

DISCUSSION PAPER

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THE SPATIAL CONTENT OF BANK URBAN SECTOR WORK

by

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The views presented here are those of the author, and they should not be interpreted as reflecting those of the World Bank.

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Abstract

Based on a review of Bank urban sector and project documents, this paper describes and compares spatial deconcentration policies adopted in several cities with those implemented in the Seoul metropolitan region. It then explores the possibility of applying the analytical framework developed in a research project (RPO 672-58) to evaluate relative efficiencies of alternative industrial location policies in these cities including Bombay, Jakarta, Mexico City, and Cairo.

Other Phase I project papers are:

- UDD-6: Michael P. Murray, "Here, There, Where? A Strategy for Evaluating Industrial Relocation Policies in Korea," December 1982.
- UDD-7: Sang-Chuel Choe and Byung-Nak Song, "An Evaluation of Industrial Location Policies for Urban Deconcentration in the Seoul Region," August 1982.
- UDD-20 Kyu Sik Lee, "Decentralization Trends of Employment Location and Spatial Policies in LDC cities," May 1983.

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I. Introduction

Rapid urbanization in developing countries has produced a heavy concentration of population and economic activity in large urban centers. In order to deal with perceived problems associated with large cities, governments in these countries have initiated various policies aiming to deconcentrate economic activity from the center to outlying areas. Even though such policies with diverse instruments have been implemented with varying degrees of success, their probable impacts have been very little understood. The main objective of an ongoing Bank research study, RPO 672-91, "An Evaluation of Industrial Location Policies for Urban Deconcentration," is to produce analytical capabilities for quantitatively evaluating the efficiency of spatial policies.

In as much as the speed of urbanization and spatial concentration depend upon the changing patterns of location of employment opportunities, the study focuses on policies intended to influence the location patterns of industries. In fact, the majority of deconcentration policy instruments in these countries have dealt with dispersing industries from the center to the periphery within a metropolitan region. RPO 672-91 will test relative efficiencies of alternative policy instruments and assess welfare losses that might result from such policies. An in-depth study is now being conducted for the Seoul metropolitan region where a variety of policy instruments have been implemented.^{1/}

^{1/} For further information, see the research proposal dated July 9, 1982, prepared by URBOR.

Based on a review of Bank urban sector documents available as of December 1, 1982, this paper describes spatial deconcentration policies adopted in several other cities.^{2/} It then explores the possibility of applying in these cities the analytical framework developed in the research project to evaluate the relative efficiencies of alternative industrial location policies.

The urban sector documents reviewed in this paper were selected because they are current and focus on city level issues.^{3/} These papers pertain to Bombay, Cairo, Calcutta, Jakarta, Lagos, Mexico City, Nairobi, and Panama City.^{4/}

1. India: Bombay City Study, by H.C. Richardson and others, December 8, 1981.
2. Metropolitan Cairo Sector Review, by R.C. Wildeman and others, May 14, 1982.
3. Planning in the Calcutta Metropolitan District, by H. C. Richardson, March, 1980; India: First Calcutta Urban Development Project, Project Performance Audit Report by the Operations Evaluation Department, June 30, 1982; India: Appraisal of the Second Calcutta Urban Development Project, by D.B. Cook and others, November 23,

^{2/} In the course of preparing this paper, several Urban Sector staff members contributed background information and materials. The following individuals were especially helpful in supporting research project staff inquiries: Messrs. Fitz Ford, Gian Carlo Guarda, Braz Menezes, Evan Rotner, Michael Walton, and Robert Wildeman. Additionally, URB and URBOR staff offered many valid comments during two Urban seminars held in December, 1982. Messrs. Michael Cohen, George Beier, Harold Dunkerley, Fritz Kahnert, Callisto Madavo, Steve Mayo, Koichi Mera, and Kyu Sik Lee provided useful comments on an earlier draft of the paper.

^{3/} The scope of this paper is limited to current published Bank documents because we are specifically interested in discerning the degree of Bank and local sensitivity to spatial issues as reflected in Bank urban work.

^{4/} Selected maps are included in Annex I.

- 1977; India: Third Calcutta Urban Development Project, Project Brief, by B. Menezes, August 10, 1982.
4. Indonesia: Selected Issues in Spatial Development, by M. Walton and others, May 31, 1982.
 5. Lagos Urban Sector Review Back-to-Office Report, by G. Gattoni, November 20, 1981 and February 25, 1982.
 6. Mexico: Engineering Loan for Metropolitan Deconcentration Studies, Preparation Mission Back-to-Office Report, by G.C. Guarda, December 11, 1981; and Project Brief, by G.C. Guarda, May 6, 1981.
 7. Kenya: Economic Development and Urbanization Policy, by R. Westin and others, July, 1982.
 8. Panama Special Economic Report: Metropolitan Unemployment, by G. Bonnick and others, June 7, 1982.

II. Current Issues in Bank Urban Sector Lending

Over the past decade, the Bank's Urban lending strategy has pursued the broad objective of assisting governments in the development of approaches for the provision of urban services and employment. This objective implied the need to develop "urban" approaches which linked shelter, infrastructure, transport, employment, and social services, thereby improving the efficiency of urban investment on a city-wide basis.^{5/}

In practice, most Bank urban sector work in large cities has focused on the urgent issues of service deficits, institutional failures and budgetary processes. Recently, it has become apparent that increasing the economic

^{5/} See the URBOR report, The Retrospective Review of Urban Operations, World Bank Report Number 3919, April 22, 1982 for a detailed description of the evolution of the Bank's Urban Sector lending strategy.

productivity of cities also requires the strategic planning of infrastructure and capturing economies resulting from locational decisions. The growing interest of borrowers in urban transport to complement shelter and infrastructure investment indicates awareness of the spatial linkages at the city level. Current urban sector work in cities such as Bombay and Mexico City focuses on the strategic planning of infrastructure investment and spatial policies for utilizing the linkages between employment location, residence and transport ^{6/}

RPO 672-91 addresses these intra-metropolitan spatial issues, although more narrowly focusing on employment location. The project will yield analytical tools to quantitatively assess government industrial location policies. The application of these tools and analytical techniques should enhance the quality of Bank policy advice to member governments by strengthening the spatial dimension of Urban Sector work.

In order to incorporate the research approach into operational work, the study proposed the "operations interface" concept whereby research staff would participate in urban sector missions during FY84-FY85. Such interactions are expected to benefit the sector work by increasing an analytical perspective, raising critical policy questions and offering the key parameters to be measured. At the same time, this exercise should provide a ground for testing the applicability and possible limitations of analytical tools

^{6/} This discussion is drawn from Michael Cohen's memo of August 10, 1982 describing the URBOR Work Program for 1983.

developed in the research. It should also help ensure the applicability of the conclusions and recommendations that emerge from the study.^{7/}

Following a review of the spatial content of selected Bank documents, candidate cities for the "operations interface" of the research project are identified.

III. Document Summaries

A. India: Bombay City Study

Summary: This study was done by Professor Harry Richardson for the South Asia Projects Department. The study sets out to assess Bombay's problems and to assign priorities to problems and sectors and particular types of projects. Major findings and recommendations of the study are: the Bombay economy makes a big contribution to Indian development, with 10% of India's manufacturing jobs; the benefits of Bombay's strong economy reach the poor, resulting in Bombay's relatively high per capita income and even income distribution vis-a-vis other major Indian cities; the shelter sector has serious problems deserving greater resource commitments and an increased allocation than current practice; Government officials in Bombay assign the alleviation of congestion in Bombay Island their highest priority, and have pursued the deconcentration of economic activity as the remedy to the problem. This approach is consistent with national decentralization policies, such as the ban on new large- and medium-scale industry in large cities. The authors indicate the narrow pursuit of decentralization may stifle the economic base of the metropolis without being compensated by growth elsewhere, generating a net welfare loss to the nation.

^{7/} See K.S. Lee's memo, "Panel Report on Research Proposal," to the Research Committee, dated September 10, 1982.

Here, we will focus on the many policies followed by regional authorities to decentralize economic activity in Bombay.

Decentralization was first advocated in the Bombay Metropolitan Regional Plan of 1970, which attributed most of the city's ills (traffic congestion, pollution, the poor's inaccessibility to housing and labor markets) to excessive concentration in South Bombay stemming from two sources: manufacturing employment and office employment. The Bombay economy is highly industrialized; manufacturing jobs employ 40% of the labor force. Office employment constitutes at least an additional 20% of total employment in the city. Thus, attempts to alleviate congestion in Bombay concentrate on these two sources of employment.

The decentralization plan most widely accepted by the Bombay Metropolitan Regional Authority is a polycentric spatial structure based on four major centers: South Bombay, Bandra-Kurla, New Bombay, and Kalyan Complex. This is being pursued mainly through direct controls on the location of industry and office activity which reflects the planners' and policy makers' preference for a strategy of direct controls and physical planning tools. Local authorities have instituted a number of policy instruments, such as the industrial location controls embodied in the State's industrial policy developed after 1974, and the use of Floor Space Index controls to attempt to relocate offices.

Chapter 5 in the Bombay City Study is devoted to the issue of planned decentralization and industrial location policies in the Bombay economy. In this chapter, Richardson describes policy instruments in detail.

The State's industrial location policy is based on the division of the Bombay Metropolitan Region (BMR) into four zones, with the extent of restrictions varying across zones. Zone I consists of Bombay Island; Zone II includes the suburbs and extended suburbs of Greater Bombay, plus Thane and Mira; Zone III is the New Bombay area; Zone IV is the rest of the BMR. In Zone I, no new industries are permitted except for service industries and small-scale establishments for which a location in Bombay is considered essential. Existing firms are not permitted to expand. Firms are encouraged to move to Zones III and IV, but are not required to do so unless they pose a threat to public health. Restrictions in Zone II are similar, but limited on-site expansion is permitted. New units and expansions are permitted in designated industrial areas in Zones III and IV. These restrictions are administered by the Maharashtra State Directorate of Industries, which issues certificates for new plants or existing plant expansion.

To a much lesser degree, the industrial location policy is motivated by the idea that the dispersal of industries would reduce pollution in Bombay. Attempts to encourage heavy polluters to relocate out of Bombay, however, have proven to be of limited effectiveness. Instead, environmental controls have been imposed on new industries as a condition for allowing them to establish a plant at a particular location.

There is also a positive component to Bombay's industrial location policy. The Maharashtra Industrial Development Corporation (MIDC) develops and administers designated industrial areas throughout the State. It provides infrastructure in these areas, as well as both serviced sites and worksheds for small firms on industrial estates. The State Industrial and Investment Corporation of Maharashtra (SICOM) was also established to promote industrial development outside greater Bombay in selected growth centers. In an attempt

to generate agglomeration economies, SICOM provides a package of services to entrepreneurs choosing sites in these areas. This package includes an incentive scheme offering capital incentives, sales tax loans, special facilities for small-scale units, rebates on electrical rates and import taxes, and financial support for feasibility studies. Other services include technical assistance in project identification, site selection, seed capital, ten-year loans, contracts with other government departments, and marketing assistance.

Another part of the positive strategy for meeting the objective of deconcentration in Greater Bombay is being pursued at the national level. A national project to develop a satellite port at Nhava-Sheva within the Bombay region has recently gained Government approval and is now underway. It is expected that this port will contribute to the polynuclear regional structure concept upon which New Bombay is based. This results from the generation of as many as 50,000 jobs due to the port. Moreover, the port may trigger a spate of investments outside Greater Bombay and in New Bombay in particular, thus helping to redress a historical imbalance in the spatial distribution of investment within the Bombay Metropolitan Region.

Although manufacturing dominates Bombay's employment structure, the city is also a major business center with a heavy concentration of office employment. A number of instruments have been adopted by local authorities to decentralize office establishments. The Bombay Municipal Corporation combats office concentration in South Bombay with land use controls based on the ratio of useable floor space in a building to lot size. Strict zoning laws limit the creation of new office establishments, but have little effect on existing firms. Since it is accepted that agglomeration economies attract firms to clusters, the Government realizes that the only effective way to relocate

offices out of South Bombay is to persuade a group of major employers to relocate simultaneously. The attractiveness of New Bombay as a major alternative office location is limited, however, due to its lack of adequate transportation, social infrastructure and amenities. Because of these deficiencies, mass relocation to New Bombay is likely to be achieved only by Government intervention. Yet, while the public sector is an obvious source of office employment suitable for relocation, the Government has moved only 1,500 State jobs to New Bombay. This emphasizes the fact that despite the Government's desire to decentralize all large cities, other considerations interfere with the implementation of the requisite actions. In another example, the 1978-83 National Five Year Plan recommended a ban on office developments in all major cities to spur decentralization. This ban was never adopted, having been rejected as politically unfeasible.

It is Richardson's concern that these and other policy instruments pose a significant threat to the economic well-being of Bombay by impeding the efficiency of the urban economy. He recommends that urban policymakers in Bombay strive to develop a decentralization strategy which relies more heavily on market mechanisms to encourage decentralization through market forces.

Links to RPO 672-91:

This brief review of industrial and office location policies in Bombay reveals that Bombay and Seoul share similar policy objectives and instruments with respect to the location of economic activity. Bombay is a city which lends itself to an application of the analytical methods used in the research project. Local urban policymakers in Bombay have adopted a number of positive and negative incentives to control office and industrial location; they may welcome a Bank evaluation of their relative costs and

efficiencies. This, in turn, might eventually lead to a reassessment of government policies.

B. Metropolitan Cairo Sector Review

Summary: This review of the Cairo urban sector, prepared under the direction of Mr. Robert Wildeman (EMP), sets out to assess Metropolitan Cairo's problems and to develop a strategic framework for policy recommendations. The report touches on all aspects of the area's urban development: institutional framework at the national and metropolitan level; demographic and geographic constraints to development; employment and investment development policies; current housing and infrastructure policy; resource availability. It concludes with recommendations for Cairo urban managers and Bank involvement.

The review finds that urban management in Metropolitan Cairo has been piecemeal in the face of unanticipated urban growth, focusing on the installation of physical infrastructure without provision for ongoing maintenance. It presents a number of recommendations which imply the need to investigate new policies of urban management, including issues of the urban poor; links between shelter, infrastructure, transport, employment, and social service to improve the efficiency of investment on a metropolitan-wide basis; and shifting the burden of urban development to the private sector.

The study begins with a descriptive account of the area's urban development. Cairo is the most important social, educational, cultural, manufacturing and commercial center in Egypt. It is the home of the national government and the Egyptian financial community. Cairo has a population of more than 9 million; these inhabitants are crammed into the area at the widening of the delta of the Nile, with a population density of 1,000 persons

per km². Moreover, Cairo is experiencing an annual growth rate of 3.3% compared to a growth rate of 1.6% in the rural areas. About two thirds of this growth is attributable to high fertility rates (the average number of children born to Egyptian women is 6.4); the remaining one third is due to rural-to-urban migration. This migration has occurred because rural population growth has outstripped rural job creation, while at the same time employment in the Cairo Metropolitan area has grown. Much of this employment has been in the manufacturing sector; for the period 1960-1976, the growth rate of manufacturing jobs in Cairo, 5.9 percent, far exceeded overall employment growth in Cairo of 2.9%, and the national rate of job creation of 1.8 percent. Currently, Cairo has more than 40% of the nation's total manufacturing jobs, and about 50% of all employment.

The historic importance of the manufacturing sector in Metropolitan Cairo has been attributed to market size, accessibility to infrastructure and services, and a wide range of human resources and skills. In addition to the concentration of existing capital stock, commerce, government, and tourism in Cairo, the city attracts industry because alternative industrial sites are limited. Although the authors offer no supporting analysis, they submit "the existing incentives (cheap land, tax breaks, etc.) for industries to locate outside the Greater Cairo Economic Region are costly to the government in terms of lost revenues, and in any case, probably insufficient to incite a large-scale shift in location investment." (p. 45). Therefore, the authors conclude that the dominance of Cairo will continue to attract manufacturing firms, jobs, and rural-urban migrants in the future.

As a result of intense population pressure created by both migration and reproduction coupled with government policies concerning agricultural rent, price controls and taxation, the densely inhabited area is increasingly

expanding into the arable land in the delta to Cairo's north and west, which is surrounded by infertile desert. This encroachment is a serious threat to Egypt's scarce supply of cultivable land and has received attention at the national level. While limiting the growth of the urban complex has long been a stated national policy objective, recent measures to redirect growth to the infertile fringes of the urban area or to the desert proper have been pursued by both local and national authorities.

The Egyptians have used five basic instruments to achieve their objective: 1) identification and promotion of satellite towns; 2) creation of "new towns"; 3) transportation projects to increase the accessibility of fringe areas; 4) land use controls; 5) relocation orders. The first three incentives are closely related positive measures which have been pursued vigorously. The last two are negative instruments which have been applied or enforced to a limited extent.

The desert settlement policy was established in 1968 to facilitate the reconstruction of the Suez Canal Zone and to relieve urban pressures on Cairo by constructing three growth poles, 6th of October, El Abour, and El Amal, within 30 km of Cairo. These self-contained communities within the economic orbit of Cairo are referred to as "satellite" towns. They are to be situated along the desert roads to draw development away from agricultural land. The satellite towns will be linked to a new regional transportation network project, and outer ring road surrounding Cairo. The towns will be outside the beltway, but will be connected to it by limited access highway connections.

The satellite towns are being promoted primarily through Government investment in infrastructure. Another feature of their promotion is the tax treatment of firms choosing to locate there; the firms are exempted from all

taxes including income and land taxes for a period of several years. These measures to attract firms to the satellite towns have not been successful: only small numbers of firms have established plants there. Of these, many have set up small plants solely for the purpose of acquiring land for speculation.

A separate component of the original desert settlement policy endorsed the creation of two new communities, Sadat City and 10th of Ramadan, at some distance from Cairo. Many Egyptians regard the New Towns policy with skepticism. It is feared the New Towns can not compete with the attractions of Cairo, and that the high capital costs associated with their development will overwhelm their potential benefits.

Another instrument of the agricultural land preservation policy is planned land use. Unfortunately, there is little evidence that land use controls are working; estimates indicate that about 1% of national agricultural land is being lost annually. There are not only losses of land to formal and informal housing, roads and commerce, but also indirect losses to speculative ownership transfers, cessation of prime agricultural activity, and the practice of stripping topsoil for brickmaking. Agricultural land continues to be attractive to private informal developers because of its access to Cairo. Enforcement of land use controls has been foiled by the sheer number of transactions.

The least-used decentralization instrument is the issuance of relocation orders. Though not documented in the report, a conversation with Mr. Wildeman revealed only one establishment has been ordered to leave Cairo. The establishment was a Ford Motors assembly plant which employed a large number of skilled Cairenes. Upon receipt of the order, Ford determined that an alternate site would not be cost-effective and began to dismantle the

plant. When faced with the prospect of losing a major employer, authorities revoked the order.

In contrast to the Egyptian policy instruments, the Bank's recommended strategy to minimize urban encroachment on agricultural land and to maximize development of desert fringe areas involves the establishment of a metropolitan land delivery agency. By solving the problems of fragmentation of land ownership, lack of coordination in land development, and rapid destruction of agricultural land, the agency would facilitate the process for new land to be released quickly, serviced and built upon. The report concludes this land must be made available on a large enough scale to accommodate projected residential, commercial, and industrial growth.

Links to RPO 672-91:

The Cairo Urban Sector Review includes a discussion of the spatial dimension of urban development in Cairo. The study predicts that, despite various Government efforts to decentralize economic activity, the primacy and growth of Cairo will continue.

The Egyptians' concerns are clearly related to those which we are examining in Korea. The national and local authorities are vigorously pursuing their objective of decentralization with both positive and negative incentives. The true costs of these incentives are not known, but given their limited impact it is likely that the costs are excessive. Because our methodology attempts to measure these costs, authorities in Egypt may welcome an application of our analytical framework to Cairo. Moreover, through our general experience and knowledge of this field, we may be able to suggest more appropriate (cost-effective) incentives, at least to induce use of infrastructure already in place.

C. Planning in the Calcutta Metropolitan District; Project Performance
Audit Report of the First Calcutta Urban Development Report; Appraisal
of the Second Calcutta Urban Development Project; Third Calcutta Urban
Development Project Brief

Summary: These four documents describe economic performance in Calcutta and trace IDA's continuing effects in assisting the Government of West Bengal (GOWB) with urban development in the State.

The Calcutta Metropolitan District (CMD) is the largest metropolis in India, with a 1981 population of about 10 million. Of these, about 2.8 million are employed in the formal sector; 1.0 million are in manufacturing, another 1.2 million are in services. The major manufacturing industries in the CMD are jute and jute products, cotton, paper, automobile products, chemicals and pharmaceuticals, machine tools, agri-business products, and engineering products such as railroad cars, textile and sewing machinery.

These traditional industries have gradually become so weak that they have been taken over by the State government. At the same time, Calcutta has suffered problems of power shortages, raw material limitations, capital shortages, labor problems and chronic excess capacity. The weak industrial structure and concurrent factor shortages have produced a stagnant economic base in Calcutta; industrial production in the State of West Bengal in 1977 remained 10 percent below the level of 1965. No major new industries have been established in Calcutta in recent years and net immigration has virtually disappeared.

Prospects for industrial revival in Calcutta are lessened further by recent national policies, such as the 1977 ban on new or expanded large- and medium-scale industry in large cities. In addition, the Union Ministry of

Industry has directed State governments to discourage the growth of small-scale industries in large cities. The ban has not yet been a constraint in Calcutta, since few firms have been interested in opening or expanding plants there in recent years. The continuation of the ban, however, may handicap efforts to revive the Calcutta industrial base.

In 1978, the GOWB introduced an industrial incentives scheme for promoting new industry and facilitating the expansion of existing industries in the State. Although GOWB offers higher incentives for "backward areas" than those within the CMD, there remain irreconcilable contradictions between this scheme and national industrial location policy. The specific incentives offered included subsidies towards additional employment, tax rebates, financial support, and subsidies for power generation.

In 1979, the Calcutta Metropolitan Development Authority (CMDA) formally endorsed a polycentric strategy of spatial distribution of population and economic activity within the CMD. Implementation of the polycentric strategy requires substantial infrastructure investments in many of the 22 satellite subcenters proposed in the plan. The investments, New Area Development Plans (NADPs), currently account for about 7% of total CMDA investments. CMDA recommends this share be increased to 10 percent.

Richardson doubts whether physical planning and industrial infrastructure can stimulate industrial development, when market forces and incentives have failed to achieve that result. He adds since Calcutta is a steady-state economy, ambitious spatial extensions such as the New Areas of Development (NADs) are not supported; Calcutta is growing so slowly that pressures for subcentering are very weak. Richardson concludes by noting Calcutta faces a severe risk of wasting public investments by promoting subcenters in advance of the market. Given the scarcity of capital resources

in Calcutta, such a risk is not easily justified; instead, offers Richardson, major public service deficiencies in an around the core should be rectified.

The objective of Bank Group lending in Calcutta has been to improve the delivery of urban services, infrastructure and land, while incorporating both State and National policy objectives. Searching for low-cost solutions and meeting minimum service standards are recurring themes in the Bank's Urban Sector work in Calcutta.

The First Calcutta Urban Development Project (CUDP I) was the first Bank lending operation to support a metropolitan-wide general development program. The project was designed to meet several goals: 1) to improve Calcutta's physical environment; 2) to initiate a "series" of projects over time; 3) to support a new kind of urban development institution, the Calcutta Metropolitan Development Authority (CMDA) which was created to act as an area-wide authority charged with planning, design and construction of infrastructure in the CMD; 4) to strengthen the planning and execution of the investment program; 5) to develop measures to improve the operation and financing of services; and 6) to support a broad program of public works.

CUDP I included 44 sub-projects in 6 sectors. These urban works stressed infrastructure to meet urgent needs in the metro core; the projects expanded the supply and distribution of potable water, improved drainage, sanitation and environment, particularly in slum areas and improved facilities for traffic in critical points.

The Second Calcutta Urban Development Project (CUDP II) expanded on the components included in the first project and placed a greater emphasis on operations and maintenance. In addition to the provision of shelter, infrastructure, solid waste management and technical assistance, it included

school and health care facility construction, credit for small businesses to promote employment opportunities, traffic engineering, strategic land management improvement and urban renewal projects.

By the inclusion of its component for the financial support of small businesses, the second project echoed the national objective of promoting small-scale enterprises. Based on the 1971 Indian census, one-third of those employed in manufacturing were employed in small-scale enterprises (having fewer than four employees) in the informal sector. These small firms provide employment to the lowest income groups in Calcutta and are labor-intensive. They tend to be profitable but suffer from a lack of working capital. Because of these features, the Government of India has adopted several policy measures to support small-scale enterprises. These measures include rights of exclusive manufacture to protect from larger competitors, licensing exemptions, subsidized credit, looser import restrictions, Government price supports and technical assistance.

Through the creation of employment opportunities for small-scale enterprises, CUDP II sought to identify affordable project designs for developing new areas in accordance with the government's policy of spatial decentralization. These small businesses are not appropriate targets for relocation, but are being promoted locally through limited positive instruments such as credit, technical assistance and serviced sites.

The second project also acknowledged CMDA's polycentric strategy of balanced distribution of population and employment in the sites and services component of the project, which selected two sites within 8 km of the CBD for development including: residential lots and rental units; industrial and commercial plots and facilities focusing on the needs of small-scale enterprises; community facilities and trunk infrastructure.

Another sub-component consisted of the redevelopment of the Howrah Fish and Pan Markets to eliminate unsanitary conditions and create direct and indirect employment opportunities in this prime location.

The proposed Third Calcutta Urban Development Project (CUDP III) aims to promote urban productivity by making the city an efficient setting for economic activity. It is intended to improve regional economic growth, to provide specialized services and to improve the effectiveness of government. The project will address matters of taxation, land values and tenure, land use controls, maintenance and operation of infrastructure, urban planning and increased emphasis on the roles of municipalities.

The increased reliance on local government stems from GOWB's plan to decentralize government. CMDA is scheduled to shift from a public-works agency to a planning, financing and coordinating body. In the past, CMDA had been criticized for concentrating resources in Calcutta City and Howrah, where most of the prior investment in urban infrastructure had been. As a result, outlying municipalities received few resources and limited experience in managing public works. The third project will support CMDA's new charter of strengthening other governmental institutions by focusing on the 37 municipalities outside the Calcutta and Howrah Corporations. In particular, CUDP III aims to improve the management of urban investments at the municipal level.

Another goal of CUDP III is the unification of metropolitan-wide policy. Currently, several conflicting policies and instruments coexist. By strengthening and clarifying institutional responsibilities, CUDP III will yield consistent urban policy.

Links to RPO 672-91:

While State Government officials in West Bengal express some interest in promoting the deconcentration of economic activity throughout the State, Calcutta does not appear to be suitable for an application of our research methodology. Although CMDA coordinates the regional investment program and articulates a broad array of regional development policies, their implementation has not been effective. To date, most successful metropolitan development activity has focused on the provision and operation of infrastructure, meeting basic human needs, and technical assistance rather than policy instruments to alter patterns of industrial location.

The latest State of West Bengal policy objective is the improvement of urban efficiency. State Government officials, along with the CMDA and local authorities are continuing to identify and proceed with infrastructure projects to meet this goal. At this time, these projects are their highest priority. Perhaps later, when urban institutions are in a position to consider pursuing coordinated schemes of industrial location, an application of our methodology might be in order.

D. Indonesia: Selected Issues in Spatial Development

Summary: This issues paper was prepared by the East Asia and Pacific Country Programs Department under the guidance of Mike Walton for the purpose of introducing issues proposed for detailed study. In the paper, Mr. Walton lays out the framework for the research without mentioning specific incentives.

The proposed work will have three parts. The first part provides the basic descriptive information for analysis of economic issues in a spatial

framework including regional variation in income, prices, natural resources, infrastructure, commercial services and public expenditures. Notably the sheer size of the country and its archipelago geographic structure are the basis for analyzing Indonesian economic development from a spatial perspective. In the second part, key issues of interregional relationships are analyzed, including industrial location. These tie into the Government's interest in balanced regional development. The third part explores the fiscal policy framework and the regional planning apparatus, again linking with stated Governmental priorities.

In his discussion of the industrial location component of the research, Walton notes that "manufacturing contributes significantly to the long-run growth of Indonesia. Clearly, the location of establishments is a critical determinant of regional development. Location decisions have a multiplicative effect since manufacturing is a sector characterized by agglomeration economies which tend to foster high concentrations of location. Firm location decisions are determined by a number of complex factors, such as access to infrastructure, information flows, trading channels, factor prices, access to government and tax or regulatory policy." The author states that even if one knows how to influence location it is not clear what the broad objectives for government location policy should be. For example, there are arguments both for and against continued concentration in urban Java. On one hand, the concentration of economic activity and population in urban Java generates low wages, employment and agglomeration economies. On the other hand, dispersion to the Outer Islands may also bring cost-saving advantages through proximity to natural resources.

The proposed work in FY83 will focus on gathering available descriptive information and on clarifying government policies influencing

location. Data sources will include information on location of approved new investment and industry surveys, with initial emphasis on large- and medium-scale manufacturing. The FY83 effort will link up with the ongoing research project, "A Statistical Analysis of the Efficiency of the Indonesian Manufacturing Sector," being conducted by Professor Mark Pitt at the University of Minnesota. His study will evaluate the variations in efficiency at the firm level, distinguishing firm location by province and whether it is urban or rural.

Mr. Walton offers three candidate areas for further study in FY84 (p. 15): 1) an analysis of government policies which could lead to the identification of existing distortions in the incentive framework such as investment licensing and credit restrictions or other discretionary factors that are causing "excessive" spatial concentration of industry or other problems associated with location. This would support an even more detailed examination of the policy environment for location decisions of private firms; 2) analyze the validity of the objective of favoring underdeveloped regions. If a review of government policy reveals that this is an appropriate and important objective, the research strategy would include an examination of the costs and effective of instruments to achieve decentralization of manufacturing, accepting the policy objective as given and, 3) examine the complementarities between investment in associated producing sectors and infrastructure, and on external benefits of location in both developed and underdeveloped area.

Mr. Walton justifies the study as supporting Bank project work in all sectors involving locational decisions including agriculture, industry, social sectors, and economic infrastructure.

Links to RPO 672-91:

The Indonesian Government is interested in promoting balanced interregional spatial development. In particular, it seeks the growth of labor-intensive industries to expand employment opportunities throughout the nation. Currently, this objective is being impeded by industrial incentives whose effects on industry are not fully understood by Government policy-makers. The ongoing research by Professor Pitt and the future research proposed by Mike Walton will systematically analyze these various instruments. Once they are known, and their effects measured, we will be in a better position to determine whether Jakarta is an appropriate city for an application of the analytical framework being developed under RPO 672-91. While Indonesian development policy incorporates spatial considerations, their focus is on interregional issues. A decision regarding the appropriateness of an inclusion of Jakarta should be made only after gaining more information on industrial incentives and their locational-inducement content.

E. Lagos Urban Sector Review

Summary: The Lagos Urban Sector Review is being prepared at this time, with the white cover draft expected in 1983. Two back-to-office reports were prepared by Mr. George Gattoni (WAP) and others to present preliminary findings in Lagos. These reports identify the critical subsectors in Metropolitan Lagos as Drainage and Solid Waste Management, Area Upgrading and Urban Transport, and recommend that the first Bank project in Lagos be for Solid Waste Management and Storm Drain Cleaning.

These documents convey the notion that Lagos is relatively inexperienced in dealing with problems related to rapid urban growth. These

problems are exacerbated by the city's sheer size, physical environment and complexity. The Lagos State Government has recently begun to actively address these problems and play a significant role in their management.

Links to RPO 672-91:

As a consequence of Lagos' relatively recent emergence, there are many high priority problems of a basic nature in the city, such as the need for expanding urban investment and maintenance activities. Issues such as industrial location patterns within the city have been discounted by Bank staff in lieu of more pressing matters of physical infrastructure and land development for housing. The back-to-office reports make no reference to spatial or industrial issues.

Thus, Lagos is not an appropriate city for an application of the research methodology. According to the Bank reports reviewed, the spatial distribution of industry is not currently a critical issue within Lagos metropolitan region.^{8/}

F. Mexico Engineering Loan for Metropolitan Deconcentration Studies

Summary: The project brief prepared by Mr. Gian Carlo Guarda presents a discussion of sector development issues, objectives and development strategy in Mexico City, thus providing the context for this loan, which includes demand, planning and engineering studies of a proposed highway scheme intended to promote urban growth in a decentralized pattern.

^{8/} The Nigerian government has recently placed considerable emphasis on the objective of widely dispersing industrial activities to relieve urban congestion and to develop strong regional economic bases throughout the Federation. This interregional focus is beyond the scope of the research project.

The current Mexican administration has adopted an explicit policy of spatial development with the intent of restraining the settlement of additional population and industry in the central conurbation. The report notes that congestion is already producing some centrifugal tendencies of economic activity, which is dispersing throughout the region. These natural tendencies have been augmented by extraordinary incentives introduced in 1978 to promote industrial deconcentration. These incentives are documented in Mr. Ian Scott's book, Urban and Spatial Development in Mexico. The book mentions several Government policy instruments applied toward the goal of urban deconcentration. They include positive incentives to firms locating beyond the metropolitan center such as: 1) reductions of 50 to 100 percent in import duties, income, sales, stamp, and capital gains taxes; 2) favorable accounting practices such as accelerated depreciation; 3) subsidized interest rates on credit; 4) provision and promotion of industrial estates; 5) provision of infrastructure, community facilities and shelter to support the establishment of new economic activities in peripheral areas; and 6) projects to improve access to areas slated for development as alternative sites.

The Libramiento Norte is a highway project which represents the desire of the Mexicans to achieve deconcentration by improving regional accessibility to exploit both raw materials and distributive activities, acknowledging their impact on location as the critical factor in shaping future urban growth. The Bank's involvement with Mexican authorities on this loan is to undertake a group of studies on deconcentration in Mexico City to justify the proposed investment. One topic proposed for in-depth study is the impact of the new highway on industrial location in the region.

Links to RPO 672-91:

The strategy of the Central Conurbation Commission is to contain population movements from the periphery to the center by strengthening the economic base of outlying urban areas and promoting establishment of manufacturing in outlying communities. Many positive policy instruments are used in attempts to achieve this spatial distribution. Officials in Mexico and Korea share many similarities with respect to their approaches to urban development: in both nations, policies have been adopted to direct industrial firms away from the central city.

Discussions with Mr. Guarda indicate his support for the inclusion of Mexico City under RPO 627-91. He believes that an application of research methodologies to the Mexico City case promises to provide useful insights to the relative values of alternative policy instruments. Such feedback in FY83 would be timely since the loan has been approved and the Bank is proceeding to define research tasks for the deconcentration studies.

G. Nairobi, Kenya: Economic Development and Urbanization Policy

Summary: This report was prepared under the direction of Mr. Richard Westin, EAP. It provides a comprehensive review of the urban sector in Kenya including a brief description of population; income and employment trends; policies; institutions; and finance.

The single most significant finding of the report is that Kenyan urbanization has been characterized by the diversification of urban growth into secondary towns and throughout different regions. This spatial distribution has emerged in large part from Kenya's long agricultural history which produced settlement patterns consisting of separated farms with small centers established as trading points. The continued strong rural-urban

linkages in the economy have focused migration into the secondary towns. Moreover, the Government has adopted a neutral strategy toward rural-urban income distribution, thereby preventing a massive shift in migration to the largest cities. One feature of national fiscal policy which acts to limit the growth of the largest cities is that the Government has allocated urban investment funds for basic infrastructure according to population share, thereby preserving the various cities' relative attractiveness.

Despite the role of secondary towns, Nairobi is expected to double or triple in size over the next two decades. This increase is due to the natural rate of population growth in Kenya as well as Nairobi's continued dominance in as the main business center in Kenya.

Nairobi leads the nation in concentration of modern sector activities, accounting for 56% of national urban wage employment in 1978. The industrial breakdown of wage employment shows that almost all industries have high concentrations in Nairobi, with construction and business services being particularly concentrated there. Manufacturing, however, shows the least relative concentration in the two largest Kenyan cities, Mombasa and Nairobi, and the highest share of employment in major secondary towns. This pattern may be the result of Government initiatives to decentralize manufacturing out of Nairobi and Mombasa, or it may simply reflect various locational advantages for resource-based industries. Government initiatives adopted to spur decentralization of economic activity are articulated in the National Development Plan, which identifies three methods by which the Government will spur urban decentralization. First, interregional government investment will reflect spatial priorities. Second, investment allowances will be available in a larger number of urban centers outside Nairobi and Mombasa. Finally, Rural Industrial Development Centers (RIDCs) will be used to promote small

businesses and industries. In fact, investment allowances are tax reductions on future profits and are considered weak incentives. The authors argue that since small-scale industries are most likely to relocate to secondary towns, and since they would receive little benefit from the investment allowances, development of RIDC's to promote business through technical assistance, serviced sites, machinery and credit will likely induce more firm relocation.

In the future, the dispersed pattern of urban growth will be further strengthened by Government trade policies, shifting emphasis from capital intensive import-substitution goods which are produced by large capital-intensive industries tending to locate near major urban centers to export-oriented goods. The export-oriented goods will likely be produced in secondary towns as industries and services locate closer to Kenya's agricultural resources which occur throughout the nation, hence yielding a dispersed distribution of economic activity. The disincentives for capital-intensive products will also encourage industry to become more cost-efficient and labor intensive.

These economic factors and policy incentives produce a decentralized pattern of economic activity throughout Kenya which cannot effectively be managed by centralized control. Instead, the authors advocate the development of local initiatives and implementation capacities and financial resources linked to an appropriate institutional structure at the level of central Government. These institutions, including the Local Government Loans Authority and a Housing Finance Institution, would allow the development of a programmatic urban investment capacity of Kenya allowing local Kenyan institutions to take over increasing responsibility for identification, implementation and supervision of investment projects.

Links to RPO 672-91:

Based on the multi-polar nature of urbanization in Kenya and due to the moderate growth of Nairobi, the authors conclude that urban growth patterns in Kenya are satisfactory and no additional focus on spatial growth is necessary. Furthermore, Kenya's trade policy will continue to reinforce the diversified pattern of urban growth in secondary towns. As a result, Nairobi will not face overwhelming rural-urban migration encountered in other primate cities. Government urban investment policy has effectively promoted multi-polar urban development; these spatial considerations will continue to be dominant in shaping Kenya's urban development. Based on these factors, and the emphasis on interregional industrial location rather than intraregional industrial location, Nairobi is not an appropriate city to study in relation to the present research effort.

H. Panama Special Economic Report: Metropolitan Unemployment

Summary: This report was produced by an economic mission team headed by Mr. Gladstone Bonnick. The report begins with an overview of Panama's recent economic performance which has improved steadily since reversion of the Canal Zone in 1979. In contrast to the increased economic activity, unemployment persists. Indeed, estimates and projections of metropolitan unemployment in the period 1980-1985 range from 15% to 20%.

The main causes of the excessive metropolitan unemployment are rural-urban migration, the small domestic market, and the pro-capital bias inherent in the present system of incentives and labor regulation. For example, incentives such as accelerated depreciation favor the intensive use of capital relative to labor.

Regulation of the labor market has introduced severe penalties and restrictions regarding adjusting numbers of employees during slack periods. The Government also has authority to decree ad hoc pay increases. These and similar measures effectively raise the cost of and reduce the demand for labor. The authors propose that appropriate policy changes, coupled with a public investment program would enhance growth and employment prospects in the 1980's.

The report highlights the tradeoff between maximizing employment creation and avoiding concentration of population and economic activity. The authors state "...[I]n the light of the potential risk which high unemployment poses for the climate of social stability that has been a major positive factor Panama's growth, the creation of employment at a reasonable economic cost should be the overriding priority in development policy for the next few years." (p.11) Assuming the primacy of the employment objectives they go on to explain that since the labor force is relatively immobile, more weight must be given to the residence of workers in locating new employment opportunities and less to the most cost effective location of economic activity. For example, sites incurring lowest transport costs. The authors recommend that Panama's public investment programs provide opportunities where the people are, rather than encouraging them to follow relocated jobs, even if there are economic costs of doing so.

Links to RPO 672-91:

Panama has chosen to concentrate on job creation at the expense of urban concentration of both people and jobs. In contrast to our findings in Seoul, officials in Metropolitan Panama do not share the Koreans' degree of concern with the deconcentration of economic activity. Indeed the Panamanian

employment-creation policy will lead to further concentration in the central conurbation. Most of this employment in Panama will be concentrated in the services and agricultural sectors, which employ 90% of the nation's labor force. Only 10% of the nation's employment is in manufacturing.

IV. Conclusions and Recommendations

This review reveals that officials in many developing countries are concerned with the spatial concentration of economic activity in their largest cities. Typically, industrial incentives are adopted and infrastructure investments made in the hopes that the desired industrial location patterns will emerge. In general, the experiences of countries with such spatial policies have been mixed. Given the uncertainties associated with the true costs and effectiveness of these policies, policymakers would surely benefit from a quantification of the effectiveness of the alternative policy tools available to alter location decisions such as that being developed in RPO 672-91.

Based on this review, four cities appear to be appropriate for considering to undertake the operations interface exercise as proposed in the research project: Bombay, Mexico City, Jakarta and Cairo.^{9/} In addition to having the requisite policy focus on the spatial deconcentration of economic activity, all have adopted a vigorous program of initiatives to achieve their objectives. Furthermore, none of the cities has had unqualified success in the application of the policy instruments. Therefore, government officials are likely to welcome an assessment of the relative costs and effects of alternative instruments.

^{9/} Published data are expected to be available to support analysis in each of these cities.

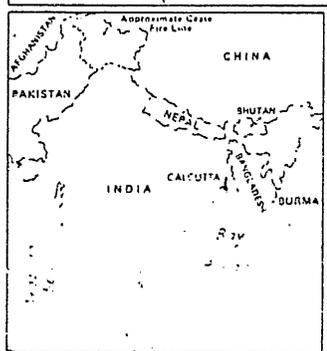
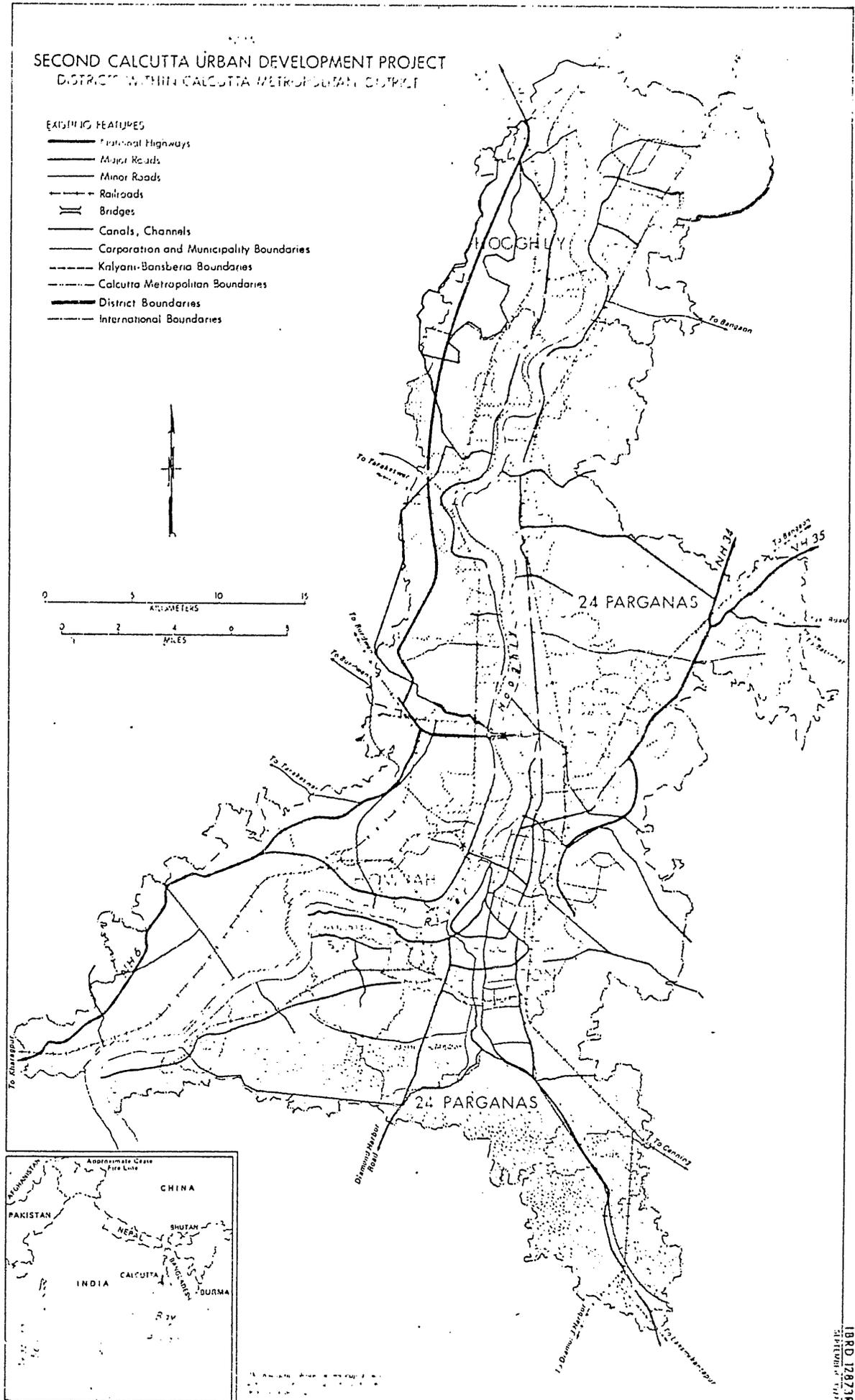
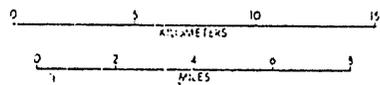
Annex I

Selected Maps

SECOND CALCUTTA URBAN DEVELOPMENT PROJECT
DISTRICT WITHIN CALCUTTA METROPOLITAN CONTROL

EXISTING FEATURES

- National Highways
- Major Roads
- Minor Roads
- Railroads
- Bridges
- Canals, Channels
- Corporation and Municipality Boundaries
- Kalyani-Bansberia Boundaries
- Calcutta Metropolitan Boundaries
- District Boundaries
- International Boundaries



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