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# **Decentralization: Improving Urban Management in Asia**

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**DECENTRALIZATION:  
IMPROVING URBAN MANAGEMENT IN ASIA**

**United States Agency for International Development  
Regional Housing and Urban Development Office for Asia**

**Ronald W. Johnson  
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August, 1991**

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**TABLE OF CONTENTS**

	<u>Page</u>
<b>EXECUTIVE SUMMARY</b>	i
<b>1. URBAN MANAGEMENT NEEDS IMPROVEMENT</b>	<b>2</b>
1.1 Population Growth	3
1.2 Urban Economic Activity	4
1.3 Weaknesses in the Management of Urban Systems	5
<b>2. DECENTRALIZATION: CHANGING THE URBAN MANAGEMENT FRAMEWORK</b>	<b>8</b>
2.1 Decentralization	8
2.2 Urban Management	11
<b>3. WHY DECENTRALIZATION MAY IMPROVE URBAN MANAGEMENT</b>	<b>14</b>
3.1 Allocation of Public Sector Resources	14
3.2 Mobilization of Resources	15
3.3 Accountability	15
3.4 Problem Solving	16
<b>4. MANAGEMENT SYSTEMS AND PROCESSES OFFERING MAXIMUM LEVERAGE FOR LOCAL GOVERNMENTS</b>	<b>17</b>
4.1 Strategic Planning	18
4.2 Resource Mobilization	22
4.3 Services Provision, Regulation and Enforcement	23
4.4 Budgeting and Accounting	28
4.5 Monitoring and Evaluation	34
4.6 Accountability Mechanisms	35
<b>5. CONSTRAINTS ON ACHIEVING THE LEVERAGE OFFERED BY DECENTRALIZATION</b>	<b>35</b>

## TABLE OF CONTENTS (continued)

	<u>Page</u>
<b>6. ACTION ISSUES TO BE RESOLVED IN DEVELOPING DECENTRALIZATION STRATEGIES</b>	<b>37</b>
6.1 Developing an Incentive System that Rewards Performance of Urban Managers	37
6.2 Making Local Government Performance Visible to Local Residents	38
6.3 Developing Accountability Mechanisms that Enable Local Residents to Affect the Incentive Structure of Urban Managers	38
6.4 Identifying the Appropriate Mix of Local Institutions (Local Govern- ment, NGOs, Private Production Organizations) in Managing the Urban System	39
 <b>ANNEX 1: URBAN MANAGEMENT NEEDS IMPROVEMENT</b>	 <b>1-1</b>
<b>ANNEX 2: SOLID WASTE COLLECTION WORK</b>	<b>2-1</b>

**DECENTRALIZATION:  
IMPROVING URBAN MANAGEMENT IN ASIA<sup>1</sup>**

**EXECUTIVE SUMMARY**

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Urban management in Asia and throughout developing countries needs improvement. The scale and complexity of urban systems are increasing rapidly. Present, generally complex, institutional arrangements for managing the scale and complexity of the urban system are inadequate to the tasks. Scale and complexity increases are due to two interacting, fundamental changes in Asia. First, most of Asia is experiencing a rapid increase in urban population. Second, the basic economic character of the region, as with most developing countries, is becoming rapidly more dependent on urban economies. Weaknesses in the present institutional framework for managing these rapidly changing urban conditions threaten to slow or even reduce the rate of economic growth.

While Asia has not been as highly urbanized as the rest of the world, the region will exceed 50 percent urban in another quarter century. In absolute numbers, managing the urban system in Asia now in 1991 means responding to the needs of almost a billion people. In the next quarter century, that number will grow to well over two billion people. That doubling implies enormous investments in urban services and economic activity to shelter, transport, employ and provide for other basic necessities. Furthermore, these requirements are not limited to major metropolitan areas. In fact, while overall urban growth rates throughout developing regions has been exceeding 4 percent, it has begun to be even higher for smaller towns and secondary cities than for the primate cities.<sup>2</sup>

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<sup>1</sup> This paper was funded by the United States Agency for International Development, Regional Housing and Urban Development Office for Asia. The views and observations are solely the responsibility of the author and do not represent the position of the Agency for International Development.

<sup>2</sup> World Bank. *Urban Policy and Economic Development: An Agenda for the 1990s*, Urban Development Division (World Bank: 1991, p. 3).

Running ahead of even these startling urban population growth figures is the change from rural to urban dominated economies. In 1965, for a set of ten developing countries in Asia, agriculture alone accounted for over 40 percent of Gross Domestic Product (GDP) in all but three. The lowest was Sri Lanka at 28%. By 1988, in only two of those same ten countries did agriculture account for greater than 40 percent. In fact, in all the others, agriculture was one-third or less of the composition of GDP. GDP growth in agriculture is lower than for almost any other component, and certainly lower for all ten countries than the other three components of GDP. Other estimates are that for all developing countries, more than 50% of economic activity already occurs in urban areas.<sup>3</sup>

The evidence is substantial that developing countries in general, and in Asia in particular, are becoming much more highly urbanized, and that this urbanization is shaping, indeed even controlling, economic growth. How urban systems are managed may be the single most important determining factor in the region's economic future. However, there is considerable evidence that some of the most valuable economic assets to urban areas -- infrastructure and land -- are not being well managed in many instances.

Inadequately or improperly maintained infrastructure does not last its expected life cycle, resulting in significant capital expenditure that should have been available for other needed facilities. In other cases, infrastructure investments are inefficient because they fail to match in quality and quantity the real economic demand, fail to match real willingness to pay, and fail to reflect the best uses of economic resources. Land may be over or undervalued as an asset. Regulatory practices that distort efficient land markets, such as cumbersome and inequitable land registration and titling processes, make it more difficult to meet land requirements for shelter and commercial expansion. Inefficient management of these two basic assets adds considerably to the cost of urban systems, and, due to the dominance of urban systems in the national economy, acts as a brake on the potential for economic growth for the whole economy.

The present institutional framework is one of the key contributors to present management failures in the urban system. The roles of central and local governments often are not clearly defined, and many changes made in the name of decentralization or other national urban strategy have been made in a piecemeal fashion, in some cases making the situation worse rather than better. In addition, donor agencies and other external groups often are involved in setting urban priorities and channeling investments, not always in a comprehensive and coordinated fashion. The unsorted mixture of responsibilities and multi-jurisdictional conflicts in the largest urban areas combine with inefficient asset

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<sup>3</sup> Urban Policy and Economic Development: An Agenda for the 1990s.

management to him; that, despite their present dynamically positive impact on developing economies, urban systems could in the future in some countries become obstacles to economic development.

Changing the present institutional framework in most developing countries to include a significantly increased role for local governmental and non-governmental institutions in managing the urban system has the potential for significantly improving urban management. The key characteristics of such a decentralization strategy involve changes in the structure of local government and in the status of local government as an institution. Structurally, three characteristics are important in a decentralized institutional framework:

- Chief policy officials of local government are accountable to citizens or residents of the jurisdiction, not to central government agencies or officials (e.g., chief executive such as mayor, legislative body such as municipal council).
- Key management or administrative department heads are accountable either directly to citizens or residents or to chief policy officials.
- Chief financial officials (responsible for both revenue and budget) are accountable either directly to citizens or residents or to chief policy officials.

Greater autonomy for local institutions does not imply that central government does not have authority to set limits, such as borrowing authority. But it means that local government does not clear decisions with central government within the limits of statutory and constitutional provisions. This autonomy confers on local government a status sometimes referred to as "corporate" status. Corporate emphasizes that local government institutions are the managers of assets "owned" by current and future residents; local officials therefore are responsible for managing those assets for the benefit of current and future residents.

Decentralization is not all or nothing. There are degrees of decentralization that depend on the extent of:

- Independence from central government of selection of policy, administrative and financial officials;
- Authority to decide without prior approval of central government the quantity and quality of basic urban services;

- Proportion of total expenditures for basic urban services funded by "own source" revenues (revenues that are determined by and collected by local government);
- Authority to assign value to taxable base and to set rates on that base;
- Authority to establish schedule of charges and fees for services;
- Authority to accept or reject or modify central government plans for urban infrastructure to be constructed by central agencies.

Decentralization from central to local governments can improve urban management in four respects:

- Better allocation of public sector resources;
- Better mobilization of resources to finance public sector activities;
- Greater accountability of public sector officials to the citizens being served;
- Better public sector problem solving.

However, the adoption of decentralization policies and revision of local government codes do not alone ensure achieving the benefits of decentralization. Along with formal structural change, specific management systems or processes are important to enable local governments to achieve the benefits of decentralization. Also, local governments can but not necessarily will be more accountable to urban residents. Newly decentralized or decentralizing systems may or may not have mechanisms for achieving that accountability.

Local governments' ability to achieve leverage over urban systems management problems depends on their having independent status as public authorities with accountability to the residents of their jurisdiction as opposed to accountability to central government. That does not mean the central government does not have an interest in regulating to some degree these corporate local governments, but the regulatory position of central government is defined and limited in statute and/or constitutional provision. Thus, local officials do not report to officials in higher levels of government, although they are bound by statutory and constitutional provisions. In many countries, this corporate status would be a major change from the existing institutional framework, but it is an essential characteristic of local governments being able to exert leverage on the urban system.

**Six management systems or processes are essential ingredients in local governments assuming greater responsibility and authority for managing the urban system:**

- **Strategic planning**
- **Resource mobilization**
- **Services provision, regulation and enforcement**
  - **Services production**
  - **Regulation, negotiation and enforcement**
- **Budgeting and accounting**
- **Monitoring and evaluation**
- **Accountability mechanisms**

**Local governments have a comparative advantage over central institutions in the strategic planning process for urban areas. Central governments focus their major energies on a very few elements. National security, exploitation of nationally owned or controlled natural resources, and macroeconomic management of the national economy absorb significant energies and in many cases absorb the best talent within central government institutions. Central governments, therefore, lack leverage over strategic planning processes for urban systems because they typically are preoccupied first with other concerns. For the autonomous local government, strategic planning for the urban system can be the first, highest priority. Hence, local governments can exercise more leverage.**

**Central governments also lack leverage in strategic planning for urban systems because they have an inherent disadvantage in acquiring, maintaining and analyzing detailed information about specific urban systems. On issues specific to urban areas, such as employment patterns, constraints on the small scale entrepreneur, activities in the informal sector, involvement of NGOs, problems with specific urban services, demand for services, point sources of environmental pollution, and so forth, central government is at a distinct disadvantage compared with local government. Hence, local governments can exercise more leverage on strategic planning for urban systems because they have greater access to, and higher salience for most of the information necessary for strategic planning for urban areas.**

The local government role in strategic planning for urban systems begins with formulating the strategic vision of the specific urban area and its fit into the national economy and the national social system. The most important transition from a centralized to decentralized system of local government is for local government officials to view local institutions as having a central and dynamic role in development. This vision involves local government as an active agent rather than passive administrator. Guided by this strategic vision, specific planning responsibilities for local governments then include capital facilities planning, capital financial planning, physical planning, human resources planning, and long-range environmental planning.

Local governments have a comparative advantage over central governments in two aspects of resource mobilization. First, local governments can collect more revenues that are "local" in origin. Business operations of strictly local organizations are almost uniquely accessible to local governments. The further the geographic distance from the national capital, the less likely is central government to have sufficient knowledge of and access to small business operations. Business taxes based on size of physical facility, the number of employees, or a simple business classification correlated with income are all means for determining tax liability easily within the capacity of most developing country local governments. And enforcement is much simpler for local governments because the businesses are known to the local tax collectors.

The second component of comparative advantage for local governments is the assignment and collection of taxes and charges for benefits residents perceive as being provided by the local government. The heart of the issue is the direct linkage between local government provision of a service with direct accountability to local residents. If residents perceive the local government as providing a set of services and perceive that the local government is accountable for the quality and quantity of those services, they are more likely to be willing to be taxed or to pay specific user charges. Property taxes represent the single largest own source revenue for local authorities in most developed countries. Their rationale as a local tax is based on the premise that property values accruing to the owner of the property, to the extent that they are affected by public sector direct actions, are more affected by the basic urban services provided by most local governments than by the services of any central government agency.

The other direct linkage between benefits of services and resource mobilization is for those services in which individual beneficiaries are clearly identifiable. Services that can be consumed on some kind of excludable basis, such as household connections to the water system, are susceptible to direct charges to recover the costs of that service. Again because they are in a better position to know and to keep records on use, local governments are better able to collect user charges.

Identifying the areas in which local governments have more leverage than central government in providing basic services in the urban system does not mean that local governments necessarily should be the "producers" of those services. Provision means the responsibility for deciding on levels of quantity, quality, and therefore cost, and making arrangements for those quantity and quality levels then to be produced at the budgeted cost. But it does not mean the act of production itself. Local governments may decide on the quantity and quality of solid waste collection, but contract for or regulate the actual private implementation of solid waste collection.

In budgeting and accounting for financial management transactions in the urban system, local governments if given responsibility and authority can develop budgets and maintain a system accounts that will serve the urban system better than present financial management systems in place. However, present financial management systems in most developing country local governments suffer from two fundamental weaknesses: (1) the poor quality of financial management information; and (2) weak linkages among the different components of local financial management systems.<sup>4</sup> In order for local governments to achieve the potential leverage they have over management problems in the urban systems, budgeting and accounting systems will have to provide management information on the unit costs, the quality and quantity of services and the management responsibility for cost, quality and quantity performance results.

Much of the argument that decentralized institutions can be more efficient and effective managing the urban system depends on the individuals in those institutions viewing their role as managers of the physical and human resources or assets in the urban area for current and future residents. Individuals of course may be motivated by many incentives, and it is the incentive to please central government officials that seems to dictate the actions of "local" managers in highly centralized systems. Decentralizing does not automatically make local managers and officials accountable to local residents.

Democratic systems typically rely on election of key executive and legislative officials to achieve accountability. Corporate systems also rely on selection and replacement mechanisms for holding officers and managers accountable. In developing countries, NGOs and informal community organizations often play a key role in ensuring accountability, with or without extensive electoral systems. Political culture influences the selection of specific

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<sup>4</sup> The following paragraphs draw heavily from Ronald W. Johnson and Syedur Rahman, "Budgeting as a Tool for Enhancing the Role of Local Government in Developing Countries," forthcoming in a symposium issue of *Journal of International Public Administration*, (June, 1992).

accountability mechanisms, so prescription of particular models is not appropriate across all systems.

Typically, central government agencies who are providing and/or financing urban services view local governments with some suspicion about their capability to take on new responsibility. Usually, lack of management capacity and technical skills are the main concerns. And it is true that institutions which have not been managing services and performing technical tasks generally lack those skills. However, those skills can be acquired, and need not be a major obstacle. The key constraint on local governments performing effective urban management is on the fundamental status of local government as an autonomous entity in developing countries. In order for local governments to exert the potential leverage on urban development that is possible with decentralization, they must have a degree of autonomy and an existence as a corporate entity that few central governments have been willing to confer.

## **DECENTRALIZATION: IMPROVING URBAN MANAGEMENT IN ASIA<sup>1</sup>**

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This paper examines the theme that decentralizing authority for planning, financing and carrying out a number of urban functions, from national to subnational institutions, can improve urban management. Subnational institutions in this paper means institutions that are at least quasi-autonomous from central government, with a less comprehensive scope of operations than central government, and that may be public or private. A central focus, however, will be on local governmental institutions and their role in managing the urban system, either through direct planning, financing and production of urban services, or through regulatory and cooperative operations with the private sector.

Urban management encompasses a range of basic functions that numerous different organizations and market interactions produce. For convenience in expression, this paper refers to the complex group of functions that must be carried out, and the institutions and market interactions that produce them, as the urban system.

Section 1 begins the paper with the implied premise in the title, that urban management needs improvement. It needs to be improved in order to respond to rapidly changing urban conditions including the growth of urban populations and the increasing dependence of national economies on urban-related organization and services. The ability of both the public and the private sectors to respond to those changing conditions is hampered by weaknesses in the present institutional framework for managing the urban system. Especially weak is the management of existing assets in urban areas, including principally infrastructure and land. Since other sources effectively document changing urban conditions and the present

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<sup>1</sup> This paper was funded by the United States Agency for International Development, Regional Housing and Urban Development Office for Asia. The views and observations are solely the responsibility of the author and do not represent the position of the Agency for International Development.

institutional framework for managing urban systems, Section 1 is only a brief synopsis to set the context for examining the potential for decentralization to improve urban management.

Section 2 clarifies what decentralization means in the context of improving urban management. Decentralization is a change in the institutional framework by which urban systems are managed; it means decreasing the role of central government and increasing the responsibilities and authority of subnational institutions. Section 3 then describes how decentralization **potentially** improves urban management. The arguments summarized in Section 3 conclude that a decentralized institutional framework **can** provide more leverage in managing urban systems. However, to realize the potential, decentralization strategies must involve the key management systems that give local institutions', especially local governments', the most leverage for affecting management of the urban system. These key management systems and processes are the subject of Section 4. Since decentralization, even if focused on the management problems in which local governments can have the most leverage, does not automatically produce improved management of the urban system, Section 5 analyzes the constraints that affect the potential for decentralization to improve urban management.

The paper concludes with an action agenda identifying key issues that central and local institutions should consider in developing and implementing a decentralization strategy. The conclusion is that changing the mix of responsibilities for key urban functions in favor of decreased central responsibility can improve urban management, if accompanied by implementation actions that enable local institutions to increase their leverage over specific urban management functions.

The paper relies on worldwide examples and evidence, but the main statistical information and more detailed case examples come from Asia.

## **1. URBAN MANAGEMENT NEEDS IMPROVEMENT<sup>2</sup>**

Urban management must be improved because the scale and complexity of the urban system are increasing rapidly. These increases are due to two interacting, fundamental changes in Asia. First, whatever the changing rate of growth in total population, most of Asia is experiencing a rapid increase in urban population. Second, the basic economic character in the region, as with most developing countries, is becoming rapidly more dependent on urban economies.

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<sup>2</sup> Annex 1 includes more details on the well documented trends in urban population growth and urban economic activity.

Weaknesses in the present institutional framework for managing these rapidly changing urban conditions threaten to slow or even reduce the rate of economic growth.

### 1.1 Population Growth

While Asia has not been as highly urbanized as most of the rest of the world, the region will exceed 50 percent urban in another quarter century, as

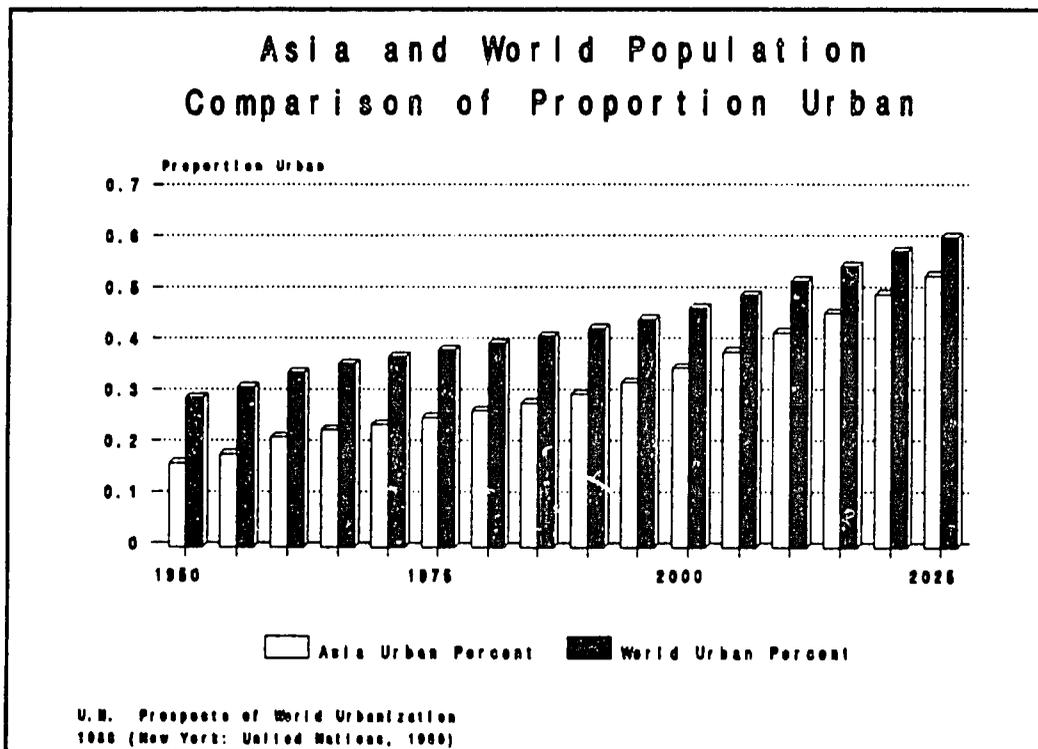


Figure 1

Figure 1 illustrates. In absolute numbers, managing the urban system in Asia now in 1991 means responding to the needs of almost a billion people. In the next quarter century, that number will grow to well over two billion people. That doubling implies enormous investments in urban services and economic activity to shelter, transport, employ and provide for other basic necessities. Indeed, investments in various services and economic activity will be required in rural areas as well, but the rate of growth in population is dramatically greater in urban than in rural areas. In fact, for Asia, beginning in 1980 and projected through 2000, urban population growth rates are increasing while rural growth rates are decreasing.

These sheer numbers will strain the capacity of infrastructure systems for

which long lead time investments are necessary and current services for which manpower and supplies are the major expenditure. In the metropolitan areas, these investments will in part be necessary to meet increasing population and in part to replace once well functioning infrastructure which now is rapidly reaching the end of useful life. But the requirements are not limited to major metropolitan areas. In fact, while overall urban growth rates throughout developing regions has been exceeding 4 percent, it has begun to be even higher for smaller towns and secondary cities than for the primate cities.<sup>3</sup>

## **1.2 Urban Economic Activity**

In 1965, for a set of ten developing countries in Asia, agriculture alone accounted for over 40 percent of Gross Domestic Product (GDP) in all but three. The lowest was Sri Lanka at 28%. By 1988, in only two of those same ten countries did agriculture account for greater than 40 percent. In fact, in all the others, agriculture was one-third or less of the composition of GDP. Annex 1 includes more detailed information on the sectoral composition for these Asian countries.

Furthermore, as are urban populations growing rapidly, the fastest economic growth also is occurring in urban-related economic activities. GDP growth in agriculture is lower than for almost any other component, and certainly lower for all ten countries than the other three components of GDP. Other estimates are that for all developing countries, more than 50% of economic activity already occurs in urban areas.<sup>4</sup> Figure 2 illustrates the relationship between urbanization and development for a select Asian group.

The evidence is substantial that developing countries in general, and in Asia in particular, are becoming much more highly urbanized, and that this urbanization is shaping, indeed even controlling, economic growth. How urban systems are managed may be the single most important determining factor in the region's economic future. In the next section, we examine evidence that some of the most valuable economic assets to urban areas -- infrastructure and land -- are not being well managed.

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<sup>3</sup> World Bank. **Urban Policy and Economic Development: An Agenda for the 1990s**, Urban Development Division (World Bank: 1991, p. 3).

<sup>4</sup> **Urban Policy and Economic Development: An Agenda for the 1990s**.

### 1.3 Weaknesses in the Management of Urban Systems

Two fundamental weaknesses are affecting the ability of urban systems to absorb the large increases in population and to support the urban economic activities vital to national economic growth. First, basic physical assets of infrastructure and land are not being managed efficiently. Inadequately or improperly maintained infrastructure does not last its expected life cycle, resulting in significant rehabilitation expenditure that should have been available for other needed facilities. In

other cases, infrastructure investments are inefficient because they fail to match in quality and quantity the real economic demand, fail to match real willingness to pay, and fail to reflect the best uses of economic resources. Land may be over or undervalued as an asset. Regulatory practices that distort efficient land markets, such as cumbersome and inequitable land registration and titling processes, make it more difficult to meet land requirements for shelter and commercial expansion. Inefficient management of these two basic assets adds considerably to the cost of urban systems, and, due to the dominance of urban systems in the national economy, acts as a brake on the potential for economic growth for the whole economy.

The second fundamental weakness affecting the ability of urban systems to manage both population growth and the increasing importance of urban economic production is the complex institutional structure through which management responsibility is exercised.

**1.3.1 Inefficient Asset Management.** Capital expenditures by local governments in many developing countries amount to as much as thirty percent of total local expenditures, even in countries with limited local responsibility for urban services. Central government expenditures for all infrastructure services (not limited to "urban" services) can amount to fifty percent of national budget expenditures. For many cities, the five year capital investment program, all

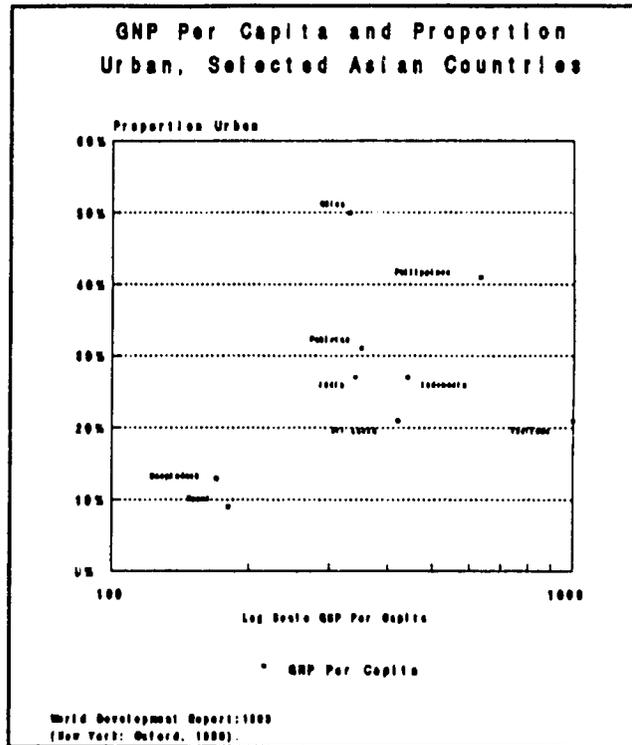


Figure 2

sources of infrastructure finance combined, can be larger than the annual operating or current services budget. If the facilities resulting from these expenditures are not treated as corporate<sup>5</sup> assets of the city and properly maintained, significant amounts of these expenditures will be wasted, requiring renewed expenditure for an asset that would not have been "needed" given proper maintenance. For example, if inadequate or improper maintenance decreases useful lifespan to only 75 percent, then the capital investment budgets for urban infrastructure will be split between maintaining/expanding capacity and needless expenditure on premature replacement. The effect is to amortize the investment over a 75 percent lifespan, meaning a 133 percent expenditure relative to value received.

Publicly produced infrastructure that is poorly maintained causes excessive public sector expenditures, funds that otherwise could have gone to other needed public services or been left to productive private investments. Land, as another key physical asset, suffers from economic inefficiency when market and non-market interventions by one or more public sector institutions distort urban land market functioning.

The U.S. Agency for International Development (USAID) 1990 annual Regional Housing and Urban Seminar focused on five urban land issues that constrain development in Asia: insufficient land in the right place at the right price; low affordability of land and housing; ineffective public urban land development programs; private resistance to public land regulations; and environmental resource constraints on land development.<sup>6</sup> These five land issues stem from two urban management issues. First, urban land management is a mixed responsibility of central and local institutions. Second, urban land often is not managed at all, that is, public authorities often do not view urban land management as a policy issue. Rather, a mix of central and local authorities acquire land for infrastructure and other development, regulate land transactions through registration and taxation, impose standards on construction, and regulate

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<sup>5</sup> The use of the word corporate to refer to urban infrastructure "assets" comes from viewing the managers of those assets as having a "corporate" responsibility to manage them on behalf of the "owners." The ultimate "owners" of those assets are the residents themselves, not the agencies who produce these assets. This perspective, which is elaborated more fully in Section 2, emphasizes that managers responsible for providing infrastructure and other services, whether they are central government or local government officials, are accountable to the residents of the specific jurisdiction for that provision.

<sup>6</sup> Dowall, David E. (manuscript) "Urban Land Policy Issues in Asia," Third Annual Asian Regional Policy Seminar, Chiang Mai, Thailand (U.S.A.I.D.: May 13-16, 1990).

land use through physical plans that often are prepared with limited awareness of economic trends and with little coordination with agencies that greatly influence land use.

Public regulation of land use and building practices also add to inefficiency in the conversion of land assets to productive purposes. One study estimated that 3 percent annually of GDP is the cost of regulations affecting housing construction in Malaysia.<sup>7</sup> In the Philippines, central government controlled land use and building regulations make it difficult for private individuals and developers to bring enough land together to make an economically efficient development parcel.<sup>8</sup>

Poor management of the infrastructure base and urban land thus creates problems in managing the urban system. As the next section discusses, the institutional structure for urban management further complicates these problems.

**1.3.2 Complex Institutional Structure.** The second fundamental weakness is the complexity of the institutional structure for managing urban systems. The roles of central and local governments often are not clearly defined, and many changes made in the name of decentralization or other national urban strategy have been made in a piecemeal fashion, in some cases making the situation worse rather than better. In addition, donor agencies and other external groups often are involved in setting urban priorities and channeling investments, not always in a comprehensive and coordinated fashion. The unsorted mixture of responsibilities and multi-jurisdictional conflicts in the largest urban areas, combined with inefficient asset management, already are showing hints that, despite their present dynamically positive impact on developing economies, urban systems may become in the future in some countries obstacles to economic development.

In many cases, national governments have created quasi-autonomous institutions that do not answer to local governments to provide utility and transport services within urban areas, but have assigned to local governments responsibilities for such services as the road network and drainage. Failed coordination among these different levels and different institutions often causes recently paved streets

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<sup>7</sup> World Bank, "Urban Policy and Economic Development," p. v.

<sup>8</sup> USAID/Manila. "Decentralized Shelter and Urban Development Project Paper: Annex 7, Role of the Private Sector." (USAID: 1990).

to be dug up again for installation of utility lines or repair of water mains.<sup>9</sup>

"The difficulty of inter-agency coordination also constrains the efficient management of the growth of Bangkok. For the transport sector alone, there are almost a dozen agencies and committees involved in infrastructure investment planning and implementation -- Bangkok Mass Transit Authority (BMTA), Expressway and Rapid Transit Authority (ETA), Department of Highways, Department of Public Works, Department of Land Transport, State Railway of Thailand, Traffic Engineering Division of BMA, Department of Town and Country Planning, Office of the Committee for the Management of Road Traffic, among others."

The Metropolitan Waterworks Authority, an autonomous institution, relies on the central government's Town and Country Planning department for the land use plan on which to base its water capital investment plan. But Town and Country Planning is responsible for land use plans for 130 towns and cities in Thailand. Lee, Kyu Sik, "Infrastructure Constraints on Industrial Growth in Thailand." World Bank, Urban Development Division, WP#88-2.

## **2. DECENTRALIZATION: CHANGING THE URBAN MANAGEMENT FRAMEWORK**

The preceding section developed the theme that urban management must be improved due to a rapidly changing environment and to weaknesses in the existing institutional framework. This section introduces decentralization as a change in the institutional framework by clarifying what commonly is thought to be decentralization and adopting a consistent definition suitable for focusing on urban management improvement through decentralization.

### **2.1 Decentralization**

In a state of the art paper for U.S.A.I.D, Rondinelli summarizes decentralization as:

- **Political:** involves increasing political power of citizens or elected representatives;

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<sup>9</sup> Johnson, Ronald W. "Montevideo Municipal Development Project: Financial and Institutional Issues,II," World Bank, Latin American and Caribbean Urban Projects Division, December, 1986.

- **Spatial:** involves diffusing population and economic activities geographically, to decrease concentration in fewer large cities;
- **Administrative:** involves transfer of responsibility for planning, management and raising and allocation of resources from central to field offices of central government, to subordinate units or levels of government, or other semiautonomous institutions.<sup>10</sup>

In an examination of the implications for structural reform of decentralization, Silverman follows Rondinelli's subclassification of administrative decentralization into three forms:

- **Deconcentration:** transfer of responsibility from central agencies in the national capital to field offices of central agencies (regional, provincial, local, etc.);
- **Delegation:** transfer of responsibility from central agencies to organizations not wholly under central control (semi-autonomous corporations, subnational units of government);
- **Devolution:** transfer from central to autonomous units of local government with corporate status (units with a statutory or constitutional basis for powers distinct from central government).<sup>11</sup>

Bahl uses the terminology somewhat differently, although emphasizing the same differentiation. He refers to administrative decentralization as permitting limited local discretion whereas devolution involves greater local discretion.<sup>12</sup>

In this paper, decentralization means transfer of responsibility and authority to units of local government that have a formally defined degree of autonomy from central government, defined in statutory or constitutional provisions. This is what most observers describe as **devolution**.

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<sup>10</sup> Rondinelli, Dennis A. **Decentralizing Urban Development Programs: A Framework for Analyzing Policy**. (U.S.A.I.D.: Office of Housing and Urban Programs, 1990), pp. 9-13.

<sup>11</sup> Silverman, Jerry M. **Public Sector Decentralization: Economic Policy Reform and Sector Investment Programs**, (World Bank: Public Sector Management Division, Africa Technical Department, 1990); and Rondinelli, **Decentralizing Urban Development Programs**.

<sup>12</sup> Bahl, Roy, Presentation for U.S.A.I.D./Cairo, March, 1991.

The key characteristics of decentralization involve changes in the structure of local government and in the status of local government as an institution. Structurally, three characteristics are important:

- Chief policy officials of local government are accountable to citizens or residents of the jurisdiction, not to central government agencies or officials (e.g., chief executive such as mayor, legislative body such as municipal council).
- Key management or administrative department heads are accountable either directly to citizens or residents or to chief policy officials.
- Chief financial officials (responsible for both revenue and budget) are accountable either directly to citizens or residents or to chief policy officials.

The status of local government refers to the autonomous relationship between local government and the citizens or residents of the jurisdiction. Autonomy does not imply that central government does not have authority to set limits, such as borrowing authority, but it means that local government does not clear decisions with central government within the limits of statutory and constitutional provisions. This autonomy confers on local government status sometimes referred to as "corporate" status. Corporate emphasizes that local government institutions are the managers of assets "owned" by current and future residents; local officials therefore are responsible for managing those assets for the benefit of current and future residents.

Decentralization is not all or nothing. There are degrees of decentralization that depend on the extent of:

- Independence from central government of selection of policy, administrative and financial officials;
- Authority to decide without prior approval of central government the quantity and quality of basic urban services;
- Proportion of total expenditures for basic urban services funded by "own source" revenues (revenues that are determined by and collected by local government);
- Authority to assign value to taxable base and to set rates on that base;

- Authority to establish schedule of charges and fees for services;
- Authority to accept or reject or modify central government plans for urban infrastructure to be constructed by central agencies.

## 2.2 Urban Management

Urban management does not connote any particular set of institutions, but rather refers to four management functions that must be performed in the urban system. Decentralization implies that the relative roles of central government and autonomous local government in performing those four management functions change toward greater local responsibility and authority. The four urban management functions provided by a variety of public and private institutions are:

- **Service provision:** managing the urban system means providing basic services such as shelter; water; sewerage; solid waste collection and disposal; streets, roads, footpaths, canals and bridges; drainage, flood, and landslide prevention; transportation; power and communications utilities; health; education; and a variety of registration and other public recordkeeping activities.
- **Public protection:** protecting the health, safety and security of urban residents, including protection from antisocial or asocial human behavior; abuse by employers or other institutions; and environmental hazards, both natural and manmade.
- **Strategic planning:** developing a corporate vision of the urban area as it should be in the future; establishing physical, program, financial and human resources plans to enable the vision; and establishing research and monitoring programs to evaluate progress toward the vision and adjust plans accordingly.
- **Economic development:** engaging in positive actions to expand job creation and increase income growth, adjusting regulatory policies and practices to minimize constraints on efficient operation of land and other economic markets while still meeting services delivery and public protection responsibilities.

The basic services listed above are not necessarily all carried out by public sector institutions. In countries in which competitive market systems are the primary source of production and consumption incentives, many are not considered public services at all. In countries in which production and consumption decisions

are controlled largely by public sector planning, these services are carried out almost exclusively by public sector agencies. What urban management has to accomplish is to have infrastructure and other services in place at the time it is needed to enable commercial and industrial growth to take place at a pace dictated by market conditions. In a centrally planned or command economy, those market conditions largely are dictated by central government plans and regulations. In a competitive market-based economy, market conditions are determined largely by the entrepreneurial actions of independent producers and consumers. In either type of economy, the services provision component of urban management is to be certain that the services are in place when needed to support the production and consumption of goods and services. Whether public or private, central government or local government, these basic services provided efficiently are necessary, but not sufficient, for an efficient urban system.

Public protection involves preventing harm to health, safety, security and property. Central government is supreme in most aspects of public protection in developing countries, but again for the urban system, what protection is provided and who provides it are two different questions. Some basic urban services assist in this function. Sewerage systems and solid waste collection and disposal both contribute to protecting individuals against health hazards from untreated human waste and from diseases whose incubation or spread is assisted by uncollected garbage. Likewise, drainage and flood protection services contribute to health and property protection. Other protection involves regulatory policies and practices designed to prevent unsafe buildings (commercial and residential), to identify and prevent source pollution and hazardous releases, to clean up and remove pollution and hazardous releases, and to encourage good hygiene and safe sexual practices through health education. Protection from environmental hazards is a fast becoming one of the highest priority functions in densely populated urban areas.

Strategic planning is a corporate concept. The English word corporate derives from the latin *corpus* meaning the "main body or substance". Strategic planning means planning for the "main body" of the urban system, planning for all members of a unified group. Strategic planning for the urban area involves visioning the future of the urban area. Visioning means imagining, but it also means setting goals. To do strategic planning for the urban system, therefore, means to imagine alternative future conditions and to select among alternative possible futures. It is a crucial management concept to an efficient urban system because strategic planning for the urban system provides reference points for making choices in the present about short-run current services and about long-run investments. Strategic planning for the urban system also provides benchmarks against which the results of current services and capital investments can be evaluated, and revised if necessary to improve progress toward the strategic

vision. And strategic planning communicates to urban residents the strategic vision of the future and provides the opportunity for citizen input.

Even under the most decentralized circumstances, central governments in most developing countries can be expected to continue playing important roles in the urban system. Identifying a locus for strategic planning for urban areas, therefore, is critical to coordinating the actions of central and local governments, voluntary and other non-governmental organizations, and individual producers and consumers in the urban economy. Sectoral planning carried out by individual central ministries contributes to a fragmented vision of the urban system. And national economic and social planning by the central planning agency is too large in scope to reflect the intricacies of urban areas. Applying the corporate concept of strategic planning emphasizes a key urban management function that has no single locus in most developing countries.

Economic development involves the active promotion of job creation and income generating activities, as well as review and adjustment of regulatory policies and practices that affect the operation of the productive sector. Economic systems characterized by a high degree of central planning rely on institutions, typically the central government, to allocate all or most of society's resources to the production of various goods and services, including both consumption and investment goods and regulatory services such as public safety and environmental protection. Economic systems characterized by a high degree of autonomy for non-governmental systems rely on the behavior of individuals and institutions "signalling" their intentions through consumption and production actions for most consumption and investment goods and some regulatory services. As we noted in the previous section, inefficient and inappropriate regulatory behavior acts as a constraint in many developing country urban areas on the generation of income and jobs in the private sector, and weaknesses in the market system makes it sometimes difficult for private sector institutions to accumulate the land and financial capital to engage in efficient production. An active role in assisting or facilitating private entrepreneurs to aggregate land and finance is an important urban management function in many developing economies. An active evaluation and understanding of the impacts of regulatory activities on these same two land and finance aggregation activities also is a necessary urban management function.

In summary, decentralization for improving urban management means reassigning responsibility and authority from central government institutions to local governments that have corporate status, separate from and not directly controlled by central government. The responsibility and authority reassigned from central to corporate local institutions are aspects of four urban management functions: service delivery, public protection, strategic planning and economic development. The following Section 3 discusses in a general way the reasons why decentralization is supposed to improve urban management, and then in section 4

looks at specific management systems or processes that have more promise for allowing local governments to leverage resources for managing the urban system. By implication, other management activities are left to central government or other than local government because local governments can exert little leverage.

### **3. WHY DECENTRALIZATION MAY IMPROVE URBAN MANAGEMENT**

Decentralization from central to local governments can improve urban management in four respects:

- Better allocation of public sector resources;
- Better mobilization of resources to finance public sector activities;
- Greater accountability of public sector officials to the citizens being served;
- Better public sector problem solving.

#### **3.1 Allocation of Public Sector Resources**

Under the present complex structure of urban management, there is a lack of reliable information about the performance of urban systems, and there is a confusing welter of contradictory policies toward the costs of urban services and the allocation of resources across geographic areas. Under these circumstances, it is difficult to evaluate the costs and benefits of present resource allocations. With more local responsibility for financing services and from resources mobilized within the urban area, the quality and quantity of services produced is more likely to be regulated by the actual costs of those services and by real demand for services. This is likely to lead to a better spatial allocation of resources as neither urban nor rural areas will be as subject to distortions caused by hidden subsidized costs. Closely following this will be a better spatial distribution of population as job seekers in urban areas will require wages that make the costs of urban living affordable, and employers will pay those wages as long as the economic gains from economies of scale and agglomeration economies of urban areas exceed the costs of factors of production. Those industries unable to operate in urban areas at true market costs will move elsewhere or cease production, and population will tend to stabilize around a market balance of costs and opportunities.

The allocation of resources to public sector services provision also is likely to be more efficient under a decentralized regime because local governments are

more likely to be aware of citizen preferences and needs. Unneeded quality or quantity of services is less likely to be produced because of this closer knowledge of the level of quantity and quality demanded. Furthermore, local governments are less likely to provide or produce services at an unaffordable (without subsidy) cost because they are more likely to know the real willingness to pay (demand) and ability to pay (affordability).

### **3.2 Mobilization of Resources**

Under a decentralized regime, mobilization of resources for public sector activities is likely to be both greater and more efficient. First, there is a greater willingness to be taxed and to pay other charges for services that are: (1) demanded by citizens in the first place; and (2) more within the control of the beneficiaries of those services, or of public officials who are accountable to those beneficiaries. Second, some revenues are easier to collect at the local level because local officials are more familiar with and have greater access to some tax bases. For example, the business license tax is extremely difficult to collect from small businesses and individual entrepreneurs unless the collecting agent is close to the source. Central government, even with local collection agents, is less likely to have access to that tax base because the collection agents are upward oriented in their reporting relationships and are often not perceived as part of the local community. Autonomous local governments are downward oriented in the sense that their reporting relationship is toward their local constituency.

### **3.3 Accountability**

Under a decentralized regime, there is likely to be greater accountability between public sector service providers and service beneficiaries. The managers who are responsible for the quality and quantity of services are easier to identify. Hence quality and quantity per unit of resource input are more likely to be higher. As with some tax bases, local governments are closer to and more familiar with threats to the health, safety and security of citizens. Obviously external threats to national security are not likely to be as known to local government as to central, but many forms of urban air and water pollution and hazardous materials releases are more visible to local citizens and officials than to distant central government agencies. Furthermore, local governments that are responsible to their constituent citizens as opposed to central government are more likely to see a direct linkage between the members of their corporate community and the need to monitor and regulate possible threats to health and safety. Local institutions thus are in a better position to enforce regulatory standards because they are closer to the problem and because they can be more directly accountable to residents for failure to enforce environmental health and safety standards. Where formal accountability

mechanisms, such as electoral systems, are weak, informal mechanisms such as voluntary associations and NGOs are more effective in influencing local than central government.

### **3.4 Problem Solving**

All forms of central planning rely heavily on the assumption that solutions to problems are known; therefore, the exercise of public authority involves priority setting and implementation of actions designed to achieve the desired results. However, the solutions to many of the problems that are left by market forces to the public sector, and the most efficient and effective means to achieve public purposes are among the most intractable problems humans face. Autonomous local institutions not governed by completely uniform standards and centrally planned approaches are more likely to produce innovative solutions. It is not that local officials are more innovative or experimental than central officials, but the institutional structure of numerous autonomous institutions trying to solve similar problems and trying to design effective and efficient approaches is more likely to produce innovations (both successes and failures). But the costs of failure will be less because it will have been implemented locally rather than uniformly nationwide. A corollary to this is that means of sharing information about successes and failures is necessary for a nation to take advantage of the "experiments" conducted by local institutions.<sup>13</sup>

Local governments similarly are in the best position to work with non-governmental organizations (NGOs) and other voluntary, community-based organizations. Local governments can be perceived as more responsive to community differences within the urban area. NGOs and informal sector institutions are more likely to work with local governments if they perceive local governments as accountable locally rather than accountable to central bureaucracies.

Similarly, economic development activities by local governments are more likely to reach small entrepreneurs and other individuals currently disadvantaged by the operation of private markets because they lack understanding of regulatory policies and lack access to sources of finance available to formal, larger institutions. Local governments are more likely to be able to develop forms of assistance and business stimulation on a scale appropriate to the small entrepreneur. In addition, local governments are more likely to be able to work with voluntary groups and community organizations in stimulating the development

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<sup>13</sup> Johnson, Ronald W. "Social Policy Planning in a Federal Structure: A Social Learning Strategy," *Evaluation and Program Planning*, (Winter, 1978).

of small scale, often informal economic organizations to achieve larger scales of production.

#### **4. MANAGEMENT SYSTEMS AND PROCESSES OFFERING MAXIMUM LEVERAGE FOR LOCAL GOVERNMENTS**

The preceding section discussed why decentralization can improve urban management, stressing potential and not certain improvement. The potential rests in inherent advantages a decentralized institutional structure has over a centralized structure. But these inherent advantages may or may not be realized. The adoption of decentralization policies and revision of local government codes do not alone ensure achieving the benefits of decentralization. Along with formal structural change, specific management systems or processes are important to enabling local governments to achieve the benefits of decentralization. Also, local governments can but not necessarily will be more accountable to urban residents. Newly decentralized or decentralizing systems may or may not have mechanisms for achieving that accountability.

This section considers six systems or processes where local governments have greater leverage on the urban system than more highly centralized governmental institutions. The systems are sufficiently general that not in every respect do autonomous local governments have greater leverage. Therefore, we will be specific in identifying activities that local governments in principle should be able to carry out more efficiently and effectively than central institutions.

Local governments' ability to achieve leverage in these six systems all depend on their having independent status as public authorities with accountability to the residents of their jurisdiction as opposed to accountability to central government. That does not mean the central government does not have an interest in regulating to some degree these corporate local governments, but the regulatory position of central government is defined and limited in statute and/or constitutional provision. Thus, local officials do not report to officials in higher levels of government, although they are bound by statutory and constitutional provisions. Furthermore, local government employment is not a part of the central civil service system with employees oriented toward promotion upward and out of local government into a central ministry. In many countries, this corporate status would be a major change from the existing institutional framework, but it is an essential characteristic of local governments being able to exert leverage on the urban system.

The six management systems or processes are:

- Strategic planning
- Resource mobilization
- Services provision, regulation and enforcement
  - Services production
  - Regulation, negotiation and enforcement
- Budgeting and accounting
- Monitoring and evaluation
- Accountability mechanisms

#### **4.1 Strategic Planning**

Local governments have a comparative advantage over central institutions in the strategic planning process for urban areas. Central governments focus their major energies on a very few elements. Where external threats to the national interest are perceived, national security is one of the highest planning priorities for central governments. Where internal threats to stability are perceived, national security is a primary planning priority. Exploitation of nationally owned or controlled natural resources is another key central government focus. Macroeconomic management of the national economy, including foreign exchange, foreign debt, balance of trade and balance of payments, interest rates, money supply and total size of the public sector is a high priority focus in most developing countries, especially in those engaged in structural reforms with or without International Monetary Fund pressure. Each of these foci absorb significant energies and in many cases absorb the best talent within central government institutions. Furthermore, many of these are "high prestige" concerns, with participation rewarded by high visibility and perhaps high remuneration.

Many of these have direct or indirect effects on urban areas, and urban economic and political activity certainly have effects on these national issues. However, urban development usually does not take precedence over any of these issue areas, except as a component of macroeconomic policy management or national security when disaffected urban residents are part of a threat to internal stability. Central governments, therefore, lack leverage over strategic planning

processes for urban systems because they typically are preoccupied first with other concerns. For the autonomous local government, strategic planning for the urban system can be the first, highest priority. Hence, local governments can exercise more leverage.

Central governments also lack leverage in strategic planning for urban systems because they have an inherent disadvantage in acquiring, maintaining and analyzing detailed information about specific urban systems. Central governments do have a comparative advantage in information about national demographic trends (fertility, morbidity, mortality), about national economic conditions that affect urban areas, such as about those macroeconomic issues listed earlier, and about regional characteristics cutting across local government jurisdictional lines. However, detailed information about some of the causes and consequences of even these same phenomena are more accessible to local institutions than to central governments. On issues specific to urban areas, such as employment patterns, constraints on the small scale entrepreneur, activities in the informal sector, involvement of NGOs, problems with specific urban services, demand for services, and point sources of environmental damages, central government is at a distinct disadvantage compared with local government. Hence, local governments can exercise more leverage on strategic planning for urban systems because they have greater access to, and higher salience for most of the information necessary for strategic planning.

The local government role in strategic planning for urban systems begins with formulating the strategic vision of the specific urban area and its fit into the national economy and the national social system. The most important transition from a centralized to decentralized system of local government is for local government officials to view local institutions as having a central and dynamic role in development. This vision involves local government as an active agent rather than passive administrator. Local leadership that perceives itself as responding to initiatives and directives from central government cannot as effectively manage the challenges of urban growth as leadership that understands the need to respond creatively at the local level. This includes imagining alternative future conditions involving assumptions about population growth, employment trends, levels of quality and quantity of basic urban services, population characteristics such as health and shelter status, and so forth. As a strictly research and projection exercise, it is within the capability of central institutions, assuming a large enough staff and a willingness to locate or hire staff across the country. However, using various formal and informal means to assess the preferences of urban residents and capture a sense of direction is almost impossible for central institutions whose outlook is national rather than local and whose preoccupation is with other, larger scale issues.

For local governments, the strategic planning process also encompasses long range capital facilities planning, long range capital finance planning, and human resources planning. Long range capital facilities planning for the local government is an exercise in managing the physical asset base of the urban system and establishing the time sequence by which assets will be rehabilitated and new assets put in place. A multi-stage process is involved:

- Evaluate present service characteristics (inventory existing assets and current services to identify condition, coverage, quality, cost per unit of service);
- Identify environmental trends (e.g., population growth, regulatory environment, employment trends, accumulation of long-term health hazards);
- Define service objectives, based in part on strategic vision of alternative futures (extension of service to new population or areas, quality improvements, opportunities to stimulate economic development)
- Develop preliminary list of capital projects and cost estimates (rehabilitation of existing facilities, replacement of existing facilities, addition of new facilities);
- Identify financial resources (external assistance, additions to revenue base, growth in present revenue base, opportunity for direct cost recovery, use of credit);
- Select subset of projects for inclusion in five-year capital investment plan (CIP);
- Identify future recurrent cost impact of CIP on operating (current) budget;
- Include first year of CIP in next annual budget estimate.

Long-range capital finance planning must be closely linked to the capital facilities planning process. Each capital facility or section of infrastructure built will have some kind of economic impact on the urban area. Presumably, positive economic growth will provide the long-run means to finance the capital investment. However, many of the economic benefits of urban capital investments attach to individuals or institutions without causing a corresponding increase in the local government's revenue base. For example, improved sewerage systems

improve individual health and may make the city more attractive to potential business investment. Individual health gains lead to improved productivity and potentially greater lifetime earnings, and increased business investment produces income growth within the urban area. However, most of these benefits are "taxable" only by central government. Typically, local governments have no means to capture the benefits to individual and business income gains. Hence, long range capital finance planning involves:

- Examining the time pattern of economic benefits from capital investments;
- Evaluating the local government's capacity to obtain directly from the economic beneficiaries a share of those economic benefits to finance the time pattern of costs of the investments;
- Reviewing projected sharing of resources from other jurisdictions, mainly central government, who do have access to a share of the economic benefits of selected capital investments;
- Evaluating the competing demands on "general" revenue sources, such as local property tax, for all those investments for which the local government does not have direct access to a share of the economic benefits of selected capital investments;
- As necessary, revising the long-range capital facilities plan to reschedule, reduce or eliminate investments to bring the capital investment and capital finance plans together.

Human resource planning involves establishing an incentive structure that rewards performance of local staff as a valued career in itself, rather than as a minor post in the central civil service system. For local officials to develop a strategic vision of the urban system, they also must vision the importance of their positions in the system. If local governments do not have the authority to select managers, to set reward systems, and to reward on the basis of performance, then the human resources necessary to achieve the potential benefits of decentralization will be deficient.

Finally, an increasingly important part of local governments' strategic planning process is evaluating the long-range environmental condition of the urban system and developing control strategies to minimize negative environmental changes or to facilitate positive environmental improvements. Local governments have a comparative advantage in identifying the sources of some environmental hazards and for holding local sources accountable through enforcement procedures.

A long-range environmental plan includes identifying and holding accountable local sources while providing information to regional and/or central government about the consequences to the urban system of environmental hazards from sources outside the planning jurisdiction.

#### **4.2 Resource Mobilization**

Local governments have a comparative advantage over central governments in two aspects of resource mobilization. First, local governments can collect more revenues that are "local" in origin. Of course, all revenues in principle originate in some "local" area, but income attributable to large corporations with operations in many parts of the country, and perhaps outside the country, is more difficult for most developing country local governments to access. On the other hand, business operations of strictly local organizations are almost uniquely accessible to local governments. The further the geographic distance from the national capital, the less likely is central government to have sufficient knowledge of and access to small business operations. Business taxes based on size of physical facility, the number of employees, or a simple business classification correlated with income are all means for determining tax liability easily within the capacity of most developing country local governments. And enforcement is much simpler for local governments because the businesses are known to the local tax collectors. Other licenses and fees, for example, permits to operate vehicles are more easily collectible at the local level from residents. Interregional commercial vehicles are more difficult for local governments to license.

The second component of comparative advantage for local governments is the assignment and collection of taxes and charges for benefits residents perceive as being provided by the local government. The heart of the issue is the direct linkage between local government provision of a service and direct accountability to local residents. If residents perceive the local government as providing a set of services and perceive that the local government is accountable for the quality and quantity of those services, they are more likely to be willing to be taxed or to pay specific user charges. Property taxes represent the single largest own source revenue for local authorities in most developed countries. Their rationale as a local tax is based on the premise that property values accruing to the owner of the property, to the extent that they are affected by public sector direct actions, are more affected by the basic urban services provided by most local governments than by the services of any central government agency. The linkage is direct between the total bundle of basic urban services and property value, but not usually specifically to any one particular service. Of course, to the extent that central governments in developing countries provide basic urban services, then local governments are not perceived as benefiting property values. Particularly as central governments shift responsibilities to local governments, the value of urban

property increasingly will be affected by the actions of local government, and the ability of the local government to tax and collect on property will increase.

The other direct linkage between benefits of services and resource mobilization is for those services in which individual beneficiaries are clearly identifiable. Services that can be consumed on some kind of excludable basis, such as household connections to the water system, are susceptible to direct charges to recover the costs of that service. Again because they are in a better position to know and to keep records on use, local governments are better able to collect user charges. Semi-autonomous water agencies reporting to the central government of course can also identify users and volume of use easily, but they lack the "local" character of local government. Beneficiaries seem more willing to avoid or postpone payment of user fees if the agency is a "distant" agency of the central government.

### **4.3 Services Provision, Regulation and Enforcement**

Identifying the areas in which local governments have more leverage than central government in providing basic services in the urban system does not mean that local governments necessarily should be the "producers" of all those services. Provision means the responsibility for deciding on levels of quantity, quality, and therefore cost, and making arrangements for those quantity and quality levels then to be produced at the budgeted cost. But it does not mean the act of production itself. Local governments may decide on the quantity and quality of solid waste collection, but contract for or regulate the actual private implementation of solid waste collection. This distinction between provision versus production is an important assist in understanding the comparative advantage local governments may or may not have for various urban services.<sup>14</sup>

Section 1.3 discussed the complex institutional structure that characterizes the provision of urban services in most developing countries today. Some of the consequences of that complex and confused institutional structure are facilities that are built to standards or technical requirements that are not suited to those who ultimately must operate and maintain. Further, standard national designs often are imposed on all urban areas, regardless of local conditions and regardless of genuine demand. In addition, new construction is more glamorous and therefore favored over maintenance and rehabilitation, especially for central government institutions who have no direct connection either geographically or in political accountability with the beneficiaries of services. The argument that local governments can exert more leverage over urban service provision than central

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<sup>14</sup> Silverman, *Public Sector Decentralization*, pp. 15ff.

governments therefore, is related to the same argument advanced for local resource mobilization -- local knowledge of demand and willingness to pay plus local accountability for performance improves service delivery over central provision. It follows then that local governments can provide those services best for which variation in level of quality and quantity, suited to local conditions, is desirable.

There are two perspectives to be examined in assessing the local role in services provision, regulation and enforcement. One perspective considers economic and political concerns for efficiency and effectiveness in answering the basic question of how are responsibilities to be divided between public and private, central and local. The second perspective considers administrative or management operations in answering the basic question of how can efficiency and effectiveness be improved.

**4.3.1 Economic and Political Efficiency.** The appropriate services for local governments to provide, either through direct local government production or through negotiation and regulation of private providers, can be evaluated through the application of economic and political/administrative criteria. In different political and cultural systems, this will lead to some variations in which services local governments can have the most leverage. Economic criteria focus on the nature of the goods and services to be provided by the public or private sector. Political and administrative criteria focus more on the nature and role of the institutions themselves.

The service characteristics rely heavily on economic criteria to establish goods and services that need to be provided by the public sector:<sup>15</sup>

- **Non-excludable** goods and services are those that once provided some people or some area are difficult to prohibit large numbers of people from enjoying the same benefits whether or not they contribute to financing. Drainage and flood control are examples of urban services that once established afford protection to entire areas.
- **Non-divisible** goods and services are those for which the quantity and/or quality consumed is difficult to measure, and therefore

difficult to establish unit pricing. Monitoring and enforcement of

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<sup>15</sup> These characteristics are adapted from Silverman, **Public Sector Decentralization**, who summarizes public finance economics and public choice literature in arriving at these characteristics, pp. 10-11.

environmental regulations for air and water pollution are examples.

- **Unavoidable goods and services** are those which residents cannot avoid consuming or enjoying. Health and safety regulations are examples.
- **Natural Monopolies** occur because the scale of operations necessary to provide the service at all is so large as to preclude, or at least discourage, more than one producer from entering the market. Most utilities, within specific geographic and population size boundaries, are regarded natural monopolies, such as water treatment and distribution systems.
- **Insufficient private incentives** exist when the good or service requires specialized assets that are not sensible for private entrepreneurs to acquire or must be used in combination with other assets in complex management systems in such a way as to discourage private production. While this clearly varies from country to country depending on the size and nature of the private sector, a common urban example is fire protection.
- **High political saliency** is often used as the argument to support public housing provision where it is felt too politically explosive for large numbers to be without adequate shelter.
- **Minimum health and welfare standards** provide the rationale for some public regulatory and production services such as health and safety inspections, environmental regulations, solid waste collection disposal, and sewerage.

These criteria generally distinguish between goods and services that are largely public in character, therefore require a significant public sector role in producing those goods and services, arranging with the private sector for production, or regulating the otherwise private production of those goods and services. By themselves, they are not sufficient to resolve the basic questions of decentralization, to which level should the provision (including financing) of various urban services be assigned in order to achieve the most leverage in managing the urban system? However, there is an implicit assumption underlying each of those criteria -- that any good or service should be provided in the most efficient manner possible (the first five are essentially efficiency criteria) and the most effective manner possible (the last two admit of possibly less than efficient public versus private choices on the grounds of political importance or social welfare).

The other dimension introduces political and administrative criteria to assist in sorting goods and services between local government and larger, usually central, government.

- **Minimize externalities**, while an economic sounding criterion, means that services should be provided by the political or administrative institution whose jurisdiction is sufficiently large to minimize the benefits from a good or service from spilling over on to non-paying, other jurisdictions. The presence of significant externalities, either costs or benefits, makes it politically and administratively less possible for a specific jurisdiction to provide the particular good or service. Local government determination of air pollution standards can lead to significant negative externalities for one jurisdiction if other, nearby local jurisdictions fail to provide for the same level of protection because the environmental hazards will "spill over" to the more tightly regulated jurisdiction.
- **Maximize economies of scale**, is almost a composite of the natural monopoly and insufficient private incentive criteria. Public sector institutions often provide utility services as noted above in order to achieve necessary size economies and to enable acquisition of necessary assets. Administratively, however, economies can be lost when size exceeds economical scale -- technically, when marginal benefits no longer exceed marginal costs. Central provision of services such as water, sewerage, streets, drainage and other physical capital intensive infrastructure usually exceeds economies of scale because of the tendency to employ the same design standards, the same administrative structure, and the same technologies, regardless of variations in local conditions and consumer demand.
- **Sufficient legal and administrative authority** means the institution providing the service must be empowered to make the necessary planning, financing, implementation and evaluation decisions to make the service efficient and effective. Even where local governments are assigned the responsibility for services such as maintenance of physical infrastructure, their not having had the authority to influence the design choices of technology, quality and quantity of service reduces the leverage that can be applied to managing the urban system.
- **Sufficient services to provide a forum for conflict resolution** means the service providing institution is more effective if it is

involved in a number of different services so that the same legal institution is seen as the forum for responding to residents' complaints and demands. Having to address demands for service or complaints to largely independent national ministries discourages residents from actively participating in the choices of quantity, quality and cost of services because they must deal with numerous separate bureaucracies, each with their own rules and procedures. Multi-purpose local governments can employ the same approaches to resident involvement and complaint handling across all, or most services, and thereby increase participation.

- **Performance accountable to residents** means that there must be clear management responsibility for the cost, quality and quantity performance of specific services and that management must be susceptible to being held to account by residents and/or direct beneficiaries of the services. Management responsibility is less clear in distant central government institutions, and the means to hold central bureaucracies accountable for specific services performance are weak. Local governments can be more accountable and more identifiable as the sources of good or bad quality and quantity/cost relationships in urban services.

In different political and cultural settings, application of the criteria included in the matrix will not automatically yield the same results. Streets, roads, footpaths, drainage, water, sewerage, solid waste, public markets and similar facilities are commonly local by the application of these or similar criteria. However, the criteria contain implicit prescriptions for the institutional framework that, if not followed, reduce or at least threaten to reduce the leverage potentially gained from assigning key responsibilities and authority to local governments. Of particular import, for example, is performance accountability. If local governments are assigned responsibility for a group of services, but key local officials are either appointed by or are actually employees of central government, then the main direction of accountability is local to central, rather than local to residents and/or service beneficiaries.

**4.3.2 Management and Administrative Efficiency.** Management and administrative tradition for local government in most developing countries focuses mainly on formal organization structure and reporting responsibilities. Less attention is given to the actual examination of work activities and to procedures for more efficiently employing the resources devoted to providing urban services. Particularly important are examining the assignment of staff to tasks, since labor costs constitute from 70 to 90 percent of most local government budgets in

developing countries, and the employment of capital equipment such as vehicles and heavy machinery. Improving management and administrative efficiency means employing systems for monitoring and evaluating work performance, for scheduling, for inventory control, and for basic skills training.

An example for a common local government service is improving the efficiency of solid waste collection and disposal through detailed recordkeeping for individual work crews and use of those records to identify bottlenecks to production, poor employment of human or capital resources and non-productive down time. Solid waste collection and disposal involves four major work activities:

- Route planning (travel times and distances, crew size, equipment assignment);
- Vehicle and other equipment maintenance;
- Actual waste pick-up;
- Landfill and/or other disposal facility operation (e.g., incinerator, recycling facility, etc.).

Each of these can be further subdivided, but the principle involved is identifying the separately distinguishable activities that constitute the total service, then establishing a means to observe and evaluate work performance in those activities. There must be an initial investment in routine reporting and analysis, but once routine, the results can be used to determine where improvements are possible and to pinpoint problem areas that need detailed, special studies. A case example of a set of reporting and analysis forms for solid waste collection is Annex 2.

#### **4.4 Budgeting and Accounting**

This subsection discusses the type of budgeting and accounting framework local governments require in order to manage the urban system. It is not that local governments have any distinct advantage over central governments in generic budgeting and accounting, but in budgeting and accounting for financial management transactions in the urban system local governments, if given responsibility and authority, can develop budgets and maintain a system of

accounts that will serve the urban system better than present financial management systems.

Present financial management systems in most developing country local governments suffer from two fundamental weaknesses: (1) the poor quality of financial management information; and (2) weak linkages among the different components of local financial management systems.<sup>16</sup>

**4.4.1 Poor Quality of Financial Management Information.** The poor quality of financial management information manifests in two important respects. First, information about costs and performance is insufficient to identify how much urban services cost and how well those services perform. Second, information about costs and performance does not adequately identify responsibility for managing those services efficiently and effectively.

It is common for local budgets to be made up of as little as 30% of their own source revenues with 70% coming from various forms of central government transfers or direct payments. For example, salaries of all local officials in Indonesia are financed by a central government salary subsidy grant (Subsidi Daerah Otonomi), with central authorities determining pay levels and annual increases as well as number and types of local civil servants.

As systems become more decentralized, central governments increasingly require local governments to get involved in infrastructure finance and construction as well as accepting more responsibility to raise revenues from own sources to finance other services. But the budgeting and accounting systems presently in place were evolved to support legal reporting requirements to central government rather than identify the cost and management issues in providing the basic service. Thus, central support for salaries, for example, may appear as part of a consolidated salary line item in a total local budget, and not be disaggregated into the various service departments. Therefore, it is impossible to determine the total or unit costs of any particular service.

The local government budget for operation and maintenance of a water system, originally financed and constructed by central government, typically will show only those operation and maintenance costs, with no debt service costs for the financing mechanism that built the system, because that is in a central government budget account, and no depreciation charges to incorporate capital costs. User charges set to recover costs, therefore, typically are expected to recover only the operation and maintenance costs. However, as central governments look more to local governments to assume responsibility for some

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<sup>16</sup> The following paragraphs draw heavily from Ronald W. Johnson and Syedur Rahman, "Budgeting as a Tool for Enhancing the Role of Local Government in Developing Countries," forthcoming in a symposium issue of *Journal of International Public Administration*, (June, 1992).

infrastructure services, future capital expansion of that water system will become a local responsibility. But the budgetary and accounting practices that have been in place have supported a cost recovery system that will not finance capital expansion. Local governments increasingly face refusals to pay higher tariffs or indeed may not even be able to estimate accurately what the tariffs need to be to finance capital expansion.

Most cities in developing countries, whether a megacity like Bangkok or a secondary market town such as Salima, Malawi, operate one or more markets to assist rural agricultural producers and other entrepreneurs in marketing their products. And most of these cities charge vendors some type of stall or head tax to recover some or all of the costs of operation. However, the cities' budget and accounting systems do not account for the total costs of that market, including original capital costs, utilities consumed during market operation, and the services provided the market by various city departments. The result is that market fees may or may not be even close to operating costs, and only a special study can provide the information needed to determine accurately what the operating costs are. A set of budget accounts that reflect market operations, including interdepartmental transfers, would provide the type of information necessary to set fees at whatever level of cost recovery public policy has determined is appropriate.

The second record keeping problem is the inability to identify responsibility for managing costs and providing services. Line item or object of expenditure budgets reflecting the city organizational structure often do not reflect the operating structure for service provision. The Public Works Department, for example, may be responsible for streets, drainage, public parks and recreation areas, and city buildings. But the Public Works Department budget is not likely to be subdivided into separate accounts for those functions, or if it is, it is not likely to include personnel costs in those subaccounts. Therefore, managers responsible for those services cannot be held accountable for the level of services they provide at known costs, and indeed may not even know themselves what the costs of their operations are.

**4.4.2 Weak Linkages Among Different Components of Financial Management System.** There are five areas in which different components of financial management information are not at all, or are inadequately connected to each other: (1) accounting information not appropriate for financial management decision making; (2) revenues weakly connected to purposes; (3) inadequate attention to performance as the basis for budget and revenue estimation; (4) inadequate attention to operating (recurrent) budget implications of capital investment decisions; (5) inadequate attention to impact of operations and maintenance on future capital investment requirements.

Local governments newly taking on responsibility for urban services provision are not accustomed to budget allocation decisions that determine how much of what different kinds of services will be provided. To the extent that they have been involved in preparing budgets previously, they have prepared them for central government review and approval, rather than as a set of decisions about services to be provided. Budgets prepared by local governments therefore rarely reflect real estimates of expenditure requirements in these highly centralized systems.

In Egypt subnational administration prepares annual estimates of revenues that will be collected locally and estimates of expenditures (non-salary) that will be required (a centrally guided assumption about cost and/or service increases). The difference between these two estimates is presented to central government as the amount of central budget support required. Budget estimates are not based on accounting records of the actual costs of services provided in the previous year, which would not have included salary costs anyway, and are not based on service records of actual performance of those responsibilities. Lacking these basic linkages between account information on costs and service information on performance, budget decisions rarely reflect even approximate estimates of the funds required to perform basic services. In primary schools, for example, it is not uncommon to run out of basic supplies before the mid-year point.

The second problem, weak connection between revenues and the purpose for which the revenues are collected, affects both decisions about which and how much of a service to undertake and tariff setting for those services based on user charges. A decision to collect user charges to recover part or full cost of a particular service influences demand for that service from potential users. The decision to finance a service from general local revenues has varying impact depending on the main sources of general local revenues. If the city's general fund budget is financed say 75 percent by central transfers, there is less incentive to be efficient with that service than if the general fund budget is financed 75 percent by local property taxes. Property tax payers are more likely to pressure local government than a nebulous "national public" is to pressure central government. It is more likely that demand for local services will be less the more identifiable and the more local are the revenues used to finance services.

As they have had little responsibility for providing major services in the past, local governments are unlikely to have systems in place to evaluate the performance of public services, or even to consider linking performance to costs.

Local budgets that are exclusively line item or object of expenditure and departmental typically do not contain any information about volume of service or service quality. Unfortunately, the first major emphasis in many decentralization efforts has focused exclusively on increasing local governments' ability to generate new revenues. This emphasis has had some success, as local governments given the authority to collect and retain part or all of property taxes generally increase property tax collections substantially. However, inattention to performance on the expenditure side will soon begin to erode taxpayer willingness to pay if service improvements, in quantity or quality, do not soon follow increased local tax collections. Performance measures to evaluate the quantity and quality of local services, even crudely, are an important missing link in most local government financial management systems.

The fourth problem is the inadequate attention to the future operation and maintenance implications of present capital investments. Central governments in many developing countries already have done a poor job of budgeting for and executing operation and maintenance programs on the infrastructure systems they have built. In many instances, that operation and maintenance has been a local responsibility. One consequence has been that central governments are saddled with debt repayments for infrastructure that no longer is even functional.<sup>17</sup> Local governments assigned the responsibility to maintain infrastructure in which they had no planning or decision role do not carry out that responsibility with enthusiasm, and it is difficult to generate local revenues for facilities citizens did not necessarily agree with in the first place. Furthermore, infrastructure constructed by central governments and financed by large sector loans from development assistance agencies often have only rough rules of thumb estimates of future operation and maintenance costs, and the assignment of responsibility for actually financing those roughly estimated costs is often left to the future.<sup>18</sup>

The reverse problem also is as serious. Even when fully engaged in decisions about how much and what kinds of infrastructure to finance, local governments still do not often plan adequately for operation and maintenance. The need for capital facilities often overwhelms planned decision-making for long range capital investment. Since newly constructed facilities require less maintenance, it becomes easy to defer maintenance, and once deferred, never performed. In many developing countries, operation and maintenance budgets wind up being spent

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<sup>17</sup> World Bank. Road Deterioration in Developing Countries: Causes and Remedies. World Bank: Washington, D.C., 1988.

<sup>18</sup> Bates, Thomas, and Alan S. Wyatt. The Operation and Maintenance of Water Supply Systems in Developing Countries: A Cost Study. WASH Working Paper No. 59, Water and Sanitation For Health Project (U.S.A.I.D.): Arlington, Va., 1988.

mainly on reconstruction and rehabilitation of facilities that have become dysfunctional long before their expected lifespan would have predicted. Some estimates place the capital investment costs of facilities that must be built or rebuilt prematurely due to improper and inadequate maintenance at half the total capital investment expenditure.<sup>19</sup> Another way of putting it is to say that half of the capital investment expenditures in many developing countries is spent on facilities that should not have needed replacement, denying the opportunity to put in place needed facilities that would expand economic development.

The interaction between capital investment and current operations budgeting can be one of the most significant management contributions local governments can make to improved management of the urban system. Section 5.1 described the comparative advantage local governments have in making comprehensive, integrated decisions for their respective urban systems, in contrast to the sectoral approach of separate central government ministries. Local governments are in the proper position, given cooperation from central government, to establish a comprehensive capital investment plan and budget for the entire urban area, regardless of which elements in that plan and budget are local responsibility to plan and implement. Local governments are not now, but can be the most effective central information point for budgeted capital investments and for actual execution, although in virtually every country that will require some reporting relationship from central to local government -- a distinct contrast to the usual reporting relationship.

Budgeting and accounting for current services and operation and maintenance of physical facilities is more complicated. Capital projects are definitionally projectized; that is, budgeted expenditures and incurred costs are both associated with the specific capital project. Even those projects which continue to be planned and constructed by central government will have identifiable project budgets and statements of account, which local governments can add into a comprehensive, urban investment budget. However, current services such as Health Ministry financed clinics providing inoculations and other preventive or curative care may not have budget and cost accounts that allow full identification of those costs separate from other activities of the Health Ministry. Therefore, it is unlikely that local current budgets can incorporate central government current expenditures. Similarly, operation and maintenance by central government of urban infrastructure it plans and builds is not likely to be budgeted or accounted for in an identifiable manner sufficient to include in a local government current budget. Therefore, only on the investment side does it seem

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<sup>19</sup> Johnson, Ronald W., James A. Ternent, and Stephen Pereira. Urban Public Works Institutional and Manpower Development Project: Indonesia Final Report. Asian Development Bank: Manila, 1988.

likely that local governments can develop and maintain a complete inventory of all physical facilities and infrastructure in the urban area and maintain complete budget and account statements for all those investments.

#### **4.5 Monitoring and Evaluation**

Local governments also can play a key role monitoring and evaluating the results of urban programs. For a very few services, principally water systems and solid waste collection, some developing country institutions collect considerable information on volume processed, customers, water loss, amount (by weight or volume) recycled, and so forth. However, this is still rare, and the information often is not used. The Bangkok Metropolitan Administration, for example, has an excellent set of records on solid waste collection and disposal that includes detail at the level of individual work crew and daily volumes by crew. However, BMA officials also indicate that the information provides only guidance on scheduling and is not used for any other purpose.<sup>20</sup> The Ministry of Public Works in Indonesia, which is responsible for most of the construction of urban water systems in the country, maintains detailed performance records for each water authority, but like the BMA, makes far less use than is possible.<sup>21</sup>

To date, most decentralization programs and municipal strengthening efforts focus on getting more revenues to local governments. Certainly a necessary step, it also can be dangerous. There is plenty of evidence that improved collections and reallocation of revenue authority for some sources produces significant revenue improvements for urban services and development. However, these revenues will be "collectible" only so long as taxpayers and beneficiaries believe they are getting value for money. Hence, an important attribute of an effective and efficient urban management approach involves considerable attention to monitoring and evaluating how well services are delivered and what results are achieved with expenditures. As with urban planning, resource mobilization, delivering services and financial management, local

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<sup>20</sup> Johnson, Ronald W., Sally S. Johnson and Thomas J. Cook, **Bangkok Municipal Management Assessment**, (U.S.A.I.D.: 1988), Research Triangle Institute.

<sup>21</sup> "Application of the WASH Financial Management Guidelines to Indonesia's Autonomous Water Supply Enterprises," (U.S.A.I.D.: WASH Field Report No. 289) and Sally S. Johnson, **Guidelines for Conducting a Financial Management Assessment of Water Authorities**, (U.S.A.I.D.: WASH Technical Report No. 053, 1990).

governments assigned responsibility and authority are in the best position to monitor the results of their service delivery.

#### **4.6 Accountability Mechanisms**

Much of the argument that decentralized institutions can be more efficient and effective managing the urban system depends on the individuals in those institutions viewing their role as managers of the physical and human resources or assets in the urban area for current and future residents. Individuals of course may be motivated by many incentives, and it is the incentive to please central government officials that seems to dictate the actions of "local" managers in highly centralized systems. Decentralizing does not automatically make local managers and officials accountable to local residents.

Democratic systems typically rely on election of key executive and legislative officials to achieve accountability. Corporate systems also rely on selection and replacement mechanisms for holding officers and managers accountable. In developing countries, NGOs and informal community organizations often play a key role in ensuring accountability. These institutions are relatively weak in most highly centralized systems, as even the "local" managers who are directed by central officials realize their future is dependent on their accountability upward to those central officials. NGOs and other community groups can play a significant role, with or without extensive electoral systems, in holding local officials accountable if those local officials are reasonably autonomous from central control. Political culture influences the selection of specific accountability mechanisms, so prescription of particular models is not appropriate across all systems. However, achieving the benefits of decentralization, in addition to the five management-oriented systems discussed above, depends on establishing means by which local officials have clear responsibilities, and by which they can be held to account for the execution of those responsibilities.

#### **5. CONSTRAINTS ON ACHIEVING THE LEVERAGE OFFERED BY DECENTRALIZATION**

Typically, central government agencies who are providing and/or financing urban services view local governments with some suspicion about their capability to take on new responsibility. Usually, lack of management capacity and technical skills are the main concerns. And it is true that institutions which have not been managing services and performing technical tasks generally lack those skills. However, those skills can be acquired, and need not be a major obstacle. The key constraint on local governments performing effective urban management is on the

fundamental status of local government as an autonomous entity in developing countries. In order for local governments to exert the potential leverage on urban development that is possible with decentralization, they must have a degree of autonomy and an existence as a corporate entity that few central governments have been willing to confer.

Indonesia's Urban Sector Policy Statement assigns responsibility to local governments for urban services delivery. However, at this stage in its decentralization program, the GOI has not yet given autonomous status to local governments. Most local government officials consider themselves employees of central government, and many aspire to promotion "up and out" of local government. Their perception is governed by their being part of the civil service system; their pay and benefits are set by central government. Furthermore, central government pays all salaries for local government staff via a central grant for salaries (Subsidi Daerah Otonomi -- SDO) and routine expenditures. Even if a municipality concluded it could be more efficient with fewer employees, the municipality would not be able to convert the salary savings into any other kind of expenditure.

The Philippines has elected local mayors and councils since soon after the end of the Marcos regime. These officials, although some may have larger political ambitions, clearly see themselves as responsive to the local residents and electorate and do not consider themselves central in any respect. However, the local Treasurer, who is the chief financial officer responsible for both budget and tax administration, is an appointee of the central Department of Finance. Financial management, therefore, is still controlled to a considerable extent by central government.

India has a similarly mixed strategy for urban development with some assigned responsibilities to local authorities, but retention of considerable control by state and central institutions. Local governments do not control, and have a difficult time influencing, state development agencies in the selection of capital investment programs.<sup>22</sup>

Each of these examples illustrate the principal constraint -- the degree to which local government is, or is not, legally and perceptually the corporate entity responsible for the economic, social and administrative health of the urban system. To the extent that local officials consider themselves primarily responsible to the residents and institutions of the urban system, and to the extent that authority and responsibility is assigned for the functions described in the preceding section, local

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<sup>22</sup> Datta, Abhijit, "Decentralizing India's Urban Development," *Cities*, February, 1985, p. 73.

governments can manage the urban system more effectively than is true in most developing countries today.

## **6. ACTION ISSUES TO BE RESOLVED IN DEVELOPING DECENTRALIZATION STRATEGIES**

Numerous action issues are to be resolved in developing a decentralized system for managing urban areas. Consensus on these issues will vary from country to country depending in part on the political culture, in part on the level of development, and in part on the resource base. The following brief sections introduce the issues for discussion.

### **6.1 Developing an Incentive System that Rewards Performance of Urban Managers**

As previous sections of the paper have argued, most local officials in developing countries do not view local government service in political, administrative and working positions, as a viable career or as an end. In part this is due to an inadequate monetary reward structure and in part to the perception that local governments are merely administrative agents for implementing decisions made at a higher level of government. As long as central governments make the key decisions, and also determine the reward structure, the incentives are likely to remain insufficient to attract and retain quality local officials. The behavioral questions to be resolved are:

- If local governments are autonomous institutions, with significant roles in deciding on urban development strategies and significant authority to mobilize resources to implement those strategies, will sufficient numbers of quality personnel perceive local government employment as a prestigious and rewarding career, for itself and not merely as a stepping stone to a more valued career with central government?
- Can the financial rewards necessary to recruit and retain local personnel be reached through local revenue mobilization with local residents perceiving that the services are of sufficiently high quality and quantity that the costs, including adequate compensation for local employees, are worth the services?

## **6.2 Making Local Government Performance Visible to Local Residents**

Most citizens in developing countries think of central or regional government institutions as the most important public sector influence on their daily lives. By and large, this is an accurate perception as the services that affect daily lives in urban areas still largely are controlled by central government institutions. Aside from the presence or absence of a service, there are very few visible indicators of the quality, quantity and cost of services. Even to the managers, central or local government, of basic urban services, there are very few indicators of quality, quantity and cost available. For the arguments supporting a decentralized structure to hold, local residents must be willing to support in most cases higher charges for services and higher general taxes. The evidence seems to be overwhelming that significant increases in local revenue mobilization are possible, mainly on the strength of new enforcement and a new sense of the local government as "belonging to" local residents. However, there also is evidence that this is achievable for only a short time if residents do not see a visible improvement in the quality or quantity of services, and a quality and quantity that matches demand for service.

While the presence or absence of a service, and severely poor quality are visible without any effort to publicize, more subtle results of local decisions to change the quality or quantity will not be visible, unless there is systematic communication of local government performance. Since local officials are accustomed to seeing their reporting relationship upward to central government, rather than downward to citizens are residents, overt communication strategies will be necessary to make local government performance visible to citizens. An example of an overt communication strategy is the preparation of an "Annual Performance Report" that describes in language and charts accessible to most residents the basic features of revenues and expenditures, sources for those budget items, measures of the quantity and quality of services provided by local government, comparisons with previous years, and if assisted by central government, comparisons with other similar local governments.

## **6.3 Developing Accountability Mechanisms that Enable Local Residents to Affect the Incentive Structure of Urban Managers**

Section 6.1 introduced the issue of incentives for local officials and managers to take on the "corporate" role of managing the urban system for the benefit of residents and to enhance the urban system's overall contribution to national development. Both economic and political criteria for evaluating the division of labor between public and private and central and local (Section 4.3) emphasize that public sector institutions perform best when they are closely linked

to the demand (economic concept) and preferences (political concept) of citizens. Focusing only on "assignment of responsibility and authority", however, will not alone ensure efficient and effective systems. Specific mechanisms also must be established by which officials and managers can be held accountable for their performance. Mechanisms can be both administrative and political.

Administrative mechanisms involve establishing clear management responsibility assignments, as discussed in part in Sections 4.3.1 and 4.6. Clear assignment means the organization structure and the organization of financial management systems make it clear who is responsible for the services and financial performance of specific departments or subdepartments. Further, administrative accountability mechanisms involve operational statements of the quantity and quality of output expected of those departments and subdepartments, and hence of their managers. And administrative accountability mechanisms involve accounting records sufficient to enable evaluation of the cost per unit of quantity and quality of service.<sup>23</sup> Finally, as discussed in the preceding section, communication of performance results is a necessary component of administrative accountability mechanisms.

Political mechanisms typically focus on the means of holding public officials and managers accountable through selection and removal. Electoral systems represent the ultimate democratic means of holding some public officials to account, but depend on an interested and informed electorate. The capability of citizens to change government leadership when dissatisfied with performance is the crux of political accountability, and electoral systems can accomplish that. However, they are only a means. Even in the absence of electoral systems, if local government officials respond to citizens demand and preferences, then they are accountable. Community groups and NGOs have proved capable of changing public sector officials, and they are most effective when targeting their pressure to local government officials.

#### **6.4 Identifying the Appropriate Mix of Local Institutions (Local Government, NGOs, Private Production Organizations) in Managing the Urban System**

Decentralization and privatization evoke considerable rhetoric and some change in political and economic institutions. Sometimes lost in ideological

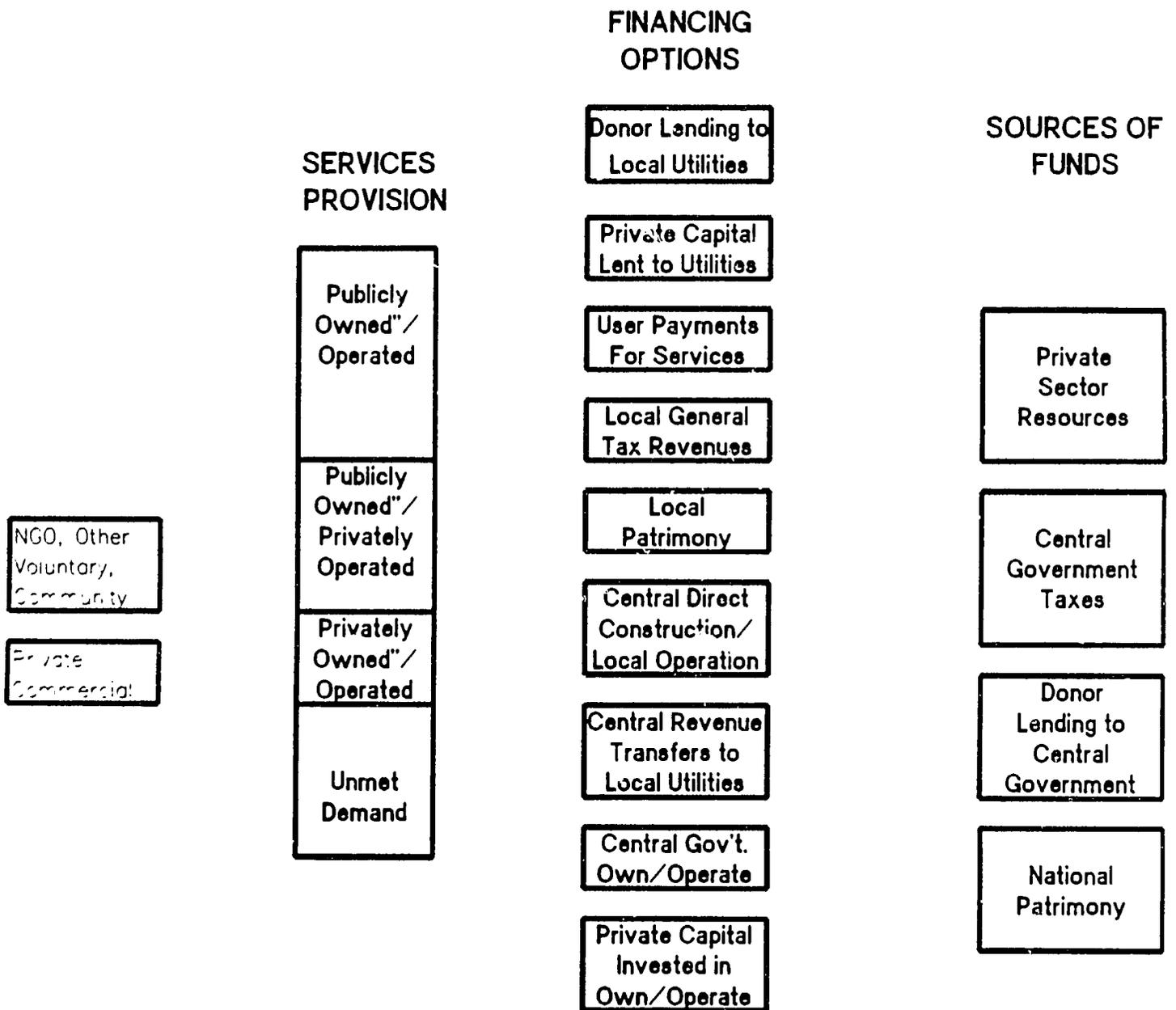
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<sup>23</sup> Discussion of budgeting systems as mechanisms for holding public officials accountable to residents may be found in Robert D. Lee, Jr. and Ronald W. Johnson, **Public Budgeting Systems**, (Baltimore: Aspen Publishing, 1989), chapter 1.

argument for or against is an analytical perspective. In a fundamental sense, almost every "public" service begins locally in the private sector. In systems based on a high degree of private ownership of the means of production, with the exception of nationally owned resources, such as oil, forests and minerals in some developing countries, most resources originate with private individuals or institutions. Taxes or charges are imposed on the private sector, and regulations are enforced on private sector individuals and institutions. Figure 3 provides an analytic framework for identifying the linkages among private and public, central and local. On the right hand side are sources of financing. The central column represents transformations of private and other sources of financing, and the left hand side of the figure represents options for public or private provision. The former (public) distinguishes between central and local. The latter (private) distinguishes between public provision (decision making) but private production as well as between private for-profit and NGOs or other voluntary and community groups.

Figure 3 is useful only as a means of focusing attention on specific urban services and considering the range of options for each. It does not lead to or away from either decentralization/centralization or private/public. In conjunction with the economic and political/administrative criteria introduced in Section 4.3, Figure 3 serves as a touchstone to focus discussion and debate.

FIGURE 3



## **ANNEX 1: URBAN MANAGEMENT NEEDS IMPROVEMENT**

### **1.1 Population Growth**

The percentage of the world's population living in urban areas, led by developing countries continues to climb. In 1950, less than 30% of total population lived in urban areas. According to U.N. projections, in just over ten years, the world will be more urban than rural.<sup>1</sup> Figure 1 depicts the historical pattern from 1950 and shows U.N. projections for the world and for more and less developed countries. In 1950, more urban dwellers were in developed than in developing countries, but this had reversed by 1975. After 1975, the growth in total urban population, projected to be over 5 billion by 2025, was due almost exclusively to developing countries.

Figure 2 illustrates that while Asia has not been as highly urbanized as the rest of the world, this region too will exceed 50 percent urban in another quarter century. In absolute numbers, managing the urban system in Asia now in 1991 means responding to the needs of almost a billion people. In the next quarter century, that number will grow to well over two billion people. That doubling implies enormous investments in urban services and economic activity to shelter, transport, employ and provide for other basic necessities. Indeed, investments in various services and economic activity will be required in rural areas as well, but the rate of growth in urban population is dramatically greater in urban than in rural areas. Figure 3 shows the average annual growth rate for urban and rural areas for the region, beginning in 1950-55 and projected through 2020-25. Except for a period in the early 1960s, when rural population growth rates climbed rapidly while urban growth rates declined, the trend has been for rural population growth to decline much more rapidly than urban rates. In fact, for Asia, beginning in 1980 and projected through 2000, urban population growth rates are increasing while rural growth rates are decreasing. After 2000, while urban population continues to increase, it does so at a declining rate, but the slope of the declining rate is much shallower than for rural growth rates.

Thus, the problems of managing the urban system in Asia will in part be the need to respond to very large numbers of people. These sheer numbers will strain the capacity of infrastructure systems for which long lead time investments are necessary and current services for which manpower and supplies are the major expenditure. In the metropolitan areas, these investments will in part be necessary to meet increasing population and in part to replace once well functioning infrastructure which now is rapidly reaching the end of useful life. But the requirements are not limited to major metropolitan areas. In fact, while overall urban growth rates throughout developing

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<sup>1</sup> United Nations, **Prospects of World Urbanization: 1988 Assessment**, (United Nations: New York, 1989). **RESEARCH TRIANGLE INSTITUTE**

regions has been exceeding 4 percent, it has begun to be even higher for smaller towns and secondary cities than for the primate cities.<sup>2</sup>

New residents and old lack access to adequate services. Figure 4 indicates that less than 75 percent of urban dwellers in Asia in 1985 had access to potable water supplies and less than 50% to sanitation services. At present rates of investments and population growth rates, the proportions having access to those services likely will decline rather than improve.<sup>3</sup>

Shelter and related services will become a more fundamental problem than it already is in the face of population growth. Already, as many as 40 percent of urban dwellers are living in slum or squatter areas of Asian cities.<sup>4</sup> For example, more than 2 million residents of Calcutta in 1980 were living in slum areas. The World Health Organization cites a range of estimates for service deficiencies: between one-quarter and one-half of urban dwellers in developing countries lack basic urban services.

## 1.2 Urban Economic Activity

In 1965, for a set of ten developing countries in Asia, agriculture alone accounted for over 40 percent of Gross Domestic Product (GDP) in all but three. The lowest was Sri Lanka at 28%. By 1988, in only two of those same ten countries did agriculture account for greater than 40 percent. In fact, in all the others, agriculture was one-third or less of the composition of GDP. Table 1 shows the GDP composition and growth rates for these ten countries.

While it is not appropriate to equate agriculture's contribution to GDP with rural areas and all other components -- industry, manufacturing, and services -- to urban areas, this component analysis of GDP is a good surrogate measure for urban contribution to GDP. Industrial, manufacturing and most services depend heavily on urban service bases, access to urban communications and financial facilities, and urban concentrations of labor and related suppliers of intermediate products. This analysis is corroborated by anecdotal evidence. Thailand, in the 1980s, realized more than 70%

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<sup>2</sup> World Bank. "Urban Policy and Economic Development: An Agenda for the 1990s," Urban Development Division (World Bank: 1991, p. 3).

<sup>3</sup> U.S. Agency for International Development, *Urbanization in the Developing Countries: Final Report to Congress*, (A.I.D.: Washington, D.C., 1989).

<sup>4</sup> Rondinelli, Dennis. "National Objectives and Strategies for Urban Development in Asia," (Manila: Asian Development Bank, 1987).

of its GDP in urban areas.<sup>5</sup> As Table 1 indicates, 68% of Thailand's GDP in 1988 was composed of industrial, manufacturing and services activities.

Furthermore, as are urban populations growing rapidly, the fastest economic growth also is occurring in urban-related economic activities. Also in Table 1 are indications that GDP growth in agriculture is lower than for almost any other component, and certainly lower for all ten countries than the other three components of GDP. Other estimates are that for all developing countries, more than 50% of economic activity already occurs in urban areas.<sup>6</sup> Figure 5 illustrates the relationship between urbanization and development for a select Asian group.

The evidence is substantial that developing countries in general, and in Asia in particular, are becoming much more highly urbanized, and that this urbanization is shaping, indeed even controlling, economic growth. How urban systems are managed may be the single most important determining factor in the region's economic future.

### 1.3 WEAKNESSES IN THE MANAGEMENT OF URBAN SYSTEMS

Two fundamental weaknesses are affecting the ability of urban systems to absorb the large increases in population and to support the urban economic activities vital to national economic growth. First, basic physical assets of infrastructure and land are not being managed efficiently. Inadequately or improperly maintained infrastructure does not last its expected life cycle, resulting in significant capital expenditure that should have been available for other needed facilities. In other cases, infrastructure investments are inefficient because they fail to match in quality and quantity the real economic demand, fail to match real willingness to pay, and fail to reflect the best uses of economic resources. Land may be over or undervalued as an asset. Regulatory practices that distort efficient land markets, such as cumbersome and inequitable land registration and titling processes, make it more difficult to meet land requirements for shelter and commercial expansion. Inefficient management of these two basic assets adds considerably to the cost of urban systems, and, due to the dominance of urban systems in the national economy, acts as a brake on the potential for economic growth for the whole economy.

The second fundamental weakness is the complexity of the institutional structure for managing urban systems. The roles of central and local governments often are not clearly defined, and many changes made in the name of decentralization or other national urban strategy have been made in a piecemeal fashion, in some cases

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<sup>5</sup> Johnson, Ronald W. and J. Brad Schwartz. "Maximizing the Economic Impact of Urban Water Supply and Sanitation Investments," in draft, Research Triangle Institute, (Water Supply and Sanitation for Health Project: U.S.A.I.D., 1991).

<sup>6</sup> World Bank. *Urban Policy and Economic Development: An Agenda for the 1990s*, (Urban Development Division, 1991).

making the situation worse rather than better. In addition, donor agencies and other external groups often are involved in setting urban priorities and channeling investments, not always in a comprehensive and coordinated fashion. The unsorted mixture of responsibilities and multi-jurisdictional conflicts in the largest urban areas combine with inefficient asset management to hint that, despite their present dynamically positive impact on developing economies, urban systems could in the future in some countries become obstacles to economic development.

### 1.3.1 Inefficient Asset Management

**1.3.1.1 Infrastructure.** Capital expenditures by local governments in many developing countries amount to as much as thirty percent of total local expenditures, even in countries with limited local responsibility for urban services. Central government expenditures for all infrastructure services (not limited to "urban" services) can amount to fifty percent of national budget expenditures. For many cities, the five year capital investment program, all sources of infrastructure finance combined, can be larger than the annual operating or current services budget. If the facilities resulting from these expenditures are not treated as corporate assets of the city and properly maintained, significant amounts of these expenditures will be wasted, requiring renewed expenditure for an asset that would not have been "needed" given proper maintenance. For example, if inadequate or improper maintenance decreases useful lifespan to only 75 percent, then the capital investment budgets for urban infrastructure will be split between maintaining/expanding capacity and needless expenditure on premature replacement. The effect is to amortize the investment over a 75 percent lifespan, meaning a 133 percent expenditure relative to value received.

The evidence in most developing countries is that infrastructure is inadequately planned and maintained, with the consequent loss of other opportunities. Infrastructure investment is plagued by poor planning, inappropriate standards and rapid deterioration. Poor planning means facilities are built which are not suited to the technical capacity of those who will implement and/or maintain. In many cases, standards are set too high, mirroring the standards used in the more developed, high-wage countries where capital substitutes for labor. As a consequence, construction materials, some equipment, and spare parts may have to be imported. In addition, maintenance requirements for over designed structures or facilities may require additional, imported technical expertise or materials and parts.

Expenditures for water supply and sanitation illustrate the problem. The World Health Organization estimates annual investments in water supply and sanitation at over \$9 billion annually, with an additional 60 percent annually needed to meet population increases.<sup>7</sup> Poor maintenance means that some of this capital investment is

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<sup>7</sup> McCullough, James S., "Alternatives for Capital Financing of Water Supply and Sanitation," USAID, Water and Sanitation for Health Project, WASH Working Paper, March, 1990, pp. 2-3.

45

unnneeded.<sup>8</sup> One estimate shows that in Mexico alone 200 water treatment plans were closed due to poor maintenance.<sup>9</sup> Another estimate puts more than half of the water entering and leaving some developing country systems as unaccounted for.<sup>10</sup> Even if all water systems as a whole are maintained to 80 percent of what is possible, \$1.8 billion per year of present expenditures could be avoided or could be converted toward the additional \$7 billion per year needed. Better maintenance and repair work will reduce the need to build new capacity, reduce the overall level of capital investment, and improve the water quality. Many large cities such as Cairo and Manila which have otherwise safe water systems experience periodic and severe contamination due to ground water intrusion under low water pressure conditions.

Publicly produced infrastructure that is poorly maintained causes excessive public sector expenditures, funds that otherwise could have gone to other needed public services or been left to productive private investments. Land, as another key physical asset, suffers from economic inefficiency when market and non-market interventions by one or more public sector institutions distort urban land market functioning. The following section focuses on weaknesses in managing land as an asset.

**1.3.1.2 Land.** Countries with high levels of economic distortion affecting the land market and construction have severe distortion in housing prices.<sup>11</sup> The U.S. Agency for International Development 1990 annual Regional Housing and Urban Conference focused on five urban land issues that constrain development in Asia: insufficient land in the right place at the right price; low affordability of land and housing; ineffective public urban land development programs; private resistance to public land regulations; and environmental resource constraints on land development.<sup>12</sup> These five land issues stem from urban management issues. First, urban land management is a mixed responsibility of central and local institutions. Second, urban land often is not managed at all, that is, public authorities often do not view urban land management as a policy issue. Rather, a mix of central and local authorities acquire land for infrastructure and other development, regulate land

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<sup>8</sup> Fox, William F., "The Contribution of Infrastructure Investments to Growth: A Review of the Literature," (draft manuscript) World Bank, Urban Development Division, 1990, p. 42.

<sup>9</sup> World Bank, "Urban Policy and Economic Development," p. v.

<sup>10</sup> Water and Sanitation for Health, "Urban Water Supply and Sanitation: Status and Opportunities for Intervention), Wash Technical Report # (U.S.A.I.D.:1989).

<sup>11</sup> World Bank, "Urban Policy and Economic Development," p. 23.

<sup>12</sup> Dowall, David E. (manuscript) "Urban Land Policy Issues in Asia," Third Annual Asian Regional Policy Seminar, Chiang Mai, Thailand (U.S.A.I.D.: May 13-16, 1990).

46

transactions through registration and taxation, impose standards on construction, and regulate land use through physical plans that often are prepared with limited awareness of economic trends and little coordination with agencies that greatly influence land use.

Insufficient and/or unaffordable land in part is a result of how land is brought to the urban land market. Throughout the developing world, considerable undeveloped urban land is owned by government. In Latin America, much of that land is municipally owned, but rarely is it managed by the municipality as an asset. Squatter settlements, or even well organized lower middle and middle income communities occupy municipal land rent free.<sup>13</sup> In Africa, much of the land is owned by central government with householders granted only leasehold rights for varying periods. Lack of secure tenure in both Africa and Latin America discourages private investment in improved shelter and retards the growth of small scale, household-based industry.<sup>14</sup> Public urban land ownership is on a somewhat lower scale in Asia, compared with other developing regions, but private owners acting similarly to public owners hold land off the market, although for different reasons.

Publicly owned land is held off the market because public institutions may not know they own it (this is common in Latin America). It is held off the market because it is owned by central government, and central government is not willing to release it either to local government or private developers. It is held off the market because it simply is not viewed as a resource available for development. Privately owned land is held off the market because taxation policies permit, even encourage long term speculation. Low taxes on undeveloped land permit long-term withholding from the market, and low or no transaction costs based on price obtained allow speculators to retain all or most of the price accumulated while holding the land.

Public regulation of land use and building practices also add to inefficiency in the conversion of land assets to productive purposes. One study estimated that 3 percent annually of GDP is the cost of regulations affecting housing construction in Malaysia.<sup>15</sup> In the Philippines, central government controlled land use and building

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<sup>13</sup> Johnson, Ronald W. "Asuncion Municipal Development Project: Financial and Institutional Analyses," November, 1984 and "Municipality of La Paz, Municipal Strengthening Project: Financial and Financial Management Issues in Project Design," August, 1986. World Bank, Latin America and Caribbean Urban Projects Division.

<sup>14</sup> Mabogunje, Akin L. (manuscript) "Perspective on Urban Land and Urban Management Policies in Sub-Saharan Africa," Africa Technical Infrastructure Department, (World Bank: 1990); de Soto, Hernando. *The Other Path*. (New York: Harper and Row, 1989).

<sup>15</sup> World Bank, "Urban Policy and Economic Development," p. v.

regulations make it difficult for private individuals and developers to bring enough land together to make an economically efficient development parcel.<sup>16</sup>

The complex mix of institutions involved in land use and construction standards complicate the functioning of urban land markets, as it complicates the development of an adequate infrastructure base. In the next section, we describe this institutional framework in a more general context.

**1.3.2 Complex Institutional Structure.** There are two main problems with the institutional framework for urban management in most developing countries. In many countries, there is confusion and conflict over who is responsible for some urban functions. Second, even in those for which clarifying policy has been adopted, the resulting implementation still leads to fragmentation, overlapping responsibilities and gaps in responsibility.

Confusion and/or conflict arises when more than one institution has shared responsibility for providing a service, but exercise of a share of that responsibility by one institution impinges on the ability of one or more other institutions to exercise their share. For example, one central government agency may be responsible for allocation decisions among different capital investments, such as priorities among roads and drainage, water supply and sewerage, and shelter-related sites and services. Another central institution is likely then to be responsible for design standards, such as the physical planning body often found in central public works departments. Still another central institution may be responsible for direct construction or contracting for construction. And local government may be responsible for operation and maintenance and collecting user fees once the facility is completed. Some conflict may exist between central institutions over these split responsibilities, but even greater conflict exists between central and local. Local government's ability to maintain infrastructure built to complex or sophisticated (and typically capital intensive) design standards is limited by the technical capacity of local staff. And local government's ability to collect user fees sufficient to recover costs, whether only operation and maintenance or that plus capital, is constrained by systems built to specifications not affordable by the beneficiaries.

In many cases, national governments have created quasi-autonomous institutions that do not answer to local governments to provide utility and transport services within urban areas, but assigned to local governments responsibilities for such services as the road network and drainage. Failed coordination among these different

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<sup>16</sup> USAID/Manila. "Decentralized Shelter and Urban Development Project Paper: Annex 7, Role of the Private Sector." (USAID: 1990).

levels and different institutions often causes recently paved streets to be dug up again for installation of utility lines or repair of water mains.<sup>17</sup>

"The difficulty of inter-agency coordination also constrains the efficient management of the growth of Bangkok. For the transport sector alone, there are almost a dozen agencies and committees involved in infrastructure investment planning and implementation – Bangkok Mass Transit Authority (BMTA), Expressway and Rapid Transit Authority (ETA), Department of Highways, Department of Public Works, Department of Land Transport, State Railway of Thailand, Traffic Engineering Division of BMA, Department of Town and Country Planning, Office of the Committee for the Management of Road Traffic, among others."

The Metropolitan Waterworks Authority, an autonomous institution, relies on the central government's Town and Country Planning department for the land use plan on which to base its water capital investment plan. But Town and Country Planning is responsible for land use plans for 130 towns and cities in Thailand. Lee, Kyu Sik, "Infrastructure Constraints on Industrial Growth in Thailand." World Bank, Urban Development Division, WP#88-2.

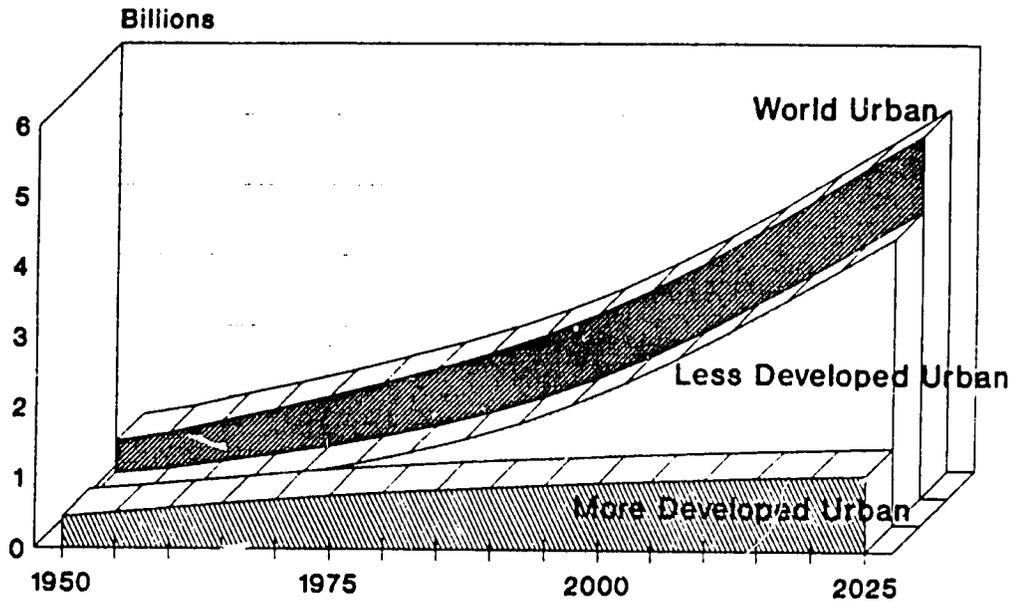
A review in 1981 concluded that the fragmentation of responsibility for key urban functions is especially critical for the major metropolitan areas of Asia where inconsistent capital investment planning is one of the important casualties. Important investments planned by one agency depend on strategic investments by other agencies at the same or different levels of government, many of whom may be unaware of the importance of their investment to the plans of the first agency.<sup>18</sup>

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<sup>17</sup> Johnson, Ronald W. "Montevideo Municipal Development Project: Financial and Institutional Issues: I and II." World Bank, Latin America and Caribbean Urban Projects Division, June and December, 1986.

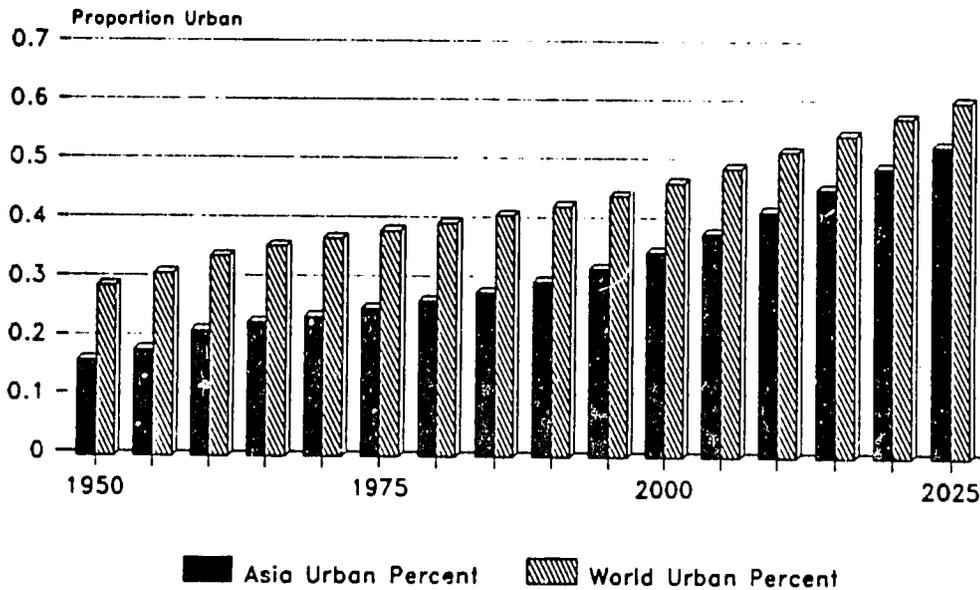
<sup>18</sup> Sivaramkrishnan, K.C. and Leslie Green. *Metropolitan Management: The Asian Experience*. (New York:Oxford, 1986), pp. 36-37.

# World Urban Population Less and More Developed Countries



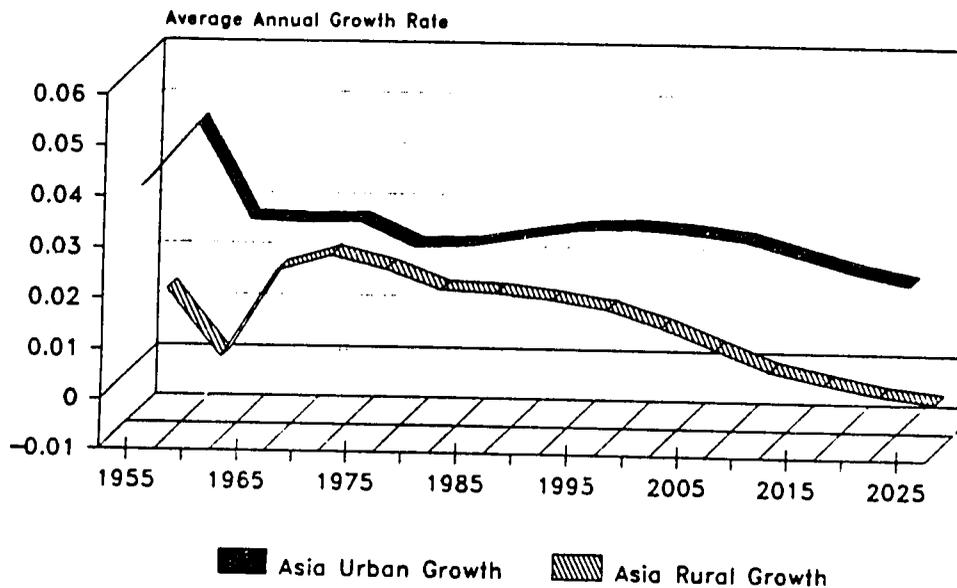
U.N. Prospects of World Urbanization  
1988 (New York: United Nations, 1989)

# Asia and World Population Comparison of Proportion Urban



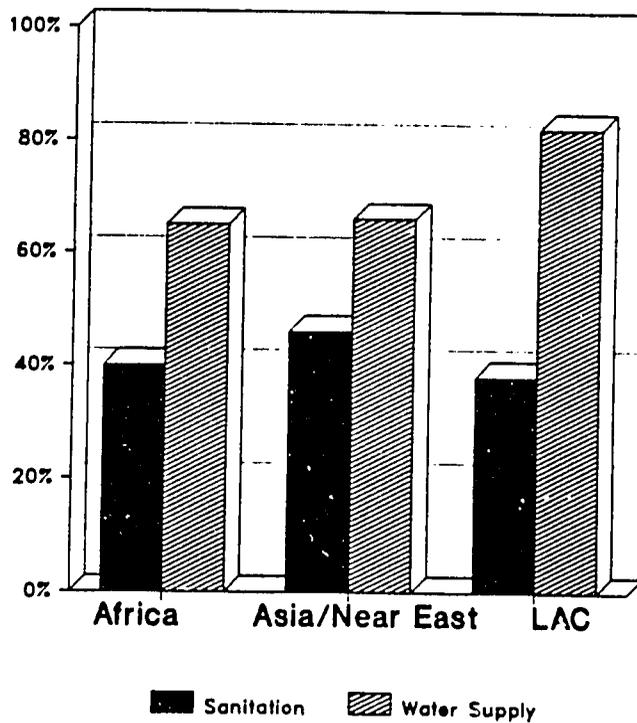
U.N. Prospects of World Urbanization  
1988 (New York: United Nations, 1989)

# Urban and Rural Population Growth Comparison



U.N. Prospects of World Urbanization  
 1988 (New York: United Nations, 1989)

# Urban Water Supply and Sanitation Coverage



Developing Countries, mid water decade  
 (1985) WHO and various sources

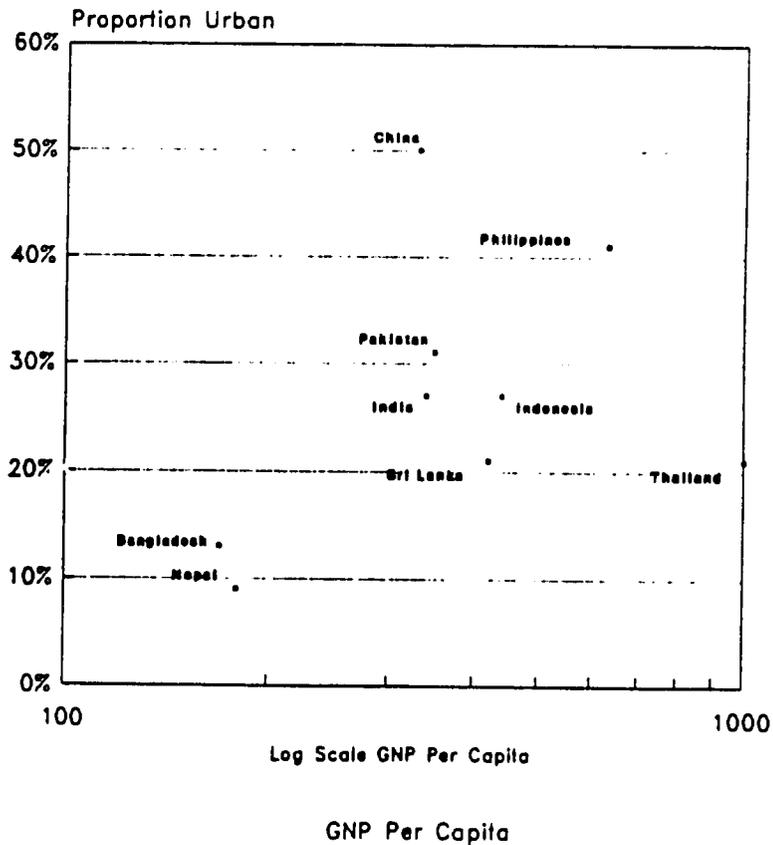
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	GDP Total		GDP Composition		Industry		Manufacturing		Services	
	1985	1988	1985	1988	1985	1988	1985	1988	1985	1988
Bangladesh	4380	19320	53	46	11	14	5	7	36	40
Nepal	730	2860	65	56	11	17	3	6	23	27
China	67200	372320	44	32	39	46	31	33	17	21
India	50530	237930	44	32	22	30	16	19	34	38
Pakistan	5450	34050	40	26	20	24	14	17	40	49
Sri Lanka	1770	6400	28	26	21	27	17	15	51	47
Indonesia	3840	83220	56	24	13	36	8	19	31	40
Philippines	6010	39210	26	23	28	34	20	25	46	44
Papua New Guinea	340	3520	42	34	18	31	0	9	41	36
Thailand	4390	57950	32	17	23	35	14	24	45	48

	GDP Total		GDP Growth		Industry		Manufacturing		Services	
	1965-80	1980-88	Agriculture 1965-80	1980-88	1965-80	1980-88	1965-80	1980-88	1965-80	1980-88
Bangladesh	0.024	0.037	0.015	0.021	0.038	0.049	0.068	0.024	0.034	0.052
Nepal	0.019	0.047	0.011	0.044						
China	0.064	0.103	0.028	0.068	0.1	0.124	0.095	0.11	0.103	0.113
India	0.036	0.052	0.025	0.023	0.042	0.076	0.045	0.083	0.044	0.061
Pakistan	0.051	0.085	0.033	0.043	0.064	0.072	0.057	0.081	0.059	0.074
Sri Lanka	0.04	0.043	0.027	0.027	0.047	0.044	0.032	0.062	0.046	0.053
Indonesia	0.08	0.051	0.043	0.031	0.119	0.051	0.12	0.131	0.073	0.064
Philippines	0.059	0.001	0.046	0.018	0.03	-0.018	0.075	-0.003	0.052	0.007
Papua New Guinea	0.041	0.032	0.032	0.027		0.056		0.001		0.02
Thailand	0.072	0.06	0.046	0.037	0.095	0.066	0.112	0.068	0.076	0.068

Source: World Bank, World Development Report: 1990 (Oxford:1990).  
Tables 2 and 3, pp. 180 - 183.

## GNP Per Capita and Proportion Urban, Selected Asian Countries



## **ANNEX 2: SOLID WASTE COLLECTION WORK ACTIVITIES**

Nine data collection and analysis forms following provide the basis for observing, recording and analyzing the principal work activities for solid waste collection. The forms focus on the work activities of collection crews, the vehicles and other equipment they use, the volume of solid waste collected, and the resources consumed in the collection activities. Summary forms reduce the daily information into weekly and monthly totals, and a comprehensive cost performance analysis worksheet concludes the group. Using these forms and maintaining a systematic observation process enables identification of bottlenecks such as one or a few crews performing noticeably differently from other crews. For example, if one crew collects noticeably less solid waste per cost input, it might lead to reexamination of their route (is the mileage traveled significantly greater than others), their training, or their outright performance in the job.

Form 9, the Monthly Summary for Cost of Solid Waste Collection, Treatment and Disposal, summarizes all cost elements, including labor, vehicle depreciation, vehicle maintenance, fuels and lubricants, and other materials and supplies. Used with time, distance and volume information collected, by crew and vehicle, on other forms, Form 9 enables specific cost performance analysis include cost per metric ton collected, proportion of cost attributable to labor, proportion attributable to capital equipment, and proportion to maintenance and supplies. These forms are illustrative of the type of work activity observation and analysis that is necessary to management and administrative efficiency and effectiveness improvements.

Section 4 discussed the importance of local governments' monitoring and evaluating their performance, and developing budgeting and accounting records for detailed cost performance analysis. This Annex contains examples of work activity and cost monitoring forms for solid waste collection and disposal. These have been adapted from work developed by the Institute Fomento de Cesesoria Municipal, San Jose, Costa Rica.

DAILY REPORT  
SOLID WASTE COLLECTION  
TIME, DISTANCE AND VOLUME INFORMATION

SECTION A:

MUNICIPALITY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 COLECTOR (CREW) #: \_\_\_\_\_  
 WEIGHT OF VEHICLE EMPTY: \_\_\_\_\_  
 NAME OF DRIVER: \_\_\_\_\_  
 SECTOR (AREA) #: \_\_\_\_\_

SECTION B:

	FIRST TRIP		SECOND TRIP		THIRD TRIP	
	Time	Mileage	Time	Mileage	Time	Mileage
Leave Municipal Garage						
Begin Collection						
Finish Collection						
Arrive at Landfill						
Leave Landfill						
Enter Municipal Garage						

SECTION C:

TRIP	KILOGRAMS DELIVERED TO SANITARY LANDFILL
1	
2	
3	

NOTE: Section A. should be completed by Department staff prior to giving form to Driver. Sections B & C should be entered by Driver. The form may be extended when more than 3 trips per day are part of the schedule.

15

FORM 2

DAILY REPORT  
SOLID WASTE COLLECTION  
VECHICLE CONDITION

SECTION A:

MUNICIPALITY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
COLECTOR (CREW) #: \_\_\_\_\_  
NAME OF DRIVER: \_\_\_\_\_

	GOOD	BAD	REMARKS
Temperature			
Oil Pressure			
Voltage or Amperage			
Fuel Level			
Clutch			
Brakes			
Turn Signals			
Lights*			
Tires*			
Other*			

\*Indicate in remarks column specific item at fault.

SECTION B:

Indicate in following specific problems and location on/in vehicle

Leaks \_\_\_\_\_  
Noises \_\_\_\_\_  
Vibrations \_\_\_\_\_  
Maladjustments \_\_\_\_\_  
Other \_\_\_\_\_

GENERAL OBSERVATIONS

47

FORM 3

WEEKLY SUMMARY BY VEHICLE  
SOLID WASTE COLLECTION  
TIME, DISTANCE AND VOLUME RECORD

WEEK OF \_\_\_\_\_ TO \_\_\_\_\_  
MUNICIPALITY: \_\_\_\_\_  
OF \_\_\_\_\_, 1990:  
VEHICLE #: \_\_\_\_\_  
NAME OF DRIVER \_\_\_\_\_

	Mileage		Time in Minutes		Volume Collected	Sector #:
	Collection	Total	Collection	Total	Metric Tons	
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						
Sunday						
<b>TOTAL</b>						

Note: 1000 Kilograms = Metric Ton

19





FORM 6:

COMPLAINT REPORT  
SOLID WASTE COLLECTION

MUNICIPALITY: \_\_\_\_\_

DATE: \_\_\_\_\_

NAME OF PERSON REPORTING \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

NATURE OF PROBLEM/COMPLAINT: \_\_\_\_\_

DATE SERVICE/RESPONSE PROVIDED: \_\_\_\_\_

NATURE OF SERVICE/RESPONSE PROVIDED: \_\_\_\_\_

SIGNATURE \_\_\_\_\_

FORM 7:

MAINTENANCE REPORT

PREVENTIVE \_\_\_\_\_  
CORRECTIVE \_\_\_\_\_

MUNICIPALITY: \_\_\_\_\_  
DATE ENTERED: \_\_\_\_\_ DATE DELIVERED: \_\_\_\_\_  
COLLECTOR #: \_\_\_\_\_  
MILEAGE: \_\_\_\_\_

TYPE OF SERVICE OR REPAIR	DESCRIPTION OF PARTS AND REPAIRS	HOURS WORKED	COSTS		
			PERSON HOURS \$	PARTS \$	TOTAL \$
TOTAL					

SIGNATURE OF PERSON MAKING REPAIR: \_\_\_\_\_

100

FORM B:

MONTHLY REPORT  
FUEL AND LUBRICANT COSTS PER VEHICLE

MUNICIPALITY:

\_\_\_\_\_, 1990

COLLECTOR (TRUCK) #

DAY	KILOMETERS RECORDED	EXPENDITURES FOR:							
		FUEL		OIL		GREASE		OTHER	
		QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
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31									

