MANAGING URBAN INFRASTRUCTURE DEVELOPMENT OF INDONESIAN CITIES USING PUBLIC-PRIVATE PARTNERSHIPS

by

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A PLAN B PAPER

Submitted to

Michigan State University

in partial fulfillment of the requirements

for the degree of

MASTER OF URBAN PLANNING

Urban Planning Program

Fall 1994

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Chapter 1

INTRODUCTION

The Indonesian government is now experiencing an increasingly complex challenge, that of rapid urbanization. The rapid urban growth, caused by people moving from small towns to cities seeking ~~for~~ better jobs and education, creates significant problems for urban development and management. The difficulties include providing sufficient numbers of jobs for a burgeoning urban labor force, extending urban services and infrastructure, and dealing with physical expansion of metropolitan areas.

According to Dennis A. Rondinelli (1991), it was believed that rapid urbanization was inevitable. The unattended issue made Asian governments develop urbanization policies upon a concept of creating a more balanced distribution of urban settlements, population and economic activities. The concept of balance implies a reduction of income and wealth disparities within a country and a prevention of over concentration in megacities in terms of both population and economic activities.

Guidelines for the state policy to implement Indonesia's fourth five-year development plan or *Repelita* IV (1984-1989) stressed that ".....urban development must be planned by giving attention to the harmonious relation of the city and its environment and between the city and its rural hinterland as well as the harmony of city development itself (Padmopranoto, 1987)." There are three reasons underlying the concept of balanced distribution of urban settlements, population, and economic

activities. First, the basis of the idea was rapid growth of urban population and of large metropolitan cities such as Jakarta during the 1960s and 1970s.

A reaction to the physical, economic, and social problems related with huge populations concentrated in one or two areas and national productive capacity that was not evenly distributed among places were the second argument of the theory. Third, another ground of the idea was the growing income inequalities between people living in urban and rural areas. In general, policies regarding more balanced urban development can be classified into two groups: urban and metropolitan growth control policies, and urban diffusion and development policies.

Urban and metropolitan growth control policies were never really implemented; however, partially due to the governments' inconsistent attitudes toward macroeconomic policies and investment strategies. Few governments were willing to state explicitly that the policies and strategies they adopted helped create metropolitan centers, triggering concentration of people in urban areas. Fewer still agreed to change the policies of urban and metropolitan growth control to direct the design of urban development.

Another reason that made urban and growth control policies were rarely implemented was the comparative advantages of some regions. These relative benefits were gained by particular areas from preferential investments during colonial and post-colonial and from macroeconomic policies. The advantages of the

preferential investment and macroeconomic policies reinforced those specific cities' dominance of the settlement system (Dewar, Todes, and Watson, 1986).

Finally, efforts to control the growth were not successful because certain cities continued to perform important economic functions providing economies of scale that contributed to industrialization. The potential roles allow both the cities to attract people looking for jobs and government to build more facilities that made them even more interesting to rural migrants (Dennis A. Rondinelli, 1991). Considering the difficulties in executing growth control policies during the 1980s, governments in Asia started giving greater notice to investing in the services, facilities, and infrastructure necessary to make secondary cities more attractive to rural migrants and private sector investors.

The purpose of these urban diffusion and development policies were to widely spread urbanization by reinforcing the economies of secondary and intermediate urban centers and smaller towns with increased growth potential. According to Rondinelli, the 1990s' urban development policies adopted by Asian government cover five major areas: (1) mobilizing financial resources for investments in services and infrastructure, (2) improving the efficiency of metropolitan areas as economic units, (3) investing in secondary cities and towns with growth potential and integrating urban and rural markets, (4) seeking greater participation of the private sector in urban development, and (5)

decentralizing more administrative and financial responsibilities to local governments in urban areas. Since its establishment in 1985, the Integrated Urban Infrastructure Development Programme (IUIDP), an Indonesian urban development policy, has been evolving through four phases.

Firstly, it was begun with the planning and execution by the government of single sector projects in water supply, sanitation, etc. Secondly, efforts were continued for the partial integration of different sectoral projects into a programme tied together by urban master plans. Thirdly, the programme was fully integrated through the IUIDP of the planning, implementation and operation of key infrastructure sectors (water supply, drainage, sanitation, solid waste, urban roads, the *Kampung* Improvement Programme, market improvement and guided land development).

Greater responsibility for planning, financing, and executing these programs has also been delegated to the local governments. In the fourth phase of the IUIDP, which coincides with Indonesia's fifth five-year plan or *Repelita* V (1989-1994), it is the policy of the Indonesian Government that the private sector play a larger role in the development of urban communities. This constitutes an increased emphasis on private sector participation and on a partnership between the public and the private sectors for providing urban services and infrastructure.

This paper will focus on the fourth issue of the urban development policies in terms of Rondinelli's classification;

seeking greater participation of the private sector in urban development, especially in the infrastructure programmes of Indonesian cities. The purpose of this paper is to discuss both urban infrastructure development programme in Indonesia and to examine the current role of public-private partnership in managing urban development of Indonesian cities. Since this is a new policy within urban Indonesia, this paper will provide recommendations relating to policies and strategies needed to meet the infrastructure development challenges that Indonesia faces, and to improve private sector participation in provisions of Indonesia's urban infrastructure.

The paper is organized into six chapters. Chapter one is an introduction including the thesis statement, or the purpose of this paper. The second chapter briefly discusses about Indonesia in terms of its geographical location, its population, and its cities. Chapter three emphasizes the concept of, implementation of, and financing of the Integrated Urban Infrastructure Development Programme (IUIDP) as an innovative approach to urban management in Indonesia. General rationale for private sector participation, current examples of private sector participation in Indonesia, and problems that impede private sector participation will be the main focus of this paper and are discussed in chapter four.

Chapter five contains recommendations relating to issues of the policies and strategies necessary for meeting the challenges of Indonesian infrastructure development and increasing public

private partnership in the urban infrastructure development programmes. The policies and strategies suggested are focused on promoting efficiency, and expanding infrastructure capacity. Finally, the last chapter ends this paper by briefly reviews the major issues discussed earlier and concisely states conclusions.

Chapter 2

CITIES AND TOWNS IN INDONESIA

The state of Indonesia, officially known as the Republic of Indonesia, has existed since 1945. Located in South East Asia, Indonesia covers an area of almost 2 million square kilometers spread over 14,000 islands, and is populated by more than 185 million people. As the fourth-largest country in the world in terms of area covered or population, Indonesia is not a homogeneous country (Larry R. Ford, 1993). Indonesia's many different cultural groups are reflected in its cities and towns.

Population and Rural-Urban Distribution

According to Aris Ananta and Udi H. Pungut (1992), the population of Indonesia is predicted to increase from 164 million in 1985 to 253.7 million in 2020. Unfortunately, the population is very unevenly distributed over the archipelago. A dominating contrast can be seen between the high population densities of Java and Bali on the one hand, and the sparsely populated outer islands on the other. Java, comprising only seven percent of the country's land area, is occupied by 110 million people, making up 65 % of the total population. The average population density of Java is 690 inhabitants per square kilometer and that of Bali is 444 people per square kilometer (Werner Rutz, 1987).

In contrast, provinces of the outer islands such as North Sumatra, Lampung, Lombok, Sumbawa, and North and South Sulawesi are sparsely inhabited by only 100 people per square kilometer

and Central and East Kalimantan are only occupied by 6 persons per square kilometer. There are two primary reasons for the denser populations in Java and Bali. First, the central government was not willing to distribute autonomy to local governments. The policy made the political and economic system were centralized in Jakarta, the capital city. Consequently, the densities of Java and Bali were motivated by these centralized political and economic system. Second, macroeconomic policies and investment strategies focused primarily on cities in Java and Bali made these two islands were more populated than other regions.

Increasing urbanization and improved transport infrastructure in big cities on Java make the population distribution over the country even more unequal. People seeking the urban labor market and other facilities contribute to the significant increase in the populations living in urban areas. It is projected that the percentage of the Indonesian population residing in urban cities will grow from 25.4 per cent in 1985 to 52.2 per cent in 2020 (Ananta and Pungut, 1992).

A study of the 1990 population census showed that in 1992, Indonesia had seven areas exceeding a population of one million people and twenty-two cities comprised of more than 250,000 inhabitants (Ford, 1993). Yet, most people are still living in *desas*, a collection of villages identified as *kampungs*, informally developed residential areas which are administered from the provincial or higher level of authority.

The regional variations in population density has already had an impact on the urban system: the development and the distribution of its cities and towns, requiring coordination of urban management implementation.

A Model of Indonesian City Structure

Indonesian cities and towns have been shaped by different cultural groups during the latter half of the first millennium (Werner Rutz, 1987). Indian-Hindu culture, pre-Hindu Malayan tradition, and China's style marked the urban structure of the earliest towns in the country. During the 17th century, the colonial period of the Portuguese, Spanish, and Dutch coming from Europe added another structural element to the towns. The characteristics are still found in buildings such as upper-class residential areas and bungalows. It was followed by the age of the 19th and early 20th centuries when all of the buildings were exposed to the dominant influence of the industrialization spirit, such as multi-store apartment blocks and high rise buildings.

Influenced by the historical development, socioeconomic, and political context, the modern Indonesian cities have identifiable districts consisting of nine zones: (1) a port-colonial city zone, (2) a Chinese commercial zone, (3) a mixed commercial zone, (4) an international commercial zone, (5) a government zone, (6) an elite residential zone, (7) middle-income suburbs, (8) industrial zones, and (9) *kampungs* (Ford, 1993).

Port-Colonial City Zone

Port-colonial city zone created by many port-related activities still remain in most Indonesian coastal cities and located in the original zone even when new, larger facilities have been constructed elsewhere. The port is frequently situated next to Dutch colonial design that is only marginally functional in the modern city. The boundaries between the colonial city and the port are not clear, because many warehouses, forts, watchtowers, houses, and other waterfront features from the colonial era may be present in some form, even in the midst of expanded modern port facilities. The Dutch colonial area is an important visible element in the Indonesian city that still looms large in the landscape. Unlike the ports, which keep their activities, the colonial city zone is no longer functionally important.

Chinese Commercial Zone

The Chinese commercial zone located in Indonesia is less distinctive than it formerly was due to the Indonesian government's policy that restricted any signs in Chinese characters, but allow Buddhist temples to be Chinese in style. The Chinese commercial district corresponds to a vaguely defined Chinatown, in which much of the business of the city is transacted. It is an area of traditional shophouses and of new shopping plazas with discount appliance stores. Due to its incredibly high densities and jumbled land uses, Chinatown become an identifiable place which are marked by compact shop houses and

Buddhist temples.

Mixed Commercial Zone

In Indonesian cities, the mixed commercial zone is situated along the spine of development leading from waterfront, where a gradation of commercial activities take place and, somewhere along it, the Chinese commercial area gradually merges into a mixed commercial zone. The district is likely to be the main economic center of the city, with everything from traditional markets to modern pedestrian malls. Marked by architectural, ethnic, and functional diversity, the zone covers Javanese rice sellers, Chinese jewelers, and American Pizza Huts.

The mixed commercial zone is identified by a few office buildings, especially Chinese banks and older governmental buildings; a relatively short buildings; the streets that are wider than in Chinatown whereas the broad boulevards of the inland new city are not evident; and residential streets although business dominates the scene. The commercial spine rarely parallels a waterfront and so is never on the edge of the city. The spine is thus surrounded by *kampungs* where various support functions such as street vendors are based.

International Commercial Zone

The international commercial zone, characterized by skyscrapers, malls, Italian restaurants, and convention centers, is a business district where office buildings, international hotels, luxury shops, discos, and high-class theaters are

located. Found only in big cities such as Jakarta, Surabaya, and Semarang, the zone is typically thin and confined along the main monumental boulevard. The land is extremely expensive for houses, and apartment living is not yet common, especially among the elite. Some recently erected residential towers along the spines may well become accepted as traffic worsens and as accessible location gains higher priority.

Government Zone

The government zones, which are located primarily in metropolitan areas such as Jakarta, Surabaya, Bandung, and Medan, are marked with either spacious gardens accompanied by fountains, or towers. The district is relatively distant from the colonial city, and is elongated in the model so as to include both the pre-independence areas and the post-independence developments. Not every governmental office is located in this zone, but the mix of a nineteenth-century area and the new areas makes for a sector of highly symbolic governmental buildings. In addition to office buildings, there are likely to be stadium, sport centers, exhibition halls, schools, military compounds, and various public and semi public open spaces.

Elite Residential Zone

The elite residential zones are areas with large houses along tree-lined, curvilinear streets which are occupied by high income group of people. The zone was originally initiated by European elite who sought residences outside the compact,

unhealthy ports in the eighteenth century. Those early attempts usually involved living in a distinctly linear pattern along main highways leading from the city. In the 1950s, the zone expanded into noncontiguous large-scale developments.

In Jakarta, the new town of Kebayoran Baru was established immediately beyond the Asian Games complex and new governmental buildings at Senayan. In Semarang, high income people moved into the rolling hills south of the new open square and built houses with views of the city below. Over the years, it has been noticed that the elite district keeps growing together into a continuous spine in order to take advantage of modern highways, luxury shopping, urban services, and land use regulations.

Middle-Income Suburbs

Planned suburbs for middle-income groups was initiated in the 1970s, when the construction of ring roads, suburban industrial parks, shopping centers, university campuses occurred. The changing pattern created the need for properly planned, modestly priced tract housing, and increased demand for housing. The new suburbs have been built on one or both sides of the traditional linear city, well away from the elite spine and the *kampungs*. The middle-income suburbs are located relatively far inland to avoid swamps and saltwater intrusion but have quick access to the port-related industrial and transportation employment. Planned middle-income tracts may exist occasionally in separate, inland locations in association with a village or employment node, but these are usually distant from the elite

spine.

Industrial Zone

Originally, industrial zone had no particular role in Indonesian urban morphology. There are no vast areas of railroad yards, steel mills, and warehouses in the central city. Craft-scale industries have typically been embedded in the *kampungs* rather than in highly visible industrial landscapes. The industrial zone did not exist until the 1970s when Indonesia applied a program of import substitution creating unplanned industrial activities such as textiles, wood products, leather, automobile assembly, chemicals, and electronics. Recently, developing areas such as port facilities, satellite cities, and suburban industrial parks have been joined by highways to form a pattern of dispersed industrial zones.

Kampungs

Historically, *kampungs* are informally developed residential areas that are occupied by mainly low-income people and have gradually been built and serviced. Separately supported from the largely alien city, the *kampungs* are usually isolated and, in recent years, have been engulfed by the growing cities. Efforts dealing with *kampung* improvement have been created to improve the environmental quality of the *kampungs*. As a result of the project, some of the better-located *kampungs* could be described as predominantly middle class. *Kampungs* might be in the original colonial city, in the middle of a city, in the fringe of a city,

and scattered throughout the metropolitan area.

Growth of Cities and Towns

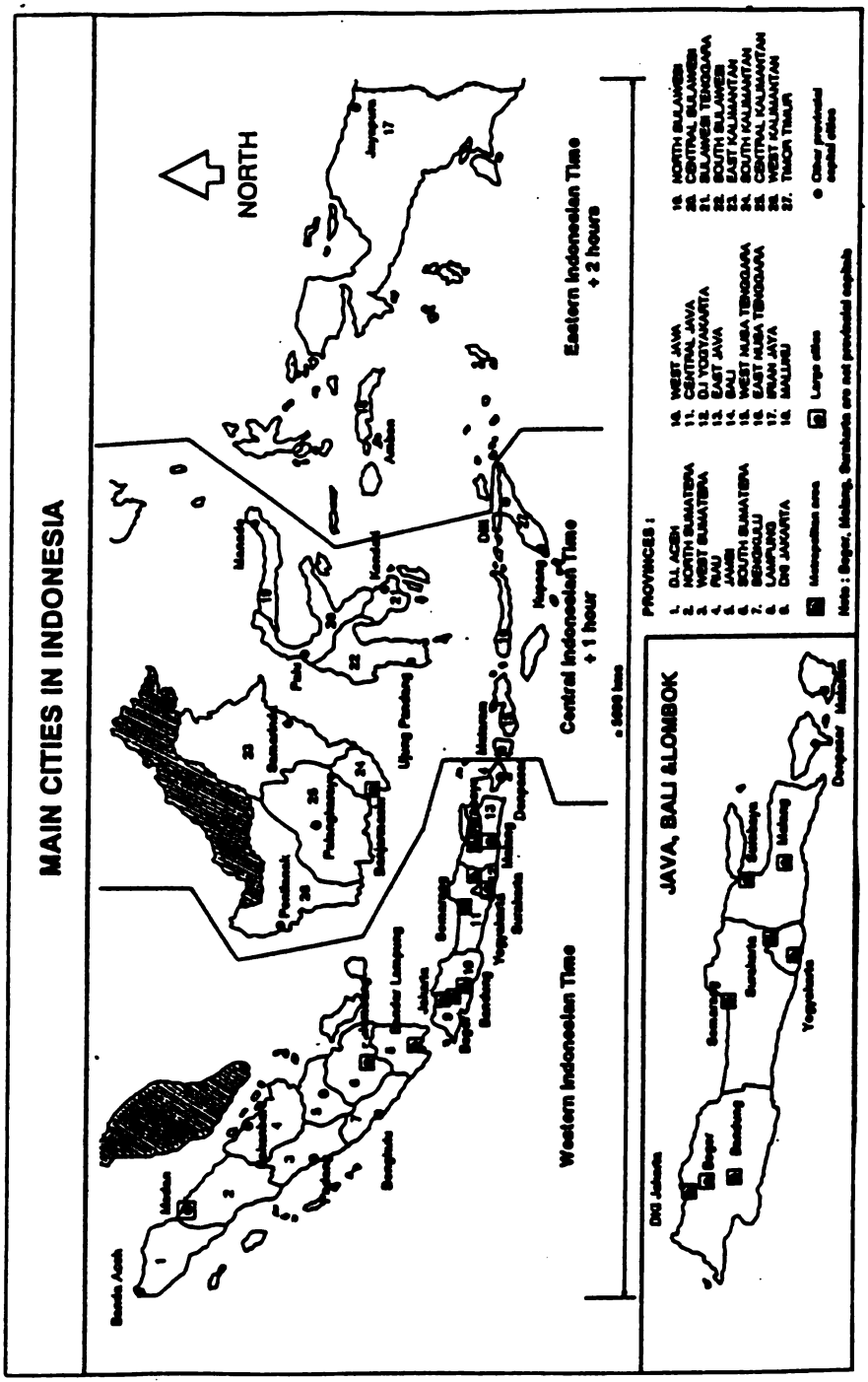
As the Indonesian urban population has grown faster than the rural population, the towns and cities have also increased more rapidly when compared to other settlement areas. In recent years, several Indonesian cities have even been expanding at a growth rate of six per cent per annum. According to Rutz (1987), between 1930 and 1980, the average growth rate of the towns and cities in the country was 3.5 per cent annually.

Between 1971 and 1980, many cities and towns expanded very rapidly, however, depending on the administrative establishment and transportation system development, the progressive consolidation of the transport infrastructure, and the large-scale extension of corresponding municipal areas. The main group of cities and towns experiencing more than an 8 per cent annual growth rate were Depok and the provincial capitals outside of Java: Palangka Raya, Palu, Bengkulu, Medan, Denpasar, Kendari, and Samarinda.

The numerous remaining, rapidly expanding administrative and transportation places outside of Java are scattered throughout the entire archipelago. The development of land on the outer islands is especially promoted in those areas where the Javanese are settled under the state transmigration programme or where the oil and mining industries encourage the development of large areas of land. Lampung is an example of an area situated in Sumatra which expands very quickly because it is targeted as a

new settlement region under the transmigration policy.

Within the expansion and reconstruction of Indonesian towns, the oil and the mining industry had a considerably greater influence than that of the transmigration programme. For example, Balikpapan, located in Kalimantan, has seen population suddenly increases up to 8 percent per annum. Generally, there are three factors determining the process of urban growth in Indonesia: development of the land and transportation systems on the outer islands, mining and heavy industrial projects with regional effects, and the formation of conurbations on Java. These factors result in a widely differing growth of towns and cities throughout the country.



Source: Innovative Approaches to Urban Development

Chapter 3

INTEGRATED URBAN INFRASTRUCTURE DEVELOPMENT PROGRAMME IN INDONESIA

In Innovative Approaches to Urban Development, 1992, Steinberg and van der Hoff say that urban management has been defined as an activity of attempting to mobilize diverse resources to work in a co-operative manner in the fields of (1) planning, programming, and budgeting development; and (2) of operation and maintenance of a settlement in order to achieve the development objectives of the (city) government.

The urban management activities in Indonesia have been using strategies and approaches in the forms of the government's new role, development policies, procedural deregulation, manpower and institutional strengthening. These efforts call for management as a process involving negotiation and consensus-finding between related parties including the government, the private sector, community, and donor agencies.

Yet, three problems relating to effective and efficient urban management act have existed since the beginning of early urban projects. First, it was believed that a centrally administered infrastructure provision did not meet local needs and was not properly operated and maintained by a community in the local government. Second, infrastructure programmes of central, provincial, and local government showed duplication of efforts, resulting in an inefficient use of limited resources. Finally, overdependance on a central government budget for

provision of an urban infrastructure could not work in the long run and, therefore, should be distributed (van der Hoff and Steinberg, 1992).

In order to effectively and efficiently employ scarce resources, in 1985 the Government of Indonesia initiated a program called the Integrated Urban Infrastructure Development Programme (IUIDP). Another consideration underlying the establishment of the program was that local government resources in the development of urban infrastructure were barely utilized. Finally, a decline in the central government budget due to falling revenues from oil production was perceived as a barrier to the ability of the central government to supporting the total costs of future infrastructure expenditures.

The Urban Infrastructure

According to development economists such as Paul Rosenstein Rodan, Ragnar Nurkse, and Albert Hirschman (1994), infrastructure is an umbrella term for many activities referred to as "social overhead capital" due to its potential share in both technical features like economies of scale and economic features such as spillovers from users to nonusers. The World Bank Report 1994 classifies economic infrastructure into three major types: first, public utilities, which include power, telecommunications, piped water supply, sanitation and sewerage, solid waste collection and disposal, and piped gas. Second, public works, which consist of roads, major dams, and canal works for irrigation and drainage. Third, other transport sectors such as urban and interurban

railways, urban transport, ports and waterways, and airports.

Infrastructure can deliver major benefits in economic growth, poverty alleviation, and environmental sustainability but only when it provides services that respond to effective demand and does so efficiently (World Development Report 1994). When the infrastructure provisions are able to accommodate growth, the adequate infrastructure plays an important role in economic growth in terms of increasing productivity and reducing production costs. The infrastructure facilities placed in rural areas will generate farm productivity and non-farm rural employment resulting in poverty alleviation. Sufficient infrastructure services deliver a significant impact on environmental sustainability. Environmental deterioration can be reduced through provision of such infrastructure services as clean water and sanitation, non-polluting sources of power, safe disposal of solid waste, and better management of traffic in urban areas.

Realizing the crucial role of infrastructure provision, the Government of Indonesia has been giving infrastructure development high priority in successive five-year development plans in which more than fourty per cent of all development expenditures are allocated for the provisions. The World Bank report clarifies four indicators that mark Indonesia's achievements in infrastructure development from 1970 to 1990: (1) the installed capacity of the state electric company increased eighteen-fold, (2) the number of telephone lines rose seven-fold,

(3) the length of paved roads increased nearly six-fold, and (4) the area under technical irrigation expanded by about 75 per cent.

Besides the good accomplishments, unfortunately, the current operations of the infrastructure facilities are either close to capacity or overloaded. However, in order to meet the increasing demand of the infrastructure requirements in the 1990s, Indonesia faces three potential problems (Document of World Bank, 1992). First, Indonesia should make an effort to deal with issues such as insufficient supply of infrastructure in meeting the demand.

Second, due to future economic growth, it is important that the Government of Indonesia study the projected demands of infrastructure services in order to accommodate the growth. And third, improving the quality and reliability of infrastructure service is another challenge the Government of Indonesia should overcome. The challenges in the infrastructure areas require both large investments in new infrastructure capacity and policy reforms to improve efficiency in the delivery and use of infrastructure provision.

The Concept of the Programme

The IUIDP is a method for planning and programming integrated urban infrastructure provision which depends on the institutional and financial capacity of local governments. The programme has the purpose of integrating urban spatial planning and sectoral components, mobilising the sources of funding, and tailoring programmes to local needs through the lead of local

government instead of the central government.

Founded by General of *Cipta Karya* of the Ministry of Public Works, the IUIDP is fashioned into a multi-year IUIDP investment plan or *Program Jangka Menengah (PJM)* which covers 5 to 7 year investment projects. In the PJM, factors, such as population trends, strategic urban planning decisions, infrastructure needs, and prioritized inter-sectoral infrastructure development projects are linked to available and usable local resources. The association between the considered factors and the local resources is needed in order (1) to programme-specific grants and local borrowing with resources from central and provincial governments through proceeds of tax sharing arrangements with higher government levels, (2) to block grants from central government, and (3) to institutionalize capacity to coordinate, implement, operate, and maintain the integrated programme (van der Hoff, 1992).

Regarding the purpose of the programme, there are four goals of the IUIDP: (1) to speed efficient investments in urban infrastructure, (2) to improve the operation and maintenance of urban infrastructure, (3) to enhance cost recovery and cost effectiveness of urban infrastructure development, and (4) to strengthen the capability of local government to plan and manage local development by providing incentives to increase local revenues and to improve the management of local government institutions and enterprises (B. Tjahjati, 1992).

During the implementation of the programme, the general

principles espoused by the IUIDP are optimization, resource mobilization, decentralization, and mutual agreement (van der Hoff and Steinberg, 1992). First, the IUIDP is designed to optimize the urban service development's spending through the integrated inter-sectoral programme which is based on local priorities. The programme priorities suggested by local government determine the allocation of funds derived from foreign money, private sector, central, and local governments.

Second, under the IUIDP, generation and mobilization of local resources such as improvement of the current water supply enterprise and establishment of a new company for a solid waste management and sewage disposal system are important income sources that local governments utilize. In addition, local governments utilize local taxes such as property tax and vehicle tax.

Decentralization is another principle in implementing the IUIDP. Past programmes were initiated by the central government, particularly the Ministry of Public Works, without the involvement of local governments. Using the decentralization concept, the central government encourages local governments to plan, to implement, and to monitor their desired programmes. The central government provides general directions allowing local governments to fashion programmes that meet local needs.

Finally, in the context of the IUIDP, formal agreement among related parties, such as the central government, local government, local community, foreign donors, and the private

sector, regarding the proposed urban development programme are expected. Due to the limited budget available at the local government level, the financial agreement among the parties is crucial in looking for other possible sources of funds. Therefore, in the preparation of the IUIDP programmes, local government is responsible for proposing programmes that are reasonable, feasible, and affordable to the parties.

Within the IUIDP, the planning process of multi-year infrastructure projects requires three preparatory activities. First, the municipality is required to create a master plan to be used in directing the mid-term infrastructure program development plan or the PJM. The role of the master plan is to guide the PJM in preparing potential infrastructure projects which are feasible, and to provide the intended development with detailed engineering design. However, the IUIDP Development Assessment Plan or IDA should be developed and employed to replace the function of the master plan if the master plan is not possessed by a municipality.

Second, in order to enhance and maximize the utilization of local revenue, the local government investigates its financial bases and compiles potential resources in a Revenue Improvement Action Plan or RIAP. Finally, to examine existing local institutions and to assign their responsibilities, the mid-term infrastructure program development plan or PJM requires that a Local Institutional Development Action Plan or LIDAP be created.

Implementation

The implementation of the IUIDP is being accompanied by technical assistance from various donors such as the International Bank for Reconstruction and Development, the Asian Development Bank, the United Nation Development Program, and several foreign governments including Australia, Canada, Netherlands, and Switzerland. When no external assistance is available, the financial responsibility created by the IUIDP's implementation remains in the hand of every level of the government of Indonesia.

According to Budhy T.S. Soegijoko and Paul Sutmuller (1992), since the program was initiated in 1985/86, the IUIDP activities had been utilized in some metropolitan and large cities: Jakarta, Surabaya, Bandung, Medan, Semarang, Surakarta, Yogyakarta, Bogor, Palembang, Malang, Balikpapan, and Bandar Lampung. The IUIDP has also been used in secondary cities in almost all provinces of the country.

The cities and provinces are in the different steps of adoption towards the IUIDP implementation; some are in the stage of programme identification, others are in the level of programme preparation, and the rest are varied among programme preparation, appraisal, and detailed project design (Budhy T.S. Soegijoko, 1992). In addition, several supporting activities relating to preparation of guidelines for program identification, pre-appraisal and appraisal, program preparation, implementation, and central government grants and subsidies for urban development

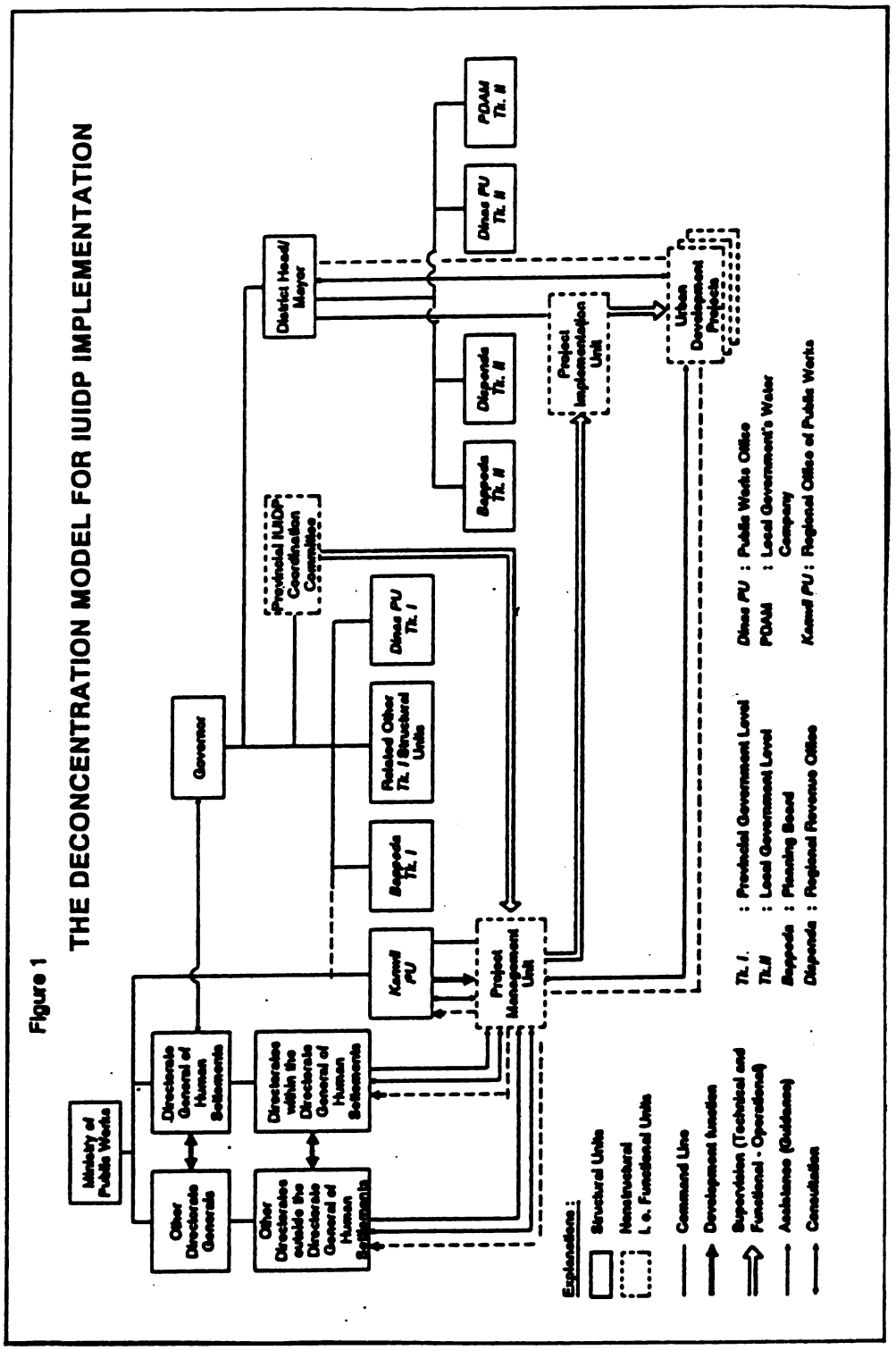
are underway.

There is also the preparation of Programme Implementation Agreement (PIA) documents, a document of agreement between the central government and a provincial government, or between a provincial government and a local government. The Regional Development Account (RDA), a mechanism whereby local governments can borrow funds for urban development, and rules and regulations for the use for the RDA are also being finalized together with guidelines and manuals for loan applications.

Generally, there are two types of the IUIDP implementation being devised by the government of Indonesia: the deconcentrated model and the decentralized model. Having its own characteristics, the deconcentrated model is the most efficient model for implementation. The model, being used so far by central government, is the smooth implementation of the physical projects, limitation of the commitments fees, and to a lesser extent the implementation of non-physical components (Budhy T.S. Soegijoko and Paul Sutmuller, 1992). However, the approach barely reflects the needs of local government and hardly calls for the responsibility of local communities in operating and maintaining projects.

Under the deconcentrated model (Figure 1), there are three supporting bodies which are established by a decree of the Minister of Public Works: Provincial IUIDP Coordination Committees (PICCs), Project Management Units (PMUs) at the provincial level, and Project Implementation Units (PIUs). The

Figure 1



Source: Innovative Approaches to Urban Development

responsibilities of the PICCs, connected to the Provincial Development Planning Board or *Badan Perencanaan dan Pengembangan Daerah Tingkat I (Bappeda TK.I)*, are overall guidance and coordination, pre-appraisal of sub-projects/multi-year provincial programmes, defining locational priorities, and monitoring financial and institutional aspects.

Pre-appraisal of sub-projects, operational coordination and supervision, planning and programming, environmental impact assessment and protection, community participation and education, and monitoring and evaluation are the obligations of the PMUs which are bound to the Provincial Department of Public Works or *Kantor Wilayah/Dinas Pekerjaan Umum Tingkat I (Kanwil/Dinas PU Tk.I)*. In addition, international and local consultants and professionals seconded from the Ministry of Public Works and the Provincial Department of Public Works are also utilised by the PMUs.

The PUI, headed by a Project Manager, is responsible for preparation and updating of multi-year programmes, execution of revenue enhancement plans, and project preparation and development covering feasibility studies, land acquisition, tendering and contract supervision, and sub-project monitoring and control. In the deconcentrated model, the programme implementation is centered on the PMUs actually accountable for programme management.

The decentralized model, on the other hand, is believed to be a better policy in terms of increasing the local sense of

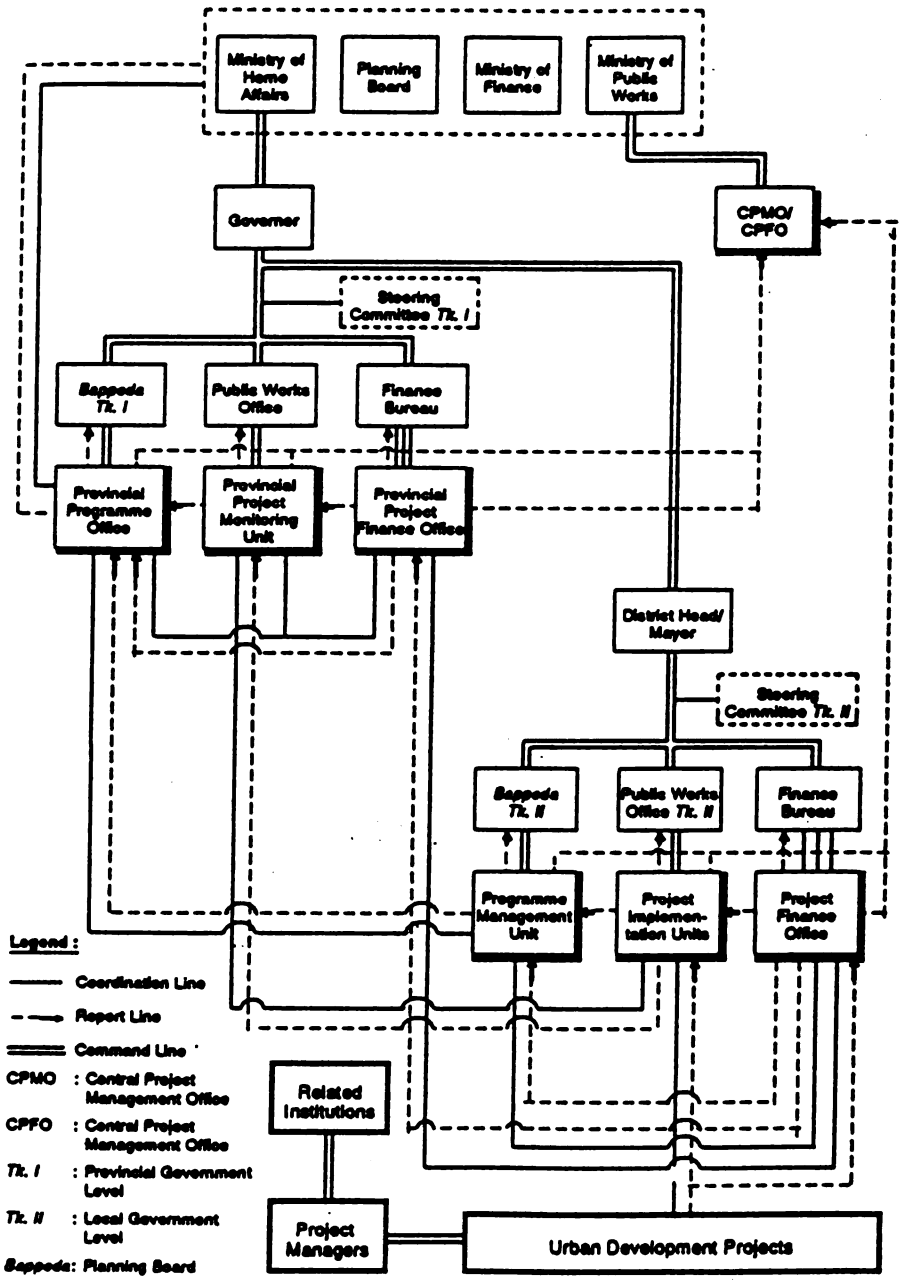
ownership. In the spirit of the IUIDP, the concept underlying the decentralized model is the creation of units for the reinforcement of local agencies and encouragement of incentive distribution to local government officials (Soegijoko and Sutmuller, 1992). The decentralization model requires that local agencies and various local governments participate in the IUIDP implementation. Unfortunately, local involvement may vary in stages of readiness towards the implementation resulting in the delay of project application.

In the decentralized model (Figure 2), a decree of the Minister of Home Affairs establishes, both at provincial and local level, eight supporting bodies. The four supporting bodies at the provincial level are the Provincial Steering Committee (PSC), the Provincial Programme Monitoring Office (PPMO), the Provincial Project Finance Office (PPFO), and the Provincial Project Monitoring Unit (PPMU). The other four supporting bodies at the local level are the Steering Committee (SC), Programme Management Office (PMO), Project Finance Office (PFO), and Project Management Unit (PMU).

Each supporting body is assigned responsibility for particular tasks. The PPMOs, attached to Provincial Development Planning Board or *Bappeda Tk.I*, are to provide the *Bappeda Tk.I* with monitoring the progress of the provincial programme implementation, the appraisal of multi-year programmes, overseeing and assisting the PMOs, and supervising the Municipal Development Planning Board or *Bappeda Tk.II* revenue enhancement

Figure 2

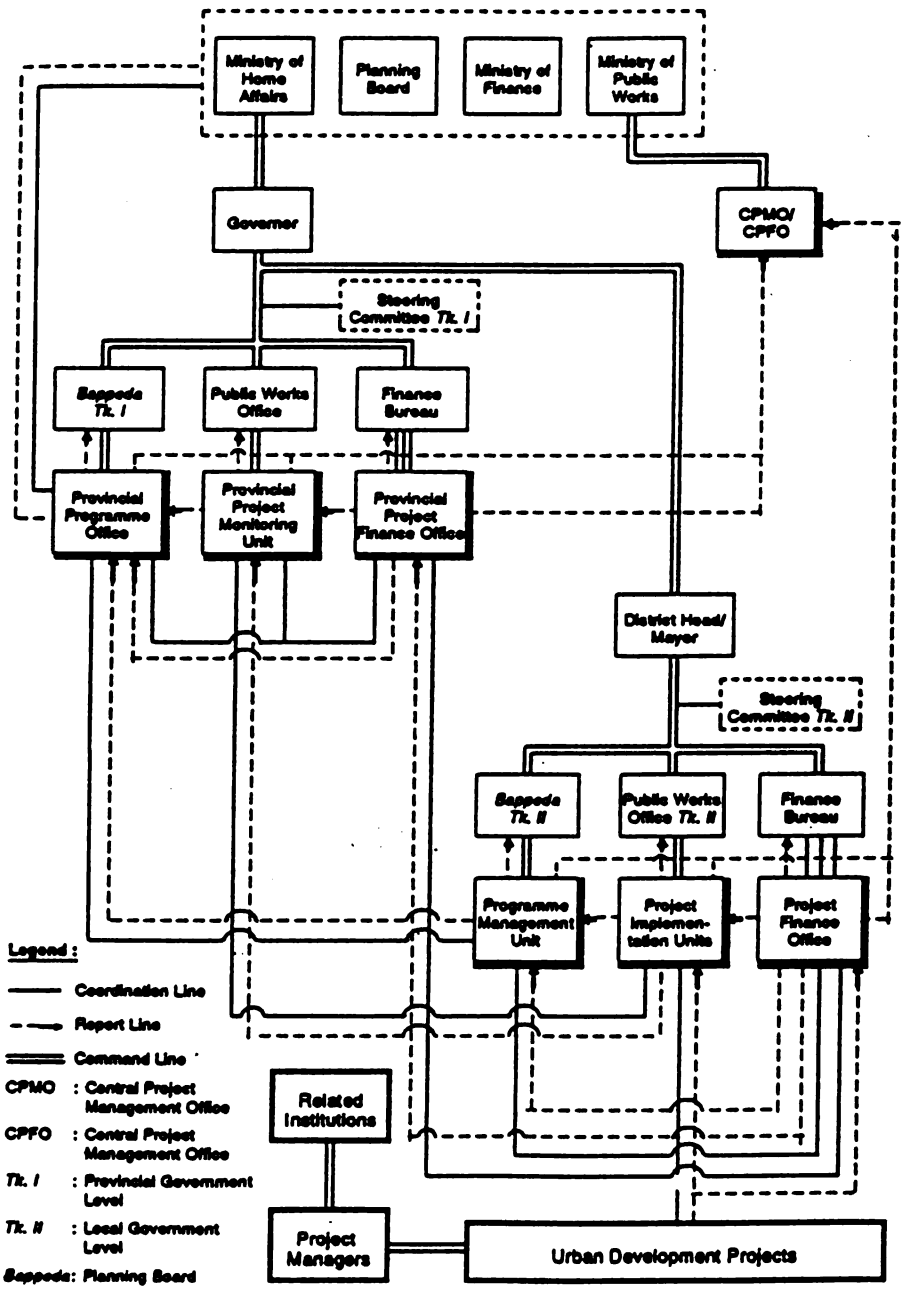
THE DECENTRALIZATION MODEL FOR IUIDP IMPLEMENTATION



Source: Innovative Approaches to Urban Development

Figure 2

THE DECENTRALIZATION MODEL FOR IUIDP IMPLEMENTATION



Source: Innovative Approaches to Urban Development

and institutional development programmes.

Furthermore, the purpose of the PPFOs establishment within the Finance Bureau Level II or the *Biro Keuangan Tingkat II* is to support the PFO at the central level, to assist the PFOs at the local level, and to compile financial statements for consolidated provincial audits. Assisting the Public Works Office at a provincial level with expediting sub-project preparation and development, monitoring sub-project implementation, and guidance on tendering and supervision works and quality control are the responsibilities of the PPMUs.

A supporting body at the local level, such as the SC, together with the *Bappeda Tk.II*, is accountable for providing policy coordination and guidance and to make reports to the district head or mayor and a purpose of providing policy coordination and guidance. The PMOs, the PFOs, and the PMUs, the supporting bodies at the local level which are added to the *Bappeda Tk.II*, the Finance Bureau Level II, and the local Public Works Office respectively, cover consultant support and seconded regular staff of the concerned local agencies.

Financing

There are three sources of funds being used to finance public urban infrastructure and services: central-local transfers, a regional governments' own revenue, and loans to local governments. Central-local transfers flowing from the central government to the regions are grants such as President's Decree or *Instruksi Presiden (Inpres) Desa* and *Daerah Tingkat*

(Dati) I/II, and central government revenue such as property tax revenues. A regional governments' own revenues are locally generated incomes derived from local taxes, user charges, regional enterprises, and miscellaneous sources, including local agencies' incomes. Loans to local governments from the central government and regional development banks subject to the agreement of the Minister of Home Affairs, and from foreign sources are under agreements between the Government of Indonesia and multi and bilateral lenders (Bastin and Hidayat, 1992).

The IUIDP programme plans to absorb these funds in a manner consistent with the integrated management and financing approach. Through the establishment of the mid-term infrastructure program development plan or PJM, financing plans proposed by the IUIDP, it is expected that local need of urban services is matched with central government infrastructure development plans. The financing plan provides predictions of local government sources allocated for the PJM, examines possible financial sources such as borrowing, appoints methods to maximize the use of revenues, and makes assessments as to whether funds from external sources are available or not. The PJM also includes expenditure plans derived from technical programmes and development proposals and maintenance of urban infrastructure.

In the IUIDP spirit, central government grants are intended to increase local governments' participation in IUIDP activities and spur investments in sectoral development. Due to its role as stimulus to arouse the self-reliance of local governments,

central-local transfers are provided to augment local revenue generation. The IUIDP concept recommends that income of regional governments be the main financial resource for financing the development of urban infrastructure and facilities.

In addition, a local government fund is expected to be able to pay routine expenditures for sufficient maintenance and operation of the projects. Unfortunately, lack of administrative capacity and reluctance to bear the financial responsibilities means most local governments do not adequately handle financial functions in terms of the PJM concept.

Loans to local governments coming from the central government and foreign sources play an important role in the IUIDP. In financing the PJM, the loans act as a balancing item that may fund programmed expenditures not sufficiently covered by other revenues. Yet, local governments are unwilling to take loans for their projects, especially non-revenue activities; some because of their inadequate knowledge of borrowing capacity, some due to their lack of skill and experience in loan disbursement and repayment administration, and some because of insufficient credit.

Due to uncertainty surrounding the terms, levels, and mechanisms of financing such a middle-term plan, funding commitments from central government agencies have proved difficult to secure. To avoid major delays in the middle-term plan execution, implementation of the IUIDP requires formal agreement among related parties relating to the proposed urban

development programme. The financing agreement addresses how much each party will contribute in the programme. It is impossible for local resources to finance all of the total budget for development; therefore, the costs of urban development will remain in the hands of local community, the private sector, and other sources such as provincial and central government and foreign sources.

Chapter 4

PUBLIC-PRIVATE PARTNERSHIP IN INDONESIA'S URBAN INFRASTRUCTURE PROVISIONS

Over the past twenty years, the development of policies and programmes for urban infrastructure provision has evolved in four phases. First, it began with the planning and implementation of single sector projects such as water supply and sanitation, undertaken in the public sector. Second, urban master plans were made to put together different sectoral projects into integrated programs. Third, the planning, implementation, and operation of major infrastructure projects such as water supply, drainage, sanitation, solid waste, urban roads, the *Kampung* Improvement Programme, market improvement, and guided land development through the IUIDP.

So far, the planning, financing, and executing of these programs was considered the responsibility of local government. In the fourth phase, which coincides with *Repelita* V (1989-1994), the government of Indonesia adopted a new policy requiring that the private sector contribute to the development of urban infrastructure and urban services.

The contribution stresses increased partnership between the public and private sectors in dealing with urban service delivery. According to Robert J. Bennet and Gunter Krebs (1991), partnership is a concept that is used to argue that not only the factors of production, but the actors involved in managing each factor, have to be brought together into a mechanism to ensure

successful and sustained local economic development. In addition, Thomas S. Lyons and Roger E. Hamlin (1991) say that public-private partnership refers to a variety of activities in which the public sector induces the private sector to behave in desired ways by becoming a partner with it. With these perspectives in mind, the Government of Indonesia encourages the private sector to be involved in Indonesian urban development and seeks greater partnership between public and private sectors.

Rationale for Public-Private Partnership

Privatization is defined as a reduction in government activity or ownership within a given service (Sandra Cointreau-Levine, 1994). Government activity is decreased when the private sector participates in urban service delivery. Furthermore, government ownership is limited when government enterprises are divested to unregulated private ownership and when government firms are commercialized, in which accountable and financially autonomous semiprivate agencies are taken into account.

Privatization of urban service delivery is a method to create competition and to allow for a more effective articulation of demand (William F. Fox, 1994). The participation of the private sector is desirable when it is able to reduce costs, to meet demands, and to provide greater choice of services. In the provision of urban services, however, both the public sector and the private sector have their own objectives. The concern of the private sector is whether the delivery of services are financially beneficial. On the other hand, one of many

government's considerations is whether it will save money through private sector participation. Moreover, government must consider known public values and address macroeconomic issues beyond the price of service.

Even if privatization appears beneficial, the public sector will not lose its role in providing the urban infrastructure. One reason is the limits of the private sector's capability in handling externalities such as sewerage, dams, and particular roads. Second, urban infrastructure characterized by large economies of scale in production or distribution, such as water, sewerage, and-to a lesser extent-electricity, can not be done solely by the private sector without the government's regulation. Next, government involvement in determining prices and subsidies for externalities like telecommunication services is needed in order to treat consumers universally. Finally, public sector participation in financing is still essential when provision of infrastructure services is to be used as a way of redistributing income.

There are five reasons underlying the implementation of public-private partnership by the government of Indonesia (Suselo and Taylor, 1992). First, the annual growth rate of Indonesia's urban population is four per cent, or nearly twice that of the population as a whole. This means that urban population in Indonesia is expected to increase from about fifty two million in 1990 to seventy six million by the year 2000. This large urban population is delivering great strains on the financial, human,

and management resources of the government which are impossible to adequately cope with. The mobilization of private sector financial and other resources will be critical as demand for infrastructure continues to grow.

Second, in many areas, some urban services such as sanitation and solid waste management are not currently being delivered by the public sector. The private sector participation is expected to fulfil unmet needs without taking responsibilities away from the government. Next, it is believed that private sector can offer a greater variety of options to consumers and provide services more flexibly than is generally the case with governmental agencies. This may be particularly the case where user charges providing full cost recovery can be levied on individuals or households for a given service and where the services may be considered as discretionary.

Fourth, private sector participation is expected to promote competition and encourage a more entrepreneurial spirit in national development. It is presumed that the private sector will have an impact on national efficiency and equity in meeting social needs. The private sector is expected to give selected urban services at lower cost and higher quality than the government.

Potential Incentives to the Private Sector

The partnership between the public and private sectors in urban infrastructure services delivery is believed to benefit both local government and the private sector in terms of

financial, managerial, physical, and other resource problems in the development process and can pace with the growth of social needs caused by increasing urban population. Consequently, in order to encourage the growth of private sector participation, beginning in 1984, the Government of Indonesia attempted to reduce and simplify economic regulations.

For the last ten years, deregulation has been covering major reforms in trade policy, investment licensing, and transport regulations. In addition, deregulation reduced the monopoly power of larger enterprises. To promote competition, a well-functioning legal system is required to reduce legal barriers and to increase the mobility of private investment. The following is the framework of incentives, regulations, and laws set forth by the Government of Indonesia to look for greater participation by the private sector (Document of the World Bank, 1991).

Trade Policy

To reduce the high cost of doing business in Indonesia, and intensify the competitiveness of domestic production, the government enacted trade and deregulation measures reducing macroeconomic imbalances, which enabled a recovery of economic growth in the mid-1980s. The changing pattern of price incentives, such as real exchange rate policies which were adopted in 1983 and 1986, resulted in soaring non-oil exports and reducing the current account deficit. In 1985, the tariff schedule was rationally adjusted together with an across the board reduction in rates. Another trade policy reform employed

by the Indonesian government was duty-free inputs for exporters.

Domestic Regulations

The Government of Indonesia combined the trade reform policy with a series of other regulatory measures in 1985-89 in order to improve domestic incentives and the regulatory environment for the private sector. A new set of domestic regulations such as investment licensing and foreign incentives were used to encourage investment. The Department of Manpower enforces labor regulations, guided by the Basic Law of 1969, to deal with the functioning labor market, hiring and retrenchment of workers, protection and supervision of workers, and employment of expatriate workers. Land laws and regulation simplification are required to let the private sector acquire land easily, through better granting of location permits, release of rights, and land investigations.

The Legal Framework

The legal framework is an important influence of the pace and efficiency of private sector development. The Government of Indonesia took steps to reform the legal system by establishing a working group of the legal advisors in the economic ministries to identify priorities and approaches to the modernization of the corporate legal framework. From the economic stand point, the principles in reforming the legal framework are based on various criteria: to reduce transaction costs by providing standards contracts and increasing access to information, to reduce legal

barriers to entry and mobility of private investment, to provide for sanctions for infringement of well-defined rules of market functioning, and to provide mechanisms to settle disputes.

Corporate laws dealing with accounting and audit requirements and capital market regulations is a legal reform activity underway. Another legal reform action being established is accessibility to legal information such as publications of laws, interpretations, and decisions. Finally, legal study relating to implementation of law reforms is also in progress.

Running Public Goods On Commercial Rules

In Strategic Options for Urban Infrastructure Management, William F. Fox (1994) writes that public goods have two major characteristics. The first is that one person's consumption of the service does not diminish other people's ability to consume the same service. The second is that a person cannot be easily excluded from receiving the service benefits. Sewage treatment is an example of a service with many aspects of a public good. All residents receive benefits from treated sewage, not only the households whose sewage is treated.

There are three issues in running public entities on commercial principles. First, in the provision of public goods, both public and private sector have their own functions, depending on the type of infrastructure. Second, realizing that the responsibility for running the public entities will mainly remain in government, making the public sector more effective is important. Third, providing public goods under commercial rules

may affect social issues such as poverty and equity.

Public or Private Provision of Infrastructure

In the context of public-private partnership, the relative role for the public and the private sectors in running public goods varies from sector to sector. Public intervention is needed when markets fail to provide adequate levels of service, for reason of cost, or lack of private competition. In cases as power and telecommunications, efficient system expansion requires a few large investments rather than a series of small ones.

Economies of scale in production can create a technological barrier to entry of competitive private providers, and efficient production requires a publicly owned or regulated private monopoly. It is impossible for public goods such as urban roads to define and charge individual users in order to make profit instead of benefit society at large. But the government need not spend scarce resources on activities, such as urban bus transport, that the private sector can do as well or better.

When competitive ownership is feasible, private sector participation is desirable in order to operate the services efficiently. One example is the power generation project that enables private and smaller producers to sell the power through the public utility. In other urban infrastructure services such as the operation and maintenance of publicly-owned water supply systems, free market entry like contracting out for construction is a preferable method in determining potential private contractors (Document of the World Bank, 1991).

It is perceived that the success of both public and private provision of infrastructure is determined by three things: (1) the businesses have clear and coherent goals focused on delivering services, (2) the management is autonomous and both managers and employees are accountable for results, and (3) they enjoy financial independence (World Development Report, 1994).

Effective Public Sector

Many argue that endemic organizational failures and poor performance are compelling arguments for abandoning efforts to reform the public sector and for relying instead on the private sector to provide infrastructure services. Nevertheless, making the public sector more effective is important for four reasons. First, given current government dominance, the public sector will maintain responsibility for infrastructure services.

Second, even with dynamic private sector involvement, some sectors, such as road networks and major public works, will be primarily left in the public domain. Third, in contrast to an inefficient public sector, an effective public sector is capable of facilitating private sector involvement. Finally, for strategic, regulatory, or political reasons, the public sector in developing countries such as Indonesia is likely to reserve much of the responsibility for building and operating infrastructure.

Improving the effectiveness of the public sector is approached through utilizing three core instruments designed to reinforce commercial operation in the public sector (World

Development Report, 1994). Corporatisation, which establishes the quasi-independence of public entities and insulates infrastructure enterprises from noncommercial pressures and constraints is the first instrument. Another method is to make explicit contracts between governments and public or private managers or private entities involved in infrastructure services.

The method is expected to increase autonomy and accountability by specifying performance objectives that symbolize government-stated goals. The last tool is to develop a pricing strategy aimed at cost recovery. The cost recovery will create a preferable condition of financial independence for public utilities.

Cost Recovery and The Poor

The privatization of basic services such as water supply raise socially sensitive issues since such arrangements may not meet the interest of the urban poor. Many governments fear that fully recovering costs will hurt the poor, yet increasing prices to enable cost recovery in the delivery of services may actually help the poor. They often pay much higher prices per unit for privately provided water and lighting because they are not connected to public service networks that have lower unit costs, and because they do not benefit from subsidies to users of the public system-usually the better-off.

Expansion of access benefits the poor by allowing them to rely on less costly sources of water and power. However, to pace the growth of infrastructure demand, it is crucial that a pricing

strategy be adopted to assure the quality of service and the efficient use of available infrastructure. In order to confirm the efficient demand management of infrastructure services, the public sector plays an important role in determining appropriate pricing policies reflecting the marginal cost of production.

Furthermore, it is perceived that certain infrastructure investments may be effective tools for helping reduce poverty. Low-income households may be among the greatest beneficiaries of infrastructure enhancements. Good quality service of infrastructure provision enable the poor to devote more time to income generating activities.

Types of Public-Private Partnerships

For the last two years, the Government of Indonesia has actively encouraged the private sector to participate and contribute to national development. Several public-private partnerships have recently been initiated in large investment schemes like toll roads, industrial estates, electric power and telecommunications facilities. The Chairman of the National Development Planning Board or *Badan Perencanaan dan Pembangunan Nasional (Bappenas)* said that they are looking increasingly to the private sector to finance and operate physical infrastructure and to upgrade skills.

The parties normally to be considered in partnership arrangements are single businesses, business bodies such as chambers of commerce, voluntary groups of business interests, community groups, co-operatives, trade unions, and both central

and local governments. In Indonesia these parties, being different in capacity and performance, represent public-private partnerships which take on several forms and are applied in a variety of circumstances. With two major parties, central/local government and single businesses, playing important roles, there are six major types of private sector participation that can be currently identified: build, operate and transfer concept; divestiture concept; leasing concept; contract operations concept; partnership in urban renewal; and informal sector participation.

Build, Operate, and Transfer (BOT)

In this type of partnership, the private sector builds, operates, and receives revenue from a new facility throughout a concessionaire period. For example, the private sector is constructing and operating major toll roads, in both inter-urban and intra-urban areas such as Jakarta, Surabaya, Bandung, and Medan. The private sector is also constructing and operating bulk water supply reservoirs and main transmission lines in several cities such as a bulk water supply scheme for Surabaya (4 cubic meters/second), a BOT water scheme for Lhok Seumawe (1600 liters/second by the year 2000), and a BOT water programme for Semarang.

Divestiture

The divestiture concept is an application of partnership where a government-owned facility or enterprise is sold to the

private sector, or where the private sector is allowed to compete by tender for works such as construction and services previously within the public sector. Although this type of partnership has not yet been executed in Indonesia, it may provide additional options in the future. For instance, the divestiture schemes may involve full privatization of one or more local government's water enterprises or *Perusahaan Daerah Air Minum* or *PDAM*.

Leasing

If one private sector firm leases a facility owned by the public sector during a concessionaire period and collects revenue generated from the facility, the application of such a partnership is referred to as the leasing concept. In this scheme, the facility will be returned to government by the end of the concessionaire period of time. The leasing concept has not yet been fully applied in Indonesia though the idea will be applicable within Indonesia' legal framework.

An example of this type of partnership is the leasing of equipment for solid waste collection and disposal owned by government to interested private enterprises which provide labor and are responsible for operation and maintenance. Another current example is to rent septic tank emptying trucks to the private sector in Sibolga and other secondary cities.

Contracting

One model of partnership currently and widely applied in Indonesia is the contract operations concept. The contracting

concept requires public agencies to control private sector companies contracting to provide management or other services during a certain period of time. The following are five examples of contracting concepts involving the private sector in urban services provision.

First, throughout urban Indonesia, almost all of the civil works construction such as urban infrastructure and public facilities are contracted out by all government levels to interested private firms through tendering procedures. Second, in many cities in Indonesia, particular sanitation services including septic tank emptying trucks, provision of small-scale communal systems, are operated by the private sector. Third, in Surabaya and Medan, water bill collection service is shifted from the *Perusahaan Daerah Air Minum (PDAM)*, a publicly owned water supply firm, to a private sector firm.

Fourth, in every Indonesian city, private consulting services to increase government performance are provided to local government agencies for planning and management activities. Finally, solid waste operations are contracted out to private firms who are responsible for purchasing, operating, and maintaining vehicles or other equipment. The contracting is designed for the development and operation of final disposal sites and for fee collection.

Urban Renewal Partnership

The partnership deals with urban renewal development such as new town improvement, downtown renewal, and industrial estate

development where the public sector mainly contributes in land provision and the private sector acts as developer and cost bearer. The partnership may be very diverse in character. The urban renewal schemes require that local government be a partner in land assembly and, together with the public sector, the private sector be an actor in redevelopment. Two examples are projects of *Senen Triangle* in Jakarta and *Citra Niaga* in Samarinda.

Industrial estate development in Jakarta, Bekasi, Surabaya, Bandung, and several other cities, uses such a partnership. Local government provides land and works jointly with the private sector to prepare infrastructure and the private sector supplies the property. Major new town developments, in which the relative roles of public and private sectors vary considerably, take place in huge projects such as *Bumi Serpong Damai* and *Bekasi 2000*, in Jakarta's outskirts, and Driyorejo, Surabaya.

Several Integrated Urban Development Infrastructure Programme (IUIDP) schemes including those in Bandung, Karawang, Padang, and Tanjung Balai are also in the planning stage where public-private partnerships are needed to carry out construction and operation of the economic activity in urban renewal, in fringe area development, in urban infrastructure, and in urban services delivery. The government will conduct detailed planning, land assembly and management, and infrastructure provision.

Informal Sector

Activities alongside the large urban formal-sector establishments fall into the category of an informal sector. The activities produce and trade a wide range of goods and services that are considered by the formal-sector firms to be non-profitable to enter. The informal-sector is already participating in meeting the needs of the low-income group of people in urban services provision such as public transportation and utilities.

A study conducted by the Center for Policy and Implementation Studies under the direction of Harvard anthropologist Marguerite S. Robinson stated that there are three main types of informal-sector activities that are important in the Indonesian capital: *becak*-driving, a three-wheeled peddle rickshaw; scavenging of waste materials such as metal, rags, and glass; and curbside retailing (Malcolm Gillis, 1992).

The following are examples of informal sector activities in virtually all types of urban services provision throughout urban Indonesia. In certain areas, where well water is of poor quality or unavailable and the distribution system of the *Perusahaan Daerah Air Minum*, a publicly owned water supply enterprise, is inadequate, small scale vendors are distributing drinking water to the community.

In many cities, private trucks and pushcarts are providing emptying services of small-scale septic tanks. At disposal sites throughout major urban areas, scavengers are searching reusable

solid waste materials. *Becak*-driving and *bajaj*, a motorized three-wheelers, are informal transport systems that transport people, especially the low income group, within cities. Finally, private (informal) sector provision of the whole range of building materials and utility systems in every part of Indonesia.

Problems Encountered by Public-private Partnerships

The main purpose in involving the private sector in such a public-private partnership is to induce private sector investment in the development of urban areas. The goal assumes that the community has recognized problems and/or opportunities that exist in the designated area (Fosler and Berger, 1982, quoted by Hamlin and Lyons, 1991). In the Indonesian context, the assumption is limited to the extent of clear definition of the common or public interest. The vague understanding of the community interest obstructs the development of policies and programmes for expanding the participation of the private sector in urban services provision.

Some of the problems arise due to misunderstandings that take place between the public and private sectors. The public sector, as well as the general community, have several negative perceptions of the private sector's commitment or ability to deliver urban services. The private sectors are considered to be so profit minded that the urban service deliveries they provide will tend to increase costs and unfairly benefit poor households. On the other hand, the private sector also holds some negative

perspectives relating to government policies and regulations that are inadequate, inconsistent, and ill-enforced (Suselo and Taylor, 1992).

Other obstacles in seeking greater private sector participation in Indonesia are (1) the lack of understanding of public-private partnerships and their activities and (2) the lack of experience in drawing up clear and explicit public-private partnership agreements such as primary sources of funding, responsibilities and risk sharing, and leadership arrangements. Difficulties in dealing with bureaucracy are another constraint which discourages the public-private partnership spirit.

Excessive government regulations or licensing procedures may erect barriers which limit the ability of private firms, especially small firms, to initiate or expand investments (Suselo and Taylor, 1992). Furthermore, rigidities in the provision of, or difficulties in obtaining, credit reduce opportunities of small private enterprises to get capital to be used in urban service activities. Next, negative perceptions in public opinion relating to the role of the private sector participation contribute to the delayed success of public-private partnership in Indonesia.

There is a general suspicion in the community that such a partnership is a practice of public-private collusion, benefiting a particular group of people. Some people think that the privatization of public services is an effort to shift national responsibilities away from the government to the private sector.

Finally, there is suspicious among government officials and civil service employees that privatization will reduce their access to job opportunities and their influence over these services (Suselo and Taylor, 1992).

Chapter 5

MEETING THE CHALLENGES OF INFRASTRUCTURE DEVELOPMENT: A RECOMMENDATION

In the upcoming years, Indonesia will face a significantly increasing demand on infrastructure facilities due to its rapid economic growth. Currently, the quality of most infrastructure in Indonesia is below standard; for example, power losses equal 18 per cent of production (World Bank, 1992), and 44 percent of the power is provided to captive users, indicating strong concerns about brownouts.

Only 38 percent of local telephone calls and 20 percent of international direct-dial calls are successful because of network congestion caused by a shortage of equipment. Success rates for local telephone calls should be nearly twice what they are. Unaccounted-for water is 43 percent of piped water, and irrigation efficiency is 25 percent, about half of desired efficiency.

Consequently, to keep pace with growth in the 1990s, it is necessary to meet the present unmet demand, in terms of both quantity and quality of services, and to ensure that there are adequate provisions available to cope with future growth. The World Bank (1992) suggests three strategies to meet the infrastructure development challenges that Indonesia faces: (1) promoting efficiency, (2) enhancing efficiency through encouraging private participation and public institutional capability power, and (3) ensuring the expansion of

infrastructure capacity.

Promoting Efficiency

Promoting efficiency in the use and supply of infrastructure services is crucial because resources are unlikely to be sufficient to meet substantial increases in demand unless efficiency is considered. Quality of services emphasize the policy of promoting efficiency covering two methods: appropriate pricing to promote efficient demand management and effective implementation of operations and maintenance activities (Document of the World Bank, 1992).

First, in pricing policies for infrastructure, the prices that guide the decisions of consumers and producers should be designed to reflect the marginal costs of production. Charging less triggers excess demand and creates wasteful use resulting in insufficient cost recovery to support the maintenance and expansion of the facilities. The existence of unmet demand at prices that appropriately reflect costs provides a true indication of the need to expand supply. Generally, utility prices should cover operating expenses, interest, depreciation, and allow self financing of a part of a new investment.

In Indonesia, while improvement has taken place, pricing policies for most infrastructure services do not reflect the purpose of pricing strategy. Only telecommunications' prices reflect full economic cost. Better aligning prices with costs would improve the efficient use of other infrastructure services. In power and water, subsidization schemes could be better

targeted to achieve equity and objectives. Therefore, Indonesia needs to continue pricing policy reforms in most of its infrastructure services.

Another method designed to promote efficiency is effective implementation of operations and maintenance or O&M. The effectiveness of O&M of infrastructure investments defines the productivity of the facilities. Inadequate operational practices make the use of the infrastructure facilities inefficient and under-utilized, and create poor quality of service. The need for new investment can often be appreciably reduced through improved O&M of existing facilities. In planning new infrastructure investments, it is important to ensure that the associated, incremental O&M requirements can be met. Therefore, the O&M method plays an important role in creating effective investment strategy for infrastructure development.

Since 1988, Indonesia has made significant refinement in its O&M improvement. The importance of O&M has been articulated in high-level policy statements promoting national recognition of the need to improve performance in this area. Budgetary allocations to O&M, in both the routine and development budgets, have been raised. However, the effort to improve O&M funding and implementation should be intensified and maintained. Maintenance improvement is especially needed in public transportation, railways and bus. In irrigation, the efficiency operation is estimated to be lower than 25 percent instead of the targeted 50 percent. In telecommunications and power, O&M problems are less

severe.

Improving Efficiency

Infrastructure development can not be approached effectively unless improved efficiency in both the use and the provision of services takes place. Two major policies have been suggested to improve efficiency in the provision of infrastructure services: (1) encouraging private participation in infrastructure development, and (2) enhancing public institutional capacities to improve the delivery of services that will remain in the public domain (Document of the World Bank, 1992).

Promoting Private Provision of Infrastructure

The increased demand for infrastructure services related to economic growth and the development of private financial and technical capacities over time requires private sector participation. A mix of market failure considerations--public goods, scale economies producing natural monopolies, and externalities--and the initially small size of the private sector have led most developing countries, including Indonesia, to rely heavily on the public sector to provide economic infrastructure.

However, as Indonesia's economy and the demand for infrastructure services have expanded, the public sector's capacity to deliver these services efficiently has not kept pace. There are three factors affecting the constraints on public provision. First, the predominance of public provision has limited the scope for private participation; the consequent

absence of strong competition from the private sector has hindered efficiency in public service delivery.

Second, public providers of services have been increasingly subject to institutional constraints on their capacities to operate and expand services, due to organizational and human resource weaknesses. Third, the decline in oil revenues and the tighter resource position have constrained public provision financially, especially given the large investment and O&M requirements of infrastructure. Considering these circumstances, private participation can contribute to infrastructure development in three important ways: (1) enhancing the efficiency, (2) relaxing implementation constraints, and (3) reducing the financing requirements.

Enhancing Efficiency of Public Provision

Another policy recommended to achieve effective infrastructure development through improving efficiency in both the use and the provision is enhancing efficiency of public provision. In the context of public-private partnerships providing public goods services, the capabilities of the public sector to improve the efficiency of large infrastructure improvement programs are also important. Improving the efficiency of public provision needs institutional reform directed at (1) institution-building in the central government, (2) decentralization of additional responsibilities to local governments, and (3) reform of public enterprise management (Document of the World Bank, 1992).

First, institution-building in the central government deals with improving its capabilities to manage its own programs and projects, and regulating or supporting other providers' projects such as those of public agencies and the private sector. Investment planning, interagency coordination, and civil service development are among the most important subjects within an institution-building concept which require reform.

Second, reformation in decentralization, a policy to transfer responsibilities to local governments, requires three prerequisites: the adequacy of the institutional capacities of local governments to take on additional responsibilities, the ability to finance these responsibilities, and proper accountability. Due to the poor capabilities of most Indonesian local governments, the three areas are in need of attention. The central government can develop local governments' capacities through collaborative participation, technical assistance, and provision of guidelines and standards. The financial ability of local government can be enhanced through a mobilizing policy of resources determined by the National Development Planning Board. Clear delineation of responsibilities and upgrading of local government monitoring and accounting will underpin effective accountability.

Finally, the performance of Indonesian public enterprises associated with the quality of management such as operational and financial capability is very weak. Reformation of the public enterprises is being undertaken by the Indonesian government by

developing a policy framework setting out financial performance criteria for public enterprises and outlining a number of options to improve their appearance.

Expanding Infrastructure Capacity

The need for investment in a new capacity can be accomplished through implementation of policies relating to managing demand and improving efficiency in the use and provision of infrastructure. Due to large unmet demand for the infrastructure services and the new increasing demand as Indonesia maintains rapid growth in the 1990s, huge investment in infrastructure will be needed requiring both a large program of public investment and increasing private participation.

To ensure that the development of sufficient new infrastructure capacity takes place, there are two major areas that should be taken into account: projecting the size of overall infrastructure investment programs and setting appropriate sectoral and intra-sectoral public investment priorities (Document of the World Bank, 1992). First, projecting the side of infrastructure investment programs in Indonesia requires allocations to infrastructure be determined in the light of competing demands of the other sectors.

The World Bank (1992) states that the total Indonesian public infrastructure investment between its fifth five-year development plan or *Repelita* V (1989-1994) and the fourth five-year development plan or *Repelita* IV (1985-1989) increased to 50 percent in real terms, implying average real growth of around 8

percent per annum. To meet the prospective demand for the infrastructure provisions, the growth in public investment should be accompanied by the contribution of private investment. In addition, the increase in the private sector's support will also contribute to raising the overall efficiency of service provision.

Second, setting appropriate sectoral and intra-sectoral public investment priorities is crucial in order to achieve the program's effectiveness in pursuing its goals. Sectoral allocations are determined by four areas of considerations: (1) overall investment requirements for meeting appropriate sectoral targets, (2) availability of financing, (3) implementation capacity, and (4) the potential role of the private sector.

According to the World Bank (1992), in Indonesia, the particularly strong and increasing demand on power services, and the importance for growth for alleviating supply shortages, are reflected in a sizable increase in the allocation to power: 2.1 per cent of GDP during *Repelita* VI (1994-1999), compared to 1.7 per cent during *Repelita* V (1989-1994) and an estimated 1.4 per cent during *Repelita* IV (1984-1989).

For similar reasons, a higher allocation is proposed for telecommunications: the proposed 0.5 per cent of GDP compares with an estimated 0.3 per cent of GDP during *Repelita* VI. For other sectors, the allocations, relative to GDP, are similar to recent levels, i.e., 2.1 per cent of GDP for transport and 0.9 per cent of GDP for water supply and sanitation. As appropriate

sectoral and intra-sectoral priorities are established, the planning of overall public infrastructure investment can be projected effectively.

Chapter 6

CONCLUSION

In order to manage the urban infrastructure development of its cities and towns, in 1985, the Government of Indonesia initiated the Integrated Urban Infrastructure Development Programme or IUIDP. The programme was designed to integrate urban spatial planning and sectoral components, to mobilize the sources of funding, and to tailor programmes to local needs by empowering local governments.

There are two types of models being implemented within the IUIDP: the deconcentrated model and the decentralized model. The deconcentrated model is considered to be the most efficient model for implementation which has been used so far by the central government. Predominant in this approach is the smooth implementation of the physical projects, limitation of the commitment fees, and to a lesser extent the implementation of non-physical components.

Unfortunately, the deconcentrated model barely reflects the needs of local governments and hardly calls for responsibility by local communities in its project operations and maintenance. The decentralized model, on the other hand, is perceived to be a better policy in terms of increasing the local sense of ownership which is triggered by local government's participation and involvement. The disadvantage of the model is that the capacity among local governments may vary, resulting in the delay of project implementation.

The implementation of the IUIDP uses various donors from foreign funds and agencies providing both financial and technical assistance. In addition, a set of preliminary activities, such as agreement documents between the central and local governments, a mechanism and regulations of borrowing, and manuals/guidelines for loan applications are also being finalized.

To finance the provision of the public urban infrastructure projects, the Indonesian government utilizes three sources of funds: (1) central-local transfers flowing from the central government to the regions, (2) local revenues raised by income generating activities such as local taxes and user charges, and (3) loans to local governments coming from both the central government and foreign sources.

Before the establishment of the IUIDP, the planning, financing, and execution of urban infrastructure provision will remain primarily in the public sector. Due to decreasing budget and resources, the Indonesian government adopted a new policy requiring that the private sector contribute to urban infrastructure provision through public-private partnerships. The partnership is primarily aimed at assisting the government to meet the future increase demand, to provide the consumer with a greater variety of services, and to promote efficiency and equity in the use of infrastructure resources.

Efforts to encourage the participation of the private sector has been made by the Government of Indonesia for the last ten years. For example, the deregulation promoting major reforms on

trade policy, investment licensing, and transport regulations. In addition, there are a set of reforms in the legal system designed to promote competition by reducing legal barriers and increasing mobility of private investment. The incentives, regulations, and laws developed to provide greater participation of the private sector include trade policy and domestic regulations, and the legal reform.

Even if the privatization appears beneficial, the public sector will not lose its important role in providing urban services. Four reasons highlight the rationale of the public role: (1) the limits of the private sector's capacity in handling externalities such as sewerage, dams, and particular roads, (2) economies of scale in certain urban infrastructure service requires public sector involvement, (3) equal treatment relating to prices and subsidies can not be born by the private sector, and (4) public intervention is needed in providing infrastructure services when income redistribution is considered.

Generally, in the spirit of public-private partnership, the role of both the public and private sector are not the same among the urban infrastructure services. Public intervention is needed when markets fail to meet adequate cost because very large investments are required. On the other hand, the private sector's involvement is wanted when competitive ownership is feasible and results in more efficient production costs.

Consequently, making the public sector effective is crucial for the success of such a partnership. Furthermore, if

partnerships are formed carefully, fears that privatization will increase costs and harm the poor can be alleviated. In fact, an increase prices to enable cost recovery in the delivery services may actually help the poor, because the expansion of infrastructure access will reduce time required by these people to access basic public services.

To keep pace with the rapid growth in the 1990s, and the resulting increase in demand on infrastructure facilities, it is necessary to meet the present unfulfilled demand and to ensure the availability of adequate services. Three strategies are suggested by the World Bank to the Indonesian government in order to pursue the challenges of infrastructure development: promoting efficiency, enhancing efficiency through encouraging private participation and public institutional capability, and ensuring the infrastructure capacity's expansion.

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