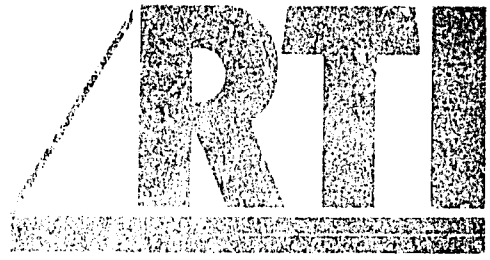


RESEARCH TRIANGLE INSTITUTE

Urban Strategy Assistance

Indonesia

James McCullough
Dennis Rondinelli
John Taylor
David Foster
John Kasarda

Prepared for:

USAID Mission to Indonesia
Jakarta, Indonesia

March 1990

POST OFFICE BOX 12194 RESEARCH TRIANGLE PARK, NORTH CAROLINA 27709-2194

Urban Strategy Assistance

Table of Contents

URBAN STRATEGY ASSISTANCE
for
USAID/INDONESIA

Executive Summary

Purpose of the Study

This study is to assist the USAID Mission to Indonesia to formulate a medium term strategy for addressing urban development needs in Indonesia. While the strategy has no precise time horizon, it focuses on programming opportunities over the next three to five years. Indeed, all of the opportunities identified in this report address pressing urban issues; most could be initiated immediately.

Urban Development Trends

Urbanization is increasing rapidly in Indonesia. With an annual urban growth rate of about 4%, the population of Indonesia's urban places will grow from about 52 million in 1990 to 79 million in the year 2000. By the year 2025, the urban population is projected to reach 152 million persons, almost triple the urban population today. By that time, over 55% of the total population of Indonesia will be living in urban places, up from only 29% in 1990.

About half of the urban population resides in the ten largest cities. Five cities have over 1 million inhabitants, including Jakarta which has an estimated 9.5 million residents. There are about fifty major cities with over 100,000 population and 350 moderately sized urban areas throughout the country.

Because of rapid population growth, the urban labor force also is growing fast. The working age population in urban areas grew by about 7% per year in the 1980's. As a result, the urban labor force is estimated to have more than tripled from about 6 million in 1971 to almost 20 million in 1990.

As the labor force grows, the mix of jobs performed is undergoing a significant transformation. Although the Indonesian economy has been rural and agricultural in the past, it is fast becoming more urban and non-agricultural. The percentage of the labor force in agriculture is dropping rapidly as employment in the manufacturing and service sectors rises at an accelerating pace. The growth rate in agricultural employment turned negative in 1985 and is expected to remain negative for the rest of the century. By 1991, more of the labor force will be in manufacturing and services than in agriculture. By the year 2025, only 21% of total employment in Indonesia will still be based in agriculture.

Most of the urban labor force is finding employment in the informal sector and is characterized by a high level of underemployment. It is estimated that about 75% of the total work force in Indonesia is employed in informal sector activities. While open unemployment rates have been quite low in recent years (about 2-3%), underemployment levels are estimated to be quite high (30-40%).

The high urban population growth rates are straining the financial and managerial resources of the government. Urban services have been traditionally financed and delivered by central government agencies. Indonesian local governments have been highly dependent on central government transfers for both operating and development expenditures, with over 80% of local government budgets provided by the central government - one of the highest levels of dependency found anywhere in the world.

The Government of Indonesia (GOI) has greatly increased its investment in urban infrastructure over the past decade. However, the investment program has started from a fairly low base with much of the investment going to make up for accumulated deficits in service coverage. In 1980 only 35% of the urban population had access to satisfactory water supply while only 29% was served by adequate sanitation.

The GOI set ambitious targets for improved urban service coverage over the last decade and has invested heavily to meet those targets. At the same time, much of the investment capital has had to be borrowed, mainly from multilateral lending institutions, such as the World Bank and Asian Development Bank, as well as from bilateral donors programs. A growing proportion of that borrowing is passed on by the central government to lower level authorities who are expected to repay the loans from increased user charges and local taxes. While loans comprised less than 20% of central government transfers to local authorities during the previous Five Year Plan 1984-89 (Repelita IV), that percentage is projected to more than double over the current Repelita V Plan period.

The Government's Urban Development Strategy

The Government of Indonesia has moved aggressively to meet the challenge of rapid urbanization on several fronts. The GOI has increased the level of resources going to investments in urban services, proposing to double the total amount to be invested over the next five years. To make this possible, the GOI has also embarked on a fiscal decentralization strategy which will enable the local authorities to steadily increase their contribution to financing that investment.

In the urban development sector, the GOI has adopted a "basic needs strategy". The strategy aims to provide coverage of a basic package of services to urban residents which includes water supply, sanitation, solid waste removal, roads and pedestrian access, drainage and flood protection, and primary health clinics and education facilities. The GOI strategy has been principally embodied in the Integrated Urban Investment Development Program (IUIDP) which has developed plans for infrastructure investment packages on a city by city basis. These plans have been based on local needs identification balanced by realistic financial constraints. To date, about 120 cities have received IUIDP planning assistance.

With the rise in urban infrastructure investments, the GOI is also committed to strengthening local government capacity to manage those investments. In 1987,

the GOI adopted the Urban Sector Policy Statement that assigns clear responsibility for urban services provision to local governments and local public enterprises such as water supply authorities. At the same time, the GOI has embarked on a program to strengthen resource mobilization at the local level so that the overwhelming dependence on central government transfers can be lessened.

Local governments have already begun improving local resource mobilization mainly through improvements in local property tax collections and water supply user fees. Local revenues grew at a rate of 10% per year after inflation during Repelita IV and are projected to grow at a real rate of 12% during the current Plan period.

The decentralization of urban services is causing important shifts in GOI central ministry roles. In the past, the Ministry of Public Works (MPW) was responsible for carrying out many municipal services, especially provision of infrastructure. As that role is gradually shifted to local governments, the Ministry of Home Affairs (MHA) is being called on to increase the training and technical support services to local authorities. The Ministry of Finance (MOF) has assumed two roles which are growing in importance - technical support to improve local revenue generation and lending to local governments for infrastructure (through the creation of a consolidated loan fund known as the Regional Development Account).

Given the high degree of coordination that must occur to implement this urban development strategy, the Coordinating Team for Urban Development (TKPP) was formed under the aegis of the National Planning Ministry (BAPPENAS). TKPP has representatives from MPW, MHA, MOF as well as BAPPENAS. It serves as the urban policy forum, a monitoring and review body and as a focal point for communication with foreign donors in the urban sector.

USAID Programming Opportunities

The GOI urban development goals provide a good fit with the USAID country assistance strategy. The GOI is intent on improving the efficiency and

financial viability of its urban investments. It is shifting responsibility from the central government to lower levels of government and the private sector. It has developed a coherent national policy and has instituted legislative reform and changed agency mandates to carry out that policy. Now, the GOI requires both financial and technical support to help implement its program.

USAID has responded to these GOI initiatives with two recent activities: provision of a $100 million Housing Guaranty (HG) Loan for urban infrastructure finance and the grant funded Municipal Finance Project which provides technical assistance at the national policy level. While this experience in Indonesia's urban sector is quite new, it provides a good model of how USAID's urban sector work should be developed. The USAID supported urban finance assistance has the following characteristics:

- It targets a critical element of the GOI urban sector strategy;
- It is driven by a policy agenda, mutually developed and agreed upon by the GOI and USAID;
- It provides assistance to the GOI to build institutional capacity to carry out the policy agenda;
- It furthers the Agency's overriding objectives of supporting "open markets/open systems;" and
- It draws on related USAID experience in Indonesia (Financial Markets Project) as well as USAID program expertise elsewhere in the region.

The study team has identified five target areas in the urban sector for potential USAID assistance. These target areas were selected on the basis of their importance to the sector, their fit with USAID country experience and policy

relevance (both to USAID and the GOI). In summary, they constitute USAID's comparative advantage" in assisting Indonesia. The areas include:

- Urban employment and job creation
- Decentralization and privatization of urban services
- Urban finance
- Regional economic development
- Urban environmental management

Notably absent from the list of target areas is the housing sector. Housing was not covered in this report for three main reasons: (a) USAID undertook an extension Shelter Sector Assessment for Indonesia in 1985; (b) a recent comprehensive study of the housing sector funded by the World Bank found relatively little need for additional donor assistance in the housing sector (although adequate infrastructure for housing remains a problem); and (c) other donors are already quite active in the sector.

It should be evident that this study views urbanization as a more dynamic and "cross cutting" issue than the traditional conception of the urban sector which is identified largely with physical planning aspects of housing, land use and infrastructure networks. That traditional view has tended to keep urban issues relegated to a small subset of development concerns and has made it easy to overlook the true role of urban areas in broader economic development. However, with the rapid shift in population from rural to urban areas, as well as the growing contribution of urban-based industry to overall economic growth, the urban sector now must be approached in a broader context.

The selection of the five target areas underscores the changing perspective on the urban sector in Indonesia. The GOI has already begun to shift emphasis from physical planning to the finance and management of urban services. As such, the five target areas represent a mix of "old" and "new" urban issues for the GOI. For example, considerable work has already done in urban finance and decentralization at the national policy level but much now needs to be done in implementation. On the other hand, very little has been done in the areas of urban employment or in urban environmental management.

Summary of Program Recommendations

The main text of the study presents programming recommendations for USAID for each of the five target areas. The recommendations tend to cluster in three types of activities: policy analysis support, technical assistance/training and demonstration project support. The following briefly describes the main recommendations organized under these three types of activities.

Policy Analysis Support

Policy analysis support involves the development of local capacity, within GOI and outside the government, to undertake high level policy review and formulation. It aims to build up the "infrastructure" comprised of trained manpower, information bases and analytical techniques. Capacity building is critical at this juncture because many of the pressing urban issues in Indonesia now fall outside the traditional scope of urban analysis - i.e., they involve issues of employment, financial markets, and public administration reform.

In urban employment programs, USAID should build on its Development Studies Project (DSP) which has developed a solid information base for monitoring employment trends in general. Additional work needs to be done in analyzing the dynamics of urban employment generation, especially to determine the linkages between urban investments, regulation, credit and job creation. It is important to

understand the links between the formal and informal sectors as well as the types of intervention programs that are successful in aiding small scale enterprise growth.

In urban finance, new issues are emerging as the GOI increases reliance on local borrowing to finance urban infrastructure investment. Indonesian expertise must be built up in the areas of domestic credit mobilization, debt capacity analysis, and alternative cost recovery mechanisms. The central-local government grant system needs to be reformed as it is poorly targeted and inhibits local fiscal effort. Indeed, increased reliance on debt financing of local infrastructure will not work well without concomitant changes in the system of grants.

In regional economic development programs, the GOI needs to look beyond the basic needs approach to examine the potential for urban investment strategies that stimulate economic growth. These include policy options that strengthen the comparative advantages of different regions as well as the economic functions of secondary cities and towns. The entire set of policies surrounding infrastructure investment needs review in light of the potential conflicts between the current national investment plan, the increasing local autonomy that comes from fiscal decentralization, and the differing demands of regional economic growth.

The environmental management area is relatively new to Indonesia and there is a basic lack of information on the true dimensions of urban environmental problems. Indonesia needs support in building up both its monitoring systems and the analytical skill base. Of particular importance are the topics of resource pricing, the impact of various government subsidy programs and mechanisms for financing pollution controls.

An important aspect of policy analysis support is the ability to communicate policy options effectively to decision makers. This is particularly true for the urban sector in Indonesia where decision making is spread across several ministries, different levels of government and the private sector. USAID has pioneered

innovative "policy awareness" communication approaches in population (through the RAPID project) and in education (through the BRIDGES project). This element should be incorporated into any USAID urban policy support.

Training and Technical Support

The major need for training and technical support is at the local municipal level where the decentralization program is forcing much greater responsibilities on local government. The GOI requires assistance first in setting up the institutions which will provide adequate training and technical assistance coverage throughout the country. This will involve greatly expanding MHA's training capabilities. In addition to training, local governments will require access to day-to-day technical assistance, a need that will exceed MHA's current capacity. This will require use of private sector firms as well as other government agencies in addition to expanded MHA capability.

Local and provincial governments will also require expertise in areas beyond the planning and management of basic infrastructure services. They need help in examining infrastructure needs of business development as well as the skills to manage private/public partnerships. Of immediate concern is the availability of technical support to the autonomous local water authorities whose financial management capabilities (especially debt management) are already seriously in question.

In the area of urban employment, there is not yet a sound understanding of how to intervene effectively. Since current programs appear to perform poorly, the immediate need is to determine what interventions work and why. This calls for both analysis of current efforts and selective experimentation, especially with programs that address the needs of small-scale enterprise.

Demonstration Project Support

USAID has already signalled its commitment to the urban sector through the provision of the first HG loan for urban infrastructure financing. There are also a number of other opportunities for support, including both small scale demonstration projects and projects requiring major capital financing that could be provided by the HG facility.

The highest priority demonstration activities are those oriented toward private sector involvement since that is the area in which Indonesia has had the least experience.

In terms of small scale demonstration efforts, there are needs in the areas of:

- Urban micro-enterprise technical support,
- Planning for market town infrastructure projects,
- Private sector provision of urban services such as solid waste collection, and
- Private sector provision of municipal financial management services (e.g., property tax computerization).

Large scale demonstration projects, involving major capital financing, include:

- Land development schemes providing serviced building plots which recover capital costs of infrastructure through land sales; and

- Private sector construction and operation of major infrastructure facilities (such as a waste treatment plant) under either foreign/local joint venture or "build-operate-transfer" arrangements with local equity participation.

The programming opportunities outlined above represent the main targets of opportunity for USAID in the urban sector. These constitute a first cut at defining the Mission's urban agenda for the near term.

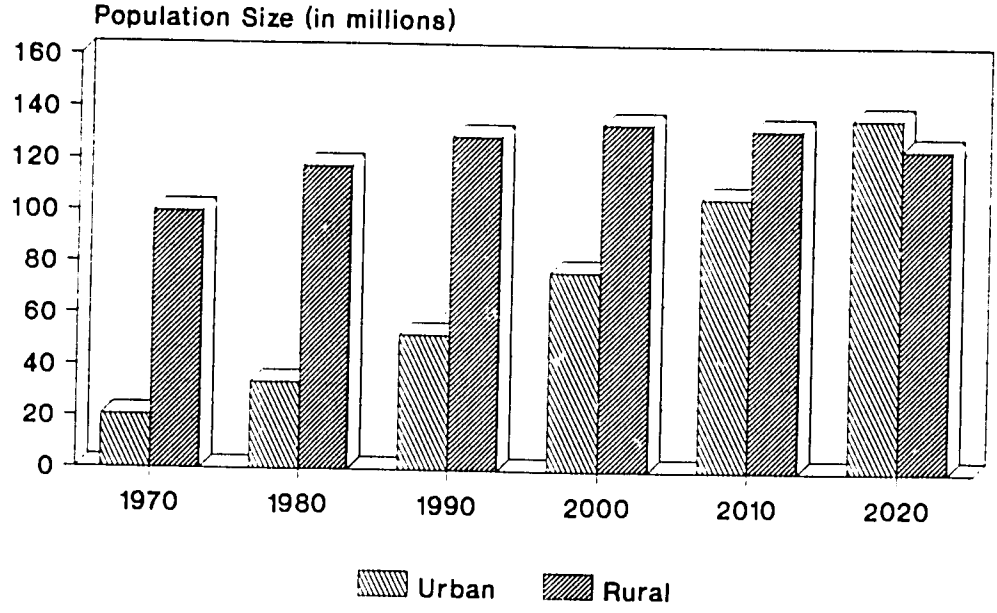
1.0 URBANIZATION TRENDS IN INDONESIA

Among the realities with which Indonesia will have to cope over the next decade are the following:

Rapid Population Growth in Urban Areas is Accelerating Urbanization

Although Indonesia has been quite successful in reducing total population growth rates over the past two decades from an average of 2.4 percent a year in the early 1970s to about 2.2 percent a year during the late 1980s, the absolute number of people has been increasing rapidly. Total population in Indonesia grew from about 119 million in 1971 to 180 million in 1990, and is projected to grow to 211 million by the year 2000. The United Nations predicts that over the following 25 years the total population will increase to 273 million (see Figure 1).

Figure 1
Population of Urban and Rural Areas in Indonesia



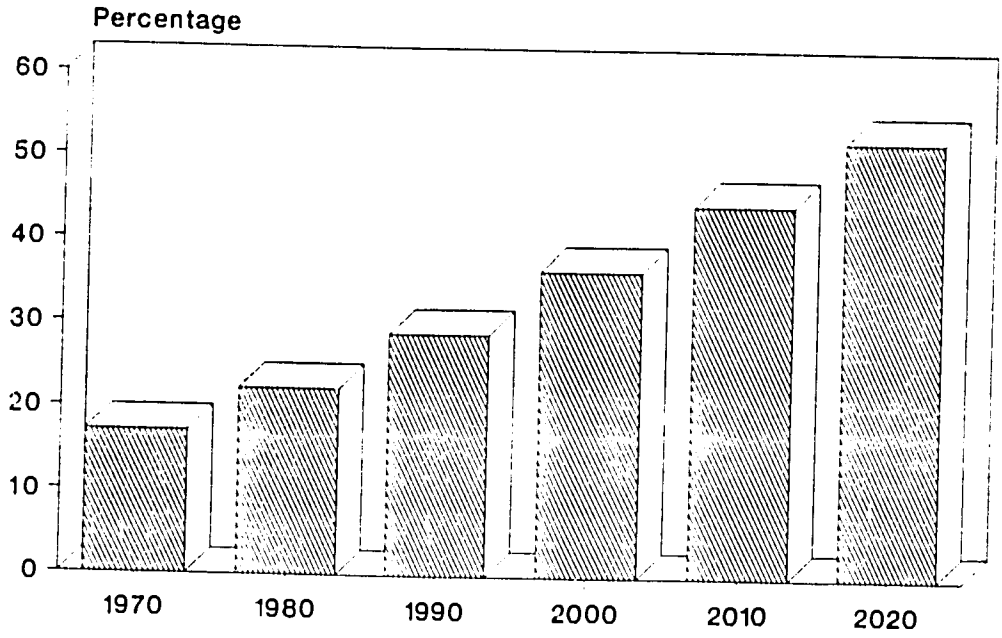
Source: United Nations (1987)

Because of substantial population growth, heavy migration of people from rural to urban areas, and reclassification of rapidly growing towns as urban places, the urban population in Indonesia increased during the 1970s, from a little more than 20 million to nearly 33 million. The largest increases in urban population were found in Java and Sumatera. Between 1971 and 1985, the urban population of Sumatera doubled from a little more than 3.5 million to about 7.1 million. On the island of Java, the population in urban areas increased from about 13.5 million to more than 30.3 million (see Table 1, Annex 1).

By 1990, Indonesia's urban population reached 52 million. The United Nations projects that the urban population will triple in size over the next 35 years to 152 million by the year 2025. If this projection is accurate, it implies that the Government of Indonesia (GOI) must be prepared over the next 35 years to accommodate additions to the populations of urban places that are equal in size to the total population of Indonesia in 1980.

The United Nations further predicts that the percentage of the population living in urban areas (defined as municipalities, regency capitals and other settlements with urban characteristics) will increase from 17 percent in 1970 to 29 percent in 1990. By the end of the 1990s more than 36 percent of the population will be living in urban areas and over the following 25 years the portion of the population living in cities and towns will increase to more than 55 percent (see Figure 2).

Figure 2
Proportion of Population in Urban Areas
Indonesia 1970-2020



Source: United Nations (1987)

The Number and Size of Urban Centers is Growing Rapidly

Both population growth and expansion of the boundaries of cities and towns account for the rapid growth in the numbers and sizes of urban centers in Indonesia. In 1961, Indonesia had only two cities with a population of more than one million--Jakarta and Surabaya. By 1980, there were five cities with more than a million people: Bandung, Medan and Semarang each passed the one million population threshold. The number of urban centers with more than 100,000 population increased from 22 in 1961 to 30 in 1980 (see Table 2, Annex 1).

Between 1961 and 1980, the populations of Jakarta, Surabaya, Medan, Semarang, and Padang all at least doubled in size, as did the populations of at least six other cities with more than 100,000 residents.

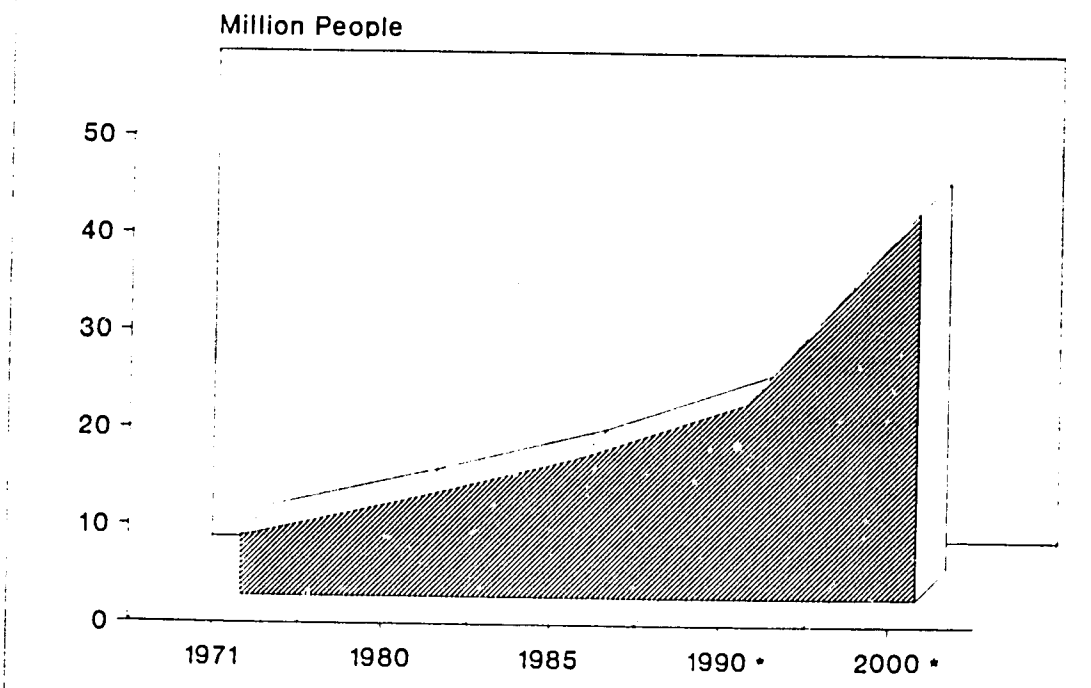
The United Nations estimates that the population of Jakarta grew from about 2.8 million in 1960 to nearly 9.5 million in 1990, and that it will continue to grow to more than 12 million by the end of the 1990s. Medan likewise grew from less than 500,000 in 1960 to about 3 million in 1990; and Surabaya's population increased from less than 1 million in 1960 to about 2.7 million in 1990.

Growth in the Labor Force Will Be Concentrated in Urban Areas

Because of rapid population growth, the Indonesian labor force has also been growing rapidly. During the 1970s, the labor force grew on average by nearly 3 percent a year, and from 1980 to 1985 it increased by nearly 4 percent annually. During both periods, the working age population (from 10 years to 65 years old) in urban areas increased even faster; by 5.6 percent a year during the 1970s and by about 7 percent during the early 1980s. As a result, the size of the labor force in urban areas of Indonesia more than doubled between 1971 and 1985 from about 6 million to more than 14 million people. If the growth rate in the urban labor force remains constant, it will have reached 20 million by 1990 and double again to 40 million by the year 2000 (see Figure 3 and Table 3, Annex 1).

The International Labor Organization (ILO) estimates that the labor force will expand on average by more than 2 percent a year until the end of the century. By the end of the 1990s, Indonesia's labor force will reach 88 million, and will expand to about 120 million 25 years later. Without a substantial job creation effort to boost demand for labor, the virtual flood of new job seekers will overwhelm available employment opportunities, preventing growth in income levels.

Figure 3
Urban Labor Force in Indonesia



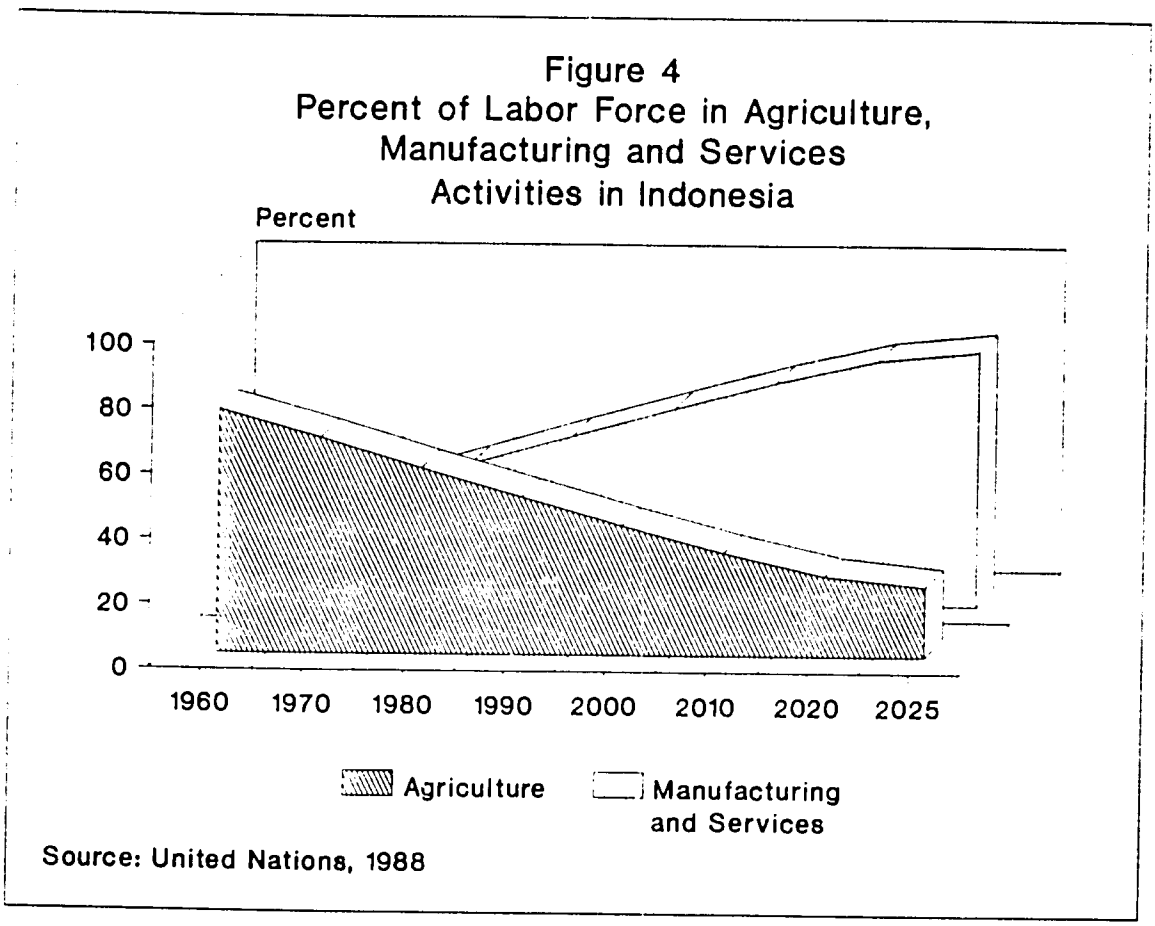
Source: Based on Table 3, Annex 1.

* Projected

The Composition of the Labor Force Is Shifting Rapidly from Rural-Agricultural to Urban Nonagricultural Jobs

Much of the increase in the working age population has been taking place, and will continue to take place, in urban areas. During the 1970s, the urban working age population increased at an annual rate that was more than twice that of the rural working-aged population. During the first half of the 1980s, the population of working age in urban areas grew on average at a rate that was nearly three times higher than in rural areas.

ILO statistics indicate that as Indonesia's labor force grows, the mix of jobs performed will undergo a significant transformation. Although Indonesia's economy has been rural and agricultural in the past, it will become more urban and nonagricultural in the future. The percentage of the labor force in agriculture is dropping quickly. The average annual growth rate of the agricultural labor force became negative in 1985 and is expected to remain negative for the rest of the century (see Figure 4).



In 1970, 66 percent of the labor force could be found in agricultural activities. By 1990, it will drop to less than 50 percent for the first time in history. By the end of the 1990s, it will drop to about 39 percent, and over the following 25 years, it will decline to about 21 percent. The labor force in nonagricultural activities (manufacturing and services) grew by about 4.2 percent a year during the late 1980s, and is expected to continue growing at more than 3.5 percent a year during the 1990s.

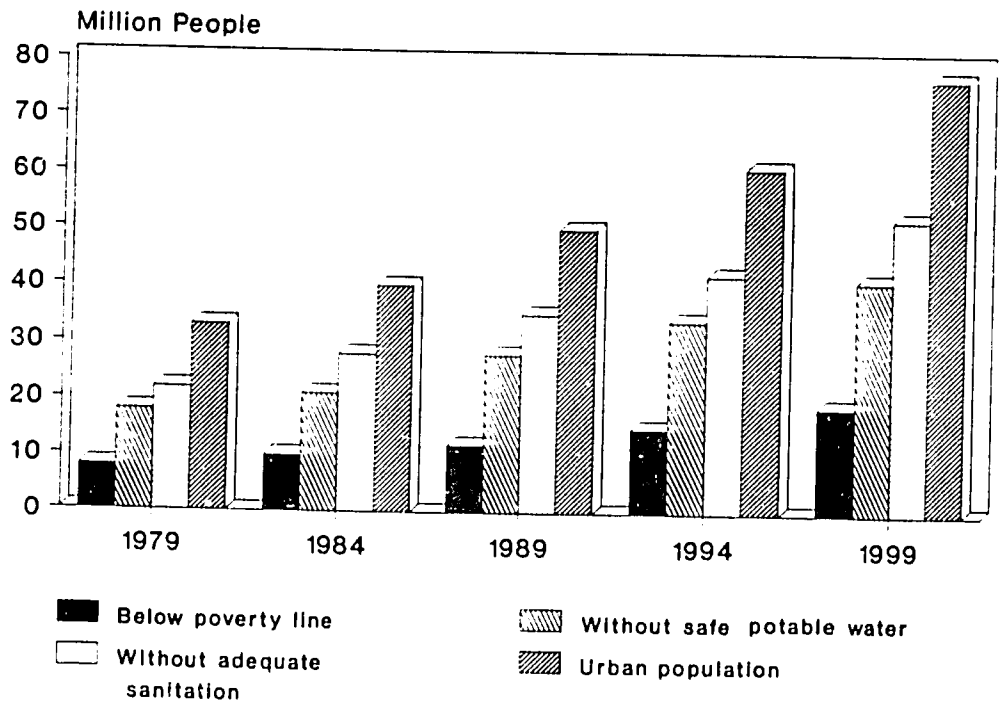
The number of people in the labor force working in manufacturing and services more than doubled from 15 to 36 million between 1970 and 1990. It is projected to more than double again over the next 35 years, reaching 94 million. Thus, nearly 60 million nonagricultural jobs must be created during this period if unemployment and underemployment rates are not to rise. Most of these jobs that must be created in nonagricultural activities will have to be in urban areas. Stated in comparative terms, Indonesia will have to create more new off-farm jobs over the next three and a half decades than the total number of jobs that existed in the country through the mid-1980s.

Despite Large Increases in Urban Infrastructure Investments, Service Deficits Will Continue to Grow

The GOI has made a major commitment to urban infrastructure investment with a proposed target of about Rps 1.5 trillion per year over the course of Repelita V (1989-94). This is more than double the investment level reached during Repelita IV (1984-89) which represented a substantial increase over previous investment levels.

Despite this accelerating investment, the service deficits of urban areas will keep rising due to the very high population growth rates in urban areas. Figure 5 shows the projected increases in service deficits in water and sanitation as well as the population living below the poverty level, even with the proposed levels of investment under Repelita V.

Figure 5



Source: UNDP, Project Document: IUIDP implementation Support Project, 1989.

The GOI investment program has had to overcome substantial existing deficits in service coverage. For example, in 1980 urban water supply coverage was only 35 percent while sanitation coverage reached only 29 percent of the urban populations. These coverage rates, especially for water supply, were among the lowest in the Asia region (see Table 4, Annex 1).

Rapid Urbanization Is Compounding the Environmental Problems of the Country

Water and water-related issues (wastewater, flooding, erosion, and groundwater) are probably the most serious environmental issues confronting Indonesia. These problems are serious in both rural and urban areas but the Indonesian urban development pattern has often compounded them. Most Indonesian cities (Yogyakarta is the conspicuous exception) have grown up around coastal valleys or tidal floodplains and urban growth has spread into unsuitable or poorly prepared building sites with inadequate infrastructure and regulation. Conversion of swamps and riparian lands reduces the capacity of the land to buffer the impacts of tropical storms. Thus situated, these cities cause and suffer some of the most severe environmental conditions. Problems include: groundwater contamination, poor sanitation, sea pollution and the adverse effects of increasingly denuded hinterlands, flash floods, and siltation. The World Bank estimates that about half of the urban population in Indonesia is currently affected by these problems.

Water quality monitoring of the rivers of Java reveal biological oxygen demand (BOD) levels six times higher than the ambient standard and fecal coliform concentrations at 1,000 to 4,000 times the ambient standard.

The Economic and Social Commission for Asia and the Pacific (ESCAP) reports that approximately 80 percent of disease in developing countries is related to water supply and waste disposal. Not surprisingly, Indonesia has chronically experienced some of the highest levels of cholera and diarrheal diseases.

By 1985, the percentage of urban housing provided with water supply had grown to 40 percent but by 1989 this number still had reached only 41 percent despite a goal of 75 percent and a doubling of the production capacity. The delay has been caused by rapid increases in the urban population and inadequate investment in water distribution.

Indonesia Has Begun to Make Progress in Fiscal Decentralization but Local Governments Remain Highly Dependent on the Central Government for Financial Support

Central-to-local government transfers have accounted for a sizeable share of total public expenditure in Indonesia. During Repelita IV these transfers accounted for 18 percent of the central government routine expenditures and 13 percent of the development expenditures. These transfers accounted for approximately 80 percent of total local government expenditures (Levels I and II) during Repelita IV.

Local governments have begun to improve the collection of local taxes and charges. Over the last 5 years, locally collected revenues increased at an annual rate of 10 percent in real terms. For the current Repelita V, local revenues are expected to increase at 12 percent annually. By the end of

the Plan, local revenues are expected to equal 2.2 percent of GDP. Despite this steady increase in local resource mobilization, local governments will remain highly dependent on central government transfers. About 76 percent of local government budgets during Repelita V will still come from the central government.

The Central Government is Shifting Much of Its Increased Financial Support to Loans, Rather Than Grants, to Local Authorities

Much of the increase in central government support for urban investment will be in the form of loans to local governments and public enterprises such as water authorities. Fully over 40 percent of the central government investment during Repelita V is proposed as loans, as opposed to less than 20 percent in Repelita IV.

Historically, local governments have had very limited access to credit. However, that has begun changing as local-government borrowing has grown from Rps 30 billion, or 1.5 percent of local development resources in 1983/84, to about Rps 63 billion, or 3.6 percent in 1986/87. Central government lending to local governments for infrastructure has operated through several channels in the past. It is now in the process of being consolidated into a single loan fund known as the Regional Development Account (RDA).

Private Sector Participation in Municipal Services Remains Quite Limited

The GOI is committed to the decentralization of municipal services, which includes increased participation by the private sector and nongovernmental organizations (NGOs) as well as local governments. However, most of the attention thus far has been focused on the transfer of responsibility from central to local government. This process has been most advanced in the water sector, where local water supply enterprises have been established in about 300 jurisdictions. The role of the private sector in the formal urban service delivery sector remains small. For example, in the program plans for the Integrated Urban Infrastructure Development Project (IUIDP) investments in East Java and Bali, the percentage of investment from private financing is proposed at 1.4 percent for East Java and 7.2 percent in Bali.

The main service areas where the private sector has become active include construction and operation of several major toll roads and the contracting out of solid waste management operations.

Despite the limited use of privatization in urban service delivery per se, the GOI has greatly increased the private sector role in engineering design and construction contracting. Various Presidential decrees have spurred the use of local private consultants and contractors since 1980. There are currently about 1,400 local consulting firms in Indonesia, most of which are quite small. The organization for consulting engineering firms has 600 members. There are 30,000 construction contractors registered with the Human Settlements Division of MPW of which 10 percent are medium and large-sized firms.

2.0 EMPLOYMENT, JOB CREATION AND INCOME GENERATION

2.1 Current Situation

One of the most important challenges facing the GOI over the next decade will be to create sufficient numbers of jobs for Indonesia's rapidly growing urban labor force. Indonesia's labor force grew from about 45 million in 1970 to 71 million in 1990. By the end of the 1990s, Indonesia's economically active population will reach 88 million, and will expand to about 120 million 25 years later. Over the next 35 years, therefore, nearly 50 million new jobs--almost 1.5 million a year--must be created to absorb those people who will be added to the labor force. All of this growth will be in off-farm employment. The nonagricultural labor force is actually projected to decline by 8 million during the next 35 years, while the nonagricultural labor force will expand by over 57 million. In the 1990s alone, Indonesia's nonagricultural labor force will grow by 16 million, with the vast majority taking place in cities.

The GOI's ability to establish a favorable policy environment and a set of incentives that will encourage private enterprises in urban areas to expand production and increase employment opportunities and incomes for Indonesian households will, to a large degree, determine whether or not the country will be able to continue on its path to economic development. This challenge is formidable.

Both the GOI and the USAID Mission recognize explicitly the urgent need to generate enough jobs to absorb the 16 million people who will be entering the labor force during the 1990s.

Indonesia's fifth 5-year plan (Repelita V) for 1989/90-1993/94 recognizes that large numbers of jobs will have to be created to accommodate a rapidly growing labor force. But the GOI estimates that the economy, growing at about 5 percent a year during the plan period, will absorb about 9.3 million new workers over the next 5 years. The plan is less cognizant of the implications for longer-term labor force growth. It says little about the impact of rapid urbanization or the spatial distribution of job needs.

The GOI's manpower and employment objectives are rather abstractly formulated to "enhance the business environment and facilitate the growth of small-scale, traditional and informal enterprises that have significant potential for creating employment, spreading business opportunities, enhancing equity, and promoting regional growth."

USAID's *Country Development Strategy Statement (CDSS) for Indonesia for FY 1989-FY 1993* takes a more urgent, and realistic, view of job creation needs. But it is also not very explicit about urban employment issues. It points out that while the growth in the nonagricultural labor force will average 3.5 percent a year over the next decade, GDP growth rate has averaged less than 3 percent a year during the late 1980s and that growth in real per capita income is stagnant. It estimates that less than 40 percent of the 10 million people who entered the labor force during the period 1986-1990 would be expected to find employment based on historical employment-output elasticities. Although the open unemployment rates (2 to 3 percent) in Indonesia have been relatively low in recent years, underemployment levels are high (30 to 40 percent).

As the CDSS recognizes, Indonesia faces difficult challenges in defining its strategy for economic growth during the next decade in what will be a highly competitive international economic environment. Petroleum prices are forecasted to remain stable for the foreseeable future. Indonesia will be competing in other sectors with East Asian countries such as Korea, Taiwan and Thailand that are extremely successful at exporting manufactured goods and that are entering high-technology fields. At the same time, Indonesia will be competing for highly mobile industries such as electronics assembly, textiles, and apparel with China, India, Bangladesh and other Southeast Asian countries that have an abundance of low-wage labor.

The large numbers of people who will be entering the labor force during the 1990s will be doing so during a period when economic conditions are expected to be less favorable than during the 1970s and mid-1980s. Many of those entering the labor force during the 1990s--and especially the young, the less educated, and migrants from rural areas--are unlikely to find formal sector employment. Most will engage in casual work in the informal sector. Indeed, approximately 75 percent of the work force in Indonesia is now employed in informal sector activities. Less than 2 percent of all economic units in Indonesia are legally registered.

USAID's CDSS (p. 24) concisely summarizes the challenge that Indonesia faces during the next decade: "The economy needs to provide sufficient numbers of productive jobs that will support rising real wages, are appropriate to the higher educational level and expectations of the new labor force entrants, and are spatially distributed to avoid undue migration to the big cities."

The critical policy issues that the GOI and USAID must be concerned with in the short run are not unemployment, per se, but rather developing policies and programs in conjunction with the private sector to:

- reduce the high levels of underemployment, especially in urban areas;
- reduce the rising levels of unemployment among better educated young workers entering the urban labor force;
- raise national industrial productivity;
- increase the quality and incomes derived from formal and informal sector jobs in urban areas.

By the middle of the 1990s, the government will face more serious challenges of stimulating private sector investment and production in order to

- diversify the economies of urban areas in manufacturing, trade, commerce, and services and stimulate the growth of small- and medium-scale enterprises that will have to absorb the majority of new workers in cities and towns;
- provide the urban services and infrastructure that will be needed to allow private enterprises to operate efficiently in cities and towns and to increase their output and productivity;

- allow micro-enterprises in the informal sector (especially street traders, food preparers, hawkers and vendors, and transportation service providers) to operate more effectively and to expand their operations.

The spatial distribution of employment opportunities will be critical, given the declining role of agricultural activities in the economy, the corresponding shrinkage of agricultural labor demand, and the need to provide jobs in secondary cities and towns to reduce massive migration to Jakarta. The United Nations estimates that under current conditions, the population of Jakarta will increase from more than 9 million to more than 13 million during the 1990s. If widespread economic development and equitable distribution of its benefits are to be achieved in Indonesia, jobs must be created in cities and towns outside of the Jakarta metropolitan area, and in regions other than Java.

2.2 Policy Issues

Based on the current trends in work force growth and distribution, the following policy implications are clear:

1. The GOI must develop and improve programs that expand formal sector job opportunities in urban areas.

Although open unemployment rates in Indonesia remain low and relatively high levels of economic growth now seem to be absorbing increases in the urban labor force, it will be difficult to continue absorbing the large absolute numbers of people who will be added to the urban labor force over the next decade.

Formal sector economic activities currently employ only about 25 percent of Indonesia's labor force. Although different definitions of formal and informal sectors are used in Indonesia, the commonly accepted definition of formal sector workers is those workers who get monthly or daily wages from a permanent job. Informal sector workers are those who are self-employed, assisted by family members or casual temporary employees. Employment in major industries grew more slowly during the 1980s than the growth rate of the urban labor force and at a lower annual rate than during the 1970s except in agriculture; wholesale and retail trade; and transport, storage and communications. Although the manufacturing sector has grown rapidly in recent years, it still employs less than 10 percent of the country's labor force (see Figure 6).

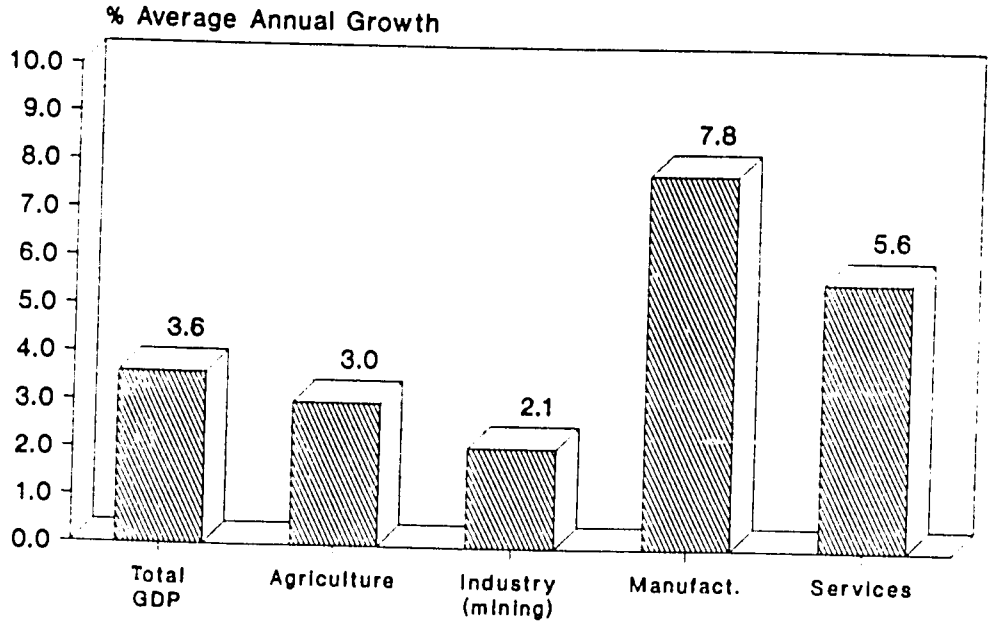
GOI officials have publicly stated that a GDP growth rate of 6 percent a year will be needed during the 1990s to prevent the unemployment rate from rising significantly. However, during the 1980s, the GDP grew on average at only a little more than half that rate. The overall growth in GDP was held down by low growth rates in agriculture and mining, while the manufacturing and service sectors grew at a much higher rate (see Figure 7).

Figure 6. Employed Persons by Main Industry
(Thousands)

Industry	1971		1980		1985	
	Amt.	%	Amt.	%	Amt.	%
Agriculture	24,772	63.2	28,834	55.9	34,142	54.7
Mining	90	0.2	387	0.8	416	0.7
Manufacturing	2,932	7.5	4,680	9.1	5,796	9.3
Utilities	38	0.1	66	0.1	70	0.1
Construction	737	1.9	1,657	3.2	2,096	3.4
Trade	4,113	10.5	6,679	13.0	9,345	15.0
Transportation	916	2.3	1,468	2.9	1,958	3.1
Finance	95	0.2	302	0.6	250	0.4
Public Services	3,923	10.0	7,145	13.9	8,317	13.3
Other & Not Stated	1,593	4.1	334	0.7	67	0.1
Total	39,210	100%	51,553	100%	62,457	100%

Source: Table 4, Annex 1.

Figure 7
Growth Rates of GDP and Subsectors
1982-87



Source: World Bank, *World Development Report*, 1989. Table 2.

If formal job opportunities are to be expanded in urban areas, the government must do more to create an environment that will allow small- and medium-scale industries to expand. The GOI classifies manufacturing industries into four size categories based on number of employees: (1) large establishments engage 100 or more workers; (2) medium establishments, 20 to 99 workers; (3) small establishments, 1 to 19 workers. Indonesia is likely to follow the pattern seen in other growing East Asian economies, as well as in the United States and Europe, where small and medium-sized rather than large-scale enterprises generate the majority of new jobs. In the United States, for example, nearly three-quarters of all new jobs created in the 1980s were by firms employing fewer than 20 persons.

Yet, in Indonesia, the full potential of small business job creation is limited by a plethora of government regulations and constraints that raise the costs of these businesses and frequently preclude entrepreneurial initiatives. In addition to regulations, entrepreneurs wishing to establish or expand small- and medium-scale enterprises in Indonesia's urban centers now experience numerous obstacles, including:

- Limited access to, and the high costs of, credit;
- High hidden costs of start-up and operation;
- Limited skills and access to information and equipment needed to improve production, efficiency and product quality;
- Difficulties of establishing and maintaining adequate marketing networks and of reducing long marketing chains;
- Inability to respond quickly to changes in market demand;
- Difficulties of competing with large-scale firms that benefit from preferential government policies and programs;
- Policies that preclude foreign-sponsored joint ventures where the investment scale is less than 250,000 US dollars;
- Limited managerial skills among small- and medium-scale business operators.

Although the government now has several programs that attempt to address these obstacles, assessments indicate that they have not been implemented effectively.

Two programs providing investment credit (KIK) and working capital credit (KMKP) to small-scale enterprises have been in existence since 1973. These programs were designed to provide subsidized loans through state and provincial development banks and commercial financial institutions to small enterprises. In addition, Bank Indonesia created a small enterprise development project in 1977 to upgrade lending procedures in the banks and to train loan officers in extending credit to small-scale enterprises.

Although the KIK and KMKP credit programs lent nearly Rps. 5 trillion by 1987 to nearly 2.5 million borrowers, only about 250,000 borrowers, and Rp. 520 million in loans, went to small enterprises. The share of the small industries benefitting from KIK and KMKP loans was never more than about 21 percent in 1975 and declined to about 9 percent in 1986. The total KIK and KMKP lending to small industries never exceeded 5 percent of total bank credits to the manufacturing sector.

Some of the difficulties of extending credit to small enterprises arose from constraints in the banking system. The amounts banks were permitted to lend was limited by the Indonesian government until 1983. But even after restrictions were eased, banks continued to favor low-risk short term loans. Moreover, the programs have suffered from inadequate staff training, mismanagement, and relatively high (about 27 percent) loan default rates.

The government has attempted to deal with the management, marketing and production technology problems of small-scale enterprises through extension and assistance programs, primarily through BIPIK, the guidance and development project for small industries; the Bapak Angkat (foster parent) program; and KOPINKRA, a program for establishing cooperatives among enterprises in the same industries.

BIPIK provides marketing, technical and managerial assistance to *sentras*, that is, groups or clusters of industries that have developed in the same location. BIPIK provides extension services, training, common service centers, and subsidized or bulk purchases of inputs and machines. Through Bapak Angkat, the government has encouraged larger industries to help small firms by providing business management assistance, inputs, financial assistance, technology transfers, and subcontracting arrangements. Through KOPINKRA, the GOI has encouraged the *sentra* to form cooperatives for mutual support, bulk purchasing, and common problem solving. The BIPIK program has also established 19 industrial estates and 160 technical service or common service facilities.

Thus far, these assistance programs have focused mainly on food industries, crafts, clothing and leather, chemicals, building materials, and metals industries.

Assessments of the the BIPIK program, however, indicate that it has not been highly successful. Most of the extension workers have little managerial or technical experience; the common service and technical facilities have low occupancy rates; and training and input delivery programs have not been responsive to users' needs.

Highly centralized planning of small-scale industry assistance and vocational training programs has left them rigid and inflexible, and of little use to potential entrepreneurs.

Likewise, GOI policies prohibiting joint ventures by foreigners in smaller-scale enterprises have been shown to preclude valuable information capital flows to local entrepreneurs and to hinder successful replication of foreign firm production activities by domestic operators. Current policies favoring large-scale joint ventures with more complex operational, marketing, and management activities are difficult or impossible to transfer to small-scale enterprises and may dampen their performance.

In sum, the types of programs that the GOI has established to assist small- and medium-scale enterprises are those that are usually needed to generate investment and employment opportunities in urban areas. But they must be planned in a more decentralized fashion, tailored to the needs of small business owners, and implemented more effectively if they are to be more successful in the future. Many of these programs could be implemented more effectively th ough private sector or NGOs than by government bureaucracies. Assistance to private organizations or contracting with them to carry out small industry development programs may yield better returns in the future. At the same time, it is necessary to remove government barriers to small business entry resulting from current licensing and regulatory policies restricting investments.

2. The GOI must create an environment that allows informal sector and micro-enterprises to expand and operate more effectively.

The ability of the Indonesian economy to absorb the large numbers of working-aged urban residents who will be entering the labor force over the next 35 years will depend largely on the ability of the informal sector and micro-enterprises to provide more jobs. Given the high levels of rural-to-urban migration that Indonesia will experience over the next decade, the informal sector is likely to remain the primary source of employment for the expanding urban population.

Informal sector activities employ about 75 percent of the economically active population in Indonesia. The Census Bureau reports that in 1985, nearly 45 percent of the Indonesian labor force was either individually self-employed or assisted by family members; an additional 24 percent were family workers. The informal sector is the main source of jobs for unskilled laborers who migrate to urban areas or who shift from agricultural to nonagricultural occupations, even in rural areas. Because of ease of entry, low capital investment requirements, and low skill demands, micro-enterprise activities such as street trading, food preparation, and hawking and vending offer a survival mechanism for the urban poor and for new migrants to cities and towns. Small-scale transportation services, stall-selling activities, mobile vending operations and low-cost service provision all employ large numbers of urban residents in Indonesia.

Studies undertaken in 1987 by BPPN, USAID and the Institute for Development Studies indicate that micro-enterprises in food vending and street selling, for example, are not just temporary sources of employment for urban residents. The studies carried out in Jakarta, Semarang, and Samarinda show that although more than 70 percent of the respondents were migrants, the majority had been involved in informal sector activities at their current location for more than 10 years. Moreover, informal sector employment was perceived by the majority of the 280 respondents as a permanent occupation. More than 68 percent of the street traders had never applied for formal sector jobs. The majority in Jakarta and Semarang operated at fixed locations. Over 90 percent owned their own businesses. Most of the respondents were satisfied with the income derived from their activities. Only 4 percent considered themselves poor; 86 percent believed they derived sufficient income from their activities to consider themselves moderately well off. Net income for most street vendors was less than Rps. 7,500 a day, but many made more than the official minimum wage of Rps. 1,600.

Although informal sector activities do not generally provide many jobs beyond employing the owner and a few family members who work as unpaid labor, about 37 percent of the sample surveyed in

Jakarta, Semarang and Samarinda reported having at least one employee, and 15 percent had two or more employees.

The informal sector is crucial in urban economies for reasons other than the large share of labor it absorbs. The linkages between informal sector economic activities and formal sector businesses in urban areas are quite strong. Many of those employed in the formal sector regularly purchase food, goods, and services from informal sector operations at significantly lower costs, thus raising the real income of many of those in the formal sector. Urban street vendors, in turn, purchase a substantial amount of their goods from local wholesalers and producers from surrounding rural areas. Nearly 78 percent of the sample of small-scale vendors in Jakarta reported obtaining the goods they sold from wholesale outlets and from producers. About 40 percent of the vendors in Semarang and Samarinda reported purchasing goods from retailers.

Finally, informal sector activities are crucial sources of food, clothing, and household items for poor families in urban areas. The overwhelming majority of consumers who do business with street traders report that their primary motivations for buying from them were the cheaper prices for the vendors' goods and proximity to consumers' place of residence. Hawkers and vendors provide essential goods in small lots at prices poor people can afford. In this sense, they help low-income urban residents of cities and towns to survive.

Many of those engaged in informal sector activities attempt to stabilize their customer relationships and to offer a sufficient variety of goods to attract new customers, but many are not willing to take risks to expand their businesses. The most frequently reported problems of micro-enterprise operators in expanding their operations are:

- Difficulty in obtaining permits or licenses to operate in a fixed location;
- Difficulties in getting access to cheap credit;
- Difficulties in obtaining supplies;
- Harassment by authorities.

Most of those engaged in micro-enterprises lack formal training and learn skills related to their jobs from other street vendors.

Although informal sector micro-enterprise activities will inevitably remain a primary source of employment, especially for unskilled new migrants to urban areas, beyond some point, expansion of the informal sector will simply result in lower returns to each new entrant.

Therefore, the GOI must be concerned with ways of creating an environment in urban areas that allows informal sector activities to operate effectively, and that encourages existing informal sector enterprises to expand employment rather than substantially adding to the number of informal enterprises. This could be accomplished as indicated above, by improving access to credit, market information, supplies of inputs, and management training. The GOI should also encourage the formation of cooperatives among smaller informal sector businesses to obtain scale economies and to improve information transfer.

3. USAID and the GOI must give more serious attention to the implications of trade and foreign investment policy for urban job creation.

Although the bulk of Indonesia's future new jobs will be generated by small- and medium-scale enterprises, GOI policies to encourage the start-up and growth of large firms need to be reinforced. This is especially the case for those firms in labor-intensive, export-based industries that generate foreign exchange as well as substantial employment. Indonesia's performance here is less than stellar. It has been reported that while Indonesia's aggregate economy and industrial sector are nearly three times larger than that of Thailand, the Philippines or Malaysia, and five times greater than Singapore's, it registered the lowest amounts of manufacturing exports among these nations.

Current policies play a role in this relatively poor performance. For example, the process of getting an export license is extraordinarily complex. Moreover, even if such a license is obtained, numerous regulations discourage investment in larger labor-intensive industries. These regulations include rules against employee dismissal, minimum wage constraints, and overtime restrictions. In addition, the GOI and subnational governments have to approve all large-scale investments, often leading to serious start-up delays and project cancellations.

The important role of direct foreign investment in establishing large-scale export industries is well documented. Foreign manufacturing firms, following product-cycle theory, are attracted to Indonesia by its low-wage, labor-surplus environment. Yet, government policies on forced divestiture of foreign ownership and indigenization of managers (i.e., firms can appoint an expatriate employee only if they can demonstrate that a qualified Indonesian cannot be found) dissuade many foreign firms from investing in Indonesia. This latter policy, explicitly developed to encourage job creation for Indonesians, may well be short-sighted and counterproductive since it significantly depresses the overall amount of foreign investment. Aside from losing the development impact of these potential investments and their substantial labor absorption function, valuable opportunities are bypassed for employee training, technology transfer, vertical linkages with domestic suppliers, and employee spillover effects.

Particularly disconcerting to USAID should be the relatively small and declining share of direct U.S. investment in Indonesia compared to other developing Asian nations. Since the late 1970s, U.S investment in Indonesia has grown at a sluggish absolute pace and dropped in relative terms from over 11 percent to just 7 percent of the amount going to four comparable developing countries in the region. At the same time, investment from Japan, Korea and Taiwan has mushroomed. Programs must be introduced or expanded that will improve investment and trade linkages between the U.S. and Indonesia. In this regard, USAID should stimulate efforts at U.S. enterprise promotion in Indonesia both with individual firms and industry associations. This can be accomplished by supporting seminars in the U.S. on investment opportunities in Indonesia and by expanding corporate missions to Indonesia as is currently being conducted by the U.S./Association of Southeast Asian Nations (ASEAN) Council for Business and Technology with USAID support. Likewise, Indonesia's entrepreneurs and managers should be brought to the U.S. to introduce them to prospective partners, suppliers and vendors. Fostering such information flows and business networks should result in numerous new joint ventures, supply contracts, technology transfers, and other cooperative mechanisms that would create jobs for Indonesians, contribute to national economic development, and shore up the relatively weak U.S. business presence in the country.

Indonesia's business community has shown that it is eager to obtain technical assistance to improve efficiency and competitiveness. But to use it effectively they will need assistance in all phases of private enterprise management. As USAID and other donor agencies have discovered in many developing countries, effective assistance requires that someone help the recipients assimilate the know-how. Therefore, industry-specific training programs should be provided on a regular basis to offer management expertise.

These programs would work with local enterprises to identify the types of technologies needed in various sectors of the economy, to find alternative suppliers in the U.S., and to facilitate contacts for the commercial transfer of these technologies. Such assistance could be provided by industry personnel from the U.S. who are on trips for their companies and are interested in developing a business presence in Indonesia. To support technology transfer and provision of managerial skills from U.S. small business owners to Indonesia's entrepreneurs would likely require USAID programmatic sponsorship.

4. The GOI must address the issues of human resource supply and demand if it is to deal effectively with urban employment problems and job creation needs in the future.

We described earlier how the excess supply of urban labor is likely to dramatically expand in the decades ahead. Innovative programs of low-skill labor absorption in cities must be implemented since it is unrealistic to believe that current and envisioned policies to develop small towns and rural areas will significantly stem the urban tide. The GOI proposals to double urban infrastructure investments should stimulate urban employment to some degree, particularly among the low-skilled. While the government should be wary of using government enterprises to create employment, infrastructure expansion represents a legitimate, and circumscribed, government activity. The GOI can ensure that these jobs do not become a permanent public sector burden by continuing to rely heavily on private constructors to construct the infrastructure.

Programs must also be implemented that will raise demand in the formal sector for better-educated labor, the group that currently has the highest unemployment rates in Indonesia. Despite their small relative numbers, nearly half of the unemployed in Indonesia hold a high school degree or higher educational qualification. The vast majority of these well-educated unemployed reside in cities. The dilemma of the education-job opportunity mismatch is documented in labor force surveys that indicate that half of the high school graduates and one-third of the university graduates experience job acquisition difficulties. The conventional wisdom that these unsuccessful job-seekers are too selective, lazy, or simply "can afford" to be unemployed would not seem to account for such a large proportion of unemployed. Because a better-educated labor force is very important to Indonesia's development future, the GOI must improve the business climate in urban areas for white-collar job growth and labor absorption through such mechanisms as tax credits and fewer regulations impacting office building construction. The GOI could also foster Jakarta's emerging role as an ASEAN and global center for information processing, finance, and corporate administration, an economic base change that will substantially raise demand for better-educated workers.

2.3 USAID Programming Opportunities

Following from these policy issues, USAID could assist the GOI to create an environment for job creation in urban areas in a number of ways. Given the lack of knowledge about the dynamics of urban job creation, initial efforts must be focused on building the information base and on understanding better the key factors which drive employment generation:

- Given the lack of attention to urban labor force growth in both GOI and USAID policy documents, USAID can assist the GOI in preparing policies for employment generation in urban areas by funding studies of the impact of urbanization on labor force growth and job creation needs in Indonesia. Such studies will be crucial to both USAID policy dialogue and GOI discussions with international donor organizations in preparing for Repelita VI.

  The lack of adequate information on and analysis of urban labor force growth will make it difficult for the GOI to develop programs that will encourage private enterprise development in urban areas and to tailor assistance programs needed to stimulate job creation.

In terms of intervention programs, there is ample evidence that past efforts have been generally unsuccessful and that we do not yet know how to intervene with much confidence. Therefore, much of the work in this area requires first learning what works and why:

- USAID can assist the GOI to assess the effectiveness of its small-scale enterprise programs and redesign them to be more responsive to the needs of small-scale enterprise operators.

- The area of credit remains of key problem areas as past subsidized credit programs have not served the needs of small and medium scale enterprises. The current financial deregulation is increasing the number and competitiveness of banks which should address part of this problem. In addition, there may be need for some specialized technical assistance to both borrowers and lenders in how to expand small scale enterprise credit.

- The limited success of government technical assistance programs for small-scale enterprise development suggests that there are opportunities for improving performance by contracting with private institutions or NGOs to provide extension services, run technology and management service centers, and work with cooperatives on improving production and marketing operations. USAID can assist the GOI to assess the effectiveness of the BIPIK and KOPRINKRA programs and to design alternatives.

- USAID can help the GOI to establish training programs for extension staff involved in providing assistance to small- and medium-scale enterprises and, potentially, to private institutions working with cooperatives or individual enterprises.

- USAID can assist the GOI to assess the effectiveness of and to redesign vocational and skill training programs for urban workers seeking formal sector jobs. General primary and high school curricula do not prepare skilled workers for jobs in urban areas, and government vocational training programs are not highly valued by business owners in many sectors.

- USAID can help the GOI to find ways of assisting micro-enterprises in urban areas to expand into employment generating activities. Studies are needed of the operation of micro-enterprises in various sectors, their needs and potential for transformation and expansion. Special attention should be given to production- or processing-oriented micro-enterprises that have the potential to employ workers other than the owner and family members.

Because Indonesia's economic future depends so heavily on creating sufficient numbers of jobs to absorb the rapidly growing urban labor force, USAID should give highest priority over the next decade to providing assistance to the GOI in urban economic development and job creation.

3.0 REGIONAL ECONOMIC DEVELOPMENT, SECONDARY CITIES AND MARKET TOWNS

3.1 Current Situation

The spatial distribution of population and economic activities has been a serious concern for the GOI since the early 1970s. The GOI has sought to attain a "balanced" distribution of people and economic activities. Spatial distribution continues to be a national policy concern because of the high concentration of modern productive activities in Jakarta, the high level of urban population concentration in Java, and the government's objective of promoting economic growth with social and territorial equity.

Although Jakarta does not have the level of population primacy in the Indonesian settlement system that characterizes Manila's dominance in the Philippines and Bangkok's in Thailand, rapid population growth in the Jakarta metropolitan area and the concentration of political, economic and administrative functions in the city give it a prominent position in the country's spatial economy. Social, economic and environmental problems associated with rapid population growth have begun to appear in the largest cities. Moreover, a country with the territorial expanse and the heterogeneous regional characteristics of Indonesia requires a system of cities and towns to serve as centers for economic growth if development is to spread throughout the national territory. The variety of natural and human resources found in Indonesia, and the declining share of the labor force in agricultural occupations, will require the development of manufacturing and service sectors in cities and towns in all regions to absorb the growing labor force seeking off-farm employment.

Thus, as urban population increases over the next decade and into the early years of the next century, the GOI must become increasingly concerned not only with overall level of economic growth but also with its spatial distribution.

Fortunately, Indonesia has a settlement system that can provide the base for spatially widespread economic development if the appropriate investments are made in services and infrastructure to support productive enterprises in secondary cities and market towns. The GOI must create conditions in larger secondary cities that encourage expansion and diversification of small- and medium-scale manufacturing and service enterprises. Much of the economic development in smaller cities and towns in areas outside of Java must be based on regional comparative advantages in the agriculture, forestry and fishing sectors.

During the 1980s, Indonesia had more than 40 urban centers with populations of 100,000 or more. These places provide at least minimum economies of scale that can support a wide range of small- and medium-scale manufacturing activities and commercial and service enterprises. By 1980, Jakarta already had more than 6 million people, and Medan, Surabaya, Bandung, and Semarang also had more than one million residents. Palembang, Ujung Padang, Bogor and Surakarta had all passed one-half million in population. Thirteen cities had populations of between 200,000 and 500,000; and an additional 20 cities had populations of between 100,000 and 200,000. Although many of Indonesia's secondary cities and towns are in Java, every province in the country except Bengkulu and East Nusa Tenggara will have at least one city with more than 100,000 population by the end

of the 1990s. Most of these cities are ports or centers of bulking, processing and distribution; they serve as markets and administrative, commercial, and service centers for their regions.

In addition, Indonesia has a growing network of small towns and market centers. In 1980, 43 towns reached populations of 50,000 to 100,000; an additional 127 towns had between 20,000 and 50,000 residents.

In order to generate employment in secondary cities and towns, both public and private investment will be needed in projects that more effectively link agricultural production areas with market and processing facilities in towns and cities.

The GOI's employment expansion objectives and USAID's assistance strategy both recognize the need to improve inter-island population distribution and to stabilize the spatial distribution of population in urban and rural areas. Although the GOI has tried to dissuade unskilled rural workers from pouring into Jakarta and to implement transmigration programs for resettlement, the populations of Jakarta and Java continue to swell. Clearly, new programs and policies are needed to promote job opportunities for people in secondary cities and market towns.

3.2 Policy Issues

The issue of regional economic development draws into focus the issues of employment generation and the GOI's urban investment strategy. The investment strategy has been driven by the "basic needs" approach, which is aimed at providing a basic package of urban services to urban dwellers. The investment strategy has not been concerned with promoting economic growth or employment. It is appropriate for the GOI to review the investment strategy, not to abandon basic needs, but to refine its underlying assumptions and expand the strategy to incorporate the objectives of economic growth and employment generation. Indeed, as the GOI moves to involve local resource mobilization and cost recovery for urban services, the ability of public investments to generate economic growth becomes essential.

- The GOI must develop economic activities that generate employment in secondary cities and market towns in order to achieve its objectives of more balanced economic development.

The GOI must create conditions--through infrastructure investment and administrative decentralization--in secondary cities and market towns in Indonesia that will create jobs and generate higher incomes if it is to achieve the objectives of more balanced territorial development outlined in Repelita V. Without employment opportunities and higher incomes, it will be difficult for the large majority of the population at the lower end of the income scale living outside of the Jakarta metropolitan area to buy more agricultural and manufactured goods, to save and invest, and to acquire the social services needed to improve their productivity.

For the rest of this century and well into the next century there will be a close relationship among urbanization, agricultural development and economic growth in Indonesia.

The rapid urbanization now taking place in Indonesia will influence the demand for food and the composition of agricultural production for the next quarter of a century. The GOI must recognize five basic points if it is to adjust its development policies and programs in the future:

First, market towns and secondary cities in Indonesia structure the marketing network through which agricultural commodities are collected, exchanged and redistributed. Agricultural goods that are not retained for household consumption or traded in rural periodic markets move through a complex network of public and private enterprises in villages, market towns, secondary cities and the Jakarta metropolitan area.

Second, without a strongly integrated network of towns and cities, agricultural trade is usually restricted to periodic markets in which subsistence farmers exchange goods among themselves or with intermediaries. The incentives for increasing production that come with the ability of farmers to market their goods competitively is lost. In such circumstances, agriculture does not easily expand beyond subsistence production.

Third, as agricultural productivity increases and farming becomes more commercialized, it depends more heavily on inputs such as fertilizers, pesticides, farm implements, irrigation equipment, storage and refrigeration facilities, and transportation equipment that are produced in cities and distributed in rural regions through market towns and secondary cities.

Fourth, rising incomes from increased agricultural production create internal demand for a wide range of household and consumer goods that can be produced in market towns and secondary cities or distributed through them. Without access to the goods and services that market towns and cities can provide, farmers have little incentive to increase their output and raise their incomes, and little opportunity to improve their living conditions.

Finally, the ability of Indonesian market towns and secondary cities to perform important functions in agricultural development depends heavily on the diversity and quality of their infrastructure and facilities; on the planning, management and financial capacities of their local governments; and on the strength of private enterprises to provide necessary services and productive activities.

National and regional economic development will depend on strengthening the physical transport and economic exchange linkages between Jakarta and secondary cities, and between secondary cities and towns and their rural hinterlands.

- The GOI's national urban development strategy must recognize and build upon the economic comparative advantages of diverse regions in Indonesia, and the economic functions that secondary cities and towns perform most effectively within regions.

The GOI's urban development, economic growth, and employment generation programs must be tailored directly to the economic comparative advantages of Indonesia's diverse regions and to the functions that secondary cities and towns perform in their regional economies.

Agricultural processing and agri-business development can be a major source of employment in secondary cities and market towns in regions with comparative advantages in agricultural, fishing and forestry products: for example, food crops and rice in Java, Bali and Nusa Tenggara; forestry

products in Kalimantan and Maluku; rice in South Kalimantan; and fish products in South and Central Kalimantan.

Urban development strategies must be based not only on regional economic advantages but also on the functional characteristics of cities and towns in different regions of the country.

Relatively little research has been done on the settlement system in Indonesia. But some evidence suggests that as in other Southeast Asian countries, most secondary cities and market towns in Indonesia perform important economic functions. Many of them:

- Provide convenient and efficient locations for decentralizing public services through field offices of national ministries or agencies or through provincial or district administrative offices, thereby offering greater access for both urban and rural residents to public services and facilities that must have a substantial population threshold to operate economically.

- Offer sufficient economies of scale to allow the concentration within them of basic and intermediate-level health, education, social and municipal services needed by the population in order to increase their productivity and employability.

- Offer a wide variety of basic household and consumer goods, commercial and personal services, and opportunities for off-farm employment in both the formal and informal sectors.

- Act as marketing centers for agricultural goods produced in surrounding rural areas and provide a wide variety of distribution, transfer, storage, brokerage, credit and financial services that are essential to agricultural market trade.

- Create new demand for cash crops and commercial agricultural goods as they grow in population size and become more economically diversified.

- Offer public services and infrastructure that are conducive to the growth of small- and medium-scale manufacturing and artisan and cottage industries that serve local markets and satisfy internal demand for low-cost consumer goods as household incomes rise.

- Act as regional agro-processing and agricultural supply centers for inputs such as seeds, fertilizers, cultivation and harvesting implements, irrigation components and pesticides.

- Provide off-farm employment and supplementary income for their own residents and for people living in nearby rural areas.

- Serve as regional centers of transportation and communications, linking their residents and those of nearby rural areas to larger cities and other regions of the country.

- Act as stopping points for some rural-to-urban migrants who might otherwise go directly to the largest cities, and absorb some migrants as permanent residents.

Of course, not all secondary cities and towns in Indonesia perform all of these functions, nor do those that perform these functions necessarily carry them out efficiently. In many poorer regions of Indonesia, there are few market towns and secondary cities that can provide outlets for the sale of agricultural surpluses and for the distribution of inputs and consumer goods and services. The report of the National Urban Development Strategy (NUDS) points out that of the 384 towns and cities with more than 10,000 population in 1980, about two-thirds are located on Java and that half of the remaining urban centers with more than that number of residents are located on Sumatera.

In other outlying provinces, there is not only a paucity of urban centers with sufficiently large populations to offer economies of scale for nonagricultural economic activities, but settlements are not physically and economically integrated and their markets are not vertically coordinated. Small-town markets often are not linked to bulking and assembly centers in intermediate cities, and the intermediate city markets are not effectively linked to the larger urban markets for agricultural products. Nor are linkages between market towns and intermediate cities and their surrounding rural areas strongly developed. Thus, only those people living in market towns and cities usually benefit from their services and facilities. Those living in peripheral or far-distant areas have little or no access to either markets or agricultural inputs.

In the future, if towns and cities are to play a stronger role in expanding off-farm employment opportunities, facilitating agricultural development, providing employment and offering the conditions necessary for private enterprise expansion, international assistance organizations and the GOI will have to give much more attention to improving the physical infrastructure and public services required for economic development. Investments in roads, market facilities, transport facilities, housing, storage, and utilities will be needed in market towns and small cities. In addition, more attention must be given to strengthening the capacity of local governments to manage urban infrastructure and services efficiently.

3.3 Programming Opportunities

Given the rapid pace of urbanization in Indonesia, the urgent need to increase food production in rural areas and to expand employment opportunities in secondary cities and market towns, policies that focus on strengthening urban-rural linkages will become crucial to economic progress in Indonesia over the next two decades.

Although USAID and other international assistance organizations have provided marketing assistance for poor farmers and for small-scale enterprises involved in urban food distribution, they have not, thus far, focused their attention on ways of strengthening the economic functions in market towns and secondary cities on which increased agricultural production, employment expansion, and enterprise development so heavily depend.

- USAID can assist BAPPENAS in developing a regionally focused and differentiated national urban development policy that strengthens the comparative advantages of regions and the economic functions of secondary cities and towns.

Much of the assistance that international organizations have given to Indonesia in the past has been for improving agricultural production technology rather than for expanding or improving marketing systems. The GOI has not given much consideration to locating its investments in agricultural support services, physical infrastructure, and social services and facilities more effectively to promote economic activities in market towns and secondary cities with growth potential.

USAID can make an important contribution to BAPPENAS's efforts to develop a national urban development strategy that is tailored to regional needs by supporting an applied policy research program. BAPPENAS officials suggest that USAID could assist by supporting applied research on regional economic development needs, the functions of cities and towns, and the potential for developing productive activities in secondary cities and towns.

A sound policy research program should focus, among other issues, on the following:

- Implications of sectoral shifts in the national economy and in regional economies for the types of investments that should be made to increase employment and income potential in secondary cities and market towns.

- Implications for stimulating formal and informal enterprises in secondary cities and market towns and how government can foster more productive linkages between formal and informal sector activities.

- Implications for investments in urban services, facilities and infrastructure in secondary cities and market towns to stimulate private enterprise expansion and the linkages between agricultural production areas and market centers.

- Implications for developing secondary cities and market towns as alternatives to transmigration programs for relieving population pressures in Jakarta and other large Indonesian cities.

- Implications for developing agricultural marketing facilities in small towns in rural areas and for developing, in secondary cities, wholesale agricultural collection and distribution facilities such as the one located outside of Jakarta.

- Implications for human capital development in secondary cities and market towns--especially with regard to building primary and secondary school facilities--to increase the employability of their populations in both domestic and export-oriented production.

Although urban development strategies must be based on regional comparative advantages, national policies can support or inhibit the expansion of investment and productive activities that generate employment in secondary cities and market towns. The ability of enterprises in market towns and cities to facilitate increased agricultural production depends, for example, on appropriate agricultural pricing policies. If government policies and pricing restrictions act as disincentives for increased agricultural production,there is no reason to believe that the existence of market towns alone will create incentives for increased output.

- USAID can help the GOI to refocus its infrastructure investment programs from a "basic needs" approach in regions where basic social needs have already been met to a "production and investment support" approach in areas with economic growth potential.

USAID can play an important function in helping the GOI with the allocation and location of investments in infrastructure, services and facilities in market towns and secondary cities. The extensive investments the GOI has made in local services and infrastructure to meet basic needs must now be refocused to support employment-generating small- and medium-scale enterprises. Because investment resources are scarce, many projects that are needed to support agricultural development and off-farm enterprises cannot be scattered widely over the countryside. They must be concentrated in strategically located urban settlements that have adequate populations to support them and that are accessible to people living in surrounding rural areas.

Moreover, Indonesia's poor communications infrastructure both within and between its urban centers poses a serious impediment to economic development and job creation. Overloaded or ineffective telephone lines cause delays, frustration, and lost opportunities among those conducting business in which timeliness is an important competitive factor. Exacerbating the problem is a serious shortage of business telephones, particularly in secondary cities, creating heavy costs for those firms that export or are important intermediary processors of goods and services for other businesses. If these firms cannot be contacted quickly, outside organizations (e.g., foreign buyers) will show little interest in working with them. In a growing international marketplace, exports will suffer and demand-side employment will not expand nearly at its level of potential unless an efficient telecommunications network is in place throughout Indonesia's urban system. Direct foreign investment will also be limited, further reducing economic and employment growth.

- USAID can help the GOI to improve the financial management capacity of municipal governments in market towns and secondary cities, to develop new methods of raising local revenues for providing infrastructure and services, and to improve municipal management capability to maintain them.

USAID can play a crucial role in helping the GOI to decentralize appropriate services to the local level, and create decentralized financial and management capabilities in local governments and NGOs. The success of a regionally focused urban development policy in Indonesia will depend on increasing the administrative capacity of local officials and developing local leadership in promoting economic development.

In a recent review of regional development in Indonesia, policy analysts concluded that local leadership and administrative capacity are important factors that differentiate more successful from less successful regions in economic development.

They conclude that "the evidence suggests that local factors do matter. Effective administrators can make national programs work better and even capture a larger share of central government disbursements. More efficient bureaucracies and local services can also attract a greater share of footloose manufacturing and agricultural investments. As the central government is forced to relinquish its overreaching fiscal and planning dominance these regional factors are likely to become

more important determinants of performance."[1] Chapters 4 and 5 below, dealing with urban finance and decentralization, address this issue of local capacity building in more detail.

- USAID can play an important role in assisting the GOI to encourage the development of agro-processing and the agribusiness sectors as a source of production, employment and income in secondary cities and larger market towns.

Indonesia already has good export markets for fresh and frozen crustaceans, fresh and dried vegetables, coffee, tea, spices, and vegetable oil. Potential markets in East Asia, North America and Europe could be developed in fresh and frozen fish, prepared fruits, feedstuffs and cereal preparations. Many agro-processing activities can be located in market towns and secondary cities close to production areas; others can be located in regional centers. Agro-processing and agribusiness in secondary cities have strong backward and forward spatial linkages; they are usually supported by intermediate processing, milling, bulking and distribution activities in smaller market towns and larger urban centers.

To develop agro-processing and agribusiness activities in secondary cities and market towns, the GOI must give greater attention to improving product quality, easing marketing constraints, improving raw material, and packaging supplies. Moreover, agro-processing industries now face many of the same problems that inhibit expansion of manufacturing, including regulatory constraints, poor access to credit, and export restrictions. Of crucial importance is improving interregional transportation facilities and lowering transport costs.

- USAID should assist the GOI to formulate new programs for developing small- and medium-scale manufacturing capacity in secondary cities and towns outside Java.

In pursuing a policy for regional economic development, the GOI and USAID should give serious consideration to, and follow up on, recommendations made in recent World Bank studies on urbanization in Indonesia. These studies suggest that industrial location incentives and subsidies have not been effective in deconcentrating manufacturing industries from Jakarta to other locations in Java or to other regions of the country. More effective policies for encouraging manufacturing activities to develop in other regions would include:

- Improving transportation and telecommunications access to domestic and international markets in order to overcome some of the economic difficulties resulting from geographic fragmentation.

- Decentralizing administrative responsibilities and easing regulatory controls so that businesses do not have to be located in or near Jakarta in order to operate effectively.

---

[1] Hal Hill and Anna Weidemann, "Regional Development in Indonesia: Patterns and Issues," in H. Hill (ed.), Unity and Diversity: Regional Economic Development in Indonesia Since 1970, Singapore: Oxford University Press, 1989: 3-54; quote at page 53.

- Modifying protectionist trade regulations that encourage the growth of inefficient import substitution industries in the largest cities.

- Limiting industrial zone and estate development to cities and areas with proven growth records or high growth potential.

- Improving access to investment and working capital for small- and medium-sized firms in secondary cities and towns with economic growth potential.

USAID should consider helping the GOI to determine the feasibility of developing processing, shipping and distribution complexes for export products that are located closer to product sources. Currently most exports flow through Jakarta even though Java generates less than 10 percent of the country's non-oil and gas exports.

In summary, Indonesia has a solid base of human and natural resources on which to build a strong economy in the future. The strength of the economy, however, will depend on developing those resources throughout the country and on integrating urban and rural production through the development of secondary cities and market towns. USAID can make an important contribution to the evolution of thinking in BAPPENAS about national urban strategy by offering policy research support on secondary city and market town development.

4.0 URBAN FINANCE

4.1 Current Situation

USAID/Indonesia has already made considerable progress in developing an urban finance program with a well-articulated policy agenda. The following builds on that base, emphasizing those issues that the study team has determined to be most critical. These are mainly amplifications, and updates, on the existing USAID urban finance policy agenda.

1. The GOI is committed to shifting the burden of capital investment in urban infrastructure from the central government to local governments and consumers.

Investment in urban infrastructure is being progressively shifted from largely a central government responsibility (through both direct investment by line agencies and grants to local governments) to debt financing by local authorities. This is the result of three factors: (a) the limitation of central government capacity to finance rising infrastructure needs in urban areas, (b) the realization that urban economies have the capacity to generate considerably more resources to pay for urban infrastructure investments; and (c) equity considerations dictate that the beneficiaries of public investments should share the financial burden.

Another aspect of the equity argument is that the central government has resorted to heavy borrowing, especially during the last two years of Repelita IV, to maintain its infrastructure investment program. Given the intention of doubling the level of investment in urban infrastructure, it will be necessary to share a sizeable part of the burden with the local governments that benefit from the investments.

The shift to debt financing will be dramatic. Over 40 percent of total central government financing to local governments during Repelita V is expected to be through loans (compared with less than 20 percent during Repelita IV.) Much of this lending will be for services with cost recovery potential; the bulk of the loans will go to water supply agencies with somewhat lesser amounts going to the other service delivery areas. Figure 8 shows the proposed amounts and percentage allocation targets among sectors for total urban investments under Repelita V.

The estimates for the amount of loan financing of infrastructure during Repelita V is somewhat speculative given that the effective demand for loans by local governments is governed partly by the rates and terms of the loans (and the interest rate question is still not resolved). The loan demand by the water authorities (PDAMs) should be somewhat more predictable since the PDAMs have been programmed by design to borrow and will be under some pressure to do so in order to keep the water supply expansion program on track.

Figure 8: Sectoral Allocations of
Urban Investments under Repelita V
(billion Rp.)

Sector	Total	Central Gov't	Prov. Gov't	Local Gov't	Percent of Total
Water Supply	3,952	2,984	50	919	42.6%
Human Waste	411	354	0	57	4.4%
Drainage	316	206	0	109	3.4%
Flood Protection	1,192	1,150	42	0	12.9%
Solid Waste	477	106		371	5.1%
KIP	629	534	0	95	6.8%
Urban Roads	2,300	1,715	0	585	24.8%
Total	9,277	7,048	92	2,137	100%
Percentage	(100%)	(76%)	(1%)	(23%)	

Estimates: Coordination team for Urban Development (TKPP).

2. The rise in debt service coupled with increasing O&M costs of existing infrastructure facilities will require rapidly increasing local government operating budgets.

The large investment in urban infrastructure over the past decade carries with it a need for increased operations and maintenance (O&M) expenditures. Indeed, since much of the infrastructure is newly built, O&M expenditures now tend to be low, but will escalate rapidly as facilities age. Case studies suggest that O&M expenditures are being neglected in local government budgets although current accounting practices make it impossible to track precise O&M expenditures. The central government has recognized the O&M problem in its policy formulation for Repelita V and has targeted approximately one-third of total expenditures under the plan for increased O&M. However, local government practices will need considerable support to meet this need. While new accounting and financial management systems have been installed in three Kotamadyas on a pilot test basis, considerable work would need to be done to introduce such improvements nationwide.

The increase in debt financing of infrastructure will also generate debt service payments which will come from the operating budgets of the urban local governments and public enterprises. A recent assessment of the financial management practices of the local water utilities (PDAMs) indicates that debt management and accounting practices are deficient in these organizations. This is disturbing since the PDAMs were reasonably well equipped with management guidelines, accounting systems, initial staff training and central government supervision during their start-up phases (when they were run as "interim water supply agencies" [BPAMs] under Cipta Karya.) Clearly, the local governments and enterprises will require considerable technical support in managing debt, especially in light of their inexperience. The performance of the PDAMs in managing debt is particularly critical since they will do a large proportion of the borrowing in the near future. If PDAMs cannot manage debt competently, then the GOI fiscal decentralization effort will be set back.

3. Most attention in the urban finance areas has been focused on the general revenue-raising capacity of local government with improvements in property tax administration and other local taxes.

Considerable work has been done on strengthening property tax performance and, to a lesser extent, the performance of other local taxes. Almost all of the interventions thus far have been administrative reforms (improved billing and collection systems) rather than structural reform of taxation authority. The program to improve property tax performance is making progress but it will take some time for the initial improvements (now being tested on a pilot basis) to be fully implemented. In the meantime, the property tax yields are improving steadily. Local revenues grew at a rate of 10 percent per year after inflation during Repelita IV and are projected to grow at a real rate of 12 percent during Repelita V. A new property tax was introduced in 1986 replacing the previous property and land taxes. Since that time, property-based tax revenues have more than doubled in current Rupiahs, although in the latest fiscal year, collections were below target.

The expansion in the use of user fees has been confined largely to the water sector, in which the government has committed itself to an ambitious decentralization program. The creation of autonomous local water utilities has proceeded fairly quickly and with a considerable amount of guidance and assistance in the initial stages. As the newly created water authorities (BPAMs) reach the so-called "break-even point" (i.e., revenues cover operating, but not capital, costs), they are transferred from Cipta Karya control to the status of an autonomous water supply corporation (PDAM) under the direction of an independent board chaired by the local government. From this point forward, all new capital works are to be financed by the PDAM, which has access to GOI credit (in the past, direct loans from the MOF; in the future, loans from the RDA.) Currently there are 157 PDAMs and about 150 BPAMs, which should all be transformed to PDAMs by the end of Repelita V.

Although a good deal of the increased credit to local government under Repelita V is expected to go to PDAMs, it is likely that much of the capital investment by PDAMs will not go to new systems but to rehabilitation, reduction of leakage and "unaccounted-for water" and increasing hook-ups in already serviced areas. There is some case study evidence that PDAMs may have overestimated potential revenues from water sales and that consumer demand for water is much more price elastic than anticipated. (This finding is consistent with a recent study by the World Bank of about 70 Bank-financed water projects worldwide which found that only 11 percent of the projects reached their revenue targets, mainly through shortfalls in demand, not because of too-low

tariffs.) During Repelita V it is planned that user fees will be extended in other urban services such as solid waste collection, but considerably less work has been done in cost recovery systems in those sectors than in water supply. There is strong sentiment for more private sector involvement in that sector and some preliminary experimentation as well (see Chapter 5 below.)

An area of great potential for direct cost recovery of infrastructure is in urban land development, where infrastructure "packages" can be financed by the land developers and recovered through plot charges or capitalized in the selling price of the plots. The issue of land development and speculation is particularly acute in the fast-growing metropolitan areas as evidenced by the recent creation of a ministerial-level task force on the issue. There is great scope, not only for dealing with the immediate issues of speculation, but also for developing methods to recover infrastructure servicing costs through development schemes such land consolidation or "readjustment" mechanisms such as those used in Japan and Korea.

4. As the GOI moves to decrease the proportion of direct central government grant support to local governments, there is considerable pressure to restructure the whole central-local government grant system.

It is well recognized that the current grant system is a rather complicated patchwork of special earmarked, sectoral and general purpose grants whose total impact does not appear to have a consistent rationale. That is, while the total grant allocations favor smaller (in population) provinces on a per capita basis, there appears to be no correlation with levels of poverty or income. As the GOI puts the local government lending program in place and overhauls the system of local taxation, pressure is also mounting to revamp the grant system along a more rational basis. On other hand, the current system, by being so large and having the weight of incumbency, is hard to restructure without creating sizeable losers.

It is also generally agreed that the current system has a negative impact on resource mobilization at the local level and, at the very least, provides no incentive for increased local own-source revenue generation. Therefore, there is sentiment to build into a reformed grant structure some incentive for improved local tax effort. Alternative models have also been proposed (drawing mainly on the Korean model) which incorporate a measure of public service deficits in the allocation formula as well as measures of local fiscal capacity.

While there is considerable pressure from within and outside the government to rationalize the grant system, there is an obvious lack of agreement on what the underlying objectives of a new grant system should be (resource base equalization, service deficits, revenue-generation incentives, etc). Indeed, the selection of these objectives is the proper role of GOI and not the donors. However, it should be pointed out that local grant systems should have an understandable rationale and satisfy some basic requirements:

(a) It should provide adequate resources to local governments in light of their service delivery mandates and own revenue-raising potential;

(b) It should be sufficiently predictable so that local governments can budget effectively;

(c) It should not introduce perverse incentives in either local resource mobilization or in the efficient management of public and private assets; and

(d) It should be properly designed to reach the intended targets of the public subsidy.

The current patchwork system satisfies the first two criteria somewhat, but fails on the last two.

5. The development of the Regional Development Account (RDA) as the main lending channel for local governments and local public enterprises raises a number of issues about the linkages to overall financial sector reform and the long-run institutional development needs in local government credit.

The RDA is intended as a first step toward consolidating and rationalizing the existing fragmented system of lending to local authorities. There is already controversy over the RDA interest rates, given the GOI's policy of financial sector liberalization. There is also a strong push by some of the donors (especially World Bank and USAID) to have urban sector lending contribute to general financial sector liberalization and growth through the adoption of unsubsidized interest rates by the RDA.

There are two opposing forces at work in this disagreement. One side holds that local authorities (both governments and public enterprises such as PDAMs) need subsidized rates as a transitional aid in moving from grant financed urban development to self financing (via loans). The opposing view holds that by using subsidized loans, the RDA will not be able either to wean local governments from subsidized credit in the future or be able to tap domestic capital markets to meet increasing demand for urban investment capital. Furthermore, the use of subsidized and directed credit for urban infrastructure hampers the liberalization of the overall financial sector, which requires the elimination of sectoral biases in credit markets. It is clear that the interest rate question cannot be readily solved without tackling the grant system at the same time. Other countries have addressed this same question by packaging loans and grants together, maintaining the purity of the loan fund while providing linked grants that effectively lower the cost of the financing package (the Municipal Urban Development Fund of Tamil Nadu State in India is the most recent example of an innovative means of doing this.)

The argument over RDA interest rates has important implications for the long-term development of local government credit. If GOI intends a continuing move to loan financing of urban infrastructure, then it will have no choice but to provide access to domestic private capital; the GOI simply cannot borrow enough from international lenders to meet the urban investment demands of the future. This means that interest rates will have to be high enough to attract domestic private capital.

Addressing the development of the Indonesian municipal credit system means addressing the development of the local financial markets, an area where USAID has current project work. There are indications that the deregulation of the banking sector has begun to improve the overall efficiency of the sector. Although the domestic market rates of interest are fairly high (reflecting high loan spreads as well as some discounting for inflation), the competition in the financial sector should continue to reduce loan spreads and drain the excess liquidity. All of these indications bode

well for the growth of the financial sector and the prospect for development of a wider municipal credit system integrated into the overall financial markets.

A second main issue involves the structure of the RDA itself. Should the RDA operate as a "retail" lender to local governments, or should it follow a different model, more integrated into the commercial banking sector? For example, the RDA might follow the model of the Colombian Financial Fund for Urban Development (FFDU) which operates as a rediscount facility for commercial bank lending to local government. There are other models being tried in other countries and it would be instructive to examine that experience in light of the long-term objectives of the RDA.

It is clear that the RDA has a pivotal role to play, not only as a conduit for local government loans, but as a "proving ground" for local government debt management. The whole fiscal decentralization policy of the GOI hinges on the competence with which the local governments and public enterprises manage debt. Furthermore, if the municipal credit system is to move beyond the limited role of the RDA as a conduit for foreign loans, Indonesian financial institutions need to learn how to appraise the debt management capacity of local authorities.

6. The shift in financial responsibility from central government agencies to local authorities creates new demands on GOI agencies that provide technical support and training to local governments.

The fiscal decentralization is placing new demands not only on local governments but also on the central government agencies that support them, especially the Ministry of Home Affairs. MHA has not had to deal with many of these financial issues in the past and is currently not well equipped to provide training and technical assistance in local government finance. Part of the problem is the changing roles of the ministries. While MHA has responsibility for oversight of local governments, much of the work on developing new tax systems and financial management practices has been carried out in the MOF. Almost all of the infrastructure planning and training has been done by Cipta Karya (including all the initial work in establishing the local water supply authorities.) In general, while MHA has the mandate to provide technical support, including training, to local governments, much of the expertise and relevant experience resides in MOF and Cipta Karya.

There has been a good deal of training activity at the local level but little building up of the training institutions. For example, many training activities have been carried out under the IUIDP Program, but it has tended to be project specific and has not added greatly to the institutional infrastructure in local government training. There is a tremendous need for training at three distinct levels:

(a) Central government decision makers who deal with national policy, budget allocations and regulation;

(b) Local government decision makers who will be increasingly required to make local investment decisions, budgeting and tax/fee rate setting; and

(c) Local government staff who require job skill training.

Given the size of Indonesia and the changing nature of the demands created in the local government finance area, the training task is large. Size alone dictates that the institutional structure be well designed to do the job effectively. Furthermore, given that the training mandate and capability are spread across three ministries, the institutional structure will have to be well designed to accommodate and meld the resources of the three ministries.

4.2 Policy Issues in Urban Finance

There are six main policy areas in urban finance with which USAID and the GOI should be concerned.

1. The GOI and local governments should accelerate the use of direct cost recovery from service beneficiaries in financing municipal services.

The GOI policy is to expand usage of the "benefit principal" in service cost recovery, but efforts so far have been limited to certain subsectors (e.g., water supply utilities) and with most attention paid to strengthening local tax collection (property taxes) rather than user charges. While all sources of local resource mobilization need strengthening (see Policy Item 4 below), expanding use of user charges requires special attention.

This requires first an understanding of which services provide "private benefits" versus "public benefits" and which services can be run on a fee- for-service basis (where consumption by individual users can be measured and nonpayers can be excluded from the service.) This understanding is fundamental to decisions regarding the need for central government grants, the level of local general taxation, and which services should (or could) be provided by the private sector.

A critical element of this policy item is the reform of the central-local government system of transfers which, as currently constituted, is overly complex, is poorly targeted, and undermines efforts to stimulate increased local resource mobilization.

The use of user charges adds new complexity to financial management and resource mobilization at the local level since it involves service pricing (tariff setting), demand analysis and new cost recovery practices. There is considerable scope for private sector initiative ranging all the way from complete privatization of some services to the use of private contractors in fee collection.

2. The GOI should ensure greater availability of investment capital for urban development, primarily through expanded access to sources of domestic private capital.

The GOI is moving to make loans more generally available to local governments and enterprises through the establishment of the RDA, which is capitalized primarily with donor loans. It is important that the operations of the RDA (as a directed credit facility) do not hinder or distort the current liberalization of financial markets in Indonesia. Indeed, it would be important to develop an institutional development plan for local government lending that (a) relies increasingly on the domestic capital market for funds and (b) is consistent with the overall financial sector liberalization (and over time becomes integrated with other financial institutions).

3. The GOI should expand efforts to encourage greater direct private sector investment in urban infrastructure and service delivery.

As a corollary to the preceding policy item, which deals with expanded credit facilities for local governments, this policy item deals with increased private investment in four main areas:

(a) private development of serviced urban land;

(b) private investment in municipal service ventures which are run by private companies on a profit-making basis;

(c) private investment in municipal services which are run under a private/public partnership such as "build, operate and transfer (B.O.T.)" utility services; and

(d) private contract services that provide equipment and manpower to the municipal governments on a lease or contract basis.

As noted under the privatization target area (see Chapter 5 below), expansion in private sector involvement in municipal services requires action on several fronts: deregulation of service monopolies, replication of successful models, training of local officials in contracting, and credit availability.

4. The GOI must maintain its efforts to increase resource mobilization at the local level.

The GOI has impressive efforts under way to increase local revenue generation, especially the local property tax and consolidation of other local taxes. This work will require considerable expansion of training and technical assistance available to local governments. At present, the MHA would need considerable capacity building to be able to take on this responsibility.

While the provision of technical assistance and training to local government has traditionally been considered a public sector responsibility, there is scope for filling some of this need through private sector organizations. In other countries, private contractors are used to collect taxes, provide accounting services, and take on similar roles. Some such roles (e.g., tax collection or property valuation) can be financed out of increased revenue yields. The GOI would need to deregulate the financial support services sector to allow this system and provide technical assistance to local governments in how to contract for such services.

In addition to the expansion of technical assistance and training support for local government, the GOI's operational policies in central government grants and lending can have a profound impact on local tax efforts. These policies can, and should be, set to increase local tax efforts.

5. Local governments should be encouraged to lower the "overhead costs" of their operations, devoting an increasing proportion of expenditures to direct service delivery.

Local governments must not only increase local revenue generation and the level of expenditures on municipal services, they must improve the efficiency of those expenditures. Efforts are already under way to consolidate the wide array of local taxes and fees in order to lower the administrative costs and increase the net revenue yield of local efforts. Extending this concept, the improvements in financial management at the local level should result in a lower proportion of expenditures going to general administrative costs and a higher proportion devoted to direct service delivery. Efficiency of expenditures can be increased by increasing the options for delivery of services (e.g., allowing private sector competition and contracting). In addition, efficiency can be spurred by developing

and monitoring performance measures of local government operations, especially the delivery of services that are readily quantifiable.

The local water authorities deserve special attention in improving operational efficiencies since water supply commands such a large percentage of total urban investment (42 percent of total--see Figure 8 above). Studies indicate that a number of PDAMs are experiencing rising proportions of "unaccounted- for water." One study of Monado PDAM found that the problem is not leakage but the creation of oversupply--i.e., expansion of PDAM capacity is outrunning demand as projected water sales have not materialized. The World Bank has discovered similar problems in a number of Bank-financed projects, indicating that water supply agencies need help in both forecasting and managing demand better.

6. GOI should continue the process, already started, of transforming the role of central government agencies from municipal service providers to support agencies concerned with (a) ensuring the stability and availability of investment credit, (b) adequate technical assistance and training for local government, and (c) effective policy analysis and development.

The government has already started the process of transforming the role of the central ministries concerned with urban development. It is important that the government continue the process of devolution from the centralized "command/control" structure to one of supporting local government and private sector initiative. This means that the GOI's role in directed credit (through the RDA) should evolve to that of a guarantor of credit availability, moving out of the retail credit business as soon as practicable. This also means that national investment strategies will give way to local options, with national public investment increasingly concentrated on truly public benefits (e.g., public health, environmental protection, national economic infrastructure, etc.).

An important aspect is the continued development of a strong policy analysis infrastructure, which includes trained manpower, information systems, and analytical techniques for dealing with the key policy issues of urban finance. Since many of these issues are quite new to the urban policymakers in the government and are continually evolving (such as financial markets liberalization), additional effort should be made to help GOI develop and maintain a strong policy analysis capacity.

4.3 USAID Program Opportunities

There has been a sizeable amount of donor involvement, including USAID, in the area of urban finance in Indonesia. These efforts have concentrated on the following topics:

- local tax collection improvements (principally the property tax);
- development and pilot testing of financial management systems for municipal governments;
- capital investment programming, which integrates sources of financing at the local level (IUIDP);
- local government manpower training needs assessments;

- training in financial management related to infrastructure planning and finance (IUIDP);

- design assistance for the RDA; and

- limited policy analysis support on grant system reform.

While there have been a number of policy issue papers prepared on various aspects of the urban finance system (e.g., grant system reform), there has not been a sustained effort to build up the "policy analysis infrastructure" within Indonesia. To some extent the USAID Municipal Finance Project and the UNDP/Netherlands-funded technical assistance for the proposed IUIDP Implementation Project can address this need. However, they would need to focus on supporting policy work by local institutions and not merely the production of policy papers by outside experts. It is also critical that the policy analysis capability be supported outside, as well as within, GOI ministries since many of these issues cut across ministry boundaries and often require an outside perspective.

On the basis of the analysis of issues and policy agenda above, we recommend that USAID concentrate on four main areas in the urban finance area:

1. Building up the institutional capability to provide technical assistance and training to urban local governments;

2. Improving the use of user charges and other benefit-based levies in financing local municipal services with emphasis on private/public involvement in land development and a selection of other municipal services;

3. Assistance in the development of long-term strategies for municipal credit systems tied into the development of broader financial markets (and integrated with USAID's current work in the financial markets; and

4. Support in building up the local "policy analysis infrastructure" to deal with the emerging issues in urban finance.

The following paragraphs describe each of these four areas in more detail.

1. <u>Institutional Capacity in Technical Support to Municipal Government</u>

There are three areas of capacity building that are of highest priority:

(a) Building a training infrastructure that can deliver appropriate training throughout the country. The training system should address needs at three distinct levels:

- national decision makers;

- local municipal decision makers (mayors, senior department heads, PDAM Directors, etc.); and

- technical staff at the local level.

Given the size of the country, as well as the varying levels of need from province to province, some form of distributed network will have to be developed which draws on resources of several ministries, universities and vocational schools, the private sector, and NGOs. This is an area where there is also interest from other donors (especially the Netherlands and UNDP) and a collaborative effort among the donors is warranted. It is also an area where several of the GOI ministries already have considerable experience (MHA, MPW, MOF) and mechanisms to allow the efficient combining of those resources should be found.

(b) Building a technical assistance support network for municipal governments and enterprises. In addition to training, local authorities require access to technical expertise in all phases of their operations. Unfortunately, outside of the services provided by Cipta Karya in infrastructure planning and construction and in setting up water supply authorities, local authorities do not have a ready source of technical support. This is particularly acute in the management and finance areas where there is not even a close monitoring of local financial conditions (outside some of the pilot project work done by MOF on property tax reform and financial management practices.)

The technical assistance area is one where private sector participation has great, but untapped, potential. Private firms can provide consultancy services in financial management, accounting, tax records and even collection services. Indeed, the increased revenue yields that should result from better financial management and revenue generation can more than pay for the local consulting services. As with the training support described above, the technical assistance support should comprised a distributed network involving resources from the several ministries as well as NGOs and the private sector. At the same time, the MHA has responsibility for support to local government and should be the lead agency mobilizing this support.

(c) Strengthening MHA to carry out its supervisory and support roles. MHA has the responsibility for supporting local authorities (governments and public enterprises) but has not had the resources, expertise and training to do this extensively. The decentralization mandate places an expanded burden on MHA; the USAID Municipal Finance project and the IUIDP Implementation Support Project will provide some advisory services to PUOD and BANGDA but more will likely be required in:

- information systems to monitor local government finance and debt capacity (especially PDAMs in the immediate future);
- training program development and management;
- technical assistance program development and coordination; and
- policy analysis.

2. Expansion of User Fees and Benefit-Based Levies in Municipal Services

There are three main target areas for improvement and expansion of beneficiary charges:

(a) Improvement in cost recovery by PDAMs - case studies indicate that PDAMs need help in administering their charging systems, marketing water sales, managing debt, and projecting finances. Most of the assistance available to PDAMs has been through Cipta Karya and has been oriented more to technical engineering concerns than to management.

(b) Extension of user charges to other municipal service areas (beyond water supply), including:

- road construction and maintenance (which is slated to account for 30 percent of all infrastructure investments under Repelita V);
- municipal markets and bus parks;
- solid waste collection; and
- drainage.

In all of these areas, the role of the private sector should be promoted both through privatization of services (including deregulation of monopoly services where practicable) and through the contracting of selected service functions.

(c) Adoption of new approaches to urban land development where costs of infrastructure servicing is capitalized in the price of the serviced lots. Although the issue of urban land development is a sensitive political issue in the fast growing metropolitan areas, it provides an opportunity to introduce the concepts of infrastructure cost recovery through beneficiary charges. Initially, USAID can probably best approach this idea through policy option papers and seminars of the Municipal Finance Project. However, if interest materializes for more substantive work, USAID should be prepared to pursue the issue as opportunities arise.

3. Development of Long-Term Strategies in Municipal Credit linked to Financial Markets Assistance.

While the GOI has received some assistance in the design of the RDA, there has not been much attention paid to the long-term development of the credit system for urban authorities beyond the RDA. However, some of the most crucial debates over the RDA, such as interest rate policy, can only be settled in the framework of the future credit system.

USAID is providing assistance to develop financial markets and should be in a position to assist in both policy analysis and support in the design of the long-term municipal credit system. Of most immediate concern is the role of the RDA in (a) helping local authorities become adept at debt management and (b) serving as a bridge to wider mobilization of capital within Indonesia for urban investments. What is needed is not the immediate creation of a municipal bond market (although

some larger municipalities may be ready for this step) but the formulation of strategies and options to help GOI move in this direction.

4. The Development of a "Policy Analysis Infrastructure" in the Key Areas of Urban Finance.

This is a need that underlies parts of the three areas of opportunity described above. By this term, we mean that USAID should pay close attention to building up the institutional capacity within and outside GOI to undertake policy analysis and formulation. Much of the work in urban finance in Indonesia is new to the government and much of the policy work is being done by donor agency staff and consultants. The policy analysis infrastructure comprises trained manpower, information bases, and analytical techniques. The key issues within urban finance that require the most immediate attention include: debt capacity analysis, institutional development of financial intermediaries, alternative sources of capital financing for urban infrastructure, and intergovernmental fiscal relations.

5.0 DECENTRALIZATION AND PRIVATIZATION OF URBAN SERVICES

5.1 Current Situation

Relationship between Decentralization and Privatization of Urban Services

The study team views the decentralization of urban services to lower levels of government and privatization of services as conceptually part of the same phenomenon: rationalizing the delivery and financing of municipal services. The central question is who should deliver and who should pay for urban services.

This approach is directly responsive to the Agency's commitment to "open markets/open societies," which has been translated into four objectives of USAID programming as specified in the Program Performance Monitoring Contract (PPMC). The PPMC objectives are to be used to assess program performance over the next 5 years. They include:

(1) Freeing up the private sector;

(2) Mobilizing financial resources;

(3) Redefining the role of government; and

(4) Strengthening democratic institutions.

The concerns of decentralization and privatization are most directly linked with the objective of redefining the role of government under a more open markets/private sector economy. Achieving this objective will be reflected in a transfer of GOI responsibility for provision of service to the private sector and a reduction of direct public ownership. Here an explicit indicator in the PPMC looks for a 20 percent increase in the percent of urban infrastructure provided by the private sector.

We would argue that support to decentralization within government is complementary to the objective of increased private sector participation. Both can work together to help achieve the Mission's stated objectives. One reason why the private sector plays such a significant role in urban services delivery in the United States is that it operates within a system of relatively strong local governments in which programs and projects can be developed from the "grass roots" and utilize innovative public-private partnership arrangements.

In view of the above, we have combined these two policy areas--decentralization and privatization--in this report. We have placed somewhat more emphasis on decentralization within government only because USAID has focused less on this aspect. It is our view that the two are of equal importance and can be pursued concurrently.

GOI Stated Policy Toward Decentralization and Initial Efforts

Decentralization of basic responsibilities for planning and delivery of urban infrastructure and other urban services has been stated GOI National Policy for at least 16 years, as evidenced by Law No. 5 of 1974, which established the legal framework by giving semi-autonomy to provincial and local governments, and a series of Decrees and Instructions mandated subsequently.

This Law makes a distinction between those services provided directly by central government agencies, which are termed "deconcentrated" services, and those which are supposed to be provided by local government, termed "decentralized" services. Most elements of urban infrastructure (including water supply, sanitation, solid waste and local roads) fall into the latter category. This same Law also refers to the provision of urban services by a third means, "coadministration," defined as "the execution of services by local government under direction of central government." In general, this third approach is an accurate description of the means of provision of most services provided by local governments: most urban services noted in the decentralized category are in fact implemented in the mode of coadministration. Integration among these three systems--decentralized, deconcentrated and coadministration--takes place through the heads of the region at each level. Hence, the Governors and Mayors/Bupatis are responsible for coordinating the activities of the deconcentrated agencies of the central government with those of their decentralized local government.

The clearest GOI statement of policy regarding decentralization is reflected in Team Koordinasi Pembangunan Perkotaan's (TKPP) "Policies for Urban Development in Indonesia," published in 1987. This policy statement mentions three goals expected to be achieved over the next 5 to 10 years, namely;

(a) effective decentralization of urban infrastructure planning, implementation and operation;

(b) the strengthening of local governments' responsibility for financing urban infrastructure; and

(c) the strengthening of local governments' capabilities to carry out these responsibilities.

In the statement's six specific policies and related objectives which then follow, the theme of decentralization is heavily stressed. While planning, programming and delivery of urban services will continue to be a cooperative effort of all levels of government, it is envisaged that local governments will eventually take the leading role, with the provincial and central governments chiefly providing technical guidance. To achieve this aim, the capability of local governments to mobilize financial resources and the capability of both provincial and local government staff and institutions to execute urban development activities more effectively, must be strengthened.

Although it is generally agreed that actual implementation of decentralization is not keeping pace with pronouncements, the central government's budget cuts beginning in 1986 have led to a significant resource gap in the urban sector. This gap has caused the GOI to launch on a broad policy agenda of shifting responsibility for the planning, financing and management of urban

development to local governments. This decentralization program comprises four principal policy and programmatic areas:

- Local resource mobilization, including measures to enhance tax collections and user charges and to improve local revenue administration;

- Urban development financing mechanisms, including the establishment of a loan fund (RDA), for local governments and enterprises, and formulation of criteria and guidelines for the allocation of GOI grants;

- Strengthening of decentralized planning and programming procedures, development of planning guidelines, and formulation of medium-term urban development and expenditure programs; and

- Institutional and manpower development through technical assistance and training.

Understandably, local government institutional development in Indonesia has begun with development of the central agencies responsible for overseeing local government affairs--administrative, technical and financial. After all, in a unitary state the abilities of local government can never exceed those of the next tier of government. Hence, donor-supported institutional development efforts have in the past been focused chiefly at the center. However, within the past few years, there have been several initiatives to develop regional/local capabilities in the urban sector. These have included particularly the MHA-managed INPRES program and the MOPW/DG Cipta Karya-managed IUIDP program. Both of these programs attempt to provide flexibility to Level II local governments in the use of development funds for multisectoral purposes. They do, therefore, represent genuine efforts at decentralization.

IUIDP represents the first important initiative to combine the efforts of MOPW, MHA, MOF and BAPPENAS into a single urban development program that attempts to prepare local governments for the above-mentioned tasks. It generates medium-term urban infrastructure investment programs based on local needs analysis and attempts to integrate funding sources in order to provide more flexibility in project selection to local governments. IUIDP is referred to in the Statement of Urban Development Policies, and has been adopted by TKPP as the approach to be followed by central, provincial and local governments in infrastructure expenditure programming for the future. One limitation of IUIDP, however, is that, because the investment programs are heavily driven by MOPW/DG Cipta Karya and their consultants, local governments feel only partial ownership of them; they are thus reluctant to borrow the amount of funds being proposed in the World Bank and Asian Development Bank (ADB) projects. The development and institutionalization of the program is heavily supported by all the major donors. Full-scale implementation under IUIDP will begin in FY 1990/91 with a World Bank-supported project in East Java-Bali and an ADB-supported project in West Java-Sumatera.

What is the Purpose of Decentralizing?

The case for decentralization can be made on the grounds of both efficiency and equity in development. Local governments in a large developing country like Indonesia should be entrusted with a high degree of autonomous responsibility for local community affairs, partly because the

complexities and interrelationships of local affairs, combined with the distance separating the decision makers involved, do not lend themselves to sensitive treatment from the center.

Given the decline in the central government's budget due to the oil price cut, the need to significantly increase funds for urban services from local government and private sources has become evident. Therefore, it stands to reason that if more resources are to come from the local level, this level will demand a greater voice in planning and delivering such services. Local governments must feel that they "own" the program, which has only been partially achieved through IUIDP to date.

Although the Statement of Urban Development Policies strongly advocates decentralization, the underlying reasons for it are not clearly expressed. The policy analysis roles of TKPP and its member agencies in the center have not yet been fully realized, despite some progress in recent years. Furthermore, the policy studies carried out in planning for Repelita V do not appear to have yielded sufficient guidance in the area of decentralization. A clear set of objectives for decentralization policy regarding the GOI's goals for equity and efficiency in its development program, which can guide TKPP agencies in their short- and long-term programs, is therefore needed.

What Are the Constraints to Decentralization?

Despite the stated objective to devolve responsibilities for planning and delivery of urban services to local government, the pace of this effort has not been proceeding as rapidly as might have been hoped. We need to ask why this is the case: what are the constraints to decentralization? The following partial listing clarifies some of the problems and issues that must be dealt with:

(a) In view of the political concern for national stability, which has been a long-term goal of the New Order government, some decisionmakers continue to question the importance of decentralization within Indonesia's unitary system.

(b) The MHA is the chief agency in the center which has authority over local government. However, the institutional development apparatus of MHA to prepare local governments for the responsibilities they must face with greater decentralization is itself not well prepared at this time.

(c) Several personnel policies affecting the civil service at central, provincial and local levels of government lead to a significant difference in status, rank, salary and mobility between higher- and lower-level officials. These differences mean that local government personnel have

- less mobility
- fewer career development opportunities
- lower financial rewards (salary and project-funded allowances)
- fewer chances to receive training.

(d) Many central government officials do not perceive adequate capability at the local government level to plan and manage urban development activities.

(e) The current system of centralized urban services delivery provides a number of incentives to central government officials that they would lose under a decentralized system.

What Will the GOI Decentralize?

Another issue is related to that of what is to be decentralized. There is definitely a need to define more clearly the functional responsibilities of central, provincial and local governments. As basic responsibility for planning, financing, constructing and operating urban infrastructure and services moves to local levels of government, or to the private sector, what will be the roles of the central and provincial government agencies? In general, their roles are likely to shift to giving guidance and regulating development, but these responsibilities must be carefully spelled out, and both overlaps and gaps in such responsibilities explicated.

There are several aspects to clarifying these functional responsibilities. One involves classifying which level of government (central, provincial, local, private sector) should have responsibility for planning, financing, constructing, operating, and maintaining particular urban infrastructure and service elements. The classification of roads under the Highway Law, and rivers under Presidential Instruction 22/1982, into National, Provincial and Local components are examples of what needs to be done for all subsectors. The TKPP effort to classify infrastructure in 10 pilot cities should provide a useful basis for such a classification.

An important dimension to this plan is timing, since decentralization is a process of devolution of responsibilities to local government (or to the private sector) over time. Hence TKPP and its member agencies must formulate strategies for changing these responsibilities within given time frames. It is also essential that the financial and institutional implications of any proposed system of central-local technical roles be clearly understood. As responsibilities are devolved to lower levels of government, thorough assessments must be made of the additional financial and institutional (organizational, management, staffing) burdens that this implies for local government, and action programs must be launched to prepare local governments for the task.

Another aspect of clarifying functional responsibilities is in the central government itself, where the current roles of the various departments involved in local government development are often undefined or overlapping. The institutional development roles (such as policy analysis/formulation, guidance and training for local government, technical and financial support, along with direct responsibility for central government infrastructure) of MHA, MOF, MOPW, BAPPENAS and other agencies should be clearly assigned and defined. These roles and tasks should be carried out within an integrated system of local government organizational and manpower development policies approved by TKPP.

How Can Private Sector Participation In Urban Services Delivery be Expanded?

Increasing private sector involvement in urban services delivery is high on the policy agenda of USAID, within its objective of redefining the role of government under a more open markets/private sector economy. The GOI generally appears open to pursuing possibilities in this

area, but its experience with private sector participation in what have normally been governmental responsibilities is limited, and there is the inertia of the state-planned/state-managed development model to be overcome. One reason why the opportunity for a significant increase in the role of the private sector in urban development appears favorable is that some urban services (such as sanitation and solid waste management) are not currently being provided in many areas by the public sector. Hence, the private sector can in some instances be asked to meet unmet needs rather than take responsibilities away from government.

Another reason why there is a favorable climate for privatization in urban services delivery is that the GOI has had some positive recent experience with deregulation in several other areas, which have included the following:

- deregulation of immigration rules, and reduction of specific permits, which have allowed for more effective information flows and overall utilization of foreign expertise;

- deregulation of the financial sector, beginning in 1983 with an increase in interest rates paid to depositors, leading to a more competitive position for private banks and an opening up of money and capital markets; and

- removal/simplification of regulations and licenses for selected industries which has had the effect of reducing monopolies and encouraging industrial expansion.

Why is expansion of private sector participation in urban services delivery important? One reason is that, because public funds are limited, financial resource mobilization from the private sector is critically needed for expanded development. Another reason is that the private sector can operate urban services more efficiently in many instances than can government, with its more rigid organizational and personnel structures.

Yet another reason is that the private sector can offer consumers greater choice and provide services more flexibly. What examples already exist of private sector participation in urban services delivery in Indonesia? There are, in fact, many current examples of direct private sector involvement. Virtually all civil works construction of urban infrastructure is let out to private contractors through tendering procedures. This includes extensions to waste supply and distribution systems, flood control and drainage improvements, urban road systems, kampung improvement program (KIP) components, and other subsectors. Examples of direct private sector involvement in urban services operations include:

- construction and operation of major toll roads: inter-urban and intra-urban (Jakarta, Surabaya, Medan);

- construction and operation of water supply reservoirs and main transmission lines (Surabaya);

- contracting out of solid waste management operations, either in part or totally (central Jakarta, many secondary cities);

- operation of selected sanitation services, including septic tank emptying service, provision of small-scale private systems, etc. (throughout many urban areas);

- operation of many bus systems by private firms or cooperatives (throughout many urban areas);

- urban renewal schemes in which local government assists in land assembly and the private sector undertakes redevelopment in conjunction with the public sector (Pasar Senin, Jakarta; Samarinda; elsewhere);

- industrial estate development in which government provides land and works with the private sector (jointly) to provide infrastructure (Jakarta, Surabaya, elsewhere).

These latter two examples are of considerable interest in part because they point out the importance of public/private partnership in urban development. Increased private sector participation can be achieved more rapidly by seeking new opportunities for public/private partnership, such as in urban renewal and industrial estate schemes, where government can screen proper locations, assist with land assembly and infrastructure provision, and regulate land use; and the private sector can share responsibility for infrastructure and play the dominant role in construction and operation of the economic activity being developed.

Such examples emphasize the need to carry out detailed analysis to determine where increased private sector participation is most relevant. In which subsectors and with regard to what specific aspects is an expanding role appropriate? Also, how far is it appropriate to go within the Indonesian political, sociocultural and economic setting?

Private sector participation in solid waste management operations is a case in point. There are several current examples of cases in which a local government agency partially contracts out such operations, with a private firm providing the labor for collection and disposal. Beyond that, however, private firms can assume more responsibility for purchase, operation and maintenance of vehicles and other equipment; for development and operation of final disposal sites; and even for collection of fees.

Clearly, one need in this context is to conduct comparative case studies of current practices, and to disseminate information on significant success stories. This type of analysis can be part of a larger effort to examine in detail the potentials for expanded private sector participation in this field.

What Are the Barriers to Expanded Private Sector Participation?

Despite their merits, policies for privatizing public enterprises and for expanding the participation of the private sector in urban service provision are frequently opposed in Indonesia and other developing countries. Some of the barriers to private sector development include the following:

(a) There is often political opposition from political leaders, civil service employee organizations and consumer groups who fear that privatization will cause substantial job losses and reduce their influence over these services.

(b) There may be "technocratic" opposition arising from fears that private businesses will eliminate or reduce services that are unprofitable, provide inferior quality services in an attempt to maximize profits, and leave poor households unserved.

(c) Some forms of privatization, such as contracting, can be more expensive than public provision of services because of the tendency of contractors to maximize their profits, excessive contract management costs or the absence of sufficient competition.

(d) Privatization can sometimes be a means of shifting social responsibility for providing public services from government to the private sector. Hence, privatization may temporarily get the government "off the hook" in providing services that are really beyond the capacity of private organizations.

(e) Excessive regulations or licensing procedures may erect barriers which limit the ability of private firms, especially small firms, to initiate or expand investments.

(f) Rigidities in the provision of or difficulties in obtaining, credit may also limit the ability of private enterprises to respond to opportunities to provide urban services.

These and other barriers to expanded private sector participation need to be carefully examined and understood, so that policies and programs can be thoughtfully formulated.

5.2 Policy Issues

There are five main policy areas in the field of decentralization and privatization with which USAID and the GOI should be concerned.

1. The GOI and USAID should view decentralization within government and increased private sector participation as complementary and mutually reenforcing policies.

Both decentralization and privatization can, in combination, support USAID's objectives of strengthening democratic institutions through urban services delivery mechanisms that are accountable to the populace. The study team proposes that USAID's stated policy agenda, as reflected in a revised Country Development Strategy Statement and a Program Performance Monitoring Contract, place equal emphasis on decentralization and privatization in the future.

2. The GOI should formulate a clear set of objectives for decentralization policy and private sector participation, in urban services delivery.

Our position is that the underlying reasons for both decentralization and privatization need to be clearly explicated by TKPP and its member agencies of the GOI. Such a set of objectives can help direct TKPP agencies to formulate their short- and long-term programs.

3. The GOI should carefully examine the constraints toward devolution of responsibilities to local government, and the barriers to expanded private sector participation, with the view towards minimizing them.

The above discussion of current issues mentions several constraints to decentralization and also barriers to privatization. In both cases, they need to be carefully analyzed and understood before policies and programs are designed to help mitigate them. It is possible that USAID can assist the GOI in this type of policy analysis.

4. The GOI should continue the process of transforming the role of central government agencies from urban service providers to support agencies concerned with (a) giving policy/program guidance and (b) furnishing technical assistance and training for local government.

As the government continues this process of devolution from the centralized "command/control" mode to that of supporting local government and private sector initiatives, it is important that there be a clear rationale for classifying which level of government should have responsibility for what aspect of urban services delivery. The institutional development roles of the central government agencies must also be clarified. Furthermore, this effort to formulate strategies for changing roles and responsibilities must also take the time dimension into account.

An example of this type of activity is provided by the Philippines which recently undertook a study of the appropriate roles of government agencies and the private sector in the provision of public services. While not all of the study's recommendations have been carried out yet, the study itself provides a good example of how such an examination has been undertaken on a national level.

5. The GOI, possibly with USAID's help, should also carry out detailed analysis to determine those areas where increased private sector participation is most appropriate in the field of urban services delivery.

This analysis of opportunities for privatization should include comparative case studies of current examples of private sector involvement in urban services. It should assess opportunities and comparative advantages of the private sector in urban services provision.

In a forthcoming article, Rondinelli and Kasarda offer a conceptual framework for identifying opportunities for privatization based on the nature and characteristics of the services needed in urban areas. As shown in Figure 9, governments are most likely to retain responsibility for those services considered to be public goods, as well as those for which leaders feel an obligation to maintain coverage regardless of costs (basic needs or "must goods"). Furthermore, facilities and infrastructure that require large "lumpy" investments--such as mass transit systems or highways--will probably remain in the public sector. Those services for which user charges cannot be levied, whether for political or economic reasons, are also not likely to be profitable to private firms and will be provided either by public agencies or by public-private partnerships. Programs with potential spillover effects, such as pollution control and public health, will also remain in the public domain. As the figure shows, other programs present opportunities for privatization of urban services and infrastructure provision.

FIGURE 9
FRAMEWORK FOR ASSESSING OPPORTUNITIES FOR PRIVATIZATION OF URBAN SERVICES AND INFRASTRUCTURE PROVISION

Organizational structure for service provision	Government	Public-private partnership or contracting	Private enterprise
Characteristic of service	Public goods	Public goods for which user charges can be levied	Private goods or public services for which costs can be recovered
Primary beneficiaries	Community	Identifiable groups	Individual or household
Public perception of necessity of services	Essential, basic needs, merit goods	Essential services	Discretionary services
Cost Characteristics	Indivisible	Divisible	Divisible
Relationship between demand and willingness to pay	Low	Moderate	High
Measurability of quantity and quality of service provided	Low	High	High
"Spillover effects" of service	High	High	Low
Capital Investment of service	Large, "lumpy"	Moderate or large	Low or moderate, incremental
Capacity of non-government organizations to provide services	Low	High in specialized areas	High
Technical or technological sophistication required	Low	Moderate or high	High

From Dennis Rondinelli and John Kasarda, "Privatizating Urban Services in Developing Countries: The Role of Private Enterprise in Urban Development," Research Triangle Institute, Research Triangle Park, NC, 1990.

5.3 USAID Programming Opportunities

The following five possibilities for USAID interventions to support decentralization and privatization are suggested. These options can be amplified as necessary. Some of these suggestions also relate to other issues, such as urban finance and secondary cities development.

1. Technical assistance to TKPP and its member agencies in developing improved policy analysis capabilities, action plans and indicators for decentralization and private sector participation.

Tasks which this undertaking should encompass include (but are not limited to) the following:

- develop clear objectives and action plans for decentralization and increased private sector participation;
- analyze and define functional responsibilities of different levels of government within time-bound strategies (i.e., develop a clear rationale for which level of government should be responsible for what activity);
- develop a system of indicators for measuring progress in decentralization (such as the degree of discretion permitted to local officials in allocating funds, the percentage of urban development funds raised at the local level, etc.), and put this system in place as a basis for monitoring.

2. Technical assistance in support of a major feasibility study of the role of the private sector in provision of urban infrastructure and services.

This undertaking would include but not be limited to the following tasks:

- inventory of current experience, including comparative case studies, of urban services delivery by the private sector;
- survey and analysis of existing regulations affecting the role of private enterprises in urban services provision;
- formulation of conceptual framework or guidelines for identifying opportunities for privatization in Indonesia;
- identification of specific opportunities for increased private sector participation in provision of urban infrastructure and services.

The general institutional base for this feasibility study should be TKPP. However, counterpart staff might appropriately be assigned from BAPPENAS in this case.

3. Technical assistance to GOI in personnel management and administration for local government.

This action is geared to an effort at removing the constraints/factors accounting for significant differences in status, rank, salary and mobility between central and local government officials. Changes in personnel policy which need to be introduced include but are not limited to:

- simplify personnel planning and recruitment procedures so as to give local government more discretion and autonomy;
- introduce functional specifications (i.e. the type of skills and knowledge that an applicant should have) instead of only level of education/rank;
- increase mobility of personnel among local governments;
- (possibly) abolish the formal differences between central and local government employees in favor of a national civil service system;
- improve personnel administration in local government partially by means of a major effort to develop job descriptions for all positions in local government; and
- remove salary differentials between central and local government employees.

The institutional base for this technical assistance should be carefully considered. MHA, which was responsible for the recent Urban Institutional and Manpower Development Study, is probably the primary client. However, the Ministry of Administrative Reforms (MENPAN) and selected other central government agencies should also be involved.

4. Support to pilot projects in public/private partnerships in urban development in selected cities.

Indonesian cities have tremendous potential to formulate innovative approaches to urban development in which physical/spatial planning is linked to local economic growth and resource mobilization opportunities. In this dynamic approach to urban development, local government's manipulation of land as a major resource and the application of public/private partnerships to innovative pilot projects present substantial opportunities for breaking new ground.

We propose that a limited number of urban areas be targeted and some pilot projects be developed which experiment with innovative approaches to land assembly and utilization, and to local government/private sector roles. These projects would also be selected to maximize such objectives as employment generation and local property tax (PBB) enhancement. Types of projects can include shopping-cum-residential areas, industrial estates and a wide range of mixed-use schemes. Land readjustment or land consolidation schemes might also be developed for predominantly residential use. Specific efforts can be made to include informal sector traders and manufacturers in such developments.

The emphasis in the Municipal Finance Project is to provide long-term advisors to key central government agencies. This plan is consistent with the need to "get things right" in the center before proceeding to lower levels of government. However, it would be a logical follow-on to the MFP to provide some technical assistance to selected municipalities, to support both decentralization/ privatization and secondary cities' development concerns. Such an effort would usefully complement the MFP, and provide a testing ground for policies and programs developed in the center.

5. Selective support to training programs for local government officials.

Before the Mission engages in support to substantial training activities for local government, there is an urgent need to improve coordination at the center among the three leading ministries involved in urban development training (MHA, MOPW, MOF). This coordination should include formulation of training programs, development of training materials and curricula, coordination of training activities, funding and long-term planning.

In view of the present fragmented approach to the planning, organization and delivery of urban development training, it is probable that where such training is provided to local government officials, MHA will be recognized as the coordinating agency. Responsibility for course content would depend on the precise nature of each course.

In pursuing possible training initiatives to support decentralization and privatization, we recommend that USAID concentrate its efforts in the following ways:

- focus on municipal finance and management, partly because the technical aspects of urban planning and infrastructure (IUIDP) programming are currently being dealt with by others;

- focus on training-of-trainers, rather than on direct training, unless on a pilot basis; with USAID's limited resources, such as focus will have greater multiplier effects; and
- make maximum use of existing training institutions and NGOs.

More precise training programs will emerge from the Municipal Finance Project. However, the Mission should look beyond the MFP to formulate innovative courses that will further the concerns developed in this policy paper.

6.0 URBAN ENVIRONMENTAL MANAGEMENT

6.1 Current Situation

The Nature of Urban Environmental Problems in Indonesia

Despite rapid growth in the urban population and the urban economy, there has been comparatively little investment in Indonesia in urban environmental infrastructure. Industrial and vehicle exhausts are largely uncontrolled and domestic sewage treatment nonexistent. Failure to account for environmental externalities means that valuable resources are underpriced while resource depletion is subsidized.

Water supply and water-related issues (wastewater treatment, flooding and groundwater protection) are the most serious environmental problems facing urban areas in Indonesia today. In urban areas, it is estimated that about two-thirds of the population has access to some form of protected water supply. About half of these people are connected to a piped water supply system while the other half rely on private wells. The percentage that is covered by both a regular and safe supply is not known with any precision because many of the supply systems (both public and private) are subject to contamination and have inadequate flow in the dry months. For example, groundwater pollution in Jakarta affects up to one-third of the city. The best overall estimates of adequate water supply coverage of the urban population range from 35 percent to 41 percent in 1989. This is only about half of the target set for Repelita IV--75 percent coverage.

The environmental problems of inadequate water supply are borne out in the health indicators of the country. Diarrhea is endemic and accounts for about 19 percent of the total deaths in the country. One out of every three children and one out of every ten adults are reported to be suffering from diarrhea or related diseases.

Polluted wastewater not only contaminates the surface water in Indonesia's urban areas, it raises the cost and often defeats the purpose of providing municipal water as well. River pollution in Surabaya and Jakarta has seriously impeded the functioning of water treatment plants. In Jakarta the combination of heavily polluted water sources, plus inadequate plant operation, combined with leak-prone delivery systems, means that municipal piped water is still unsafe to drink.

While household wastes remain the single largest source of water pollution, often accounting for more than 85 percent of biological oxygen demand (BOD) levels, industrial pollution is a growing source of concern as well. Toxic substances, including heavy metals as well as organic and inorganic chemicals, are particularly serious. These substances are often not fully removed during municipal water treatment and even where they can be removed they contaminate the sludge and preclude otherwise cost-effective recycling programs. Analysis of fish and shellfish taken from Jakarta Bay indicated that

World Health Organization standards were exceeded in 76 percent of the samples for cadmium, 51 percent for copper, 44 percent for lead, and 38 percent for mercury. In addition, PCB and DDT levels were 40 percent and 80 percent higher than their respective standards.

While only limited data are available, it is apparent that air pollution is a growing problem in urban areas in Indonesia. The combination of rapid growth plus open burning and increasingly heavy automobile traffic lead to some of the highest levels in the region for fine particulate matter. Recorded levels for Jakarta represent 250 ug/m3 vs. 200 for Bangkok and 150 for Kuala Lumpur and vs. a World Health Organization guideline of 60 to 90 ug/m3. Fine particulate matter increases the incidence of disease by providing a vehicle for entrance into the respiratory tract. Lead levels are also a serious concern given the traffic patterns and the custom of eating from sidewalk stands.

One success story in Indonesia's struggle against water pollution has been the gradual substitution of degradable pesticides for nondegradable ones. While the earlier pesticides had been clearly demonstrated to impose severe ecological damage, little damage has been reported since this change was made in the early 1970s.

The GOI Response to Environmental Problems

Indonesia has begun to mobilize at the national policy level and has demonstrated an ideological commitment to environmental protection not often found in developing countries. The Indonesian constitution, for example, is one of the few such documents to expressly address the issue of environmental policy. Similarly, the National Environmental Policy calls for rational use of natural resources so as to provide for the highest possible welfare of the people.

These underlying concerns, together with the rapidly growing industrial development, led to the drafting of the Environmental Management Act in 1982. This statute provides a comprehensive base for environmental programs in Indonesia as well as the environmental recommendations contained in this paper.

Despite these important steps forward in environmental law for Indonesia, there remain a number of serious issues which will pose major obstacles to the development of an effective urban environmental control program. These include:

(a) Lack of Understanding of the Importance of Natural Resources and the Role of Resource Pricing In Protecting the Environment. Despite a growing awareness of the importance of the environment it is still rarely recognized as a major ingredient in economic development. Similarly despite numerous examples of inefficient resource use, the need for full cost pricing of resources has still not been factored into policy decisions.

(b) Lack of Financial Resources. Environmental protection, even where performed efficiently is still an expensive undertaking and given the history

and priorities of Indonesian environmental programs it is unlikely that there will be sufficient funds in general revenue to cover the costs.

(c) Lack of Technical Expertise. There is already a serious shortage of engineers and technicians in Indonesia and those few who are trained are often first picked by the private sector.

(d) Lack of Information. There is a serious shortage of information regarding sources, quantities, concentrations, impacts and ultimate fate of most pollutants. In addition, while there is some effort to build an emission inventory, there is no comprehensive program to update this information and interpret it.

(e) Lack of Public Support. While there is some public concern about pollution, flooding and deforestation, the interest has generally been limited and short lived. The NGOs lack the resources, information, and training to build and sustain public support for stronger environmental control.

6.2 Policy Issues

Whether the environmental focus is on industry, water supply, or domestic sewage, the major shortfall in Indonesian environmental policy is not the lack of goals or planning documents but the lack of sustainable implementation and enforcement. Environmental programs, because they ultimately draw their support from the general public, rarely can grow much stronger or move much faster than the public awareness upon which they are based. An environmental program capable of dealing with the pollution problems of Indonesia requires not only the development of improved control policies but also the development of institutions capable of mobilizing adequate public support to sustain them.

There are eight major policy issues to be dealt with in initiating an effective urban environmental protection program in Indonesia. These issues are chosen based on the opportunities they offer to address major environmental problems while strengthening technical, public and financial support for environmental control. The major challenge is to build a program which can provide and implement preventive care on a sustainable basis.

(1) The GOI should closely examine each of its direct and indirect subsidy and pricing programs in terms of their potentially adverse impact on the environment. While it is recognized that major national policies can not hinge totally on their environmental impact, where the decision is otherwise close, this consideration may bring about important changes. This procedure provides an opportunity for significant environmental improvement without a major government expenditure.

- Subsidization of chemical fertilizer, together with the failure to charge and enforce penalties for disposing wastes in streams, removes any incentive for recycling potentially valuable resources.

- Subsidization of domestic oil fails to recognize the externalities imposed through air pollution and traffic congestion and reduces the incentive for conservation.

- Failure to collect adequate fees for groundwater pumping fails to recognize the externalities imposed through subsiding land, salt water intrusion, and contamination and destruction of existing wells.

(2) The GOI should expand its efforts to ensure that adequate information is provided to the Ministry of the Environment (MOE) and the public regarding pollutants discharged to the air, water and land, particularly near the major urban areas and critical resource areas. This pollution inventory should be updated regularly and should include (a) the sources of individual pollutants, (b) the quantity and concentration discharged on both a peak hourly and annual basis, and (c) the risk and impacts associated with the pollutants. In order to ensure that there are sufficient financial resources to maintain this inventory, the major portion of the costs should be borne by a fee paid by the sources of the pollution themselves. Such a fee should be roughly proportional to the quantity and risk of the pollutant discharged.

(3) The MOE and other government agencies should share with the public the information gained from the inventories and more effectively involve them in discussions of environmental issues. Furthermore, they should support the efforts of local environmental NGOs to educate the public regarding the causes and impacts of both domestic and industrial pollution and the alternatives available for control. These efforts should be assisted through the dissemination of information, policy conferences and the use of realistic models to forecast and anticipate the impacts of uncontrolled pollution. The goal throughout is to build an environmental constituency which can ultimately provide constructive criticism and public support for preventive action and hard environmental decisions.

(4) The GOI should work with business groups to help them recognize that pollution control is integral to development and involve them in the search for cost-effective solutions to urban environmental problems. Private industrial expertise is an important resource in any country, but particularly in Indonesia where technical training (especially in government agencies) is in such short supply. Industry must be made aware of the economic consequences of pollution and of the opportunities for cost savings through resource conservation, recycling and pollution control at point of origin. Industry in Indonesia must be recognized not only as a source of pollution but as a critical technical resource which, when given appropriate incentives and flexibility, can provide the necessary solutions.

(5) The Environmental Management Act already endorses the "polluter pays" principle, but this concept still exists primarily in theory. The polluter should bear the burden of pollution control. This policy not only would reduce the drain on GOI and municipal resources; it also would be far more efficient because it would provide a continual incentive for pollution sources in Indonesia (both private industry and public enterprises) to look for the least costly method of reducing emissions.

(6) The Ministry of Environment should focus its primary efforts on the development and implementation of effective incentives and enforcement regulations and should avoid becoming involved in prescriptive technical solutions. Wherever possible, the choice and implementation of pollution control techniques should be left to the private sector. The enforcement program should evidence the following characteristics:

- be based on objective measurements of the quantity and concentration of the pollutant discharged,
- impose a nondiscretionary fee or other incentive on the pollution source to take necessary corrective action,
- impose minimal interference in the operation of the source, and require minimal technical and judicial involvement.

(7) The Environmental Management Act recognizes the use of economic incentives to promote environmental sustainability. However, the increased reliance on incentives must be matched with adequate mechanisms to ensure fair, effective, and sustained implementation. Such mechanisms should include the following:

- the nature and quantities of pollution discharged as well as the amount of the fees collected should be a matter of public record;
- fees per unit of pollution should generally not exceed the public awareness of the problem involved;
- fees collected should be assigned to the environmental agencies involved, with a specific allocation designated for continued public and industrial education; and
- while fees may initially involve only token amounts, there must be adequate provision for gradually strengthening them in response to new information and increased public support.

The ultimate goal of any incentive system is to promote efficient use of environmental resources rather than to raise revenue. Both goals can be reached simultaneously, however, once the fee is high enough to cover the cost of treatment and disposal.

(8) The GOI should adopt a comprehensive program to address the problem of excessive groundwater pumping. This program should fully recognize the potential impact on related activities. If the sewage treatment program (for example) is financed through a surcharge on municipal water (as is commonly done), this surcharge will only exacerbate the tendency to use groundwater. Enforcement measures must be adopted to ensure that the cost of groundwater approximates the environmental damage to the community. One possible such measure is to levy a flood protection benefit with a substantial rebate in return for documented payment of municipal water bills equivalent to estimated domestic usage.

6.3 Program Opportunities

USAID programming in the area of urban environmental management should focus on both policy dialogue and institutional development.

The target audience for policy dialogue includes GOI decision makers who deal with environmental policy (MOE, BAPPENAS, and Ministry of Public Works), allocation of revenue raising authority (MHA and MOF) and representatives of major municipalities. In addition, representatives of Indonesian industries and representatives of environmental NGOs are clients for policy dialogue on mechanisms for improving public support and private sector performance while minimizing any adverse impacts on economic development. Policy dialogue with these organizations should focus on improving debate and understanding of (1) the impact of pollution on the physical and economic health of the nation, (2) the alternatives available, and (3) the institutional improvements necessary to implement the alternatives.

Institutional Development involves the creation of systems and networks to sustain and implement the decisions reached in the policy dialogue. The target audience is composed of those involved with implementing pollution control programs, training environmental professionals, and recovering costs for environmental services. There is also a need to strengthen the institutions concerned with collecting and interpreting environmental data, disseminating information and enhancing public awareness. The Mission's primary focus should be on the development of institutional mechanisms which can be self-sustaining and can rely predominantly on available resources.

To engage these client audiences, we recommend a set of three program components:

(1) Policy Analysis Support for Strategy and Program Design;

(2) Training and Technical Assistance for Regulatory Development, Environmental Protection, and Service Delivery; and

(3) Pilot Programs.

Policy Analysis Support

There still remain a number of critical policy decisions in the area of urban environmental protection. Whether the focus is industry, automobiles, or domestic sewage, the major shortfall in Indonesian environmental policy is not the lack of environmental laws or goals but rather the lack of sustainable implementation and enforcement. Sustainability for urban environmental programs in Indonesia will require major improvements in public awareness, technical and financial support. The major issues that need to be studied and discussed with policy makers include:

- Strategies for improving public awareness and support for environmental policies relating to:
  - environmental impacts of resource pricing;
  - sewage collection, treatment and disposal;
  - groundwater pumping;
  - automobile, bus and truck emissions; and
  - industrial pollution.
- Appropriate role of NGOs in providing advice and disseminating environmental information

Improving Environmental Efficiency of Resource Pricing

- The current and potential environmental and social consequences of subsidies, tariffs and monopoly prices which ultimately value air, water, and land resources at less than their true value to society.
- The potential role and feasibility of full-cost pricing as a means of enhancing environmental sustainability.

Improving Technical Support and Service Delivery

- The potential role of the private sector in providing sewage treatment, water supply, automotive and industrial control expertise.
- The feasibility of incentive systems to encourage private industry to use its own expertise to reduce pollution at its source.
- Strategies for enforcing pollution control requirements that can be implemented with a minimum of technically trained manpower.
- Feasibility of adopting common emission standards with other ASEAN nations for control of selected industries.

Improving Financing for Pollution Control

- The role of environmental regulations in assuring inadequate cost recovery to attract private investment for sewage treatment and pollution control.
- The potential use of Housing Guaranty and other loan funds to finance sewerage systems once cost recovery enforcement programs are in place.
- The potential use of groundwater pumping fees to finance municipal water expansion and flood protection.
- The potential role of pollution fees and cost recovery to pay for pollution control services.

Analytic work recommended here provides an opportunity for an important extension of privatization efforts. Not only would the use of private sector resources and expertise play an important role in addressing major environmental problems, but because there is no entrenched bureaucracy to overcome, this privatization effort should move relatively quickly and thereby provide an important model for other applications.

Not only would privatization of environmental services offer the traditional advantages of efficiency and alternative sources of financing, but in this circumstance it offers a source of technical expertise not otherwise available.

In order to improve the opportunity for effective policy dialogue deriving from the analytic studies proposed, the studies should be linked with training seminars and policy conferences to broaden their impact. Ideally, seminars, training and research of this type could be institutionalized as part of an ongoing program in a research organization devoted to dissemination of information related to urban issues.

Training and Technical Assistance

Indonesia has a critical shortage of technically trained manpower and many of the best are often hired by the rapidly expanding private sector. Rather than relying on an army of technically trained government field inspectors, as is often done in more developed countries, the study team recommends a program of training and technical assistance designed to accomplish the following objectives:

(a) Focus a substantial portion of long-term training resources on individuals likely to have influence in macro policy decisions and ensure that these individuals are well grounded in resource economics and policy implementation.

(b) Make better use of the limited numbers of technical experts currently available to government by providing assistance in:

- selection and operation of emission monitoring equipment;
- use of microcomputers in the development and maintenance of pollution inventories; and
- regulatory development, particularly with regard to use of economic incentives and private sector environmental auditors to leverage private expertise.

(c) Draw heavily on expertise already available in the private sector, by working through Chambers of Commerce and other Indonesian industry associations to provide:

- training seminars for managers of manufacturing facilities on cost savings through pollution control and
- training seminars for private entrepreneurs and pollution control vendors on pollution control requirements and opportunities for privatization. (Such seminars can be most effective when they involve industry representatives speaking from their own experience in recycling and waste minimization.)

(d) Work with environmental NGOs to develop training seminars for teachers, educational administrators, NGO staff, community workers and news media to assist them to develop curricula for their own clients to raise their awareness of environmental issues and public responsibilities.

(e) Provide faculty assistance to develop and expand education programs at Indonesian universities oriented toward control of urban environmental pollution.

Pilot Programs

Three main types of demonstration programs seem to offer the greatest opportunity for long-term impact. In each case these efforts seek to initiate sustainable action by addressing key weaknesses in the existing institutions.

(a) Private sector involvement in the provision of sewerage and sewage treatment. USAID's involvement could include the following:

- feasibility studies of potential private sector participation;
- technical assistance in the design and enforcement of regulatory requirements, and
- capital financing via Housing Guaranty loans.

(b) Collaboration with other ASEAN nations in the development of common environmental standards for selected industrial processes. Such an arrangement would make it easier to enforce responsible standards while decreasing the fear that desired investment would be attracted to "pollution havens." USAID's involvement could include:

- feasibility studies of potential impacts and probable responses by other nations, and
- technical assistance in the development of standards and monitoring techniques.

(c) NGO involvement in the development and distribution of environmental education materials designed to raise public awareness and ultimately enlarge the constituency for improved environmental control. USAID's role could include:

- training and technical assistance on the development of environmental forecasting models and educational videotapes, and grant funds for the development of environmental newsletters and local training programs.

Annex 1

Statistical Tables

TABLE 1

URBAN POPULATION OF INDONESIA AND ITS GROWTH RATE BY PROVINCE, 1971 - 1985

Province	Urban Population 1971	1980	1985	Annual Growth Rate (%) 1971-1980	1980-1985
1. D.I. Aceh	169,497	233,501	294,228	3.56	4.62
2. North Sumatera	1,135,625	2,127,436	2,790,641	6.97	5.43
3. West Sumatera	479,302	433,120	520,762	(1.13)	3.69
4. Riau	217,893	588,212	737,618	11.03	4.53
5. Jambi	292,578	182,846	294,503	(5.22)	9.53
6. South Sumatera	928,351	1,267,009	1,524,737	3.46	3.70
7. Bengkulu	60,938	72,422	103,399	1.92	7.12
8. Lampung	272,935	576,872	849,972	8.32	7.75
SUMATERA	3,557,119	5,481,418	7,115,860	4.80	5.22
9. DKI Jakarta	4,546,492	6,071,748	7,148,942	3.21	3.27
10. West Jawa	2,683,123	5,770,868	8,277,861	8.51	7.22
11. Central Jawa	2,345,190	4,756,007	6,869,819	7.86	7.35
12. D.I. Yogyakarta	406,337	607,267	764,736	4.46	4.61
13. East Jawa	3,694,311	5,720,487	7,255,469	4.86	4.75
JAWA	13,675,453	22,926,377	30,316,827	5.74	5.59
14. Bali	208,047	363,336	488,144	6.20	5.91
15. West Nusa Tenggara	178,648	383,421	540,954	8.49	6.88
16. East Nusa Tenggara	129,449	205,467	269,884	5.13	5.45
17. East Timor	-	-	630,676	-	-
NUSA TENGGARA	516,144	952,224	1,929,658	6.80	14.13
18. West Kalimantan	222,635	416,923	552,853	6.97	5.64
19. Central Kalimantan	86,757	98,257	157,194	1.38	9.40
20. South Kalimantan	452,873	440,901	505,113	(0.30)	2.72
21. East Kalimantan	286,429	485,219	631,938	5.86	5.28
KALIMANTAN	1,048,694	1,441,300	1,847,098	3.53	4.96
22. North Sulawesi	334,950	354,607	427,718	0.63	3.75
23. Central Sulawesi	51,698	115,472	140,634	8.93	3.94
24. South Sulawesi	940,657	1,096,075	1,258,239	1.70	2.76
25. South-East Sulawesi	45,225	88,036	109,161	7.40	4.30
SULAWESI	1,372,530	1,654,190	1,935,752	2.07	3.14
26. Maluku	144,651	152,944	203,282	0.62	5.69
27. Irian Jaya	150,786	237,316	311,725	5.04	5.45
MALUKU + IRIAN JAYA	295,437	390,260	515,007	3.09	5.55
INDONESIA	20,465,377	32,845,769	43,660,202	5.26	5.40

Sources: 1. Indonesia, Central Bureau of Statistics, 1975, Hasil Sensus Penduduk Indonesia 1971, Serie D. Table 03.

2. Indonesia, Central Bureau of Statistics, 1983. Hasi Sensus Penduduk Indonesia 1980, Series No. 2. Table 06.3.

3. Indonesia, Central Bureau of Statistics, 1987. Penduduk Indonesia 1985. Serie supas No. 5. Table 08.3.

TABLE 2

URBAN CENTERS IN INDONESIA WITH POPULATION 100,000 AND OVER IN 1980 CENSUS AND ITS POPULATION GROWTH SINCE 1961 CENSUS

Urban Centers	Population at Censuses					Rate of Population Growth			
	1920a	1930a	1961a	1971b	1980b	20/30	30/61	61/71	71/80
1. Jakarta	306,309	533,015	2,973,052	4,579,303	6,503,449	5.5	5.5	4.3	3.9
2. Surabaya	192,190	341,675	1,007,945	1,556,255	2,027,913	5.8	3.5	4.3	2.9
3. Bandung	94,800	166,815	972,566	1,200,380	1,462,637	5.7	5.7	2.1	2.2
4. Medan	45,248	76,584	479,098	635,562	1,378,955	5.3	5.9	2.8	8.6
5. Semarang	158,036	217,796	503,153	646,590	1,026,671	3.2	2.7	2.5	5.1
6. Palembang	73,726	108,145	474,971	582,961	787,187	3.8	4.8	2.1	3.3
7. Ujung Pandan	56,718	84,855	384,159	434,766	709,038	4.0	4.9	1.2	5.4
8. Malang	42,981	86,646	341,452	422,428	511,780	7.0	4.4	2.1	2.1
9. Padang	38,169	52,054	143,698	196,339	480,922	3.1	3.3	3.1	10.0
10. Surakarta	134,285	165,484	367,626	414,285	469,888	2.1	2.6	1.2	1.4
11. Yogyakarta	103,711	136,649	312,698	341,629	398,727	2.8	2.7	0.9	1.7
12. Banjarmasin	46,933	65,698	214,096	281,673	381,286	3.6	3.8	2.7	3.3
13. Pontianak	28,731	45,196	150,220	217,555	304,778	4.6	3.9	3.7	3.7
14. Tanjung Karang	---	---	133,091	198,986	284,275	-	-	4.0	4.0
15. Balikpapan	---	20,843	91,706	137,340	280,675	-	3.6	4.0	7.9
16. Samarinda	6,879	11,086	69,715	137,782	264,718	4.8	5.9	6.8	7.3
17. Bogor	46,595	65,431	154,092	195,873	247,409	3.4	2.8	2.4	2.6
18. Jambi	11,311	22,071	113,080	158,559	230,373	6.7	5.3	3.4	4.2
19. Cirebon	33,051	54,079	158,299	178,529	223,776	4.9	3.5	1.2	2.5
20. Kediri	43,200	48,567	158,918	178,865	221,830	1.2	3.8	1.2	2.4
21. Manado	17,062	27,544	129,912	170,181	217,159	4.8	5.0	2.7	2.7
22. Ambon	11,120	17,334	56,037	79,636	208,898	4.4	3.8	3.5	10.7
23. Pekan Baru	---	---	70,821	145,030	186,262	-	-	7.2	2.8
24. Madiun	31,593	41,872	123,373	136,147	150,562	2.8	3.5	1.0	1.1
25. Pematang Siantar	9,460	15,328	114,870	129,232	150,376	4.8	6.5	1.2	1.7
26. Pekalongan	47,852	65,902	102,380	111,201	132,558	3.2	1.4	0.8	2.0
27. Tegal	34,687	43,015	89,016	105,752	131,728	2.2	2.4	1.7	2.4
28. Magelang	36,213	52,944	96,454	110,308	123,484	3.8	1.9	1.3	1.3
29. Sukabumi	23,533	34,191	80,438	96,242	109,994	3.7	2.8	1.8	1.5
30. Probolinggo	13,810	16,435	68,828	82,008	100,296	1.7	4.6	1.8	2.2

Sources: (a) Milone, 1966. URBAN AREAS IN INDONESIA: ADMINISTRATIVE AND CENSUS CONCEPTS. Table V.

(b) Indonesia, Central Bureau of Statistics, 1981. PENDUDUK INDONESIA 1980 MENURUT PROPINSI DAN KABUPATEN/KOTAMADYA. Seri L. no. 2. Table IV.

TABLE 3. LABOR FORCE OF INDONESIA BY SEX AND URBAN-RURAL LOCATION: 1971, 1980, AND 1985

Sex and rural-urban	1971a	1980a	1980b	1985b	Rate of growth 1971-1980	Rate of growth 1980-1985
Male						
Rural	22,396,039	27,905,049	28,032,178	31,206,265	2.44	2.15
%	83.47	79.84	79.87	76.39		
Urban	4,436,362	7,045,270	7,066,624	9,642,386	5.14	6.22
%	16.53	20.16	20.13	23.61		
Total	26,832,402	34,950,320	35,098,803	40,848,652	2.94	3.03
%	100.00	100.00	100.00	100.00		
Female						
Rural	11,612,864	14,279,365	14,387,780	18,365,819	2.30	4.88
%	87.53	83.00	83.06	79.93		
Urban	1,654,805	2,923,661	2,934,663	4,611,145	6.32	9.04
%	12.47	17.00	16.94	20.07		
Total	13,267,670	17,203,027	17,322,444	22,976,965	2.89	5.65
%	100.00	100.00	100.00	100.00		
Total						
Rural	34,008,903	42,184,414	42,419,958	49,572,084	2.39	3.12
%	84.81	80.89	80.92	77.67		
Urban	6,091,167	9,968,931	10,001,287	14,253,531	5.47	7.09
%	15.19	19.11	19.08	22.33		
Total	40,100,071	52,153,346	52,421,246	63,825,616	2.92	3.94
%	100.00	100.00	100.00	100.00		

Sources: Indonesia, Central Bureau of Statistics, 1973. Hasil Sensus Penduduk Indonesia 1971, Serie C. Table 36.
Indonesia, Central Bureau of Statistics, 1983. Hasil Sensus Penduduk Indonesia 1980, Tables 39, 38.1-6.
Indonesia, Central Bureau of Statistics, 1987. Penduduk Indonesia, 1985, Serie Supas No. 5, Tables 40.1-6.

(a) Worked at least 2 days in the previous week or temporarily not working.

(b) Worked at least 1 hour in the previous week or temporarily not working.

TABLE 4

EMPLOYED PERSONS IN INDONESIA BY MAIN INDUSTRY: 1971, 1980, AND 1985

Main Industry	1971a (N)	%	1980a (N)	%	1980b (N)	%	1985b (N)	%
Agriculture, forestry, hunting, fishing	24,772,230	63.18	28,668,554	55.93	28,834,042	55.93	34,141,809	54.66
Mining and quarrying	90,216	0.23	385,028	0.75	387,251	0.75	415,512	0.67
Manufacturing	2,931,652	7.48	4,653,191	9.08	4,680,051	9.08	5,795,919	9.28
Electricity, gas and water	37,988	0.10	65,710	0.13	66,089	0.13	69,715	0.11
Construction	737,909	1.88	1,647,637	3.21	1,657,148	3.21	2,095,577	3.36
Wholesale trade, retail trade, restaurants	4,113,328	10.49	6,650,620	12.96	6,678,952	12.96	9,345,210	14.96
Transportation, storage, communication	915,981	2.34	1,459,991	2.85	1,468,419	2.85	1,958,333	3.14
Financing, insurance, real estate and business services	95,385	0.24	300,610	0.59	302,345	0.59	250,481	0.40
Public services	3,923,314	10.01	7,103,519	13.86	7,144,523	13.86	8,317,285	13.32
Others	1,593,009	4.06	21,495	0.04	21,619	0.04	8,355	0.01
Not stated		0.00	310,889	0.61	312,684	0.61	58,942	0.09
Total	39,210,112	100%	51,257,244	100%	51,553,122	100%	62,457,138	100%

Sources: Indonesia, Central Bureau of Statistics, 1973. Hasil Sensus Penduduk Indonesia 1971, Serie C. Table 37.
Indonesia, Central Bureau of Statistics, 1983. Hasil Sensus Penduduk Indonesia 1980. Tables 38.9, 45.9.
Indonesia, Central Bureau of Statistics, 1987. Penduduk Indonesia 1985, Serie SUPAS No. 5, Tables 45.9.

(a) Worked at least 2 days in the previous week or temporarily not working. 1980 data with 2-day reference period do not decompose total employment into sectoral employment; thus, we apply the composition in 1-hour reference period composition.

(b) Worked at least 1 hour in the preceding week or temporarily not working.