1967) op. cit., p.111.

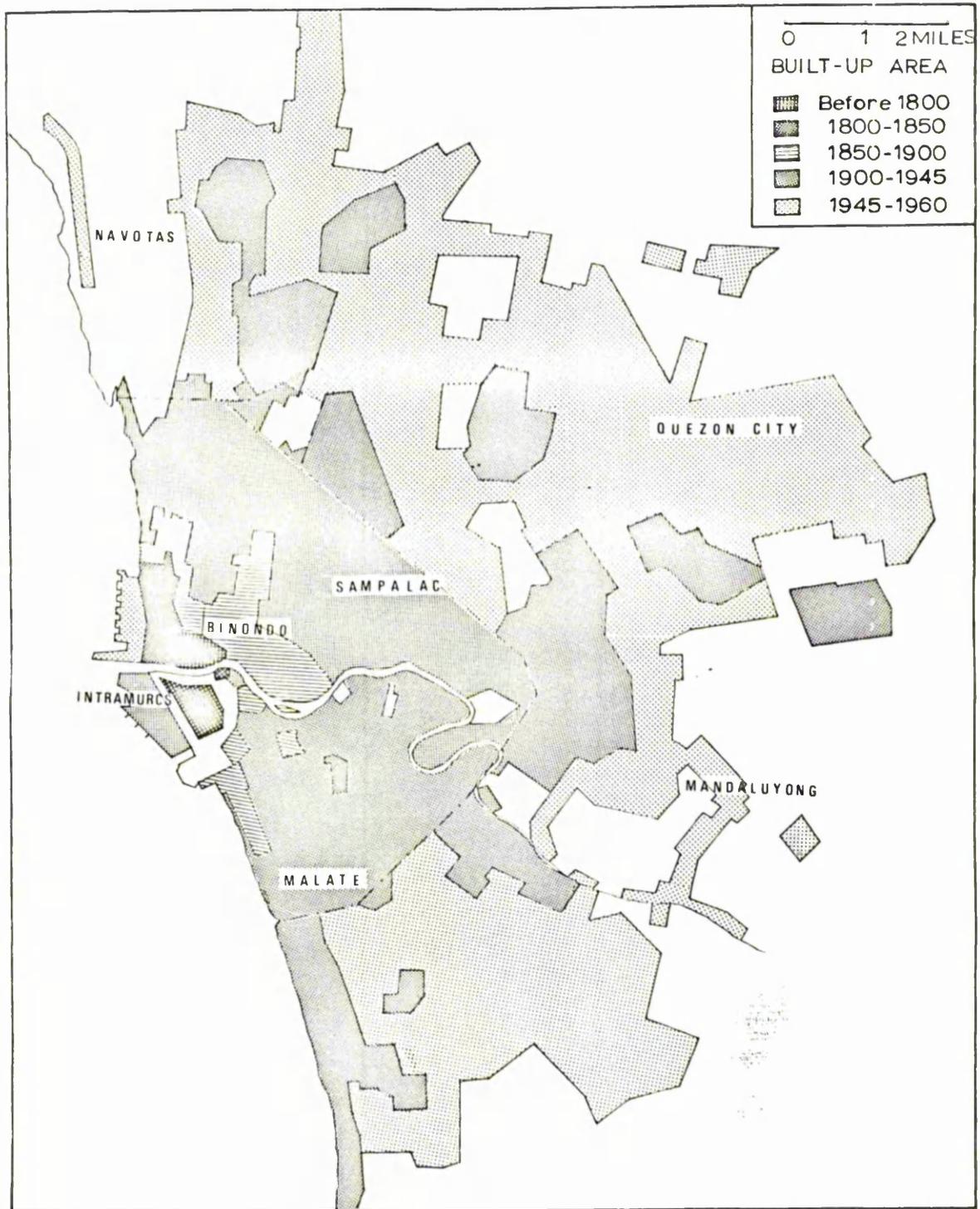


Fig. V.1 Manila-Quezon: the growth of the built-up area , 1600-1960.

development of Manila again occurred, mainly on the northern side of the Pasig. To the south of the existing city, parallel development took place, particularly in the Ermita district. These early urbanized areas roughly coincided with the main business districts of modern Manila today. By the end of the 19th century, most of these districts had already developed into densely populated areas. Except for the early walled city, Intramuros, Manila had not been built according to any plan but had grown in the most haphazard manner.

Modern Manila began at the turn of the present century after the sovereignty of the Philippines was transferred from the Spaniards to the Americans. The American rule witnessed the rapid economic development of the country. Large plantation agriculture was established in Luzon and in other islands and resulted in the marked increase of export crops and commercial activities. Manila, which served as the administrative headquarters of the archipelago and the main port for shipment, enjoyed the greatest advantage in the foreign trade. The system of free enterprise adopted by the American administration as a general principle of commercial activities had great impact upon the urban development of Manila. As the economic activities expanded the population of the city steadily increased. More and more land was utilized for residential and other purposes and in certain areas the previous landuse was altered. The periods of economic and commercial development were characterized by remarkable changes in the townscape ⁴.

In 1901, by an act of the Philippine commission, Manila became the first chartered city of the archipelago ⁵. In the first few decades of the present century, administrative and high class residential areas were erected on the south bank of the Pasig. The expansion of Manila towards the south was also accompanied by the establishment of certain commercial areas. At the same time, the old moat was filled and much of the space outside the wall was converted into park and gardens. Meanwhile, large reclamations of the sea-front had also been carried out. A modern harbour was built on the reclaimed land at the seaward side of the Intramuros.

4 Beck, C.D.J. (1929) op. cit., p.78.

5 See Bernabe, D.G. (1966) op. cit., pp. 1-3.

Under the American rule new forms of transportation were also introduced and transportation had been an important factor in shaping the pattern of urban growth. The development of motor transport had encouraged urban dispersal not only of residential areas but also of other urban functions, in particular manufacturing industry. Journeys to work extended over longer distances. The city could attain a larger total population than had ever been previously encountered. The population of Manila had increased from 219,928 in 1903 to 298,396 in 1918 and reached the mark of 663,104 in 1939. Population had begun to spread beyond the municipal boundaries in all directions, settlement along and near the principal thoroughfares extending far beyond its borders.

During World War II savage fighting took place in the city and many buildings and facilities were destroyed or damaged, but the reconstruction took place as soon as the War was over. In the post-war years, Manila experienced a boom and recovered very quickly. The increasing trade and in later years a rising industry brought a rapid increase in the urban population and the large-scale expansion of the city. A variety of industries and specialized servicing activities were added to the existing trade and commercial functions. The city had grown by this time to sufficient size and importance to accommodate more manufacturing industries. Independence had as usual brought an accelerated growth of the capital.

A significant change of growth pattern in the post-war years was the outwards expansion of the built-up areas far beyond the city limits, to engulf neighbouring towns. With the rapid growth of population there was an inevitable outflow of population to the suburbs. Again, as can be seen from Fig. V.1, the physical growth of the metropolitan area was extended to the nearby towns such as Quezon, Pasay and other towns. Except on the sea-front the built-up areas were expanded in all directions. Manila had spread out only to the east, north and south. The improvement in transportation also permitted further physical growth. The outwards movement of people originally followed the river and the main roads to the suburbs until the spread of settlements joined other older settlements until they became part of the metropolis⁶. The spread of population from

⁶ Laquian, A.A. (1966) The City in National-Building, Manila, pp. 1-2; also Cressey, P.F. (1958) The Development of Philippine City, Silliman Journal, Vol. 5, pp. 349-61.

Manila into the suburbs may be seen from the fact that the total population of the suburbs had a rate of increase many times faster than the population within the municipal boundary of Manila.

In the post-years, due to the rapid increase of both international and inter-islands trade the harbour had not enough space to provide for the vastly increased needs and considerable congestion resulted. A new port at the northern side of the Pasig along the sea-front was constructed. Today Manila is in possession of ^{two} docks, one north of the Pasig river which handles the inter-island traffic, and one south of the river functioning as the main harbour for international shipping.

Since Quezon was selected as the capital for the Republic, large-scale construction works were carried out. In addition to the residential houses, schools, hospitals, many public and government buildings required by the expanding administration, industry and commerce were erected. New roads were laid out and the scene set for rapid expansion. Indeed, Quezon is the fastest growing city in the Republic.

Like many seaside cities in the world, Manila-Quezon's physical growth is concentric in pattern. As mentioned before, the early years of her physical expansion were characterized by ribbon development along the main roads that radiated from the centre of origin from San Nicolas near the mouth of the Pasig River. However, because its central core is bordered on one side by the sea, its urban pattern today is fan-shaped and not circular. This concentric and fan-shaped pattern of growth, with a somewhat heavier thrust of development along the major traffic routes, is illustrated in Fig. V.1.

(ii) Djakarta. Little is known about the early history of Djakarta. It is believed commonly that on the site of the present Djakarta stood the native town of Sunda Kelapa. In time, it was conquered by the Sultan of Bantam who named it Jacatra ⁷ from which the present name of Djakarta derived. In the early 16th century, the Portuguese erected a fort at the mouth of the Tjiluwung River near the native settlement. A few years later the fort was captured by the Javanese but was rescized by the

7 See Milone, P.D. (1966) op. cit., p.11; Heeren, H.J. (1956) op. cit., p.231.

Portuguese who consolidated their rule for almost a century before the coming of the Dutch. In 1619, the fort was captured and razed to the ground and, upon the old site, the town of Batavia was built.

What the details of the lay-out of the old Batavia were is not very clear. The Dutch, who did not realize the full implications of tropical conditions, went ahead to erect a town on the model of those of their homeland⁸. Dutch-type buildings were constructed. Canals were built and bridges laid. The town was surrounded by a wall and protected by a fortress on the shore. The streets were narrow, intersectioned with canals. The walled city at that time covered an area of about one mile long and a quarter of a mile wide. Within a few decades the Dutch managed to convert the town into a commercial centre of the Orient. Goods from the nearby countries and islands filled its warehouses and its shops. As trade flourished, population in the town also increased.

By the mid-18th century, the physical conditions in Batavia were deteriorating. The canal deposited its copious sediment and generated pestilential diseases. The Dutch style of architecture and housing with steep narrow-fronts, tiled roofs, poor ventilation and houses closely packed together was unhealthy in the tropical climate. Meanwhile, the stagnant canals provided an excellent breeding ground for the mosquitoes which spread malaria through the population. For certain periods, the mortality rate of the town, in fact, exceeded the fertility rate⁹. Up to the end of the 18th century, the town of Batavia led a rather placid existence. The expansion of built-up areas and population growth were slow by modern standards.

In the 19th century, Batavia underwent many changes. The most important was the building of a new town on the higher ground, two miles south of the old walled city (Fig. V. 2). The major spatial growth of Batavia at this time had been towards the south. The new town, Weltevreden, was planned with more spacious villas, commercial buildings, broad streets

8 Keyfitz, N. (1961) op. cit., p. 350.

9 Wertheim, W.F. (1964) Indonesian Society in Transition, The Hague, pp. 171-73.

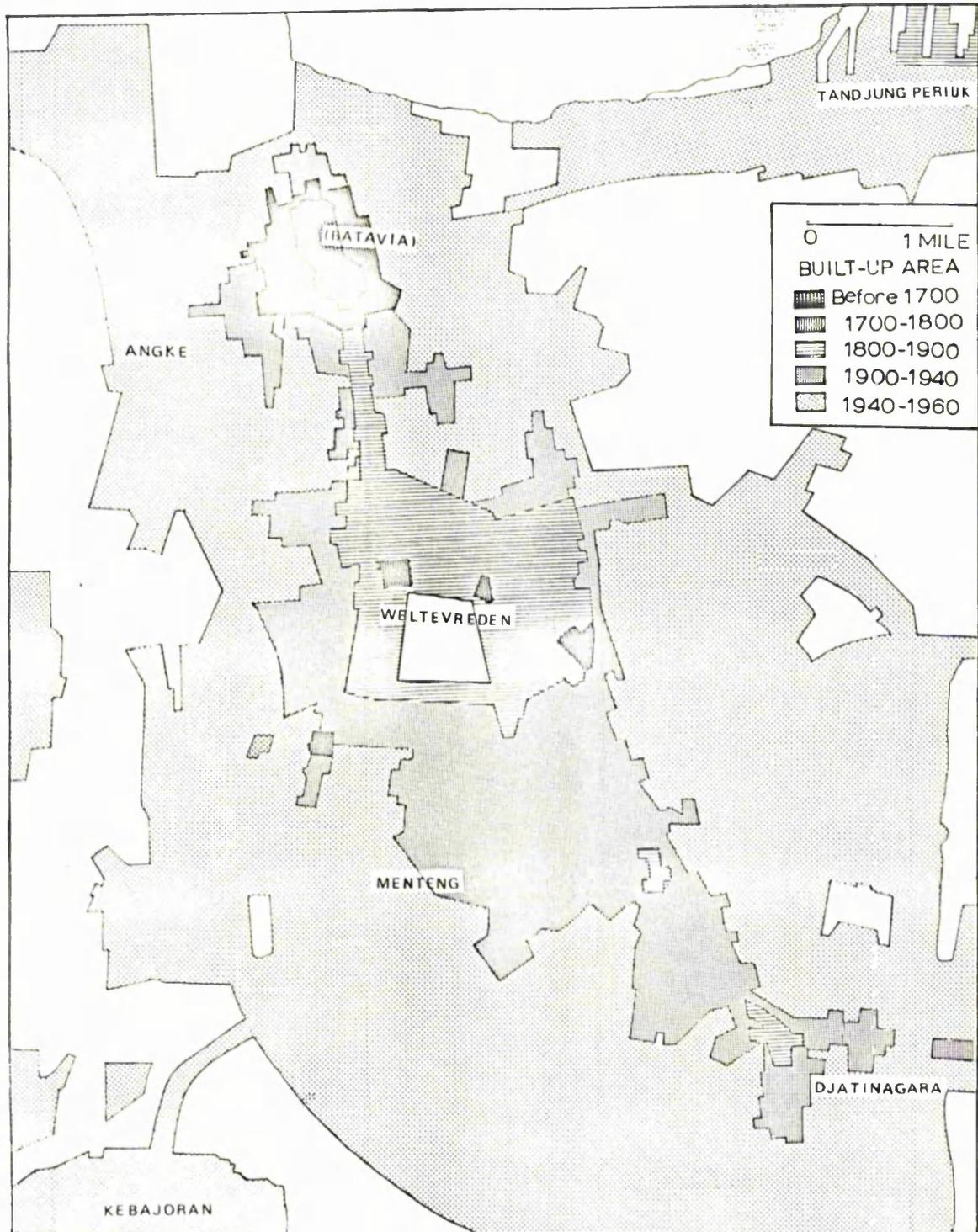


Fig. V.2 Djakarta: the growth of the built-up area , 1650-1960.

and a square which formed the centre of the new town. The lay-out of Weltevreden was influenced to some extent by the traditional Indonesia cities with a square at the city centre as the market place ¹⁰. In 1810, the seat of the Dutch East Indies government was transferred to the new town. Most of the Europeans and substantial wealthy indigenous citizens also settled in the new town.

The expansion of the Dutch political and military control throughout the archipelago in the second half of the 19th century gave new impetus to the growth of the city ¹¹. Djakarta became not only the political-administrative centre of Java but also served as the commercial headquarters of the prosperous Dutch East Indies empire. The last quarter of the 19th century saw not only the further growth of inter-island trade but also the growth of international trade as well. With the steamships and the opening of the Suez Canal, Djakarta's location as a trading port was enhanced. Meanwhile, the establishment in Djakarta of commercial banks, public and private companies, insurance firms, estate and forwarding agencies, shipping firms and transport agencies further led to its prosperity.

For centuries, the development of Djakarta was based upon the use of the old harbour near the oldest section of the city. Hence urban development took place first on the margin of the old port areas. But when the new era in navigation arrived and the ships grew larger, the old harbour was no longer enough to accommodate the larger ocean-going ships. Thus, in 1877, a new port, Tandjung Periuk was constructed to the north-east of the city. The intensified development of plantation industries in the Outer Islands accelerated Djakarta's port development. The area of the city had again extended. It had grown along the Molenvliet, a stream dervied from the Tjiluwung River. The stream has been banked up with shops and houses, and the chief throughfare of the city ran on either side of it. New suburbs had also sprung up in the southeast and southwest.

10 Keyfitz, N. (1961) op. cit., p. 349.

11 See Murphey, R. (1957) op. cit., p. 239.

Less extensive development had also taken place to the east and west of the city. Meanwhile, certain parts of the oldest section were also reconstructed because continued population growth and expansion of trade made it necessary to re-develop the old town known as the 'Kota Intan' today.

By the turn of the present century, the steady economic progress of the archipelago had considerable effect on the pattern of the city growth. The city functions were gradually increasing and its area of influence was fast developing. The spatial organization of Djakarta naturally reflected the fact that the metropolis constituted the largest port and commercial centre of the archipelago. The largest contiguous functional zone in the central area was devoted to commercial and transportation. Meanwhile, development in transportation facilities and the extension of other urban services are important factors that made possible the further expansion. In 1905, Djakarta became the first municipality¹² of the Dutch Indies.

With the growth of the population, there was a natural flow of the city population into the outlying districts, resulting in the gradual mushrooming of residential areas of the city. In the period between 1900 and 1940, Djakarta extended its built-up areas continually towards the south and southeast directions until it joined up with Meester-Cornalis, a separate town two and a half miles from Weltevreden. The coming of the tram-cars and later omnibus services and private motor-car contributed greatly to the growth of the metropolis by providing cheaper transport within the metropolitan area. This allowed many residents to live at some distance from their work, thus encouraging the rise of new suburbs. The growth of the docks, too, encouraged eastward expansion. The outlying districts, increased in size and population density. Outward expansion from the original site has been relatively easy, the surface configuration varying from undulating to flat with few hills of significant elevation setting hardly any serious limit for construction. The street pattern of Djakarta could best be described as 'irregular'. The main thoroughfares are generally north to south, parallel to the Tjiluwung River, with west to east cross connections at irregular intervals.

12 Milone, P.D. (1966) op. cit.

After the Second World War, Djakarta entered a new phase of urban expansion both in population and area. In the period between 1940 and 1961, the population of the metropolis rose from about half a million to 2.9 million. Indeed, the urban population more than doubled itself in every decade in those years. Such an unprecedented rate of population increase can only be accounted for by the continuous large-scale influx of rural population, in addition to the high reproduction rate of the urban population itself¹³. This rapid growth of the population of the metropolis has resulted in greater urban densities and accelerated suburban expansion. The metropolis showed an unchecked growth in all directions. As can be seen from Fig. V. 2, the post-war extension of the built-up areas was greater than all the previous built-up areas put together. Meanwhile, the metropolitan boundaries have extended still further. New districts are swallowed up by the extending metropolitan area.

During the post-war years, the influence of motor transport became increasingly important. Morphologically, the effect of motorcars and bus services was to concentrate urban expansion along the main traffic arteries, producing a star-shaped built-up area. But later the empty spaces between arteries were gradually filled up. Increasing modern buildings and housing estates have been built on both the east and the west fringes of the metropolis. A similar trend of development was observed at the coastal side of the metropolis. Ribbon development continued where houses and factories sprang up along the road leading to the port, Tanjung Periuk. In the south-west of the metropolis, a new residential suburb, Kebajoran, was erected to accommodate a population of more than one hundred thousand. This new suburb, almost exclusively government sponsored or built by commercial firms was the first modern planned urban development in Indonesia after independence. In the same period, new housing estates have also developed on the eastern side of the metropolis. Along with the growth of population, the metropolitan area is continuously expanding, swallowing up old and new suburbs. However, there is still a substantial population living in the rur-urban 'kampong'¹⁴ which is neither rural nor urban.

13 See Tan, G. (1965) Growth of Cities in Indonesia 1930-1961, *Tijdschrift voor Economische en Sociale Geografie*, Vol. 56, pp. 103-09; Heeren, H.J. (1956) op. cit., pp. 236-38.

14 'Kampong' is a native word for village or rural-type of settlement, commonly used in both Indonesia and Malaysia.

(iii) Rangoon. Unlike Manila and Djakarta, the history of urban development of Rangoon was not begun until the early 19th century when Lower Burma passed under the British rule. Although Rangoon had been a centre of religious life for the Burmese since very ancient days, it assumed its first national importance only when King Alaungpaya, the founder of the Burmese last monarchy, took possession of the town in 1753 and called it Yankon¹⁵ from which the name of Rangoon was presumably derived. Even then, it did not become a real city; rather it was a small river port. The early Rangoon was built along the Rangoon River and all the houses were erected of bamboo-malting with thatched roofs. The population of Rangoon was estimated at about ten to twenty thousands at the beginning of the 19th century.

With the British overlordship of Rangoon a whole new phase of urban development began. The British administration brought many immediate and momentous changes which initiated the rise of modern Rangoon¹⁶. The first was the creation of a 'new town' which formed the oldest section of the present Rangoon (Fig. V. 3). The building of a new town involved a great deal of work in the construction of new roads and houses. The works of reclamation of land were also carried out in filling up the creeks and raising the level of the land.

The town was planned by Lieut. R.E. Fraser. It was laid out on the rectangular street pattern with its main axis running from east to west, and the Shwe Pagoda was reserved in the midst of the main street. The built-up area was compact stretching along the left bank of Rangoon River for about a mile and extended inland for a little more than a quarter of a mile. This built-up area coincided with the main commercial district of Rangoon today where banks, large trading houses and departmental stores are found.

15 Crawford, J. (1834) Journal of an Embassy to the Court of Ava, London, p. 53; also Andrew, E.J.L. (1933) op. cit., p.4.

16 See Redick, R.W. (1964) A Demographic and Ecological Study of Rangoon, Burma, 1953, in E.W. Burgess and D.J. Bogue eds., Contribution to Urban Sociology, Chicago, p.33; Dautremere, J. (1951) Burma under the British Rule, London.

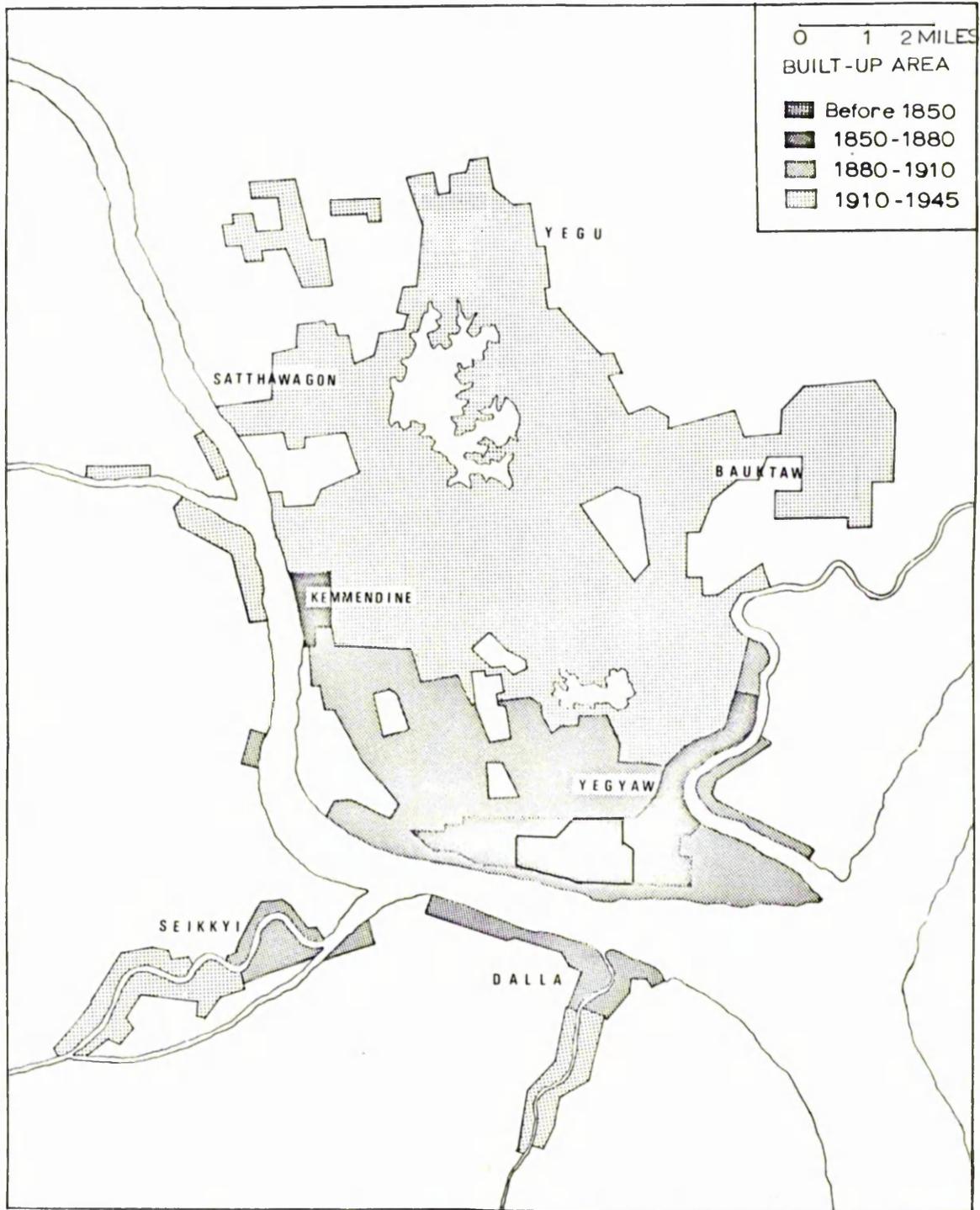


Fig. V.3 Rangoon: the growth of the built-up area , 1800-1945.

Two functions, administrative and military, influenced the early development of Rangoon, but economic and commercial functions became more important when Burma was opened up to world trade. The history of the economic development of Burma was essentially the history of the development of Rangoon. The growth of the town had been related to the general development which resulted from the rapid economic growth, especially upon the export trade of rice of the delta. The new orientation of trade strongly favoured Rangoon. Meanwhile, trade with the eastern Indian ports was generally flourishing. It had established itself as a break-of-bulk point between maritime trade routes and developing hinterland. On August 1874 under the Burma Municipal Act, Rangoon became the first city of Burma and replaced Moulmein as the principal port of British Burma¹⁷. Since then the growth of Burma's external trade has been phenomenal.

The effect of new commercial enterprises and expansion of trade were marked also by the rapid growth of population in the city. Throughout the second half of the 19th century, Rangoon's population continued to grow fairly rapidly. This increase was partly due to the influx of migrants from other countries, the bulk of which was Indian. In 1856 the population in the city was estimated at 46,000 persons. When the first census of Burma was held in 1872, it gave a return of 98,138 people in Rangoon. In 1881 the population rose to 134,176 and reached 180,324 in 1891. As the population increased, Rangoon expanded outwards. The areal expansion of the built-up area was chiefly oriented in the north-east and north-west directions from the original section. The river tended to check expansion to the south and the land to the south had not yet incised its channel, was presumably still subject to floods. There was little settlement on the southern bank of the river, but towards the north, Rangoon began its expansion over the fields of the surrounding countryside. There was also a good deal of activity of public building in addition to an increase in the number of private dwellings to meet the growth of city population. Moreover, the process of urban expansion began to accelerate.

17 Peam, B.R. (1939) A History of Rangoon, Rangoon, pp. 200-25; also Campbell, A. (1824) Two Years in Ava, London, pp. 28-30.

The further expansion of import and export trade in the early decades of the 20th century led to an equally rapid development of Rangoon's wholesale trade and other commercial activities. There was also progress in processing industry within the city. Port activities and the addition of manufacturing industry enhanced the existing economic functions of the city¹⁸. Rangoon has an external and an internal trade of great proportions. The port handled three-quarters of the national imports and three-fifths of the exports. This period witnessed a further expansion of the city. With the growth of population the city grew in size and more and more land was utilized for residential, recreation, transport and other purposes and, in some parts, the previous land use was altered to accommodate new functions.

The pattern of growth for the greater part of the city was not a uniform growth on all sides, but tended rather to be concentrated towards the north and northeast. The result of this and of the consequent importance of traffic along the Insein Road, Promé Road and Kokien Road was a spread of early 'ribbon' development along the major roads leading to the north. Vacant lands along these roads were gradually filled in by the erection of new houses. Meanwhile, built-up areas were also extended to the south of the Rangoon River, along the banks. The city also stretched eastwards beyond the Pazundaung Creek.

A further restriction to the growth of the city was removed with the improvement of internal transport within the municipality. The introduction of motor transport had made it possible for people to live further from the city centre and commute to the city. The car has encouraged both the rapid outward extension of Rangoon and infilling between main traffic arteries. The areas which were served by the urban transport grew up as new suburbs. The high-class residential areas and housing estates sprang up in the northern part of the city. The limits of the municipal area were also enlarged to cover the new built-up areas. The population of the city continued to grow and the growth of population reflected in its outwards expansion of the urbanized areas.

18 Murphey, R. (1957) op. cit., pp. 231-32.

Rangoon has increased its population rapidly in the post-war years where enlarged political functions have been acquired after independence and where rural unrest and insecurity have caused or hastened a flight to the relative security of the capital¹⁹. However, the greatest areal expansion of Rangoon took place in the post-war years when the built-up area approximately doubled. Some of the chief reasons for the post-war expansion are familiar. It was the large-scale influx of rural population that brought the city into a new phase of urban development. A mushroom growth of the city was taking place and intensive development also carried out within the city. New buildings sprang up over the vacant spaces within the municipality. In recent years, Greater Rangoon has been formed by the simultaneous growth of a number of neighbouring towns which have grown towards each other until they have reached a practical coalescence in a continuous urbanized area. In the future improvement of transportation will lead to the further outwards expansion of the urbanized areas.

(iv) Bangkok-Thonburi. Like many other cities in the region, the early history of the twin-city, Bangkok-Thonburi, is little known. However, it is believed that in the first-half of the 16th century a fortress was founded on the present site of Thonburi to guard the riverine approaches to Ayuthaya, the former capital of Thailand. When Ayuthaya was razed to the ground by the Burmese army in 1767, the Thai moved further south and established a new capital of Thonburi²⁰. While Thonburi served as the capital, the Chinese set up new settlement and market, on the opposite side of the river, to serve the capital. That town grew up to be the largest city in the kingdom, the metropolis of Bangkok-Thonburi.

The early Bangkok was mainly a market-town with Chinese mingling with Thais and Mons. It was not until 1782, under the reign of Rama I, when the capital was transferred to Bangkok that it acquired an administrative function. The government offices and the Grand Palace were built

19 See Cady, J.F. (1958) op. cit., pp. 579-88.

20 See Carter, A.C. (1904) The Kingdom of Siam, New York, pp. 45-46; also Hall, D.G.E. (1968) op. cit., p. 464.

on the east bank of the Chao Phraya. The site chosen was partly for strategical considerations. The settlement was situated on the east bank which was protected by a broad expanse of water from the Burmese who were the chief enemies who came from the west. The Grand Palace was a walled-town covering an area of about one square mile and filled with audience halls, temples and stupas. Today, it occupies only a small area of the metropolis.

The early Bangkok was essentially an aquatic city with a well-developed system of canals and creeks²¹. Houses were erected either on high piles or on the floating pontoons moored at the sides of the waterways. There were actually no roads within the city and canals were the original means of transport. The early Bangkok urban pattern reflected the water-based economy of the city. Not only did the town have its own canal network, but the whole of the Menam delta also depended on the complete network of waterways which provided an efficient transport system linking all the nearby towns and villages with Bangkok. Up to the end of the first half of the 19th century, the urbanized area of Bangkok was still largely confined to the wall-city and the areas immediately around the wall-city.

However, in the later years, the establishment of built-up areas beyond the Klong Ong Ang marked the first stage in the expansion of the city. Indeed, the second half of the 19th century witnessed a rapid growth of population and a great extension of the built-up area in the city (Fig. V. 4). One major step was the opening of Thailand to foreign trade under the reign of King Mongkut (1851-68). As a result, Siamese trade grew steadily as ships from many countries went up the river to Bangkok. With the expansion of trade and the increasing importance of the capital, people began to arrive in large numbers from abroad and other parts of the kingdom. Growth was linked with the rice export trade. The whole of the Menam Plain and upper Thailand lie in the hinterland of the twin-city.

21 See Graham, W.A. (1942) Siam, London, p. 23; Bacon, G.B. (1873) Siam, the Land of the White Elephant, New York, p. 315.

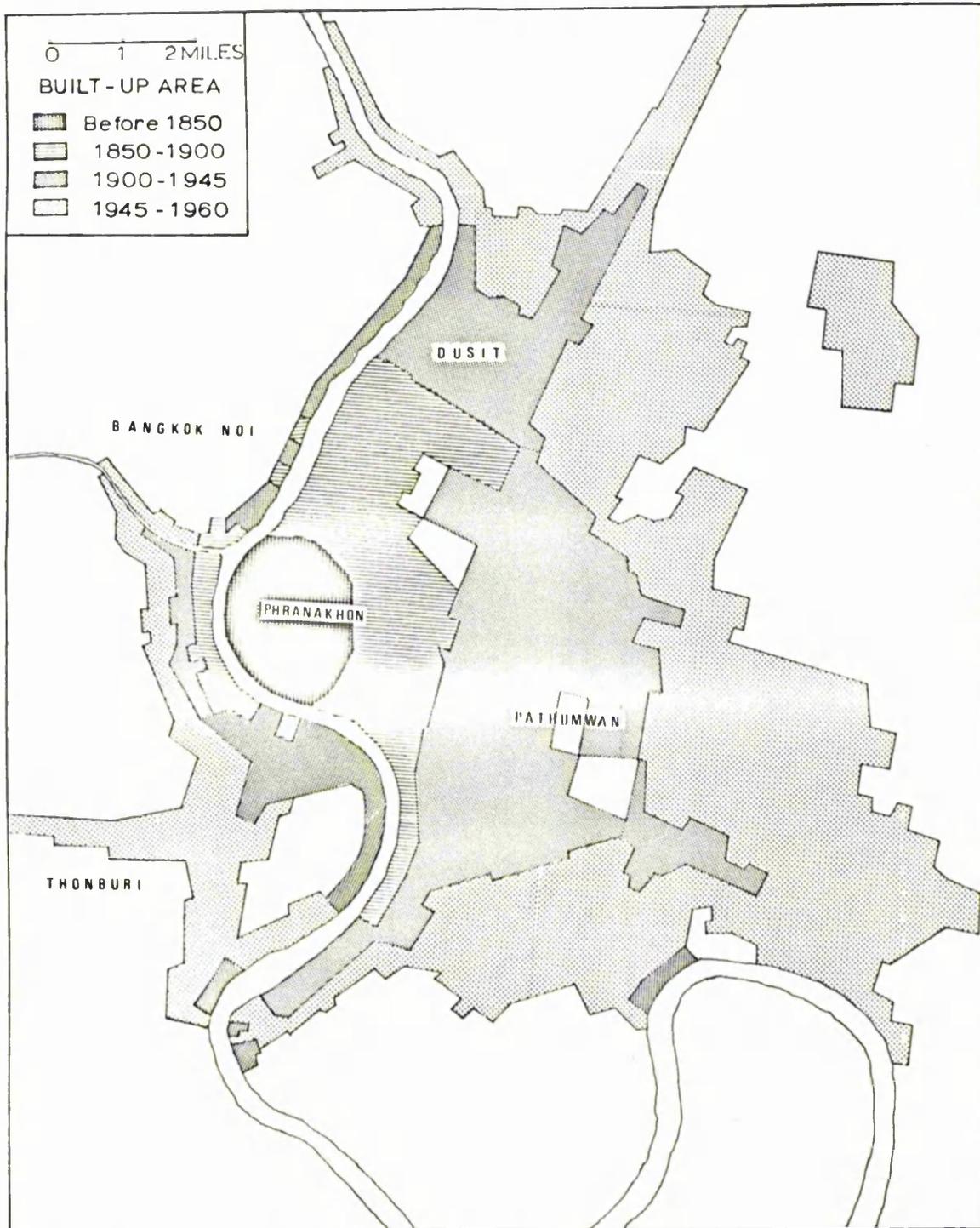


Fig. V.4 Bangkok-Thonburi: the growth of the built-up area , 1800-1960.

As the city expanded many 'klongs' and creeks were filled in to make way for streets, houses and government offices. The first road outside the Royal city was constructed in 1864 connecting the Palace with foreign delegations. Having established itself on the east bank, the city could no longer be expanded across the river of considerable width. Naturally, the first expansion of the city was extended eastward. Shortly after this first expansion, another enlargement took place, this time northwards. To the southeast extended a ribbon of development along the Chao Phraya. In the later years of the 19th century, under the reign of Chulalongkon, a further street construction programme was put forward. As a result, many more klongs and creeks were filled up and the city continued to expand. The inhabitants in Bangkok gradually shifted from the waterways to live by the thoroughfare or on dry-lands. Since that time, there was a steady increase of shops and houses on lands. Bangkok slowly transformed from aquatic city into a land-based city²². By the end of the 19th century, streets were taking over transportation, the principal function of the canals. However, the development of road systems played their part in the further development of Bangkok.

The development of Bangkok-Thonburi was closely bound up with the exporting and processing of rice and teak. Since the last quarter of the 19th century, Thailand had become a major rice producing country in Southeast Asia. Meanwhile, Chulalongkorn's (1868-1910) reign also marked the beginning of the development of teak industry in the north. However, the full effects of the economic development of the country began to be felt by the turn of the 20th century. Bangkok-Thonburi, which served as the commercial centre for the most developed hinterland, handled and milled the growing exports of rice and teak. Forwarding, distribution and financing functions were expanded; collection, storage and retailing also gained importance. Bangkok-Thonburi became the financial focus of all business enterprise within the kingdom. The growth of banking, insurance companies and other urban institutes continued to favour the growth of Bangkok-Thonburi. To this growth further impetus was afforded by the coming of the railway with its connection with the up-country and

22. Graham, W.A. (1942) op. cit., p.24.

the north-east region that the real progress of the city began. The construction of railways had increased the importance of Bangkok-Thonburi as a commercial centre.

The first quarter of the 20th century also witnessed the continuous expansion of built-up areas towards the east, southeast and the north direction. The increase in government function led to an expansion of public buildings into Samsen and Dusit to the north whereas new high-class residential areas arose in the southeast. Pathumwan and Bangrak became the main residential areas. Meanwhile, ribbon development had proceeded on a marked scale, leading to other towns and along the Chao Phraya on both banks. In the period between 1900 and 1945, the built-up area of Bangkok-Thonburi had more than doubled itself compared with the previous periods put together.

Like many large-cities in Southeast Asia, the growth of Bangkok-Thonburi in the post-war period (1945-60) was phenomenal. The spectacular change in the townscape of the metropolis went hand in hand with the marked expansion of the outlying suburban areas. This unprecedented growth also reflected in its population increase which rose from 781,670 persons in 1947 to 1.7 million in 1960. During the same period although there was a tremendous increase in population throughout the country. Bangkok-Thonburi has grown far more rapidly than the national average. Between 1947 and 1960, the annual rate of increase for the country as a whole was 3.2 per cent but the rate for the metropolis was 6.2 per cent. The great increase in urban population was due partly to the large-scale influx of population from the countryside and partly to the high reproduction rate among the metropolitan population²³. The rapid growth of population in the metropolis was also due to a broader basis of government function during the entire post-war period. The centralization of government power with their administrative agencies and large-scale organizations in the capital led to a tremendous growth of the metropolis.

23 See Sternstein, L. (1974) Migration To and From Bangkok. Annals of the American Geographers, Vol. 64, pp. 138-47; Ng, R.C.Y. (1969) op. cit., pp. 726-27.

During the post-war period, further economic development of Bangkok-Thonburi was provided by the increase of agricultural productivity of the hinterland. A still greater impetus, however, was given by industrial growth. Besides the traditional rice-milling and saw-milling, many other factories were also established in the metropolitan area. Changes in transportation in the post-war years greatly enhanced the position of Bangkok-Thonburi as the leading international air-traffic centre in Southeast Asia. Don Muang Airport, twelve miles north of Bangkok-Thonburi, lies on the main air-routes between Europe, Far East and Australia. Partly due to its crossroad position, Bangkok-Thonburi readily became the headquarters of the various international organizations such as U.N. Economic Commission for Asia and the Far East and the Southeast Asia Treaty Organization.

Formerly, the existence of a bar at the mouth of the Chao Phaya prevented large vessels from entering the port. Since 1952 the bar had been dredged through and now the ocean-going vessels can anchor at Bangkok. Further expansion of the port facilities stimulated the export-import trade of Bangkok-Thonburi to rise to unprecedented heights. The result was a remarkable increase in shipping and tonnage handled. This caused a considerable expansion of commercial activities which, in turn, provided diverse occupation and opportunities. Greater numbers of people flocked in to the cities from various provinces. Population growth has been a factor in areal expansion. The expansion of the commercial activities created new business districts.

Meanwhile, the improvement of internal transportation network of the metropolis also played a major part in permitting the greater expansion of Bangkok-Thonburi in the post-war years. The improved bus services and the rise in private car ownership together with a growing shortage of land in the city, stimulated the growth of suburban areas. With the increasing city population there was a natural flow of population to the outer rings, resulting in the gradual building up of the outlying districts as part of the metropolis. The substantial increase in middle-class families has been reflected in the large number of bungalow estates developed by private construction firms. There are also enclaves of lower income groups in rur-urban settlements which have been absorbed by the expanding metropolitan area.

In the period between 1945 and 1960, the built-up areas continued to spread further outward. Expansion, in fact, took place in nearly every direction and probably was limited only by the Chao Phraya. Nevertheless, overcrowding in Bangkok is largely responsible for the rapid growth of Thonburi in recent years, but greater expansion still occurred on the Bangkok's side of the metropolis. Fig. V. 4. also shows the remarkable extension of built-up area to the east. Many new residential areas have been established and streets and by-lanes also constructed. Although the central parts of the metropolis continued to absorb newcomers, the suburbs have a greater pace of gaining population. The pre-war Bangkok had developed in a horizontal fashion. Few buildings in the central area were more than three stories high. In recent years, there has been considerable vertical development in the central area in response to growth pressures. Meanwhile the ribbon development stretching towards southeast and along the river-banks had broadened to form a wide tongue of settlement.

(v) Saigon-Cholon. Like Bangkok-Thonburi, Saigon-Cholon is also a twin-city. Its growth, however, reflected the early Chinese economic influence, Vietnamese traditional social impact and French colonial imprint. Cholon was largely a Chinese settlement while Saigon was a French creation. Cholon could trace its origin back in the last quarter of the 18th century when a group of Chinese established themselves in an area around the present site of Cholon²⁴ along the Arroyo Chinois. It soon became a prosperous market town. Meanwhile, there existed three and a half miles west of Cholon a citadel located on the present-day site of Saigon. At the side of the fortress, some houses grew up. Prior to the coming of the French, it was still a small settlement in terms of built-up area and number of inhabitants.

Modern Saigon began with the French rule. In 1859 Saigon was seized by the French and in 1862 a new planned settlement grew up along the Saigon river which became the oldest section of present-day Saigon.

24 McCune, S. (1937) Saigon, French Indo-China, The Journal of Geography, Vol. 36, pp. 24-33.

Early Saigon was planned on the basis of the French model and French influence was reflected in the townscape with a definable street pattern²⁵. A grid plan, with broad streets set up at right angles and tree-lined boulevards, was adopted. The built-up areas within the planned settlement was about two and a half square miles.

Since its creation, Saigon served as the administrative headquarters of French Indo-China until it was transferred to Hanoi. As the administrative centre, Saigon received certain impetus to develop but the real base for growth lay with the development of commercial activities. The port of Saigon was opened to world trade in 1861, two years after its capture by the French. Since then, Saigon became the port of call for merchants and traders from many countries. The change in the city's functional environment was related to its hinterland development and coincided with the economic development of Indo-China.

In the first half of the 19th century, the Mekong region was still sparsely populated. Within a few decades of the French rule there was a rapid agricultural and economic development of the region. The consequent influx of people into the Mekong delta contributed to the development of the region. By the end of the 19th century, it became a major rice-producing area of mainland Southeast Asia. In addition to rice-production, the region also became important in plantation agriculture. With the marked expansion of export crop production, import and export flowed in and out of the port. Evidently, the geographical position of this twin-city was exceptionally favourable, for sea-going vessels could reach the very centre of the city.

The position of Saigon-Cholon was further enhanced when more canals were built to serve its surrounding agricultural areas. Almost all of the regional trade was trans-shipped from river junks and steamers to ocean freighters at the metropolis. The twin-city gained a dominant position in Mekong delta trade. The metropolis, thus, began to be the

25 Watson, J.W. (1953) ed., Indo-China: A Geographical Appreciation, Ottawa, p. 10.

focus of many enterprises. Various institutions were established. In 1887, Saigon was provided with the status of being a French city²⁶. The prosperity of Saigon-Cholon was reflected by its urban growth. The expansion of the twin-city involved a great deal of work in the construction of streets, shops and housing. By the end of the 19th century the build-up for both cities stretched along the river. Cholon had rectilinear pattern whereas Saigon contained a rectangular design (Fig. V. 5).

By the turn of the 20th century, increasing trade and the emerging industries stimulated further growth of mercantile firms, financing houses and many other kinds of commercial and related establishments. The hinterland of the port of Saigon by this time included the whole of the Mekong delta and eastern coastal areas. Saigon handled a substantial part of the entrepot trade with Cambodia and Laos, especially the export of rice, rubber, timber and the import of manufacturing goods. Commercial activities increased as its hinterland provided both goods for export and also a market for consumer goods. Furthermore, the improvement of the port of Saigon, combined with the development of roads in the later years stimulated the expansion of the city's urbanized area. The major growth and nature of the metropolis were largely the products of French and Chinese enterprises.

In the period between 1900 and 1945, the main direction of expansion of Saigon had been westwards towards Cholon and the north. The areal distribution of the population of Saigon was influenced by the need to avoid the swampy areas in the southern bank of the Saigon River. On the northern bank, people have followed the main roads and river and have settled further outwards. The twin-city was gradually joined by buildings along the North road. New roads were constructed which laid the scene for rapid development. The new tramways from Saigon to Cholon had also been built. Meanwhile, tentacles of ribbon development along the roads to

26 Joiner, C.A. (1965) op. cit., p.121.



Fig. V.5 Saigon-Cholon: the growth of the built-up area , 1800-1945.

the north were strengthened and extended and wedges of open space between the roads filled in. The site factors were responsible for the expansion of the metropolis towards the north. In 1932 Saigon and Cholon were merged for administrative purposes.

The post-war period was perhaps the most important in the study of the growth of Saigon-Cholon. Not only did the population increase phenomenally in this period, but the area occupied by the twin-city also expanded rapidly. In common with other metropolises in the region, the phenomenal growth was mainly due to the influx of refugees into the metropolitan area. People took refuge in urban localities as a result of wars and political upheavals. With the spread of guerrilla warfare the countryside became unsafe and people trekked to the city. After the partition of North and South Vietnam in 1954 hundreds of thousands of refugees flooded the metropolis. The coming of independence for the Republic of South Vietnam was another impetus for growth.

Under the pressure of tremendous population increase, the twin-city expanded physically during this period. All expansion took place in those areas immediately adjacent to the built-up city. One of the features of the post-war development is the mushrooming of squatter settlements in the periphery of the metropolis. The settlements grew in a most haphazard manner during the course of the last few decades.

However, post-war years also witnessed the expansion of residential areas in the north. The growth of population in the outer rings of the metropolis appeared to be associated with improved public transport system, especially the bus services. The number of private cars has also increased considerably in recent years in the metropolitan areas. The motor vehicles have encouraged urban dispersal of residential areas, other urban functions, in particular manufacturing industry. In the past, these factors have been responsible for the urban expansion of the metropolis towards the north but in recent years, large lands along the southern bank of the Saigon River have also been reclaimed. Here, new residential districts emerged.

(vi) Singapore. Compared with other metropolises in the region, Singapore has a shorter urban history. The origin of Singapore in the early centuries is shrouded in myth and legend. It is believed that there existed a settlement at the present site of the city known as Tumasek in the 14th century. It might be assumed that Tumasek was a mere offshoot of the Srivijaya empire but came to a sudden end in the year of the great Javanese invasion in the later years²⁷. Quite possible there were coastal settlements along the southern Malay Peninsula at that time, and Tumasek might have been one of them, but it had not been substantiated in the historical records.

The development of modern Singapore began with the arrival of Sir Stamford Raffles in 1819. On his arrival Raffles found only a handful of Malay fishermen. Within a few years the town population amounted to 10,000 persons including a large number of Chinese. Raffles realized that Singapore's location made it an excellent place for an entrepot city. Thus from the very beginning Singapore was made a free-port where goods in bulk could be unloaded free of import duties and exported in consignments again free from any taxes. Soon settlers and merchants from other countries flocked in.

The first city-plan of Singapore was laid down by Raffles in 1820. The town was divided into three main parts with governmental buildings and European residential areas in the centre ; the Chinese settlement on the west fringe; and the native quarters on the east front. Segregation by residence was a characteristic feature of early Singapore²⁸. This is the oldest section of Singapore today. Although this early urban pattern has been modified, a pattern of residential segregation continued as the city expanded. The basic structure of the economy and the sources of wealth among each group did not change very much. In common with many other pioneer cities in Southeast Asia in their early days, the old town was planned in the rectangular pattern with the main axis running on east-west direction. The old town contained narrow streets, open-front shops, single

27 See Winstedt, R.O. (1973) Tumasek or Old Singapore, in Malaysian Branch of the Royal Asiatic Society Reprint No. 1, Singapore, pp. 1-9.

28 For description of racial groupings, see Hodder, B.W. (1953) Racial Groupings in Singapore, The Malayan Journal of Tropical Geography, Vol. 1, pp. 25-36; also Hassan, R. (1969) Population Change and Urbanization in Singapore, Civilizations, Vol. 19, pp. 169-86.

upstairs floor. The town occupied an area roughly covered by the present-day Singapore's C.F.D., which included the most important government offices, public buildings, department stores, business firms and the typical Chinese shophouses.

Throughout Singapore's history, the prosperity of the city depended largely upon the entrepot trade and commercial activities. Ideally located at the crossroads of the international sea-routes, Singapore had quickly become the major trading centre of Southeast Asia. In fact, in its early years, it was not the underdeveloped Malay Peninsula which sustained it, but it was the growth and development of the Indonesian archipelago, especially Java, which enabled Singapore to grow rapidly. But Singapore's greater prosperity came when large-scale economic development took place on the Malay Peninsula²⁹ based on tin and rubber in the second half of the 19th century. Development occurred in the neighbouring countries that led to a great growth in the sea-borne trade. Singapore, which functioned as an entrepot, benefited more.

The trade of Singapore fell into two main categories: the entrepot trade and the direct trade. Its economically strategic position at the centre of one of the world's richest areas of tropical products made it the natural outlet for the products of Malaya and the neighbouring countries. The region consists of largely primary products with little manufacturing industry which resulted in the need for exporting great amounts of raw materials and the import of large volume of manufactured products. Singapore achieved its importance by gathering raw material in the region for export and in return distribution to consumers of manufactured goods from abroad. However, as the headquarters of the Straits Settlements and the residence of the Governor, it also had an administrative and military importance.

In the later part of the 19th century, the population of Singapore grew rapidly. The rate of increase reached in the mid-19th century was maintained throughout the century³⁰. The first census of Straits Settlement

29 Allen, D.F. (1951) Report on the Major Ports of Malaya, Kuala Lumpur, p. 66; Murphey, R. (1957) *op. cit.*, p. 237.

30 Saw, S.H. (1970) Singapore Population in Transition, Philadelphia, pp. 24-25.

gave a return of 67,751 persons in 1871; the number went up to 95,323 in 1891. Meanwhile, the urbanized areas had also been extended in response to the population growth. The city began to expand onto higher ground to the north and new residential districts emerged (Fig. V.6). At the same time, the reclamation of land from the sea was also undertaken. The nearby hills which had been an obstacle to physical expansion were levelled. The physical expansion at this time was both inland and seawards. The area within the older section was densely built and the buildings closely packed. Meanwhile, shop-houses were also erected along the major roads leading to the suburbs.

By the turn of the present century, Singapore remained a fast-growing and prosperous city. The rapid increase of the export and import trades brought about in wholesale and retail trades. Another factor that had played an important part in the economic growth of Singapore had been the establishment on the island of numerous British military bases which provided thousands with employment, constituting at one time the single largest industry on the island.

With the growth in tonnage and size of vessels, the original harbour was insufficient to handle the larger ships and several new docks in Tanjong Pagar were constructed to accommodate the ever-increasing traffic. Consequently, Singapore grew to become an inter-continental port. Meanwhile, large reclamation of land had also been carried out for the purpose of building commercial sea-front and recreational grounds.

The improved urban transport facilities permitted a large population to work and trade in the city. Swift transportation by motor vehicles was a great force of urban expansion for allowing the city population to spread out widely. The extension of built-up areas followed two main directions along the northern front of the city towards Tanglin, Bukit Timah, Tao Payoh and eastward towards Katong. High-class residential areas were established along the sea-front and on the higher ground inland. Many secondary shopping centres were also established in various localities to serve the needs of the local populace. Meanwhile, the main arteries as well as the suburbs were slowly filled with houses which included some 'kampong' settlements. Rapid urban expansion outside the municipal boundary was reflected in the proportional decline in the city population from 72.2 per cent in 1947 to 63.1 per cent in 1957.

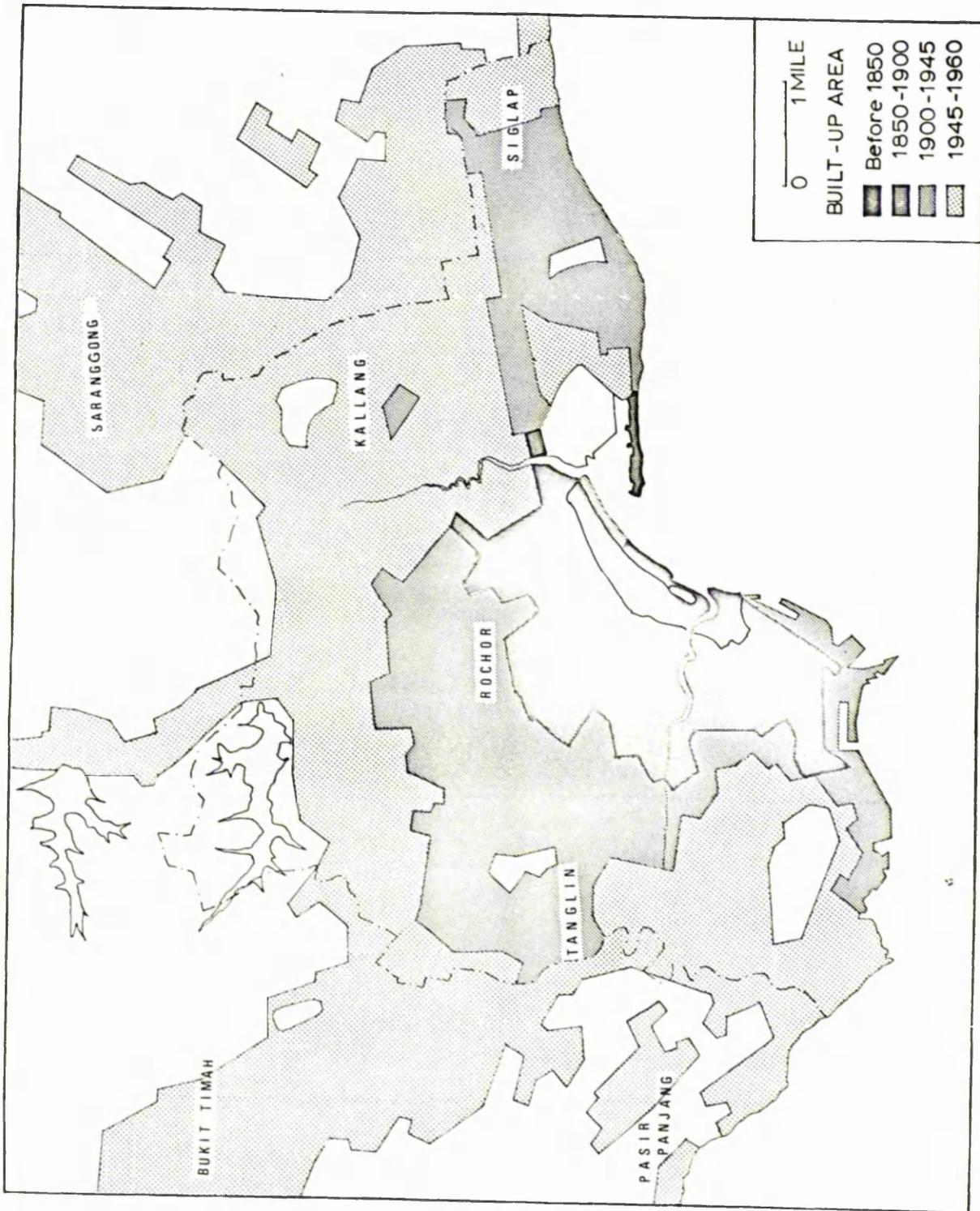


Fig. V.6 Singapore: the growth of the built-up area , 1819-1960.

Suburbanization has been the main feature of the post-war development of Singapore³¹. With the rapid growth there was a continued outflow of the city population beyond the municipal boundaries. A high birth-rate and the steadily decreasing death-rate coupled with the heavy immigration from Malaya contributed to the post-war population boom. To cope with the housing problem, several extensive housing projects were carried out by the Singapore Housing Improvement Trust since early 1950's. Satellite towns were planned to relieve congestion in the central areas of the city. Queen's Town which was based largely on the British post-war new towns self-contained units, was the first new town in Singapore³². It contains shopping centres, schools, markets, community centre and it also has its own industrial areas.

Government housing projects as well as private enterprises led to the expansion of the city in all directions. It extended many miles northwards from the city centre and houses sprang up in great number in areas like Bukit Timah, Saranggong, Kallang, Siglap and Pasig Panjang. Ribbon development could be seen notably along the Thomson Road, Paya Lebar as well as the East Coast Road. Improvement in transport and communication enabled people to move outward from areas of high density. Population density on the fringe areas increases. Vacant lands within the municipal boundaries were largely filled up by the erection of shops and new houses. Many were multi-storey apartment blocks.

In recent years, a new industrial town, Jurong, has emerged. This new town is located in the west coast of the island. It has its own deep-water harbour and wharves as well as a shopping centre and residential areas with school, parks, and open spaces. It is an industrial complex providing jobs for 200,000 people in light and heavy industrial works. Although entrepot trade is still the lifeline of the island, new industries will increase its role in the national economy.

31 Fraser, J.M. (1952) Town Planning and Housing in Singapore, Town Planning Review, Vol. 23, pp. 4-24; Hassan, R. (1969) op. cit., pp. 179-81.

32 Final Report of the New Town Working Party on the Plan for Queenstown, Singapore, 1958.

Of late, a programme for urban renewal³³ has also been carried out. The priority is to rehouse families in the congested area in the central part of the city. Former landuses were superseded by the construction of various multi-storied office blocks and flats. The new centre also provides department stores, supermarkets, restaurants, banks, post-offices and there is also space for playground as well as parking.

The Metropolis - An Overview

The few hundred years of colonial rule have remarkable effects on the development of the metropolises. Despite variations in their historical, cultural backgrounds and individual growth pattern, they present many similar characteristics of development. The majority of them underwent a similar development and played a similar role in the colonial economic development. The need for an administrative and economic centre to serve the newly acquired colonial territories rich in natural resources underlay the growth of these cities.

The forces that created these metropolises were exogenous than the indigenous in nature³⁴. Most of them hardly existed except as small local centres until the Europeans and Asian migrants made use of them as the essential funnels and service points for trade and distribution centres. The influences of the mixture of European and Asian migrant groups are still evident in the morphology and growth pattern of the metropolises today.

In common with many other former colonial cities³⁵, they were established to serve as a 'head-link' between the colony and the metropolitan country. Outward rather than inward oriented, most of them had an eccentric position to the land area. The other factors which account for their peripheral location was the marginality of the habitable and productive part of the country, and the interests of the maritime colonialism.

33 See Jensen, R. (1967) Planning, Urban Renewal and Housing in Singapore, Town Planning Review, Vol. 38, pp. 115-31.

34 See Hoselitz, B.F. (1957) Urbanization and Economic Growth in Asia, Economic Development and Cultural Change, Vol. 6, p. 42; Fryer, D.W. (1953) op. cit., p. 475; Ginsburg, N.S. (1955) op. cit., p. 458; Murphey, R. (1957) op. cit., p. 218.

35 The general case for the rest of 'colonial cities' in Asia is presented in Murphey, R. (1966) Urbanization in Asia, Ekistics, Vol. 21, pp. 8-17; also Murphey, R. (1969) op. cit., pp. 67-84.

Throughout their history of development, these urban places were the largest cities in respective countries. The growth of numerous banking and financial institutions, and other economic factors have led to a large and steady growth of their population. During the post-war period, most of these metropolises have increased their population rapidly. Factors contributing to the urban growth - natural increase, in-migration and boundary expansion - varied with metropolis. Having the largest population in the respective country, they were logically selected as the political and administrative headquarters. The very size of the urban communities themselves in turn attracted new functions and population to them.

The role of urban-rural migration in population growth among these metropolises is extremely important. Rural-urban migration in Southeast Asia is characterized by a more rapid growth of the population in the metropolis than of the total and urban population. Table V. 2 shows the annual rates of population increases in the metropolises compared with the rates of total and urban population growth of each respective country. The rate in most cases markedly exceeded the rate of population growth of the country in which the metropolis is located.

The two metropolises which show the fastest rate of growth are Saigon-Cholon and Bangkok-Thonburi. Saigon-Cholon was growing at the rate of 6.3 per cent per annum as against a national average of 2.9 per cent of South Vietnam in the years between 1936 and 1963. The figure for Bangkok-Thonburi, on the other hand, was 6.2 per cent as against 3.2 per cent per year of Thailand as a whole in the period between 1947 and 1960. Despite their high birth-rates, it is estimated not less than 53.0 per cent of the population of Saigon-Cholon was born outside the metropolis. The corresponding figure for Bangkok-Thonburi was about 38.0 per cent. Likewise, most of the post-war population growth of Djakarta has also been the result of net in-migration. In the period between 1930 and 1961, the rate of population increase in Djakarta was 3.5 times faster than the national average, 5.6 per cent per annum compared with 1.6 per cent for the country as a whole. Its actual number of population rose from less than half a million to 2.9 million within three decades.

TABLE V. 2

Annual Rate of Metropolitan Population Growth Compared With
Total Urban and Total Population Growth

	<u>Years</u>	<u>Metropolitan Areas</u>	<u>Total Urban Population</u>	<u>Growth Rate</u>	
				<u>Total Population of the Country</u>	
Bangkok-Thonburi	1947-60	6.2	5.7	3.2	
Djakarta	1930-61	5.6	4.0	1.6	
Manila-Chezon	1948-60	4.6	3.3	2.9	
Rangoon	1931-53	2.8	2.7	1.3	
Saigon-Cholon	1936-63	6.3	5.4	2.9	
Singapore	1947-57	4.5	5.0	3.0	

As shown from Fig. V. 1 to Fig. V. 6, the physical growth of these metropolises over the last hundred years has been very fast. They, in fact, responded to the advancement of industrial and commercial techniques in the external world which have in some measure brought them within the orbit of world trade. Since the second half of the last century, they have witnessed an accelerated pace of expansion. With increasing diversification of economic activities in Southeast Asia, they began to acquire a greater role because of increasing international trade and economic activities. The impetus had also been provided by the expansion of government functions and industrial developments.

Due to the pressure of population increase and the city-wards migration, all the metropolises have expanded continuously and the boundaries were enlarged to annex new suburbs. All the metropolises grew both horizontally and vertically. The horizontal expansion took the forms of suburbanization or sprawling of squatter settlements. Vertical development emphasized in the rapid growth of commercial buildings. The erection of the multi-storeyed office-blocks and high-rise flats in or near central districts became a notable feature. The early decades of the present century witnessed the growth of the city proper. Since the war, however, there has been a shift from the growth of the city centre to suburbanization. Suburban localities have, in fact, been growing much more rapidly than the city proper in recent years. Most of the metropolises have at least doubled in size over a decade or two, while others have incorporated surrounding towns.

Indeed, in the early days of their developments, high-class residences were close to the centre of the city, less desirable residences farther out, and the least desirable around the periphery. However, the use of modern transport and the rise of new wealthy class created a new spatial organization. Urban transportation, especially the automobile, removed much of the handicap of distance of the urban commuters. This new class built suburbs in the more desirable locations further out from the city centre, on hills, beaches or around other desirable topographical features. Practically all the metropolises have developed certain high-class residential areas in the suburbs.

In the recent decades, a new form of urban settlement, the satellite town, has also emerged. Satellite towns differ from suburbs in that they are separated from the central city by miles and generally have little daily commuting with the city, even though economic activities of the satellite towns are closely geared to those of the mother city. The satellite is a self-contained settlement with its own shopping centre, housing estates, schools, hospitals, libraries, industrial estates and other public utilities to serve the needs of the local inhabitants. The process of suburbanization and the emergence of satellite town will become more prominent in the years to come.

Economic Patterns

All the metropolises have an economy heavily weighted in the tertiary sector. As Table V. 3 reveals, the tertiary sector formed about two-thirds of the labour force of each individual metropolis, the rest being in manufacturing and primary sectors. Of those engaged in the tertiary sector, a greater percentage is in the commercial, governmental and public services. In Bangkok-Thonburi, for example, of those engaged in the tertiary sector, 26.0 per cent were employed in commercial services while 29.0 per cent were in public services. The corresponding figures for Djakarta were 24.2 and 32.6 per cent. Manila-Quezon had a higher percentage engaged in government and public service whereas Rangoon had a greater number of inhabitants employed in commercial activities. No data was available for Saigon-Cholon. Singapore had one-quarter of its economically active population in commercial sector and more than one-third in government and public services.

The reason for these metropolises having such a high percentage of tertiary sectors in their total working population could be summarized as follows. Firstly, it is due to the nature of the Southeast Asian economic structure. As mentioned in the previous paragraphs all these metropolises are the major port in each respective country. Some are important entrepôts serving a much larger area than the individual country concerned. In an economy which depends largely on the export of a large quantity of plantation crops and raw materials, and the import of considerable

TABLE V. 3

Percentage of Labour Force by Major Industrial Sectors, c.1960

	<u>Primary</u>	<u>Secondary</u>	<u>Tertiary</u>	<u>Others</u>	<u>Total</u>
Bangkok-Thonburi Thailand (1960)	14.0 78.7	19.0 5.5	62.0 13.8	5.0 -	100.0 100.0
Djakarta Indonesia (1961)	5.0 62.9	25.0 12.0	70.0 25.1	- -	100.0 100.0
Manila-Quezon Philippines (1960)	0.8 70.7	23.7 11.2	61.6 18.1	14.9 -	100.0 100.0
Rangoon Burma (1953)	1.3 68.4	22.0 11.8	71.1 17.8	5.6 2.0	100.0 100.0
Singapore Fed. of Malaya (1957)	8.7 52.7	19.0 14.7	70.6 31.7	1.7 -	100.0 100.0
Saigon-Cholon South Vietnam (1963)	-	-	-	-	-

Sources: Various National Censuses and Statistical Yearbooks.

amounts of manufactured goods from abroad, large numbers of people have to be employed to handle this two-way traffic. Services such as banking, financing insurance, transport, sorting, packing and distribution works had to be established. Functions like processing, trading and shipping are more conveniently and cheaply performed in one or more large port-cities of the country, linked with the overseas markets. Since the first and subsequent stages in breaking the bulk of goods imported take place in these port-cities, it calls into being numerous retailers participating at different levels of the distributive process. As the volume of trades increases, so do the number of such retailers. This inevitably provides a great number of jobs in the tertiary sector.

Before independence, the majority of these metropolises were dominated by Europeans and Asian migrant groups. Although all of them discharged administrative or commercial functions, their main concerns were with service industries. With the expansion of their controls, entrepreneurial forces became progressively more potent in urban development. Other functions became subordinated to commercial ones. Meanwhile, the relative wealth of these metropolises permits the growth of other tertiary activities such as educational, medical, transport, recreational, entertainment and other personal services. As a result, they draw a lion's share of the country's skilled and professional personnel into them.

The metropolises, serving as the national administrative headquarters, always have a large proportion of government officers and employees. After independence, the government functions have greatly expanded and the majority of the white collar jobs existed in the civil service. Probably with the exception of Singapore many of the central government and municipal departments are over-staffed.

In recent years, most rural migrants who arrived at the metropolises usually made for the tertiary activities rather than for the secondary sector³⁶. The reason could be partly explained by their lack of skills or

36 See McGee, T.G. (1970) Hawkers in Selected Asian Cities: A Preliminary Investigation, Hongkong; also Textor, R.B. (1956) op. cit., p. 7.

training that make them unsuitable for work in industry. It may also, in part, be due to the slow industrial growth to absorb the new-comers. In other words, the influx of migrants into the metropolises outruns the possibilities for employment in urban industry. Traditionally, tertiary activities are the main refuge for the unskilled labours. They end up being employed in various jobs including hawking, petty trading, trishaw-riding and domestic service. Many otherwise unemployed people have found themselves jobs in various forms in the service sectors. This may be termed as 'urban shared poverty'³⁷. The ratio of the tertiary sector of employment to the secondary sector is therefore much greater than the ratio prevailing in the Western metropolitan areas.

Although there is only a small percentage of economically active persons engaged in the manufacturing sector compared with the tertiary sector, the economy of these metropolises is moving gradually towards the industrial sector. Data on changes in the economic structure of the metropolises is not readily available, but metropolises like Singapore, Manila-Quezon show remarkable development of industrial activities. Their structure of employment has undergone considerable changes in recent years. The relative proportion of employment in manufacturing and construction rose and the proportion in commerce and other service sectors showed signs of decline. In the past, their relative wealth attracted many consumer-oriented as well as processing industries. Since independence, expansion in manufacturing has been considerably stimulated by means of protective tariffs, encouragement of 'pioneer' industries, and the establishment of industrial estates within the metropolitan areas.

Industrial growth depends on the availability of capital, raw materials, labour (both skilled and unskilled), fuel and power, transport facilities as well as a market for the products. The advantages enjoyed by these metropolises in respect to their individual locations are many.

37 The term 'shared poverty' is described by Geertz, C. (1956) in his article Religious Belief and Economic Behaviour in a Central Javanese Town, Economic Development and Cultural Change, Vol. 4. pp. 134ff.

To begin with, they enjoy a large share of the infrastructure essential for industry: water, power, and a skilled labour force. The cost of transportation, credit, banking facilities as well as up-to-date information on market conditions and business trends all tend to favour these metropolises. Not only does industrial and business success frequently depend upon other banking and financial facilities, but co-ordination with other existing industries and government departments are also important. As transportation still tends to be relatively underdeveloped throughout the region, location in the major seaport facilitates the acquisition of machinery and imported raw materials. They are also suitable for the industry engaged in processing, using imported fuel for treating exported goods or assembling imported parts from overseas.

All these factors appear to be rather common separately but together they explain why in Southeast Asia industries tend to be concentrated in a limited number of the large cities. As experience shows, so far the most successful industrial establishments have been those located in or close to the metropolitan areas.

In the present unbalanced state of economic development in the region the fragile superstructure of modern industry is based upon a relatively stagnant agricultural sector³⁸. Thus a small increase in industrial growth causes disproportionate urban growth because it attracts more people from the countryside as well as from other urban centres.

Under a long period of colonial rule there exists a dual form of urban economy among these metropolises. There is a sharp contrast between the indigenous sector of urban economy and the sector organized around the administrative, commercial building which had grown mainly in response to a world market economy in which the indigenous population have little influence.

38 See Friedmann, J. and Sullivan, F. (1974) The Absorption of Labor in the Urban Economy: The Case of Developing Countries, Economic Development and Cultural Change, Vol. 22, pp. 385-413; Murphey, R. op. cit., p. 219.

Almost all the metropolises are hybrids ³⁹ with an imported urban economic system on the one hand and an indigenous urban subsistence economy on the other. The former is usually characterized by high commercialism with large-scale foreign investments, commercialization, high productivity and skilled manpower. They control much of the import-export and the wholesale trade and financed the plantation agriculture, cash crops, mineral exploitation and other economic activities. The indigenous participation in this urban economy was minimal. They, in general, possessed no necessary capital, skills and technology for modern economic enterprise. The non-indigenous economic dominance, on the other hand, reflects the concentration of big business firms and multi-storeyed office blocks in the city core.

Side by side with the modern economic system, there also exists a subsistence urban economy among the indigenous urban dwellers. The majority of them are the new immigrants or people of low income groups. They usually worked as domestic servants, factory workers, taxi drivers, vendors, hawkers, petty traders or trishaw-peddlers, etc. They live in the native quarters or the rural-like 'kampongs' within or on the periphery of the metropolis. Except for their densities and type of employment this section lacks most of the urban feature ⁴⁰. The further influx of migrants further increase the urban slums as well as the subsistence urban economy.

Demographic Component

The metropolises were typical colonial cities of the heterogenetic type. Their growth as heterogeneous agglomerations took place during the colonial period. They possess characteristics derived from indigenous, European as well as other Asian migrant cultures. They are cosmopolitan, containing a large proportion of non-indigenous population which includes Europeans, Chinese, Indians, Eurasians, and other nationalities ⁴¹.

39 Hoselitz, B.F. (1953) *The Role of Cities in the Economic Growth of Underdeveloped Countries*, The Journal of Political Economy, Vol. 61, p. 206; Murphey, R. (1969) op. cit., p. 72.

40 See Poethig, R.P. (1971) *The Squatters of Southeast Asia*, Ekistics, Vol. 31, pp. 121-25; Dwyer, D.J. (1968) op. cit., p. 1.

41 See Ginsburg, N.S. (1955) op. cit., p. 459; Furnivall, J.S. (1959) op. cit., pp. 303-12.

The early influx of the Chinese, Indians and other Asians has resulted in their high percentage in the ethnic composition of urban population. European populations were characteristically much more significant in the metropolises than in the smaller cities. After independence, however, the European component was reduced rapidly, with the departure of many colonial administrators, soldiers and their families.

Before independence, the Europeans occupied most senior administrative posts, in professional employment or managing directors of trading firms, plantation or mining industries. They also occupied the most pleasant sections of the residential area of the metropolis. The indigenous people, with few exceptions, were employed in the low-ranking government services or as policemen. They also constituted the bulk of the unskilled or semi-skilled labour force. Their quarters were also separated or segregated, sometimes by decree, although separation would probably have economic reasons without legal restriction for high costs and rents tended to perpetuate the pattern, even at the present day. Meanwhile, the Asian immigrant groups are mostly shop-keepers, traders, skilled or unskilled workers, professionals, builders as well as industrialists and bankers. They form the intermediate level of Southeast Asian society. After independence, there were some changes at the top-level institutions. A new indigenous elite emerged and substituted the former colonial administrators and officers. In recent years the continuing influx of the indigenous population has changed the ethnic balance of the metropolises⁴². Probably with the exception of Singapore, the percentage of the indigenous population in these metropolises has greatly increased. Although the percentage of the non-indigenous groups became smaller, they still hold substantial economic influence. Even today, a large share of import-export trade is still in their hands.

Except for Rangoon and Manila-Quezon, the Chinese form an important element of the population of these metropolises, engaging in the trading activities. Singapore, for example, has a Chinese majority since its early foundation. Even today, it is primarily a Chinese city with more than

42 See Heeren, H.J. (1956) op. cit., p. 232.

70 per cent of its population being Chinese in origin. At least before World War II, some 60 per cent of Bangkok's population was also of Chinese origin. Saigon-Cholon also has a very large Chinese community whereas in Djakarta, Chinese formed about 14.8 per cent of the population of the city in 1930. There is no reliable figure of present Chinese population, but a figure of 100,000 or more or 10 per cent of the Djakarta total seems acceptable. Rangoon, on the other hand, had more Indians than Burmese in her pre-independence day. According to the 1931 Census Indians formed more than one-half of Rangoon's population, indigenous races represented about one-third. However, the large-scale influx of the Burmese plus the exodus of the Indians in the post-war period regressed the balance. In fact, for most metropolises, the post-war decline in birth rates among the non-indigenous urban population (including Eurasian, Chinese, Indians, Europeans and other minorities), and the maintenance of high birth rates among the indigenous population, plus the complete absence of permanent foreign immigration has changed the respective proportion between the indigenous and non-indigenous groups. The urban indigenous group actually includes a large percentage of recent rural migrants who have helped to contribute a higher birth rate in the metropolitan areas. As a result, the proportion of the indigenous group will continue to grow in the future.

Age and Sex Structure

The familiar demographic characteristics of the metropolises in the West is the higher proportion of female population as compared to male population. And it appears in some countries that the larger the metropolises, the greater is this sex ratio. The difference of males and females in cities is possibly related to the stage of urbanization. When a country or region has reached a relatively high level of urbanization, there is a tendency for heavier migration of females from villages or small towns to centres of commerce and industries. Males stay behind to do the heavy work in the country-side.

In contrast, the sex structure of the urban population of the Southeast Asian metropolises carries a population with males in the majority. Except for Manila-Quezon, the majority of the metropolises have a higher

proportion of males over females. As can be seen from Table V. 4, for every 100 females there were 104 males in the metropolis of Bangkok-Thenburi, 105 in Jakarta, 115 in Rangoon and 113 in Singapore in the year around 1960. The figure for Saigon-Cholon is not available, but it is believed that its composition favours males. The only metropolis where females outnumber the male population is Manila-Quezon. For every 100 females in the metropolis, there were 93 male residents. In fact, the excess of male is found in all ages in most metropolises except among those under five and over 60.

The high ratio of males in Rangoon and Singapore is partly due to the historical factors. Singapore and Rangoon were virtually all-male towns from their early foundations. The majority of their inhabitants were immigrants who did not bring their women folk with them. The transient nature of their population gave rise to an abnormal sex ratio with a preponderance of males⁴³. In Singapore, for example, in as late as the first decade of the present century, the female population was less than 12 per cent of the total population of the city. But from the 1920's onwards, more and more came and stayed on the island. Later the law sanctioned the coming of the male immigrant from abroad. Since then there was a steady trend towards a more settled and less transient population. In recent years, its population growth is largely due to natural increase, which has helped to transform the demographic structure and contribute to a more balanced sex ratio of the metropolis.

In the post-war years, city-ward migration was common and the migrants in the metropolises were a selected group with respect to age, sex and marital status. They included an excess of males to females, and an excess of youths as compared with non-migrants at destination and with general population at origin⁴⁴. The high sex ratio of male among migrants was due not only to high rates of in-migration or single-males as compared

43 See Shaw, S.H. (1970) op. cit., pp. 22-30.

44 See Sternstein, L. (1971) A First Study of Migration in the Greater Bangkok Metropolitan Area, Pacific Viewpoint, Vol. 12, pp. 41-67; McGee, T.G. (1964) op. cit., pp. 213-15.

TABLE V. 4

Sex Ratios of the Metropolises compared with the National Average

<u>Metropolis</u>	<u>Year</u>	<u>Female</u>	<u>Male</u>	<u>National Average</u>
Bangkok-Thonburi	1960	100	104	100
Djakarta	1961	100	105	97
Manila-Quezon	1960	100	93	102
Rangoon	1953	100	115	-
Siagon-Cholon	1963	100	-	-
Singapore	1957	100	113	106

Sources: Various national censuses and statistical yearbooks.

to single females but also to migration of married males, unaccompanied by wives and children. In the early stages of city-wards migration, women and children stayed behind, while their men-folks ventured to the cities. The mother-housewife, and the very old, found little opportunities in cities. People in oriental society have a social bias against allowing their women folk to seek jobs in the cities. It is also expensive for the male migrants to keep their dependents in the cities while they themselves may not have a well-paid job.

With regard to age structure, the findings for which data are available indicate that all these metropolises carry a disproportionately large share of youthful population. The migration was very high among young people, especially those from 15 to 34 years of age. Taking males who are a bit more mobile, the picture is very clear. The majority of new migrants in these metropolises come from the nearby regions and the short-distance migration is generally more selective with respect to sex and age⁴⁵. Meanwhile, the economic motive for emigrating was also selective. The majority of migrants fell within the economically active ages and especially those with prospects of long-term participation in the labour force. Consequently, there was a relatively large proportion of people in the younger groups. Furthermore, the development of these metropolises, into centres of culture, education and science also fosters the in-migration of young people and thus changes the structure of urban population.

As illustrated in Table V. 5, more than half of the population in Bangkok-Thonburi, Djakarta, Manila-Quezon and Singapore were under the age of 20. The corresponding figure for Rangoon was 42.3 per cent. Besides young people came in for education and employment, the post-war baby boom was the main reason accounting for the high percentage of youthful population. The percentage of people between 20 and 50 years of age was also relatively high, ranging from 37 per cent in Singapore to 54 in Rangoon. The youthful population of these metropolises also means that a relatively small working population must support the large proportion below working age.

45 See, for example, Sternstein, L. (1971) *op. cit.*, pp. 50-51; Hearen, H.J. (1956) *op. cit.*, pp. 236-37; McGee, T.G. (1964) *op. cit.*, pp. 210-11.

TABLE V. 5

Age Structure of the Metropolises c. 1960

	<u>Under 20 years</u>	<u>20-50 years</u>	<u>Over 50 years</u>
Bangkok-Thonburi	50.0	40.1	9.9
Djakarta	50.2	43.8	6.0
Manila-Quezon	50.9	44.3	4.8
Rangoon	42.3	54.0	3.7
Singapore	53.3	37.0	9.7
Saigon-Cholon	-	-	-

(215)

Sources: Various National Censuses

The requirement for education is disproportionately high in the metropolises. Other important demographic characteristics of metropolises is their potentially high rate of natural increase due to a large number of people under 20 in proportion to the total population of the respective country.

Internal Structure and Landuse

Zoning as it is known in explaining the urban structure of the Western cities, does not adequately account for the urban structure in Southeast Asia. Various descriptive theories have been put forward by scholars in analyzing the urban pattern or landuse of the Western cities. The three popularly known are the Concentric Zone Theory, the Sector Theory and the Multiple Nuclei Theory. Nevertheless, none has provided a satisfactory explanation of the growth structure and landuse pattern of the metropolises since the majority of them do not conform to the theoretical pattern. However, a comparison between the usual course of development of the western cities and development of those in Southeast Asia serves to point out some unique feature.

To begin with, according to the Concentric Zone Theory⁴⁶, the entire city is conceived of as a circle and its landuse pattern can broadly be explained in terms of concentric zones. Similar types of landuse originate near the city centre and radiate outwards towards the periphery. Much of the validation of the Concentric Zone Theory has been in terms of gradients of particular landuse pattern from the city centre to the periphery. Although most of the metropolises contain the modern commercial core resembling the Western Central Business District, there is little evidence of clear-cut succession of landuse. However, the core areas of most metropolises in Southeast Asia are more of a square or rectangular pattern than circular and the inner cores are rather eccentric than in the locational centre, although topography and local physical conditions may explain part of the irregularities.

46 See Burgess, E.W. (1925) *The Growth of Cities*, P.E. Park et al, eds., The City, Chicago, pp. 47-62.

The Sector Theory⁴⁷ conceived that, as the city grows, land close to the core gains in value: and as this value increases with time because of pressure for space and competition for a site for different needs; finally, that consequent development along each axis often consists of the same landuse pattern. The major premise of this theory which asserts that the important landuses are established in the city centre from where they expand radially is untenable for the majority of the South-east Asian metropolises. A stigma which might be expected to result from the close association among commercial, industrial and residential landuse pattern frequently does not exist. On the contrary, like many cities in the developing countries, they show complicated and mixed urban landuse. Besides, the development of their landuse, to a large extent, is related to their colonial past. Functional specialization exists only in parts affected by the European influence. Even that, they display only a highly modified form of the hypothesized functional patterns of the Western city. In order to establish the government sector and to house the large number of colonial administrators, the colonial regimes reserved certain districts of the metropolis for special use with no regard of urban land value and competition⁴⁸. For certain areas, legal restriction rather than the competitive ability of their particular form of landuse are the rules which govern landuse pattern.

According to the Multiple Nuclei Theory⁴⁹, the landuse pattern in many cities is built around several discrete nuclei instead of a single centre. For some cities, these nuclei have existed from the beginning, in others they have arisen as the development of the cities was stimulated by specialization. An interesting aspect of the theory is that the antagonism between certain types of landuse which it postulates as a basis for the growth of separated nuclei. It states that such antagonism

47 See Hoyt, H. (1939) The Structure and Growth of Residential Neighbourhoods in American Cities, Washington.

48 See Alonso, W. (1964) The Form of Cities in Developing Countries, Regional Science Association Papers, Vol. 13, pp. 165-73.

49 Harris, C.D. and Ullman, E.L. (1945) The Nature of Cities, Annals of the American Academy of Political and Social Science, Vol. 242, pp.7-17.

is often observable between commercial, industrial and residential districts. However, in the majority of the Southeast Asian metropolises, this antagonism is not evident. In fact, the older sections of the majority of the metropolises in the region were laid for a congested mixed landusage of commercial, administrative, light industrial, 'shop-house', and residential. This situation arose because of the manner in which these metropolises were developed. The influence of European ideas of urban development went into play side by side with the traditional Chinese and indigenous urban pattern. They exhibit a remarkable blending of European and Asian traditions producing a modified kind of Euro-Asian mixed townscape and landuse.

As seen from the above, the three main theories of urban development used in the West cannot be fairly applied to a study of Southeast Asian cities for their very different historical and cultural backgrounds, economic and social conditions. They are, thus, neither Southeast Asian cities in the traditional sense nor European cities. They are hybrids. None of the above-mentioned theories, therefore, entirely explain the internal structure or landuse of these metropolises. Nevertheless, the value of such theoretical models is that they allow comparisons to be made between the western cities and the Southeast Asian metropolises and serve to point out some contrasting features.

Although their landuse and functional zones are not fully developed, these metropolises still have their commercial, industrial and residential districts with one usage dominating the others. In each metropolis, there is a central core where metropolitan life in terms of economic and social levels is concentrated. This core area dominates the metropolis's skyline and is bustling with commercial and ancillary activities. It is an area where insurance companies, smart fashion shops, theatres, hotels and important public buildings are found. Here is also the focus of internal urban transportation, the area of maximum accessibility of both vehicular and pedestrian traffic volume. There is also a host of public, personal and professional service establishments and offices. All these personify this core area dependence on commercial activities.

The land immediately encircling the central commercial core is usually the shophouse-residential district. Shophouse⁵⁰ is a common feature among the Southeast Asian cities where there is no separating of residential and commercial functions and land use. This shophouse area represents the strong Chinese commercial and cultural influence upon the Southeast Asian metropolises. This area includes the most important secondary shopping district. The major streets are lined with retail shops, stalls and street traders. The wide variety of business that is present in this area both complement and supplement the commercial activity in the central core. In addition to the commercial-residential mixed uses, this area also contains some light industrial sites which include numerous home and cottage industries, particularly preparation of food, drink, tailoring of garments and simple manufacture of furniture, etc. At day-time, looking at it reminds one of a bee-hive and conditions of extreme crowding are common. Population density is higher in this area than in any other portion of the metropolis.

The larger portion of urban land is used for residential purposes. This includes both the high-class and the low-class residential areas. In general, high-class residential areas are likely to be in land away from nuisances such as noise, smoke and odours. As a result, they are often found on the higher ground or at the sea-fronts. In this area live the Europeans, both the diplomats and merchants, the senior government officers and the wealthy citizens. Single or semi-detached family dwellings are characteristic features of this area. Population densities are much lower compared with other residential districts. In contrast to the high-class residential area is the widespread of 'kampong type' of settlement within the metropolitan areas where the lowest income groups of urban population are found. They lack most urban features except density of settlement and urban types of employment among the residents. Those areas were neglected in the past and piecemeal development was undertaken in response to new demands from the influx of new immigrants. Over-crowding and congestion are the common features of these areas.

50 For a description of the 'shophouse' see Jackson, J.C. (1975) *The Chinatowns of Southeast Asia: Traditional Components of the City's Central Area*, Pacific Viewpoint, Vol. 16, pp. 45-77.

On the outskirts of the metropolis have emerged some new housing estates or dormitory suburbs which constitute the commuters' zone. New features have been added to the urban scene which include the construction of new industrial estates and with satellite towns. It constitutes the major morphological change of these metropolises today.

2. The Urban Hierarchy of Southeast Asia

So far only the development of the urban pattern of each country has been discussed but one of the most interesting features of the urban pattern is the distribution of city-size. In this section is discussed the formation of the urban hierarchy of each individual country, and how they were related to the historical, colonial economic complex during their whole process of urban development of the last 150 years.

Conceptually, it is believed that each economic system would generate an urban network. To a large extent any system of urban places is the end result of its spatial-economic activities⁵¹. It is also a physical manifestation of the organizational principles governing the conduct of social and historical activities in an area. The majority of the urban centres exist mainly because of their function as central places for the exchange of goods, ideas, services and information⁵². Spatial economy requires that certain goods and services which are not available everywhere should be provided at the nodal points in order to serve their tributaries.

Of course, this does not mean that all urban places must be surrounded by an 'umland' since strategic location or other special functions like mining, manufacturing and resorts will exist without the immediate umland. Nevertheless, if the central place theory holds one would expect that there would be a regular pattern of city-size distribution - that a functional hierarchy exists. Higher order centres serve larger complementary

51 See Berry, B.J.L. (1969) Relationships between Regional Economic Development and the Urban System, Tijdschrift voor Economische en Sociale Geografie, Vol. 60, pp. 288-90; also Ullman, E. (1941) A Theory of Location for Cities, the American Journal of Sociology, Vol. 46, pp. 853-64.

52 See Smailes, A.E. (1944) The Urban Hierarchy in England and Wales, Geography, Vol. 29, pp.41-51; also Berry, B.J.L. and Garrison, W.L. (1958) The Functional Bases of the Central Place Hierarchy, Economic Geography, Vol. 34, pp. 145-54.

regions and are consequently more widely spaced than lower order centres, and each functional grade has a typical population size, with high order centres having a larger population⁵³. However, such homogeneity of urban system does not occur in Southeast Asia.

As would be expected in many developing regions of the world, the urban system of Southeast Asia is not yet highly developed, as compared with the Western industrial countries. The urban system of the region is poorly integrated. City-size distribution in the majority of the countries in the region is characterized by the dominance of one large city, with many small urban centres and a deficiency of towns of medium size⁵⁴. In contrast to the regular spacing of the lower order cities, the large cities form an urban network which has little or no relation in origin and configuration to the network of smaller towns. It is, in fact, a separate urban network superimposed on the original one. In the following a test will be made to find out to what degree the urban system of each individual country deviates from the theoretical model of the city-size distribution.

In contrast to the conventional practice for applying the 'Law of Primacy'⁵⁵ as a starting point to analyse the urban hierarchy we adopt the 'Rank-size distribution' as a point of entry to the study of size characteristics of Southeast Asian cities. Adopting the rank-size rule⁵⁶ has provided a basic description of the city size distribution. This analysis provides an explanation for both the size and spacing of the urban settlement in the region. It also reveals characteristics of city-size

53 Central place theory explains not only the hierarchy relationships between cities, in terms of size and function, but also their relative spatial distribution. See Christaller, W. (1966) Central Places in Southern Germany, (English translation), Englewood Cliffs, N.J.; also L6sch, A. (1954) The Economics of Location, (English translation), New Haven.

54 Sendut, H. (1956) City Size Distribution of Southeast Asia, Asian Studies, Vol. 4, pp. 268-80.

55 Jefferson, M. (1939) The Law of Primacy, Geographical Review, Vol. 29, pp. 226-32.

56 See Zipf, G.K. (1941) National Unity and Disunity, Bloomington; also his (1948) Human Behaviour and the Principle of Least Effort, Cambridge, Mass.

distribution which would provoke interesting questions concerning the overall pattern of urban growth. It must be emphasized that this method of enquiry is suggestive, not definitive, because there are many factors other than mere population size which have affected relationships within urban systems.

To test the rule, the distribution of cities of each country corresponding to their national census of population has been plotted on double-log paper. As shown from Fig. V. 7 to Fig. V. 14 those figures are the graphic representation of the actual distribution of urban centres of each country compared with the slopes corresponding to the theoretical distribution that follows the rule. When the urban centres of each country are so plotted, deviations of an actual distribution of cities from 'normal' distribution are graphically revealed. The regression lines are drawn and their slopes are measured. The line of slope -1.0 is corresponding to the theoretical distribution. Those irregular slopes range from unusually steep to very gentle. The line with an overall slope close to ideal slope i.e. -1.0 is a country more conformed to the rank-size distribution and those deviate from the slope lean towards primate distribution. Nevertheless, positive deviations of large cities can seriously affect the slope even if rank-size rule holds for most of the distribution. On the other hand, a regression line may have a slope close to -0.1 in spite of considerable deviations along the distribution.

As would be expected, the city-size distribution of the majority of Southeast Asian countries does, in fact, show large deviation, variations from one country to another. In general, the first ranking city nearly always towers above the other groups of cities⁵⁷. There is also a positive correlation between the first-ranking city and the second largest, i.e. the more disproportionate the size of the largest city, the more regressive and distribution of population in the second and third cities onward tend to be. In other words, if the first-ranking city's dominance is particularly pronounced, and the gaps between the first and those of the second and third-ranking continues to widen. Indeed, the size relationship holds better within the urban system of most Southeast Asian countries,

57 See Ullman, E.L. (1963) The Primate City and Urbanization in Southeast Asia, SEADAG Papers; Ginsburg, N.S. (1961) op. cit., p. 36; Sendut, H. (1966) op. cit.

if the one or two largest cities were omitted. As a result, the primacy of each country would be greatly diminished. This again reflects the dominant position of their largest cities. The positive deviation of the first-ranking city and the negative deviation of other cities have seriously affected their overall distribution pattern.

(i) City-size Distribution of Thailand. On studying the city-size distribution, Thailand presents an extreme case of primacy. As Fig. V. 7 illustrates, the urban system of Thailand is characterized by the dominance of an anomalously large first-ranking city, Bangkok, a clear deficiency of cities of medium-size and a relatively large number of small towns. According to the 1960's figures, there was a complete lack of urban centres among the size categories of 100,000 - 200,000; 500,000 - 1,000,000. At the top of the hierarchy, Bangkok was three times larger than Thonburi, the second largest city in the kingdom. If we take Thonburi as part of the Bangkok metropolitan area then the index of the primacy would be much greater. The twin-city of Bangkok-Thonburi was then twenty times larger than Chiangmai, the next largest city. Indeed, even with the population of the next ten largest cities combined together, Bangkok-Thonburi was still as much as 4.5 times larger.

Since the beginning of the present century, the outstanding feature of urban development in the kingdom has been the constantly increasing degree of concentration of urban population in the Bangkok-Thonburi metropolitan area⁵⁸. The population of this twin-city rose from 450,000 in the first decade of the present century to 780,670 immediately after the war and again rose to 1,703,356 in 1960. In the period between 1947 and 1960, the share of the total urban population of the country also increased from 53.8 per cent to 56.6 per cent. In fact, since its foundation this twin-city has always contained most of the urban population of Thailand. These statistics suggest that since the end of war, the metropolis may have been increasing its population partly at the expense of other urban centres by drawing migrants from the smaller towns as well as from the countryside.

58 Graham, W.A. (1924) op.cit., pp. 22-24.

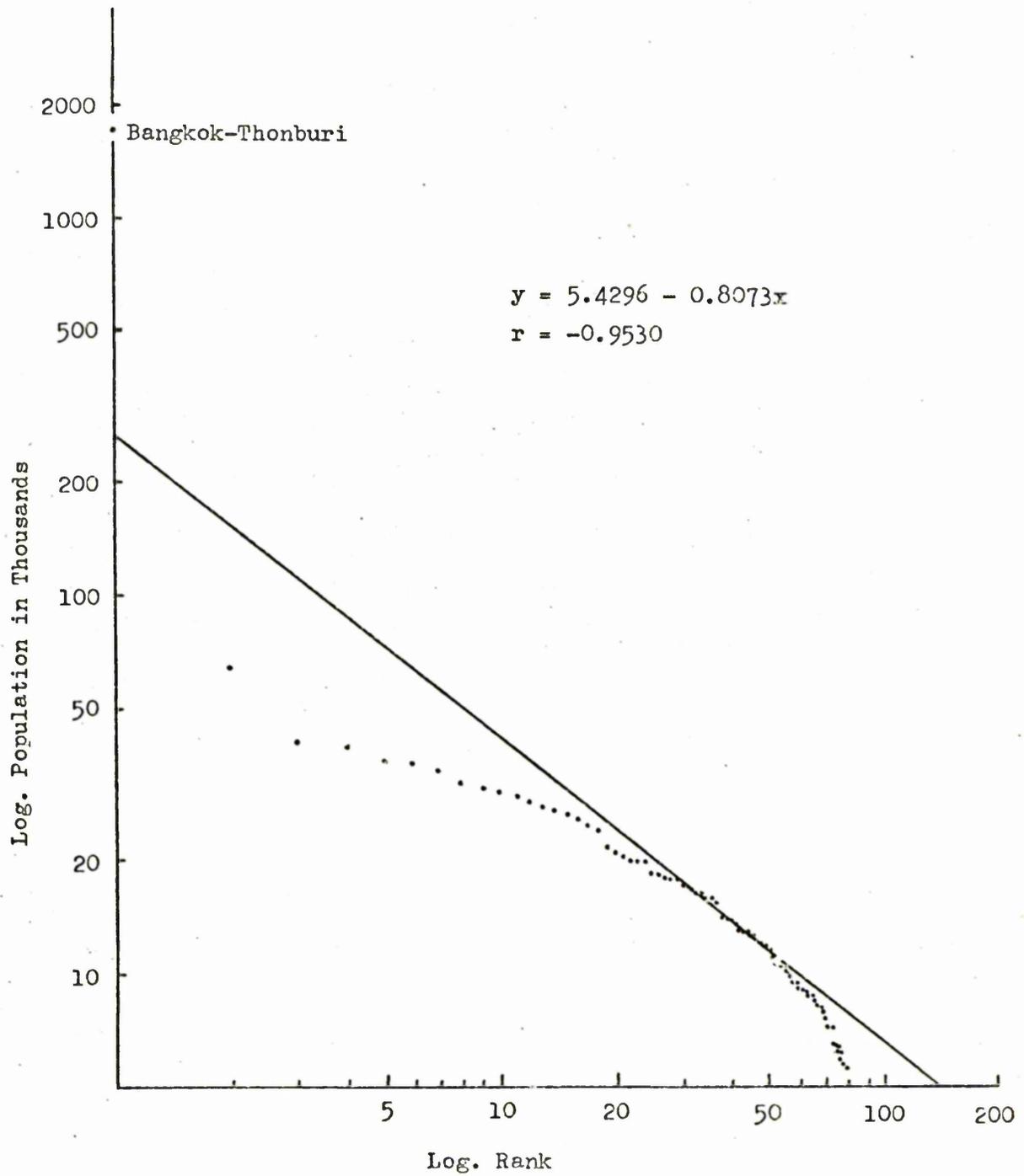


Fig. V.7 Thailand: rank-size array of towns and cities, 1960.

From the result of the calculation, the first ranking city exceeded its expected size by more than one million in 1960, while the second largest city of Thonburi exceeded her expected size by a quarter of a million. In other words, the expected size of the largest city on the present Thai urban network should be around a quarter-million, but the actual population size of Bangkok was nearly 1.3 million in 1960. Thonburi whose recent growth is due to the suburbanization of Bangkok, was about 2.6 times larger than the size that would be expected. On the other side of the spectrum, cities like Chiangmai, Ban Rachan, Nakhorn Ratchasima, Lampang, Hadyai, etc., following the size orders, all have sizes much smaller than the expected sizes which would be postulated by the Rank-size rule. Chiangmai has a deficit of about 45,500 inhabitants as the third-ranking city in the Thai urban network, while the actual size of Ban Rachan, the fourth-ranking city, is less than half of the expected population size. Nakhorn Ratchasima and Lampang have the deficits between 20,000 and 30,000 inhabitants while Hadyai, Nakhornsawn, Chonburi and Songkhla have the deficits of population between 10,000 and 20,000. The deficit between expected and actual size is most extreme for the first seven cities, dramatically reflecting the gap in city-size distribution note between primate city and the smaller towns.

On the whole, the gap between the largest and cities of the lower orders stands out as a basic imbalance in the urban scene of Thailand. It is a symptom of the immature urban development. Indeed, any critical observer who travelled in Thailand could observe the marked contrast between the Bangkok-Thonburi urban life and the life of the provincial towns. Bangkok, as the seat of the government, dominated development in the whole country. This metropolis, primarily triggered the 'inflation' of government services and since there actually was no other alternative so that it became the main reason for the single primate city of the country.

It is sufficient to note that Thai cities, rather than descending gradually from the largest to the smallest urban communities, leap in size from the lower categories to the metropolis. There are no large cities in the transitional position. At present, it is one of

the most extreme cases of primacy in Southeast Asia ⁵⁹, if not the whole world. In its long history as a capital city, it serves as the sole centre for most major political, economic, commercial and cultural activities. By serving as the administrative, financial transport and communication centre, it was given an advantage for growth in the past and continues to do so today.

In recent years, both the creation of national industry directed to the domestic market and the expansion of the tertiary sector took place on the basis of already existing locational advantages of ^{the} metropolis. Many international organisations or Western commercial companies have set up their Southeast-Asian headquarters in Bangkok thus accentuating its primacy further. Every word in the Jefferson's description of the 'Law of primacy' can be truthfully echoed in its position as the primate city. Another equally important observation that can be made is that, there is no sign of closing the gap between the metropolis and cities of the lower orders. If anything, it has been accentuated. The primacy of Bangkok-Thonburi will not be challenged in the foreseeable future. Indeed, Bangkok-Thonburi's urban primacy is among the most striking in the world.

(ii) City-size Distribution of the Philippines. Similar to Thailand, The Philippines also show a high primacy in its urban hierarchy. As can be seen from Fig. V. 8, the urban system of the Philippines is also dominated by one huge city, Manila-Quezon, a deficiency of towns of intermediate size and a heavy concentration of towns in the lower categories, 211 out of total 235 towns and cities in the archipelago in 1960 was gathered in the lower categories with populations of less than 20,000 inhabitants. In the period between 1948 and 1960, the country was more notable for the rise in the number of towns than for their growth in size, especially those in the lower categories. The reason why the Philippines has a high proportion of towns in the lower categories is partly due to its insular character. Most of the towns are local trade centres with very limited hinterlands ⁶⁰.

59 Sternstein, L. (1966) *Contemplating a Hierarchy of Centres in Thailand, Pacific Viewpoint*, Vol. 7, pp. 229-35; also Ginsburg, N.S. (1961) *op. cit.*, p. 36.

60 See Ullman, E.L. (1960) *Trade Centres and Tributary Areas in the Philippines, Geographical Review*, Vol. 50, pp. 203-18.

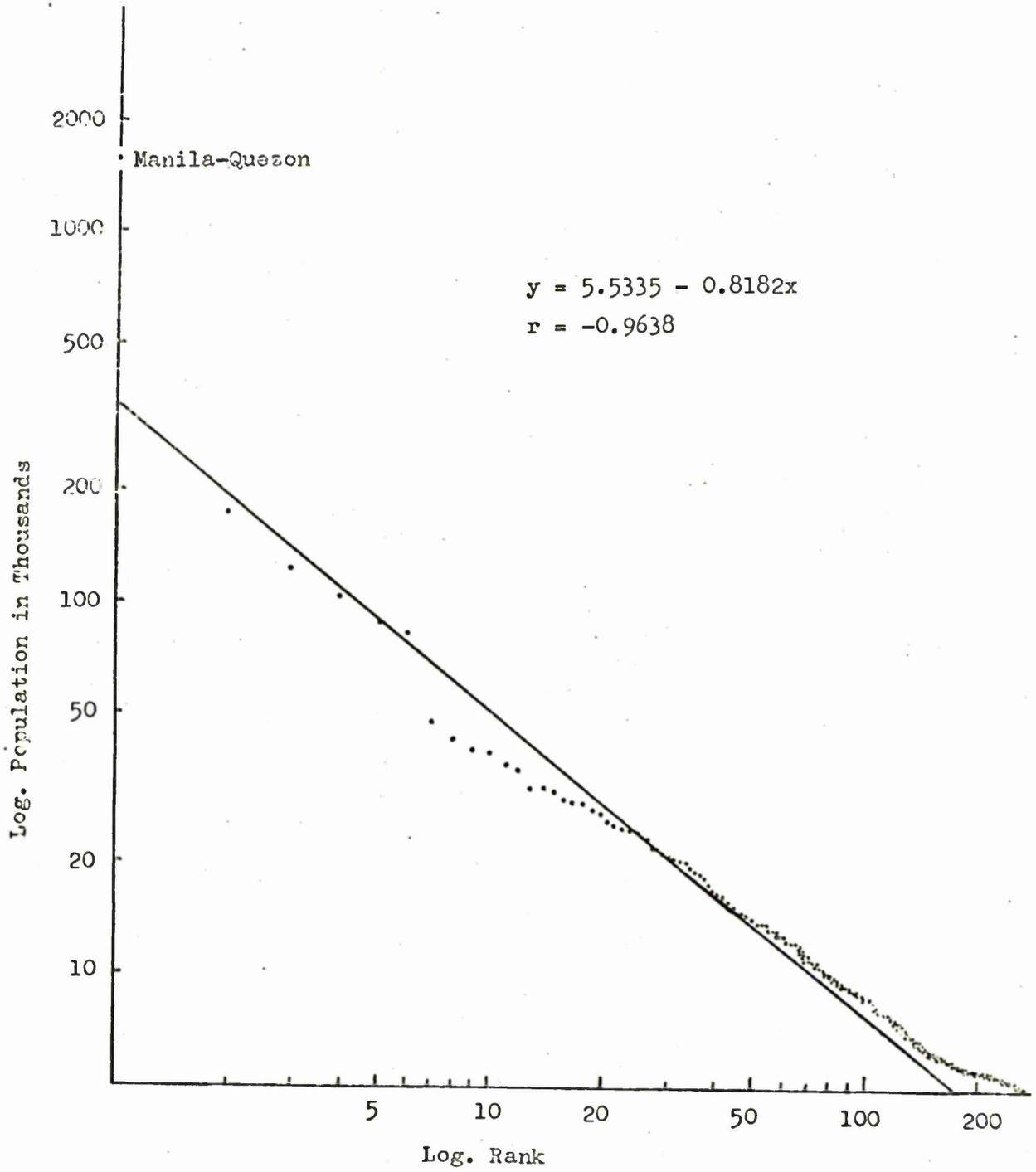


Fig. V.8 The Philippines: city rank-size relationships, 1960.

There are no large cities occupying a transitional position between the metropolis of Manila-Quezon which had 1.5 million inhabitants in 1960 and centres with a population of less than 200,000 and only two cities have reached the 100,000 mark.

The largest urban concentration in Manila-Quezon area is approximately 8.8 times larger than the second-ranking city of Cebu and about 12.0 times larger than Iloilo, the third largest city in the archipelago. The paramount position of Manila is partly historical⁶¹. Ever since Manila was made capital of the Philippines by the Spaniards in the 16th century, it has outstripped Cebu and become the largest city of the archipelago.

It was developed as the main national link to the Spanish colonies in America and indirectly with Europe in the exportation of tropical resources, and also became the principal port for the trade of Chinese goods which was the dominant economic activity throughout the 17th and 18th centuries. The Galleon Trade was oriented to the trans-shipment of Chinese export commodities, an activity which came to be wholly concentrated in Manila. Its dominant role may be regarded as a consequence of the concentration of political, economic, transport, cultural as well as higher educational functions in the following centuries. After independence, the creation of national industries directed to the domestic markets and the expansion of the tertiary sector also took place on the basis of already existing locational advantages of the largest city. Its further rise to primacy in recent years has been largely due to its coalescence with Quezon and also the enlargement of its economic base through its multi-functional role in commerce, administration and industry⁶².

According to the rank-size distribution, the expected population size of the first ranking city within the Philippine urban network should be around 350,000, but the actual size of Manila-Quezon was around 1.5 million in 1960. In other words, it exceeded its expected size by more than one million inhabitants. On the other hand, all the other major cities, with the

61 See Reed, R.R. (1967) op. cit., p. 132; Reed, R.R. (1972) op. cit., p. 311; Doeppers, D.F. (1972) op. cit., p. 781.

62 McPhelin, M. (1969) Manila: The Primate City, Philippine Studies, Vol. 17, pp. 781-89; Cressey, P.F. (1958) op. cit., pp. 350-51.

exception of Davao, the sixth largest, show a deficit in population size than would be predicted by the rule. Cebu, the second-ranking city has a deficit of about 20,000 which the third-ranking city, Iloilo, has a deficit of around 15,000 inhabitants. The fourth and fifth-ranking cities have a population size relatively close to the expected sizes. Davao, on the other hand, has a population size larger than would be expected. This reflects the importance of Davao as the regional economic and political headquarters of the second larger island of the archipelago, the Mindanao.

From the above analysis we note that the gap between the primate city and cities of the secondary importance is great. However, there is no sign of closing the gap. On the contrary, the gap is actually being widened as the growth rate of the primate city is faster than many of the lower ranking cities. No town in the foreseeable future may challenge the supremacy of Manila-Quezon in the archipelago. For the Philippines, the trend is not too dissimilar from that of Thailand.

(iii) City-size Distribution of Burma. As Fig. V. 9. illustrates, Burma also presents a high degree of primacy. Although the majority of the low-ranking cities seem to follow closely to the rank-size distribution, the largest cities apparently deviated from the rule. Rangoon is anomalously large if considered with respect to the urban network of the country. It is four times as large as Mandalay, the second largest city. The actual population size of Rangoon in 1953 was twice as large as the expected size by the rank-size rule formula. The primacy of Rangoon is, therefore, unmistakable. A slight excess between the expected size and the actual size also can be observed in the second-ranking city, Mandalay. Nonetheless, all the other leading cities of the country have actual size smaller than the sizes which were postulated by the rule.

The dominance of Rangoon was the culmulative result of the colonial heritage. Its rapid rate of growth has been due to a favourable conjunction of factors especially the advantage of its port-capital functions for industrial location⁶³. Meanwhile, the commercial and political functions

63 Murphey, R. (1957) op. cit., pp. 231-32.

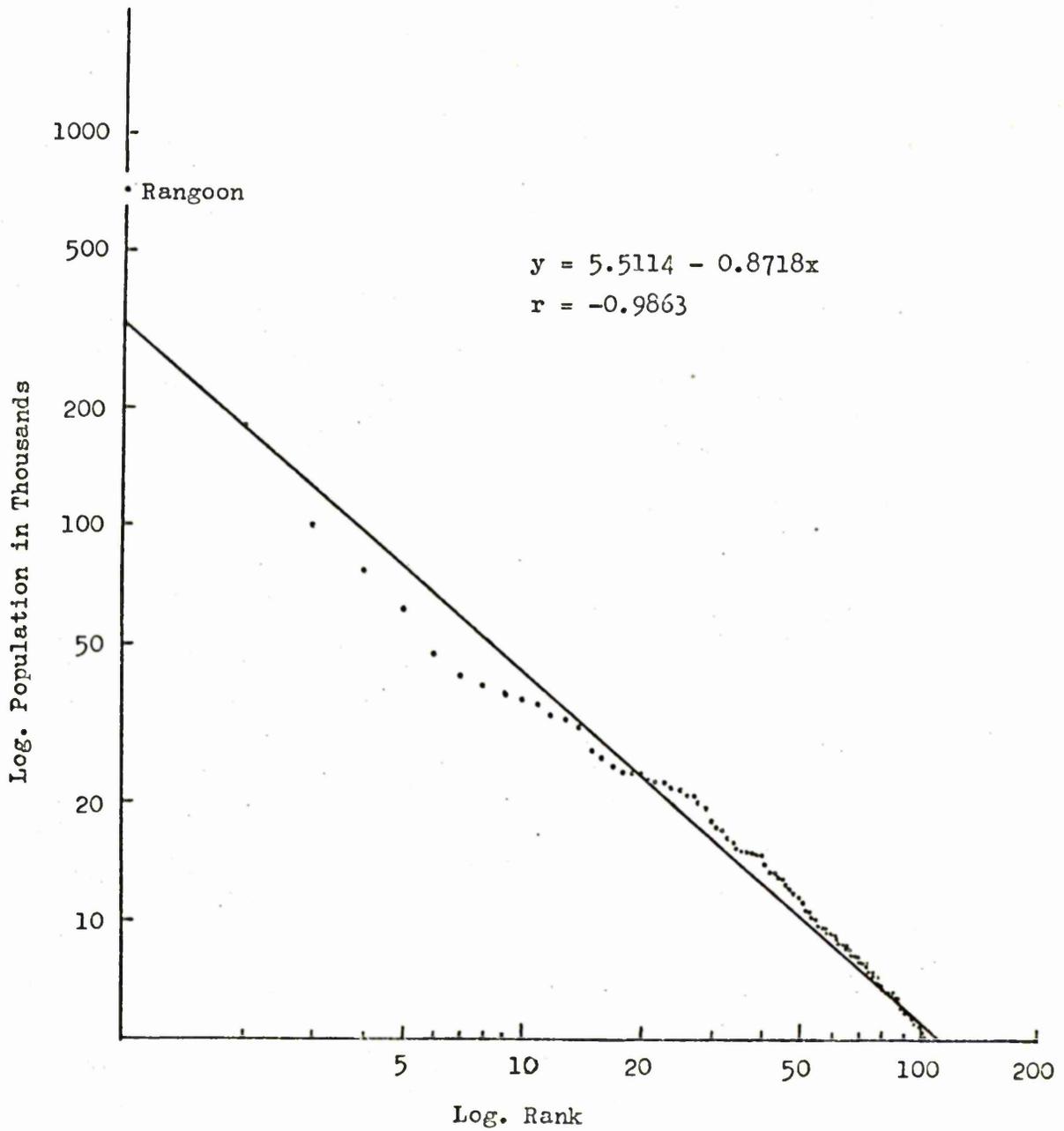


Fig. V.9 Burma: rank-size array of urban centres, 1953.

resulted in disproportionate concentrations of Europeans, Indians, Burmese and Chinese in the largest city. This, in turn, has given Rangoon considerable significance as a consuming centre. All of these factors resulted in the provision of better services and amenities than are found in lesser cities. Once started, the development snowballed.

At the beginning of the present century, Rangoon was only slightly larger than Mandalay, but it grew up with a dominant trading link between the colony and the outside world. With the growth of trade and commercial activities, Rangoon became by far the largest city in Burma. Since then, Rangoon has been growing at a much higher rate than Mandalay. This is especially true in the post-war years when large numbers of the rural population moved into the capital; thus the gap between these two largest cities has been further widened. There is a strong tendency that this situation will not be changed significantly in the coming years. In fact, all other major cities seem to stand in the shadow of Rangoon. Compared with the previous censuses, the overall size-distribution pattern among the towns seems to have changed little except that they were moving upwards as the absolute number of towns and urban dwellers in the country increased.

(iv) City-size Distribution of South Vietnam. Study of the size of South Vietnamese cities with inhabitants of 5,000 or more in 1963 reveals that South Vietnamese cities, instead of progressing gradually from the largest to the lower orders, leap in size from one different type to another. There are no large cities occupying a transitional position between the metropolis and the smaller cities. A distinct break in the distribution occurs between Saigon-Cholon and other market towns with their comparatively small populations. In 1963, while Saigon-Cholon had over 1,335,610 inhabitants, the second-ranking city of Da-Nang had less than 150,000. This, of course, does not imply that the medium-sized cities have not been growing. Indeed, as discussed in Chapter IV, that their rates of increase have exceeded other size categories, but their growth has been at the expense not of the capital city but of the even smaller urban centres of the country.

The basic pattern of city size distribution is over-concentrated in the top-ranking city.

As the graph indicates, there is a complete lack of cities in the size categories between 200,000 - 500,000 and 500,000 - 1,000,000. At the top of the urban hierarchy, Saigon-Cholon, was nine times larger than Da-Nang, the second-ranking city and about 13 times as large as Hue, the third-ranking city. The overwhelming primacy of Saigon-Cholon is thus apparent.

Fig. V. 10 also shows that the majority of the other cities seem to deviate from the sizes which the rule would predict. The deficit between expected size and actual size is most extreme for the sixth largest cities. Between 1936 and 1963 ten of the leading cities of South Vietnam have more than doubled their aggregate population, from less than a million to nearly two million persons, but among them 54.5 per cent of the increase occurred in the Saigon-Cholon metropolitan area. A partial explanation for this phenomenon may be the multifarious functions of these twin-cities. Administrative, commercial and port functions accelerated the growth of this metropolis in the past, but since World War II, there has been in general an upward trend in the volume and rate of migration to the metropolis ⁶⁴.

Under the rank-size rule, the expected size of the first-ranking city of South Vietnam in 1963 would be around half a million inhabitants but the actual size reached 1.3 million. In other words, Saigon-Cholon exceeded its expected size by 800,000. On the other hand, the second-ranking city, Da-Nang has a deficit of about 99,000 while the third-ranking city, Hue and the fourth-ranking city, My-Tho, each have a deficit of about 50,000. The deficit figures for fifth and sixth were 30,611 and 16,556 respectively. Some of the factors determining the deviations, however, are economic or at least demographic-historical factors. Nonetheless, the growth rate of Saigon-Cholon is among one of the highest in the country. As a result, no town will be in a position to challenge the supremacy of Saigon-Cholon in the foreseeable future.

64 Joiner, C.A. (1965) op. cit.,

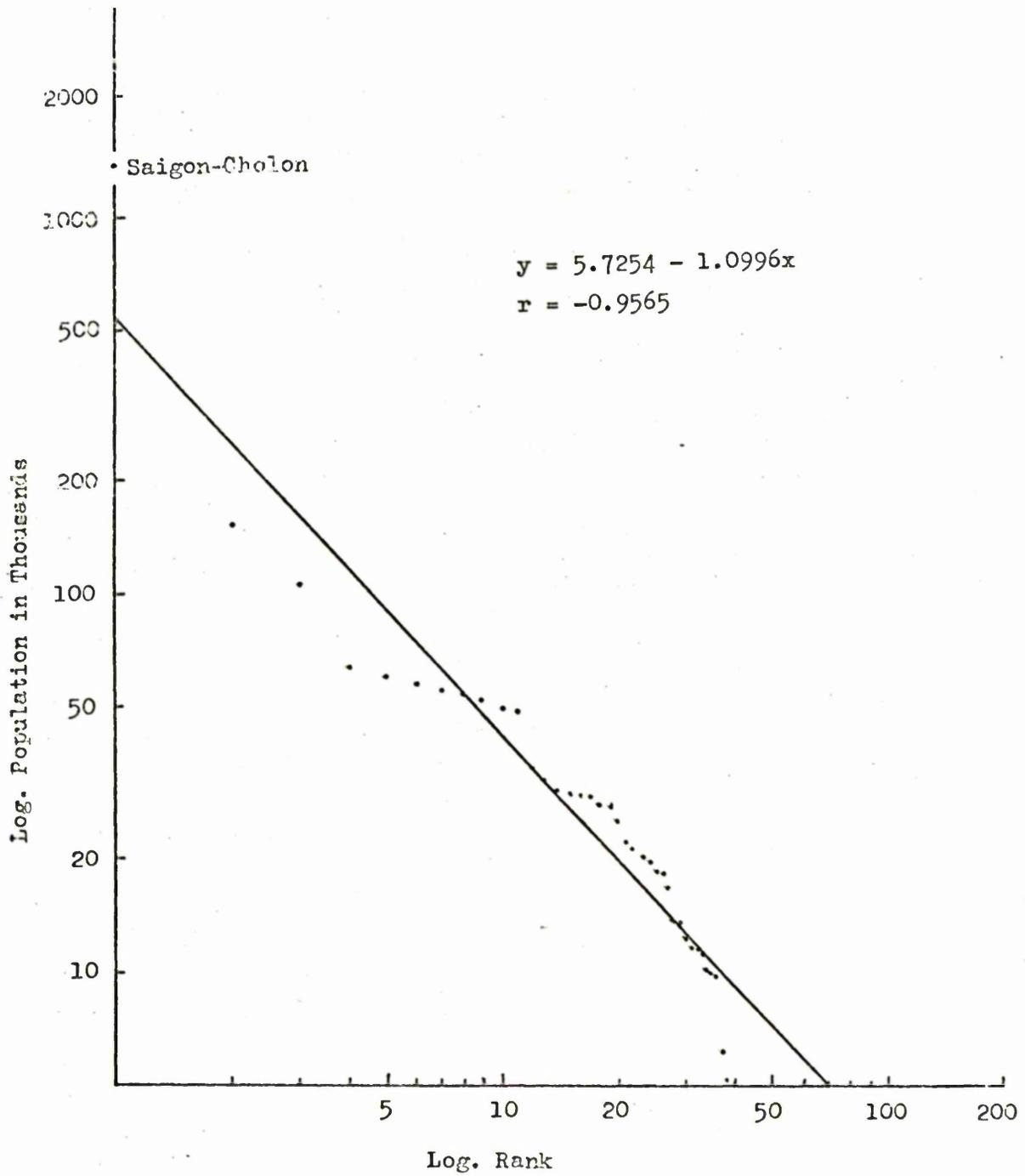


Fig. V.10 South Vietnam: rank-size of urban populations, 1963.

(v) City-size Distribution of Cambodia. When the towns and cities of Cambodia are arranged by rank and size of population they form a distribution which is characterized by the largest city being many times the size of the second largest city. As Fig. V. II indicates, there is a clear deficiency of towns of sizes between 50,000 and 200,000. Indeed, Cambodia shows an abnormal urban structure, i.e. the presence of one very large city that greatly overshadows the next largest city in the country. With a population of 403,500 in 1962, Phnom-Penh, was ten times larger than Battambang, the second largest city. As the first-ranking city, Phnom-Penh, has come to have the main concentration of the country's economic, social, cultural and political activities and consequently of its urban population as well. Phnom-Penh alone accounted for 66.2 per cent of the urban population of Cambodia in 1962. Since its early foundation it has always contained most of the urban dwellers of the country⁶⁵. In recent years it also accounts for the majority of the country's registered motor vehicles, telephones, employment in the leading industries, purchasing power and of students enrolled in institutes of higher education. Its tremendous growth, both in population and in urbanized areas, is a recent phenomenon, having occurred only after the World War II.

According to the rule, Phnom-Penh was more than twice as large as would be expected from the scales of the urban network of Cambodia. Consequently, the primacy of Phnom-Penh is unmistakable. On the other hand, cities like Battambang, Kampong Cham, Kandal, Pursat, Kampong Chhnang, and Kampot, etc. have the sizes smaller than the sizes which would be postulated by the rank-size rule. It is obvious that none of the towns in the country will, in the foreseeable future, challenge the supremacy of Phnom-Penh.

(vi) City-size Distribution of North Vietnam. Unlike other Southeast Asian countries, the city-size distribution of North Vietnam does not confirm to the sole primacy of the capital city. The urban hierarchy of North Vietnam is dominated by two largest cities instead of one. This pattern might be termed as a bi-primacy pattern in which the first two largest cities are each far larger than the third and subsequent ranking cities.

65 Young, J.M. (1913) Ancient and Modern Cities of Cambodia, Hongkong.

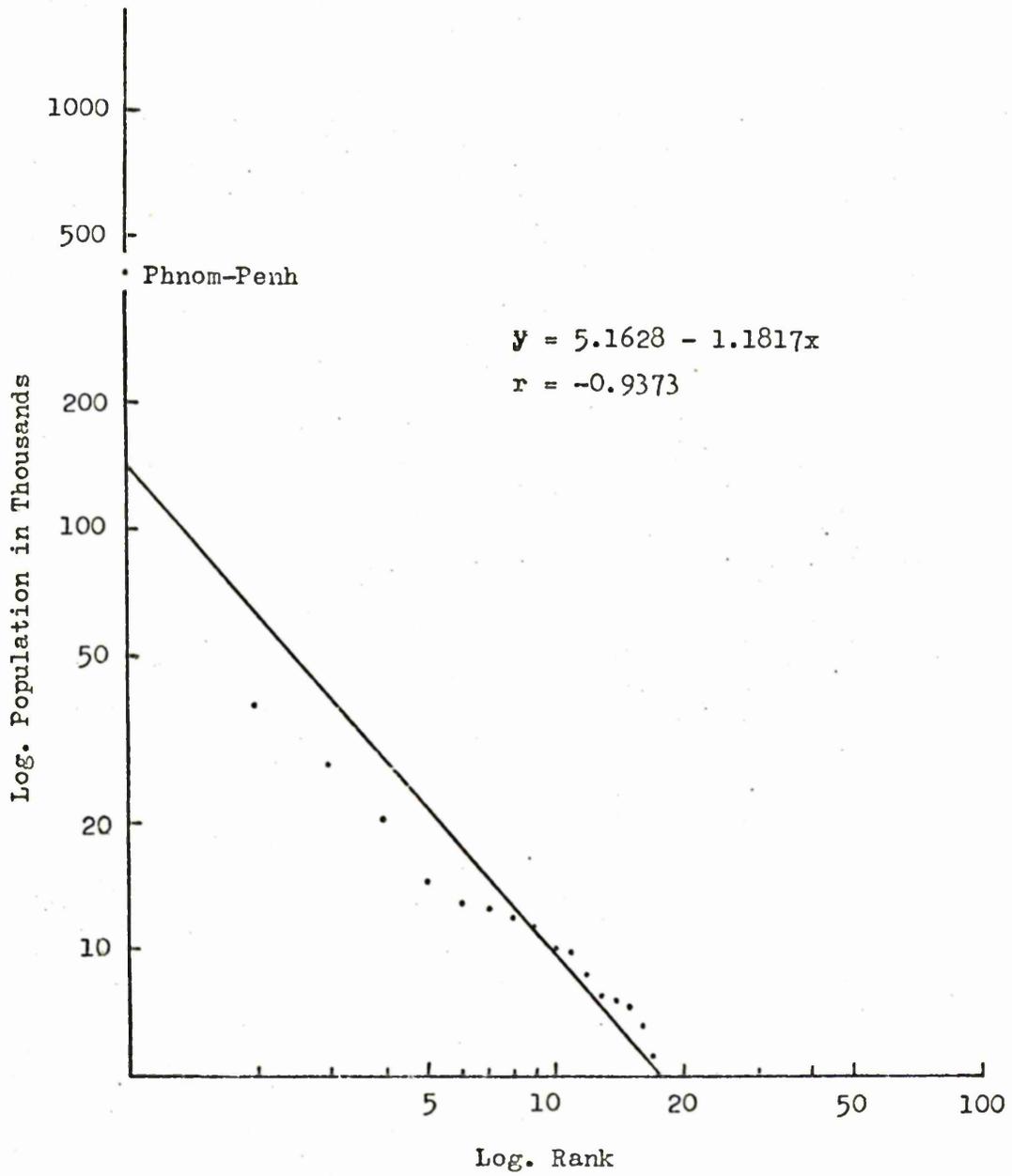


Fig. V.11 Cambodia: rank-size of urban populations, 1962.

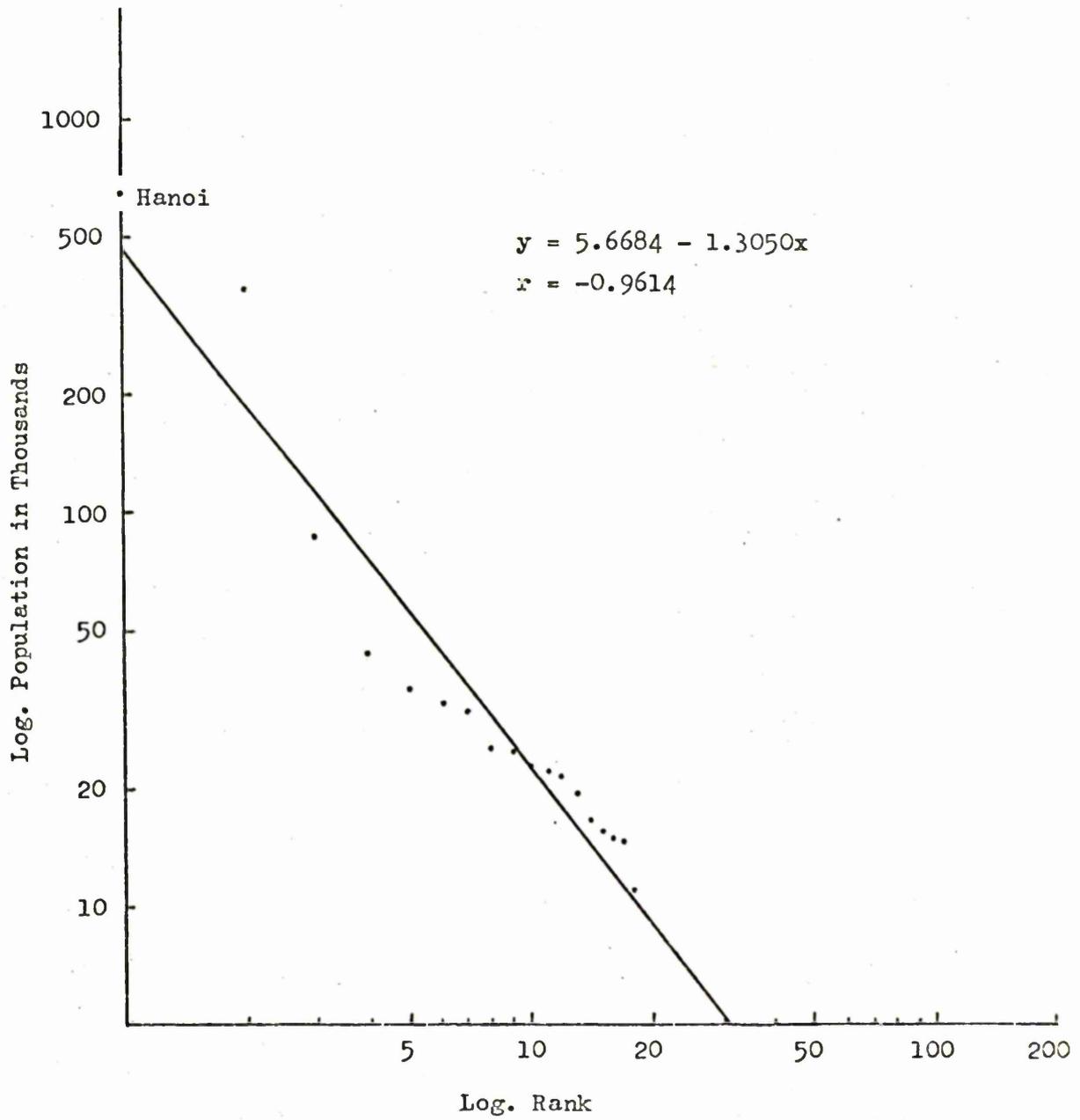


Fig. V.12 North Vietnam: rank-size of urban populations, 1960.

As can be seen from Fig. V. 12, both Hanoi and Haiphong have far greater populations than the rank-size rule predicted. Hanoi, in fact, exceeded its expected size by 177,554 in 1960 whereas Haiphong surpassed its expected size by 180,643 persons. On the other hand, other major towns like Nam-dinh, Vinh, Hong-gai, Cam-pha and so on show a great deficit in population. Indeed, North Vietnam is an example of marked bicephalic concentration as two cities, Hanoi and Haiphong together account for 70.0 per cent of the total urban population of the country.

The excessiveness of the size of the first ^{two} largest cities suggests their important roles as the administrative and the commercial centres ⁶⁶. Hanoi is the multipurpose city in administrative, commercial, financial, industrial as well as educational functions combined while Haiphong serves as the major port of the country and acts as the receiving and exporting centre for overseas trade and with considerable industrial establishments. The functions of chief port and capital are divided between Haiphong and Hanoi. Therefore, it is not surprising that neither had so large a population as the leading cities of other countries. At the beginning of the present century, Hanoi was 6.9 times larger than Haiphong but the gap between these two cities had been gradually filled as the expansion of commercial and industrial activities in Haiphong. By 1960, Hanoi was only 1.7 times larger than Haiphong. Duality rather than sole primacy is the major characteristic of North Vietnam.

(vii) City-size Distribution of Indonesia. In an analysis of towns and cities with populations of more than 5,000 inhabitants in Indonesia as plotted on Fig. V. 13, it is found that the city-size distribution pattern of the archipelago is characterized by relatively small numbers of towns in the lower categories, a heavy concentration of cities in the medium sized categories and fewer large cities. The relatively small number of towns in the lower categories is partly due to the unimpressive rate of growth of small towns which as road systems improved, smaller centres are giving way to the major towns with the latter extending their hinterlands to a wider area. The smaller towns seem less developed than the larger ones. This is especially true in Java where the number of urban centres in the lowest category has actually declined.

66 U.S. Joint Publications Research Centre (1961) Hanoi, the Capital of North Vietnam Since 1954, Washington, D.C.; Joiner, C.A. (1965) p. 24.

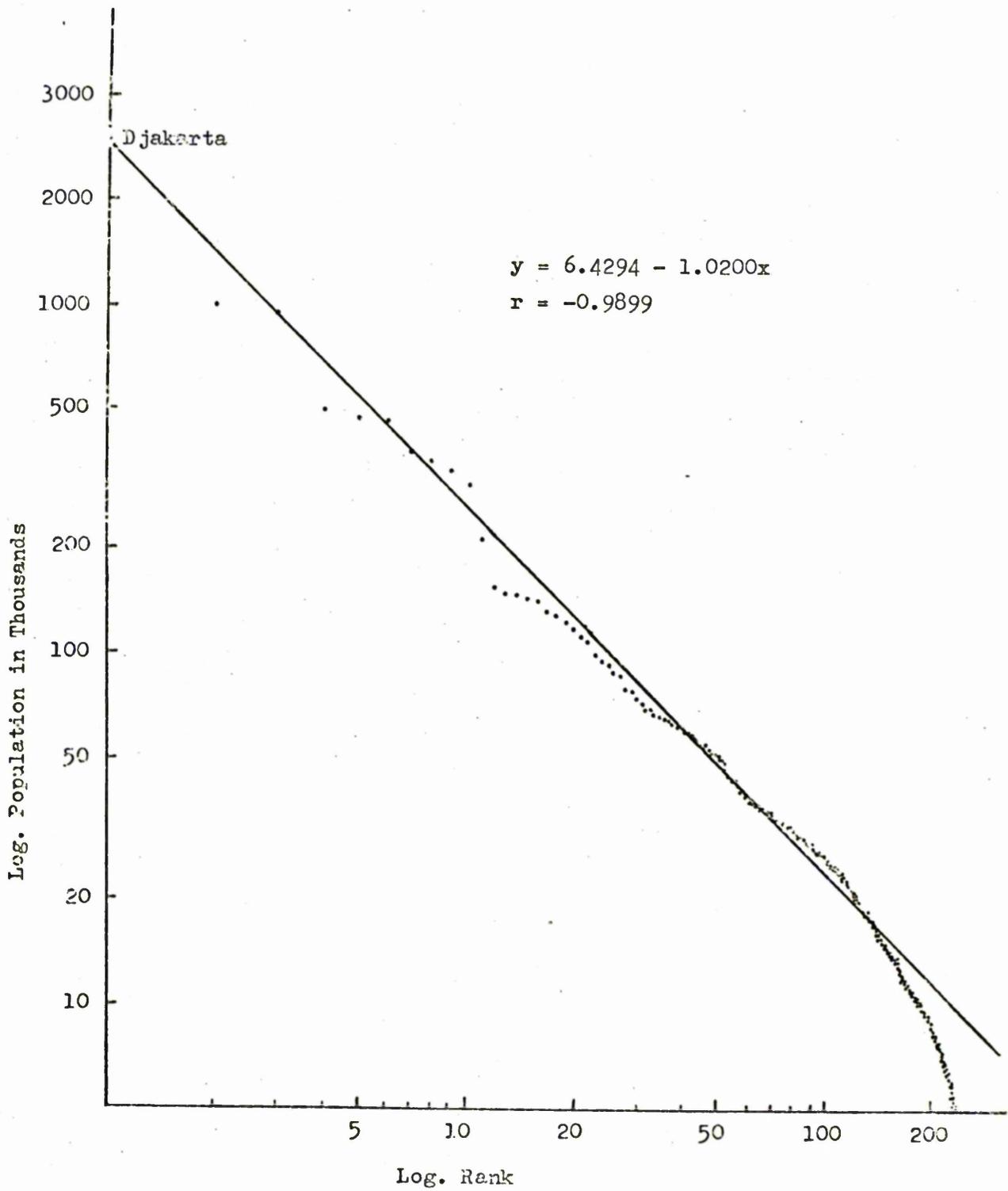


Fig. V.13 Indonesia: rank-size array of towns and cities, 1961.

Despite the relatively fewer number of towns in the lower categories, the overall pattern of urban hierarchy of Indonesia is considerably close to the rank-size distribution with a slope of -1.02 . It is, therefore, not surprising to find that the top-ranking city of Indonesia, Djakarta, is only one-tenth the size larger than the rule would have predicted.. Meanwhile, Surabaya, the second-ranking city had one-fourth fewer inhabitants than would be expected whereas the third-ranking city, Bandung, was one-ninth larger than would be postulated. On the other hand, the fourth and the fifth-ranking cities, Semarang and Medan, showed deficiencies while the other cities like Palembang, Makassar, Surakarta, Malang and Djogjakarta had sizes larger than the expected sizes. This suggests ^{their} important roles as the regional headquarters in the archipelago. In fact, each major island or region possesses at least one or two major cities. They, themselves, usually overshadowed other cities of the respective island and few of them are actually primate cities of that island in which they are located ⁶⁷. In Sulawesi, for instance, Makasar, the first-ranking city of the island, is more than three-times larger than Manado, the second largest city.

Meanwhile, on the island of Java, there were two millionaire cities and a third potential millionaire city of Bandung in 1961. This is rather unique in a small island like Java where 80 per cent of their population are still engaged in the primary industry sector. From Fig. V. 13. it is sufficient to note that the Indonesian cities rather than leap in size from class to class, are progressing gradually from the smallest to the largest. In comparison to previous distribution patterns, it shows not just the increase of population in individual city but rather a steady increasing linearity through time. The urbanization picture of Indonesia is more balanced than other countries in the same region. This is partly due to its particular administrative and economic development, geographical formation as an archipelago and the political pressures to establish many other regional centres throughout its vast area.

(viii) City-size Distribution of Malaya. Urban primacy as analyzed above is not as evident in Malaya as might be expected. The urban system in Malaya is marked by a relatively few large cities, many medium-sized cities

67 See Withington, W.A. (1963) op. cit.; Tan, G. (1965) op. cit.,

and a host of smaller towns. Malaya shows a more balanced city-size distribution. Although the three top-ranking cities have a size larger than would be expected, the over-all distribution is fairly close to the rule, (see Fig. V. 14). Cities from number 18 downwards close to the normal slope, that is they follow closely the rank-size distribution. But the excessive size of these three largest cities reflect their important roles as commercial, administrative and trading centres within the Malayan urban network.

Singapore, the first-ranking city for example, is the financial centre and the major entrepot not only for Malaya but also for the neighbouring countries. Kuala Lumpur, the second ranking city which serves as the administrative headquarters of the Federation of Malaya is also the most important commercial, transport and educational centre on the peninsula. George Town, the third-ranking city always has a substantial entrepot trade. Political rivalry and subsequent division between the Federation of Malaya and the State of Singapore have checked the growth of the primate city, Singapore⁶⁸. Since 1957, Kuala Lumpur has continued to serve as the capital of the independent Malaya. Although Singapore still remains the largest city, the annual rate of population growth in recent decades is much faster in Kuala Lumpur than in Singapore. In the period between 1947-57, Kuala Lumpur had an annual growth rate averaging 5.6 per cent as against Singapore's 3.1 per cent within the same period. Singapore, with its much larger initial population, still had a greater absolute increase, while Kuala Lumpur added to itself not more than half as many. According to the census in 1957, Singapore was 2.9 times larger than Kuala Lumpur but there is a trend in narrowing the gap between these two cities within the Malayan urban network.

At the beginning of the present century, Singapore was two times greater than George Town, then the second-ranking city in Malaya, and almost six times larger than Kuala Lumpur. After the Second World War, Kuala Lumpur had surpassed George Town and become the second largest city in Malaya. In recent years, Kuala Lumpur has grown at a rate much faster than

68 See Tregonning, K.G. (1966) Singapore and Kuala Lumpur. A Politoc-Geographical Contrast, Pacific Viewpoint, Vol. 7 pp. 238-41.

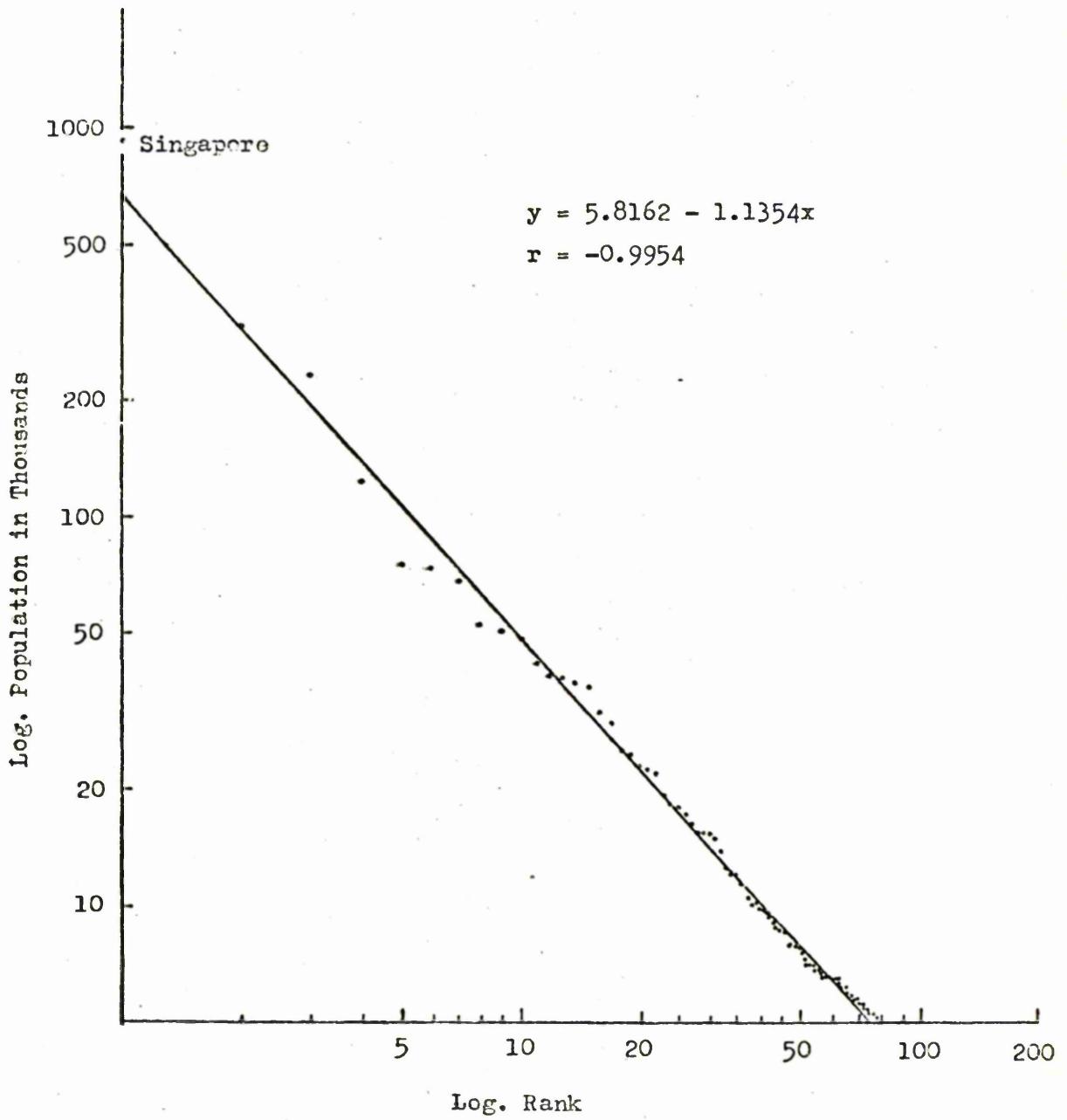


Fig. V.14 Malaya and Singapore: rank-size array of urban centres, 1957.

both George Town and Singapore. This trend will continue provided that the economic prosperity and political stability of the country can be maintained. The influx of large numbers of Malays into Kuala Lumpur is one of the significances of urban development of the city in recent years⁶⁹. Compared with the previous distribution pattern, the Malayan urban network shows an irregular pattern of urban centres in different size categories. But on the whole the trend is towards linearity, that is, towards the rank-size distribution.

Among the Southeast Asian countries, the countries which have a balanced urban system are Indonesia and Malaya. In Indonesia and Malaya the dominance of the great city is not nearly as marked because they are governed by more complex factors⁷⁰. Historically, Djakarta and Singapore have developed no real primate city in terms of being the sole centre for political, economic and commercial activities as Bangkok does for Thailand or Manila for the Philippines. Singapore was the largest city in Malaya; but the political division of the peninsula has prevented it developing into a true primate city. Singapore has never served as the capital of the Federation of Malaya but was the headquarters of the former Straits settlement and recently became the capital of the Republic of Singapore. On the other hand, the second largest city, Kuala Lumpur, has long been served as an administrative centre for the Federation of Malaya. Compared with Singapore, Kuala Lumpur is a relatively new town but has developed together with port Swettenham, the main port of the central Malay Peninsula, as the largest city in the peninsula. The coming of the independence for the Federation of Malaya in 1957, then Malaysia in 1963, has increased the importance of Kuala Lumpur not only as a capital city but also a magnet for many rural migrants⁷¹. Estimates of population growth within both cities suggest that Kuala Lumpur, although much smaller, gained from rural-urban migration almost three times as many people as Singapore. Its present rate of

69 Sendut, H. (1966) op. cit., p. 485; McGee, T.G. (1965) op. cit., pp. 7-9.

70 Sendut, H. (1965) *Statistical Distribution of Cities in Malaya*, *Kajian Ekonomi Malaysia*, Vol. 2, pp. 49-66.

71 See Bennett, W.J. (1961) *Kuala Lumpur: A Town of the Equatorial Lowlands*, *Tijdschrift voor Economische en Sociale Geografie*, Vol. 52, pp. 327-33.

growth is great and will continue to grow fairly rapidly in the future. Although the port of Singapore handled most of the Malayan imports and exports, its importance as an entrepot was also shared by Penang and Port-Swettenham. This is partly explained why the primate index among the three largest cities of Malaya is moderate compared with other Southeast Asian countries.

Similar to Singapore, Djakarta, the capital of Indonesia, has not been in a clear position which dominates the whole urban scene. In fact, during the last few decades of the 19th century, the largest city in Java was Surabaya in East Java. Djakarta regained its position as the largest city in the island only after 1920. Surabaya as the most important naval base and commercial port of Indonesia always has a substantial amount of foreign as well as the inter-island trades. Apart from this, it also has some important industrial establishments of the island. Although Djakarta is the capital, some of its administrative functions are shared by Bandung the third largest city and Bogor, famous for its botanical research institute and the presidential palace. Djakarta has developed no real primate city like Bangkok.

As pointed out by P.D. Milone, historically Indonesia has developed more urban centres than many other countries in Southeast Asia, not just for its enormous size but because it has been divided into more administrative units⁷². There are centres created as seats for central as well as local governments on at least five out of the six administrative levels compared with three levels in Thailand and Malaya, four levels in Burma, the Philippines and the Vietnams. In future, Indonesia has more potentialities for balanced growth of city-size distribution than many other countries in Southeast Asia. Its urban development represents a pattern that has been obtained for the country as a whole and whose urban processes are governed by infinitely many random factors instead of selective forces affecting urban growth at all the levels.

72 See Milone, P.D. (1964) Contemporary Urbanization in Indonesia, Asian Survey, Vol. 4, pp. 1000-12; also Milone, P.D. (1966) op. cit., pp. 73-74.

From the above analysis, it is clear that the urban network of most Southeast Asian countries presents a common feature of primacy. The extreme cases of primacy appear in countries like Thailand, the Philippines, South Vietnam, Burma and Cambodia. Their poorly-developed urban hierarchies that lie between the primate city and the villages are both political and economic in origin. Instead of development 'spreading down', the urban size-category and spreading its effects outwards within urban fields, growth is concentrated in the few capital cities. Urbanization in these countries is thus concentrated to a large extent in one principal city. In all these cases the capital itself is bigger than all the other cities with a population of more than 100,000 inhabitants put together. Some may even be that the capital is the only big town. In the case of Thailand, South Vietnam and Cambodia their populations contain as much as 50 per cent of the total urban population of the respective country. And the urban population is thus primarily the population of the primate city. The historical concentration of a high proportion of the urban population in the primate cities has been intensified by the recent heavy influx of rural population into these cities. A trend of increasing dominance for primate cities is apparent in the above-mentioned countries.

As pointed out by Berry ⁷³, primacy is the simplest form of urban hierarchy which was affected by few powerful forces. In fact, the manner in which high primacy is established may be traced historically. The European colonial economic system provided a congenial environment for the rise of primacy ⁷⁴. First of all, under a long period of colonial rule, an export-oriented economy of the region has been established. The rise of the primate city was associated with the port function, by which larger and wealthier overseas hinterlands are tied in with less extensive and poorer national hinterlands. The development of entrepot function in particular has stimulated urban growth of these port-cities far beyond expectation based on size of contiguous hinterlands.

73 Berry, B.J.L. (1961) *City Size Distribution and Economic Development, Economic Development and Cultural Change*, Vol. 9, pp. 582-84.

74 See, for example, Mehta, S.K. (1964) *Some Demographic and Economic Correlates of Primate Cities: A Case for Revaluation*, *Demography*, Vol. 1, pp. 136-47; Berry, B.J.L. (1961) *op. cit.*, p. 582; Hauser, P.M. (1957) *op. cit.*, pp. 8-9.

Export-oriented economy meanwhile tended to create the extremely patchy development. Economic development was largely unplanned. Areas which were exploited were those possessing a high degree of accessibility and those suited to the production of crops which were demanded by the colonial powers. The development was not necessarily related in any ways to local needs. It was a type of economy depended upon and subordinated to the needs from abroad rather than domestic markets. As a result, the unevenness of the development within each country has been accentuated by this type of economic policy. And the nature of colonial economy had the affect of maximising the concentration of wealth in the capital cities ⁷⁵.

Again, most of these countries have always had a tradition of strong central government focussed on the capital. Under a centralized colonial government, almost all of the key administrative areas were located in the capital cities. This cumulative effect of the resulting disproportionate share of central government's attention and investment gave these capital cities the best economic and social infrastructure in the respective countries ⁷⁶. Furthermore, transportation networks, including both rail and road systems, converged with the capital city. Political-economic initiatives combined with the 'all powerful government' under the colonial system often brought an upward shifting of central functions to higher order centres. The growth of the population and of the economy in a few cities has stressed the regional differences of opportunity between cities with very different scales and functions. As a result, it tended to disrupt the development of an integral and balanced urban network.

With independence, the capital cities became the focus of urban development and the unquestioned commercial, financial and cultural centres within their respective countries. The recent development of manufacturing industry, in turn, increased the city's power of attraction for both economic activity and labour. It did little to counteract the deficiencies of early development but tended to concentrate in these few large cities

75 See Linsky, A.S. (1965) Some Generalizations Concerning Primate Cities, Annals of the Association of American Geographers, Vol. 55, pp. 506-13.

76 Fryer, D.W. (1955) op. cit., p. 479.

rather than becoming national in scope. The primate city with its greater opportunities for other than manual hard work, its more diversified economic base and labour structure, greater amenity, no doubt has the greater attraction for the migrants⁷⁷. In the post-independence era, the scope of governmental activities has greatly expanded. This is reflected in the rapid growth of the centralized administrative bureaucracies. And large cities because of their more diversified economies and their existing immigrant populations attract more than their share of new immigrants. All these various activities have a way of reinforcing one another in practice with the result that once such an association became well established it was exceedingly difficult for any urban centre to challenge the supremacy of the primate city. In most countries the pattern was set very early and subsequently never seriously modified. Interestingly enough, the recent modernization of many of these countries has had the effect of strengthening the status of the primate city rather than weakening it⁷⁸.

In the thinly populated country like Laos whose population is too small and scattered to provide an economic base for an urban system. Low income and small demand for urban services and products combined with poor transport systems produce poor urban networks. Most of the rural population are nearly self-sufficient. They provide most of their own food and household goods from local materials. The services they require from the urban centres to any extent are rather limited.

In the Borneo Territories where agriculture is more commercialized rural and urban population have a closer tie. Agricultural specialization means a transfer of processing and manufacturing from the household and village to the urban centre. The rural population, on the other hand, has to purchase a widening range of agricultural and manufacturing products. Thus towns exist to serve administrative and commercial interests within their tributaries. The size of an urban centre depends on the services it performs. In a land where populations are too sparsely populated it is

77 See, for example, Browning, C.E. (1962) Primate Cities and Related Concepts, in F.R. Pitts ed., Urban Systems and Economic Development, Oregon, pp. 16-27; Dwyer, D.J. (1968) op. cit., p. 8; McPhelin, M. (1969) op. cit.,

78 See McGee, T.G. (1964) op. cit., Sendut, H. (1966) op. cit.

difficult for them to support any sizeable cities. When a country's or region's economy is in its early stages of development a few urban centres will probably be enough to serve simple economy⁷⁹. This could apply in countries like Laos and regions like the Borneo Territories.

Urban study, particularly of the aspects of hierarchical organization of settlements, has been found very useful for the purpose of planning. Since not all cities perform all functions and not at the same level, the centrality of a city is considered as a product of the variety and level of function performed by that urban locality. At each level of hierarchy, urban centres are viewed in the light of a typical distribution of central functions and those towns which do not conform to this distribution are considered as having gaps in their central functional structure. It was noted earlier that a town provides central functions for its own people and also for those living in its complementary regions. As a result, how those newly-created towns could be integrated with their complementary regions on one hand and with the higher order towns on the other. It is hoped that the future development through planning with the objective of influencing the present size and distribution of cities so that urban systems would approach a more rational hierarchy.

To sum up, it could be said that the effects of a colonial-export-oriented economic system upon the resulting development of urban hierarchy in the region was strong. The modern market economy of the region is unbalanced, being concentrated in a few large centres, instead of being diffused throughout the entire national territory. This process has culminated in the growth of a number of 'development islands' which are for the most part surrounded by vast areas of subsistence economics. Associated with each of these major 'poles' of development is an urban centre which acts as a major focal point for the effective organization of the regional space-economy. These centres have served in articulating the distributive and collective mechanisms of the economic system. Such urban centres represent a set of nodes which together with the transport and communication networks linking them to form a system of cities.

79 See, for example, Berry, B.J.L. (1961) op. cit., p. 584; Mehta, S.K. (1964) op. cit., pp. 136-37.

Spatially, the basic pattern in the majority of the Southeast Asian countries are more linear than Christaller allowed in his 'central place theory' ⁸⁰. The development of towns and cities in several countries has been more akin to the 'corridors theory' ⁸¹, which postulates that settlements develop essentially along major transportation routes resulting in the formation of linear urban patterns. Such a pattern of 'corridors' in Burma and Malaya, for example, reflects the important role transportation lines have played in the economic development of the above-mentioned countries. The construction of railway lines and later, road, particularly in the ^{last} 100 years, which initially linked inland towns with their ports and then with one another, were followed by the opening up of adjoining areas for commercial agriculture and settlement. With population and economic wealth concentrated in these developed zones along the routes, centres of varying functional importance were established to serve adjoining areas and to take advantage of the transportation facilities. With further economic development away from these 'corridor zones' in the later years a network of subsidiary roads has spread over landscape resulting in a more diffused spatial distribution of towns and cities.

One of the intriguing questions is how much longer the present high primacy pattern will prevail. For countries like Thailand, the Philippines, South Vietnam, Burma and Cambodia, the 'Law of the primate city' in its most extreme form appears to hold and their first-ranking city will probably not be challenged for a long time to come. For some, there is actually a marked tendency towards increased primacy. For countries like Malaya, North Vietnam, on the other hand, there may become increasingly difficult for the first-ranking city to maintain its supremacy over a much greater population in the near future. Another interesting case is Indonesia. Although Indonesia has had many large cities the rate of population of the first-ranking city in recent years is much faster than the second largest city. As a result, the population gap between the two largest cities is widening. It is difficult to pinpoint the factors which would serve to halt the rapid expansion of the primate city. The processes which lead to high primacy through the concentration of activities in the primate city, however,

80 Christaller, W. (1966) op. cit.

81 Whebell, C.F.J. (1969) Corridors: A Theory of Urban Systems, Annals of the Association of American Geographers, Vol. 59, pp. 1-26.

tend to have a sort of snowball effect, which once it develops sufficient momentum, is extremely difficult either to slow down or to change the trends. The existing high level of primacy will be continued in the foreseeable future. This would mean that several super-cities with populations of four to eight millions are going to appear in the near future, probably even before the late seventies.

Whatever the particular pattern of future urban development, there can be little doubt that the region as a whole is well on the route towards further urban development, for the powerful forces which have been put into motion in post-independence years will not easily be reversed. And for most countries in the region, the gap between the largest city and the urban centres of secondary importance stands out as a basic imbalance in the urbanization pattern of Southeast Asia. It is a symptom of immature and imbalanced growth.

CHAPTER VI.PROBLEMS AND PROSPECTS: AN INTEGRATED VIEW

Tomorrow's urban pattern is being formed by today's urban process of growth. In the previous chapters we have discussed the growth pattern of Southeast Asian cities, their causes of development and the pace of urbanization. In retrospect, one may ask, how would the present trend of urbanization affect the future growth of towns and cities in Southeast Asia and what would be the pattern to come? Of course, it is not whether urbanization would continue, but rather the present rapid pace of urban growth would continue? If the answer is definitive then what would be the consequence? Meanwhile, what are the existing problems in the urban areas of the region today, and how should the cities be planned and problems be tackled in order to make them more pleasant places in which to live.

As has been noted before, the conditions under which the urbanization process occurs in Southeast Asia differ substantially from those under which the Western industrial countries experienced their major urban growth.¹ First of all, the rate of urban growth, particularly of the largest cities is much more rapid among Southeast Asian cities than many Western cities in the same stage of development. Although the period of time required for the basic transformation has been continuously reduced in human history. Nevertheless, Western countries took more time for this vital transition than Southeast Asian countries at the present moment is taking place. Western urban society, therefore, had more time and opportunities to adapt themselves gradually to changing conditions. In contrast, many of the largest cities in

1 For summary accounts of urbanization process in western and non-western areas see, for example, Ginsburg, N.S. (1965) Urban Geography and 'Non-Western' Areas, in Hauser, P.M. and L.F. Schnore eds., The Study of Urbanization, New York, pp. 311-46; Hoselitz, B.F. (1962) The Role of Urbanization in Economic Development: Some International Comparisons, in Turner, R. ed., India's Urban Future, Berkeley, pp. 157-81; McGee, T.G. (1971) The Urbanization Process in the Third World, London.

Southeast Asia have achieved their present size in one-fifth to one-tenth the time required for the transformation of Western cities.

Urbanization of Southeast Asia's population is at present rapid. The increasing mobility of the rural population has led to a continuous massive urban population increase. In countries where data is available it is apparent that Southeast Asian urban populations are growing, on average, at about twice the pace of their rural counterparts. Meanwhile, there is every reason to expect that the pace and magnitude of urbanization will increase rather than decrease in the coming decade. While the level of urban growth among Southeast Asian countries differs widely, over time the process of urbanization has become increasingly similar throughout the region.

Secondly, urban growth in Southeast Asia has come more from non-industrial causes than from large-scale industrial development as experienced in the West. In most economically advanced countries in the West, urban growth was the result of positive demands for labour from manufactured sectors, but in Southeast Asia, urban expansion has proceeded from lack of demand in rural areas. The percentage of population engaged in the secondary sector among Southeast Asian countries is much smaller than was the case in Western countries or Japan when they were at a comparable level of urbanization. It is only in a few largest cities that recent industrial development has gradually become a cause of urban growth in Southeast Asia.

In the West, urbanization kept pace with economic development, but in Southeast Asia, urban population growth has, in a way, proceeded faster than their economic growth. This is what some people have termed 'over-urbanization'.² That is, their present rates of industrial and economic development are inadequate to meet the rapid rate of urban population increase. There is also a very important difference for the growth of tertiary sector in cities. In the West, the development of

² On 'over-urbanization' in developing countries see, for example, Svoani, N.V. (1964) The Analysis of 'Over-Urbanization', Economic Development and Cultural Change, Vol. 12, pp.113-22; Davis, K. and Golden, H.H. (1954) Urbanization and the Development of Pre-Industrial Areas, Economic Development and Cultural Change, Vol. 13, pp.6-26; Hauser, P.M. (1957) *op. cit.*, pp.22-23.

the service sector was preceded by a great rise in productivity brought about by an expansion in the manufacturing sector, but in Southeast Asia the expansion in the service sector has preceded rather than followed any growth in manufacturing industries. It is the least productive components, such as petty trading, personal and domestic services that make up a sizeable part of the total of Southeast Asian city population. For some countries public employment has also become one of the main source of absorption of the excess of urban job-seekers. Indeed, the recent rapid urban expansion in Southeast Asia is more a symptom of rural poverty rather than urban prosperity.³

Thirdly, due to their common colonial heritage, most of the countries in Southeast Asia still have strong economic ties with the metropolitan countries rather than developing their own domestic hinterlands, or establishing ties with each other. The economy of the large cities in the past looked to the foreign market where they imported the manufactured goods and where they also sent their exports. Thus, cities in the region were, and still are handicapped by the strong economic ties with the metropolitan countries.⁴ For most countries, economic decolonization has not proceeded at the same pace as with political independence. Cities generally lack industrial development which results in a lack of economic opportunities.

Although political and economic institutions are now undergoing re-organization, the urban system and especially large cities still show abundant evidence of the establishment of their urban pattern in the colonial period. The result is that most Southeast Asian cities today still display urban hierarchies typified by the absence of the regularities. The 'great cities' which were the products of former colonial economic system with heavy concentration of population and resources still dominate the urban network of the respective countries in the region.

The problems facing large Southeast Asian cities today are the

3 See Hoselitz, B.F. (1957) op. cit., pp.44-45; Hauser, P.M. (1957) op. cit., pp.33-35

4 Beckford, G.L.F. (1964) Secular Fluctuations in the Growth of Tropical Agricultural Trade, Economic Development and Cultural Change, Vol. 13, pp 80-94; Higgins, B. (1958) op. cit., pp.74-87.

physical problem of over-crowding and congestion, the economic problem of high proportion of underemployment or unemployment among the city population, and the social problem of imbalanced growth among different sections of the city population. Many of the cities in Southeast Asia lack proper planning. The unprecedented pouring of rural population into cities in the post-war years resulted in the worsening of housing, sanitary and traffic conditions and in the building up of large colonies of very poorly constructed squatters' settlements within the major cities.⁵ For some cities, slums or squatter settlements already shelter one-quarter to one-half of their respective urban populations. For others, the intense physical congestion in the squatter-settlements is approaching a state of crisis.

Many of the migrants came to the city to find a new job and better life, but found neither. The majority of them who arrived with little money cannot afford a fair rent for minimum lodgings. Even when they were lucky enough to obtain a job, food and clothing requirements frequently absorbed a large part of their earnings. For the majority, there is just not enough to provide housing as well even when costs have been kept low. As a result, they tended to live in the squatter-settlements sharing dwellings with their relatives or predecessors who came from the same village or region. As more and more people crowded in, the levels and standards of environment diminished proportionately.

Although many of the largest cities receive a relatively larger share of both public and private investments, the available funds are, very often, far below those required. The municipal authorities are trying to build houses for their residents, there are usually not enough houses to cope with the situation as new migrants kept coming in. Social infrastructural costs are beyond the resource capacity of many a municipal authority in the region.⁶ Besides, peripheral slums or squatter settlements very often are illegal. As a result, no

5 See, for example, Dwyer, D.J. (1964) *The Problem of In-Migration and Squatter Settlement in Asian Cities: Two Case Studies, Manila and Victoria-Kowloon*, Asian Studies, Vol. 2. pp.145-69; Poethig, R.P. (1971) op. cit..

6 See Hoselitz, B.F. (1957) op. cit., pp.48-49; Milone, P.D. (1966) op. cit., p.8.

authority is responsible for providing them with the essential urban services and enforcing sanitary and housing regulations. The most extreme over crowding both in the older part of the cities and in the improvised slums which have sprung up on the few available pieces of vacant land.

Again, traffic congestion is also a matter of concern. The magnitude of the transportation problem is multiplying since the number of private-owned cars is increasing at an extremely rapid rate. The reason for traffic problems is basically that too many people and vehicles are crowded into too little space, without the semblance of transport planning. Most of the cities have grown inheriting old-fashion narrow streets with uncertain width and direction that were never designed to serve the present types and volume of traffic. Indeed, the haphazard historical development of street patterns creates an enormous problem for the installation of all the facilities which form the basic infrastructure of a city. Daily movement of people and goods are carried out under enormous difficulty. Traffic congestion has, thus become a common feature among Southeast Asian cities today.

There is also an undesirable by-product of the rapid urbanization process in Southeast Asia, that is, the transfer of rural unemployment and under-employment to urban high rate of unemployment and underemployment.⁷ As mentioned earlier the rapid influx of rural migrants has not been accompanied by rapid growth of labour-absorbing industry. Although activities related to commerce and administration have been expanding, the number of jobs requiring labour are usually much less than the number of candidates seeking jobs. Indeed, the flow of migrants to large cities is out of proportion to fresh opportunities for stable urban employment. The majority of the large cities in Southeast Asia, having relatively little increase in economic opportunities are housing large numbers of unemployed or under-employed people.

Meanwhile, those countries suffering from excessive urban growth are also those suffering from rural stagnation as well. The

7 For an extended discussion on this topic, see Hauser, P.M. (1957) op. cit., p.74; Myrdal, G. (1968) op. cit., pp.2041-61; also Lewis, W.A. (1967) Unemployment in Developing Countries, The World Today, Vol. 23 pp.13-22

problem for both cities and rural areas is their inefficient use of manpower. As is known, migration is a selective process with the more dynamic members of the rural community going to the cities. Although the supplying of a young and able-bodied population added vitality to the cities, it nevertheless had the effect of drawing away manpower from the vital age groups among the rural population, which in turn, has the effect of lowering productivity in the rural area.⁸

Qualitatively, they are the cream of the rural community. Those who migrate are usually those capable of working. The rural areas are thus deprived of their most productive elements. This may be an important reason why rural areas in Southeast Asia have shown little social and economic advancement. But in cities, this potentially useful source of labour is wasted in uneconomically rewarding jobs, and left struggling with the problems of slum life.

Rural-urban migration and, above all, migration towards the larger cities is the most frequent movement of population in Southeast Asia today. This movement of the population into cities has undoubtedly had an important long-term effect on the future size and growth pattern of the cities. If the current trends of high-rate rural-urban migration continue, it is only a matter of time before most large cities in the region become extremely large. The great cities in the region might be expected to double or even triple themselves within one or two decades. Indeed, some have already reached an unmanageable size⁹ by the local authorities' standards.

Although the present magnitude and composition of migration requires some effective regulation, that is, measures should be introduced to check the rapid inflow of rural population to the cities especially the largest cities, it is, however, not possible to control population movement solely by legislation in the Southeast Asian context. One hopeful step may be the gradual strengthening of alternatives to the inflow

8 See Hoselitz, B.F. (1955) Generative and Parasitic Cities, Economic Development and Cultural Change, Vol. 3, pp.278-94; Sendut, H. (1961) op. cit., pp. 86-88.

9 Wilsher, P. and Righter, R. (1975) The Exploding Cities, London.

into large cities and to diminish the push from poor rural areas. Since internal migration from rural to urban areas is a major factor at the present and in the prospective increase in city populations, programmes planned to keep people in the countryside, or divert them away from the largest cities are important, in dealing with urban problems. In the past, few of the national or municipal planning authorities have taken any concrete steps to tackle both the rural and urban problems as an co-related entity.

In view of the above mentioned conditions existing in the major cities in Southeast Asia, a national effort to tackle those problems is urgently needed. Towns and cities cannot be viewed in isolation from their rural hinterland, nor can urban problems be comprehended without reference to the problems of the rural areas. Solutions to the urban problems are, therefore, not just improvements in the infrastructure of the urban areas but an overall regional or national planning.¹⁰ Since there is such a close indentity of interest between cities and regional planning, there is an urgent necessity to bring together these two fields of planning and view them as part of the same overall planning process. They are used as a means of achieving a more balanced development and distribution of population and resources.

However, the tasks of urban and regional planning in Southeast Asia differ from the Western economically advanced countries. In the western countries, the basic tasks of urban and regional planning are not so much concerned with development as with adjustment and reconciliation. As Western countries are already in the advanced stage of development, their problems are more connected with the use of land¹¹ and the location of employment¹² rather than solely related to development.

10 See, for example, Friedmann, J. (1973) Urbanization, Planning and National Development, Beverley Hills; Kuklinski, A. (1975) Regional Development, Regional policies and Regional Planning, in Kuklinski, A. ed., Regional Disaggregation of National Policies and Plans, The Hague, pp.1-18.

11 Scott Report (1942) Report of the Committee on Land Utilization in Rural Areas, London; Bonetti, E. (1955) Land Utilization and Planning, London.

12 Barlow Report (1940) Report of the Royal Commission on Distribution of Industrial Population, London.

In Southeast Asia, at the present levels of productivity and limited capital, the major tasks are that of allocating resources and manpower for development. In Southeast Asia where resources for development are scarce, it is particularly important to use these resources for maximum beneficial returns. The success or failure of regional and city planning would not only affect the future pattern of urban development but the general well-being of the Southeast Asian peoples.

Plans should include both the short-range practical measures to deal with the existing urban problems and the long-term programme to deal with the very cause of urban explosion. It seems clear that without an overall balanced short-term as well as long-term planning, any effort to tackle the existing problems would be in vain. Short-term measures should be addressed to problems like providing housing, public service and employment opportunities in the largest cities where these problems are more severe. However, in the absence of other growth centres and rural development, the above mentioned programmes, praiseworthy as they are, usually tend to aggravate the whole situation. If the provision of urban facilities, housing and employment opportunities in large cities were successful it would inevitably attract more new migrants which in turn would undo any good that the programmes might obtain. In a region where economy is primarily built on a stagnant and fragile rural sector even a small increase in industrial growth and economic opportunities in cities may cause disproportionate population growth.¹³

Although migration resulting in urbanization appears impossible to control, it would, on a long-term basis, be better to slow the rate of migration by improving the rural economy and employment opportunities in the less favoured regions. Progress that raised the standard of living of rural population would undoubtedly moderate the excessive flow of migrants to the urban areas. For many migrants, a shift to the city is a choice between two evils, the hardship and unfavourable rural conditions rather than stimulated by the clear economic and social benefits in the city. The implementation of rural development and land-

13 See Friedmann, J. and Sullivan, F. (1974) op. cit., p.387

reform is the step that should be taken. Land reform and agricultural improvement could help to retain the population in rural areas.

Although more than four-fifths of the Southeast Asian population still live in rural areas, there is still not enough known about them, their needs or problems. In the past, public investment in the rural sector has seemingly been neglected. Most of the public and private investment capitals were concentrated in the urban sector in support of the needs of economic expansion, without corresponding investments in the rural sector. This has resulted in an increasing social and economic dualism among the two sectors with the former economically more dynamic and progressive while the latter remains more backward and stagnant.

Rural development involves resource development programmes and land reform. The programme of land reform¹⁴ and improvement is pressing, for the outmoded land tenure systems contribute to rural poverty and indebtedness. Under government financial aid, land resources could be increased either by bringing more land under cultivation or by applying new farming techniques, the use of improved seed varieties, control of water through irrigation and flood-control. Programmes are also necessary to encourage non-agricultural activities in rural areas. Cottage and small-scale industries can provide by-employment to the farmers in their idle, off-season periods, but it must be selective. Not all cottage industries would succeed due to more difficulties in organization and marketing.

In recent years, some projects for rural development have been initiated under the government sponsorship, as in the case of Malaysia, in order to provide economic foundations of rural livelihood and improve rural living conditions. In the past, excessive specialization in primary production of a few export crops has brought about a lack of balance in the national economy. Large sections of the population, as

14 See, for instance, Dorner, P. (1972) Land Reform and Economic Development, Harmondsworth, pp.15-37; Brown, J.R. and Lin, S. (1968) eds., Land Reform in Developing Countries, Hartford, pp.27-33; Utrecht, E. (1969) Land Reform, Bulletin of Indonesian Economic Studies, Vo. 5, pp.71-88

well as the government, have to depend for their incomes on the frequent fluctuations in the world market. Thus diversification of crop production and rural economy is urgently needed.

Indeed, any steps taken to improve rural conditions and agricultural productivity would also benefit the cities by providing them with raw materials for the recently established industries, foods for population and markets for the urban products, thus creating more jobs in the cities and raising the overall standard of living in both rural and urban areas. To what extent rural development will put a brake on the city-wards population movement is still hard to predict, since present knowledge concerning the working of the push factors in the rural areas and their relative importance is still limited. However since Southeast Asia is primarily an agricultural region, any national effort to stimulate the rural economy would benefit the majority of the rural population.

Long-term measures should also involve a strategy of deliberate urban growth, a downward decentralizing strategy by increasing growth potentialities in regional centres.¹⁵ What is actually creating urban problems and affecting urban patterns of growth is the way in which the process is taking place and where it is going on. The problem would not be so intense in any country, if it was to take place in a more evenly distributed way, that is, if enough alternative potential centres for development could be established.

Urban policy might be directed towards facilitating or restricting as the case may be, the growth of individual cities or groups of cities. Perhaps the very term 'over-urbanization' serves to create a misleading impression. In Southeast Asia, the writer believes it is

15 See, for example, Brutzkus, E. (1975) Centralized versus Decentralized Pattern of Urbanization in Developing Countries, Economic Development and Cultural Change, Vol. 23, pp.635-52; Boverter, E. (1964) Spatial Organization Theory as a Basic for Regional Planning, Journal of the American Institute of Planners, Vol. 30, pp.90-100; Friedmann, J. (1959) Regional Planning A Problem of Spatial Integration, Papers and Proceedings of the Regional Science Association, Vol. 5, pp.167-79.

rather over-concentration in a few private cities than 'over urbanization'. Fundamentally, the problem must be one of the orderly decentralization of investments and activities. This requires the full support and cooperation of both government and private sectors.

Many will agree, from the national point of view, high primacy has interfered or inhibited the growth of a more balanced urban system and a more equitable spatial distribution of national wealth and economic opportunities.¹⁶ Nonetheless, it is quite dangerous to generalize about high primacy because its consequence will vary according to the nation's stage of economic development and the size of population of a country. Some view primacy as a normal developing process which occurs at the early stages of economic development, the 'take-off' stage of the country. In small and less developed countries, there is no reason why it should not be represented by high primacy.¹⁷ In an early state of economic development in any country, one or two large cities can be more effective than many small towns. Rather than the few skilled personal and capital resources being scattered out in number of small cities, the concentration in the large city helps to accelerate rather than to hinder economic and urban growth because its scarce resources and manpower can be more effectively mobilized. Moreover, each country or region must contain at least one city of sufficient size and diversity in order to accommodate the technology and innovations which are introduced into the country through this 'head-link'. A country like Laos, for example, falls into this category.

But for the larger and economically more advanced countries like the Philippines, Malaysia and Indonesia, for instance, where conditions are different, the same reasoning does not hold. Although

16 Lampard, E.E. (1955) op. cit., p.131; Browning, C.E. (1962) op. cit., pp.16-27

17 See Alonso, W. (1968) Urban and Regional Imbalances in Economic Development, Economic Development and Cultural Change, Vol.17, pp.1-14; McPhelin, H. (1969) op. cit., pp.781-82; Mehta, S.K. (1972) op. cit., pp.145-46.

there are advantages to a considerable degree of concentration of modern activities and investments through saving in scales in large city, the excessive concentration of population, resources and investment in the primate city has become increasingly a negative factor. From the long-term point of view, the concentration they represent may serve to curb the growth of other cities or regions in the respective country. The gathering of skilled personal, professional and facilities in these first-ranking cities may actually reach a point of excess supply while serious deficiencies continue to exist in the lower-ranking cities or regions. Thus the disadvantages of such a high concentration tend increasingly to outweigh the advantages.¹⁸

Excessive concentration also creates such problems as housing shortage, traffic congestion, squatter settlements and steeply rising economic and social costs among others.

Increasingly, decentralization or selective concentration of economic industrial and administrative activities is recognized as an imperative for sound national planning. There are certain advantages for the dispersion of growth poles on a national basis,¹⁹ regardless of whether or not dispersion effectively offsets the negative aspects of the over-concentration of the metropolises. Indeed, economic and social development will be promoted more effectively if the urban population of the region is kept distributed among all cities instead of concentrated in a few primate cities.

Completely new towns planned for decentralization or future growth are not realistic solutions to the overall existing problems.

18 See Watts, K. (1963) Small Town Development in the Asian Tropics: Problems and Possibilities, The Town Planning Review, Vol. 34, pp. 23-24; Hoselitz, B.F. (1955) op. cit., p.294; also Ginsburg, N.S. (1961) op. cit., p.34

19 For some literature on this subject see, for example, Kuklinski, A. (1977). Growth Poles and Growth Centres as Instruments of Modernization in Developing Countries, The Hague; Hermansen, T. et al. (1970) A Review of the Concepts and Theory of Growth Poles and Growth Centres Geneva; Hansen, N.M. (1972) Growth Centers in Regional Economic Development, New York.

They are simply too costly. Few Southeast Asian countries can afford the luxury of subsidizing the development of new towns. The main effort is thus directed towards the strengthening of the existing urban centres of the region so that they can make their contribution towards urbanization and overall development.

However, the development of small cities is costly too. Although locating economic activities in the lower-ranking cities would create a more balanced development, it requires heavy initial investment which Southeast Asian countries in the present stage of economic development can not afford. Few of the small cities in the region have the basic infrastructure for industrial and commercial development. There is also a lack of skilled manpower, market, transport facilities in addition to the developmental atmosphere. Industrial and other financial investment would not stand a better chance of success compared with the larger cities. Any misallocation of funds in a capital-scarce region like Southeast Asia may seriously jeopardise the all-important goal of national development.

Medium-sized cities, on the other hand, have certain advantages over the small cities. Although they do not have the unique advantages of concentration of public and financial institutions, transport and communication facilities, larger market and labour pool as compared with the primate cities. They, at least, provide the necessary cheaper land and sufficiently large local labour and certain ancilliary establishments and services. Since the pattern of industrial development depends among other things on the type and scale of the national infrastructure, it can be expected that decisions relative to the industrial development in the medium-sized cities will have some bearing on their future pattern of growth through the creation of employment opportunities.

With proper planning and investments, these medium-sized cities would become the new growth centres. As many of them are regional cities they can be developed as regional service headquarters and provided with full ranges of central services which will serve to promote ties with lower-ranking cities and surrounding rural areas. The existing regional cities thus provide us with one of the most valuable bases for future economic and industrial development.

In the end, development of the new growth centres, especially those regional cities, may constitute a basis for diverting the migration trend away from the new primate cities, towards the new growth centres. This would give the municipal authorities of the large cities an opportunity to proceed systematically with the improvement of their cities without the hindrance and burden imposed on them by having their populations continually increased by the influx of new migrants.

Meanwhile, the development of secondary cities would spread urbanism and modernization over the country more effectively than just a few of the largest cities.²⁰ It would also bring about a more equitable spatial redistribution of the urban population and economic opportunities. As has been noted before, the general existing urban hierarchy among Southeast Asian countries is characterized by the dominance of a primate city with a relatively large number of small towns and a deficiency of cities of intermediate size. The growth of regional centres would stimulate the development of its hinterland and ultimately could be developed into a more balanced urban hierarchy.

The gradual evolution of a system of cities demands, above all, the filling up of the gap that exists at present between the primate city and the small towns. Traditionally, urban localities have been the centres from which social change has radiated. The growth of the largest city alone is no substitute for many medium-sized cities. The latter can be scattered throughout a country, whereas the former is located in one place. Contact with a market town or regional centre are an almost universal experience of the villagers; contact with the great metropolis is limited and sporadic at best.

Finally, any long-term measure should also include population planning. The rate of future population increase would not only affect the country's economic development, but also affect the future growth pattern of Southeast Asian cities.²¹ The success or failure for solving

20 Berry, B.J.L. (1969) op. cit..

21 See Ness, G. (1963) Population Growth, Economic Development and Development Policies, Journal of Tropical Geography, Vol. 17, pp.116-26.

the existing urban problems partly depend on the population policy, For the present stage of economic development in Southeast Asia, the standard of living both in rural and urban areas, seems to have a better chance of improving if an enlightened policy of family planning is pursued.

Like most developing regions in the world, post-war censuses for most countries in Southeast Asia indicates a distinct upward trend. The only country which shows a sharp downward trend is Singapore. For most Southeast Asian countries the rate of population increase remains extremely high. Contemporary medicine and public health methods which permit startlingly rapid falls in death-rates while birth-rates remain relatively unchanged, result in a rapid population explosion. For Java, for instance, the need for birth control is desperately urgent. Since the region's population is young in terms of age structure, the potential for future growth is great.

In spite of large-scale rural-urban migration, the size of the rural population in most countries is still enormous and the number is increasing fast.²² Consequently, the pressure on the arable land has not been released and it is becoming more difficult for the traditional agricultural systems to support the rising population. Without population planning, even if all the measures to increase agricultural production were put into effect, there would follow a period when the food supply was constantly being outstripped by the continuing growth of population. The agricultural sector will not be capable of absorbing the increased population.

Without population planning, meanwhile, urban population will also continue to increase at a rate surpassing any expansions in employment opportunities and public services in cities. The sheer numbers of new influx of migrants plus the reproduction of the city's population themselves would only worsen the already congested streets, squatter settlements and the overloaded facilities in cities. Unlike the West, urbanization in Southeast Asia has produced a huge aggregate

22 See Murphey, R. (1966) The Urbanization in Asia, Ekistics, Vol. 21, pp.8-17.

of urban population, but which forms only a small proportion of the entire population. While cities expand, the rural population seems nowhere to diminish. Thus any efforts to tackle urban as well as rural problems without successful population planning and population control simply postpone the day of serious crisis.

To sum up, the rate of population growth and the magnitude of rural-urban migration would, undoubtedly, continue to affect future pattern of Southeast Asian cities in the coming years. Meanwhile, the reorientation and diversification of the national economy in some countries would also affect future growth patterns and population concentration. More and more cities in future would look towards their own hinterlands rather than abroad. The growth of cities would become more and more tied to the over-all pattern of national economic development.

Whatever the limitations of cities and their problems, it can hardly be denied that, in the long run, expansion in economic and employment opportunities is greater in cities than in rural areas.²³ The basic urban pattern for the region is now fairly well delineated and the most dynamic growth in future will take place in the agglomerations which are already the leading cities. In continuing urbanization lies the best hope of generating or accelerating the economic development of the region, provided it is planned and guided in a smooth transition. If the past colonial-economic heritage set up the situation that created over-concentration and unbalanced growth, the effects of the future economic and urban development should not be left to chance. If the past experiences of rapid urban growth and its consequences are of any guide, then the projections must be taken seriously by both urban and regional planners.

Over the past 150 years, substantial changes of an economic, social and political nature have swept throughout Southeast Asia and more

23 See, Goh, K.S. (1972) The Economics of Modernization and Other Essays, Singapore, pp. 150-54; Hoselitz, B.F. (1955) *op. cit.*, p.278; Hoselitz, B.F. (1962) *op. cit.*, pp. 163-64.

than ever before cities stand at the heart of these transformations.²⁴ Economic growth takes place in a matrix of urban centres, through which the space-economy of a country is organized. Thus the growth of cities should be considered as a symbol of progress and modernization of Southeast Asia. With more towns over the region, the cultural distance between city and countryside tends to diminish. It increases the opportunities of contacts between the rural population and the modernization that originates or penetrates into the region by way of the cities. In the coming years, there would be continued rapid growth of the urban population in most countries; continued increase in the average size of cities; increase in the numbers of urban centres and consequently a higher density of such urban settlements and a denser network of cities in the region.

24 Redfield, R. and Singer, M.B. (1971) City and Countryside: The Cultural Independence, in Shanin, T. ed., Peasant and Peasant Societies, Harmondsworth, pp.337-65; Friedmann, J. (1961) Cities in Social Transformation, Comparative Studies in Society and History, Vol. 4, pp.86-103; Hoselitz, B.F. (1955) *op. cit.*, p.279.

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