

## STRATEGIC ISSUES IN PROVIDING URBAN INFRASTRUCTURE FOR MEGALOPOLITAN AREAS IN DEVELOPING ASIAN COUNTRIES

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**Abstract :** The last two decades saw the growth of urban areas, with at least 16 cities in Asia joining the ranks of cities with a population of at least six million. Rapid urbanization has posed tremendous pressure on urban infrastructure and the capability of cities to provide the necessary facilities and services. Using cross-sectional and time-series data on Asian cities, the paper attempts to define the magnitude of the impact of rapid urbanization to urban productivity, evaluate the traditional ways of financing infrastructure within local government context, and explore new and emerging approaches to providing infrastructure and services. The paper concludes that the more plausible solutions to current issues involve looking beyond traditional approaches employed by local governments. The conclusions and lessons derived are summarized in an array of strategic issues for megalopolitan areas in developing countries in Asia.

**Key Words :** Asian Urbanization, Local Government Financing, Cross-section and Time-series Infrastructure Data, Urban Infrastructure Development Strategies

### 1. INTRODUCTION

The challenges that will unfold in the 21<sup>st</sup> century are products of a global phenomenon situated in local settings. The transformation of rural into urban areas, followed by accelerated concentration of people in selected cities, poses tremendous pressure on our capability to maintain a high level of human productivity and an acceptable quality of life.

Cities have always played a vital role in the social and economic transformation of the country at the macro level and the citizen at the micro-level. It is at the city where changes are most profound and far-reaching. As the traditional focus of growth and opportunities, where services, products and employment proliferate, large cities have to grapple with new dimensions of problems. The declining mortality rate is compounded by increasing immigration from smaller rural agglomerations, stringing in the process a host of deficiencies in many areas\_ housing, security, water supply, sanitation, air quality, transportation, communications and other social infrastructure.

The contribution of large cities to the national socio-economic make-up is not insignificant (Table 1). Many of these areas are hosts to more than ten (10) percent of the national population. While some account for less, it is not difficult to imagine that they will eventually reach a similar stage given the current trend of agglomeration. The same areas are concurrently the contributors of a substantial part of the national gross domestic production.

With the magnitude and scope of responsibility, compounded by their huge potential for growth, many large cities are entrapped in a complex relationship with their central

governments. While there is unclear delineation of administrative control (particularly for generation and use of revenues) for some large agglomerations, there is overly dependence on the national government for most of the smaller ones. This complexity makes it difficult to mobilize resources to meet the growing needs of the city and to address the resultant deficiencies.

**Table 1 : Contribution to National Socio-Economic Structure**

Megalopolis	Country	1999 Population (million)	Percentage of National Population	Cumulative Percentage
Seoul	S.Korea	10.1	21.54%	33.90%
Pusan		5.8	12.36%	
Tokyo-Yokohama	Japan	19.0	14.98%	21.77%
Osaka-Kobe		8.6	6.78%	
Bangkok	Thailand	9.1	14.56%	14.56%
Metro Manila	Philippines	10.2	13.47%	13.47%
Karachi	Pakistan	9.3	6.71%	10.34%
Lahore		5.0	3.63%	

[References: Asiaweek 1999, UNDP 1978, UNDP1985]

This paper recognizes the many dimensions of the urban problem but focuses only on the case of large agglomerations of population in Asia. Using representative cities from India, Philippines, South Korea, Indonesia, Bangladesh and Pakistan, it attempts to provide empirical insights into how growing Asian cities can cope with the problem of providing for their infrastructure needs, concentrating on the aspect of local project financing.

The succeeding section of the paper traces the growth of the cities in Asia, emphasizing the high rates of growth and how the extent of agglomeration influences the rates. This is followed by an examination of their implications, highlighting the magnitude of their impacts on the vitality of the city. A particular emphasis is given to how local government units (LGU) have performed in addressing the important issues related to infrastructure and service provision.

The last two sections examine the instruments available to LGUs in financing infrastructure and development interventions. The characteristics of traditional means from the case countries are outlined, together with their strengths and weaknesses. The insights gained from a cross-examination of various instruments across selected Asian countries are summarized in a framework of strategic issues on the provision of infrastructure for megalopolitan areas.

## 2. GROWTH OF URBAN AREAS

There are sixteen (16) cities in Asia which have grown positively over the last one and a half decades and now with a population size of at least six (6) million in 1999 (Table 2). Not so surprising is the fact that more of these areas are found in China and India, each having a total national population of at least one billion. The population size of each city



agglomeration relative to country population varies from ½ percent to more than 21 percent of the entire national population.

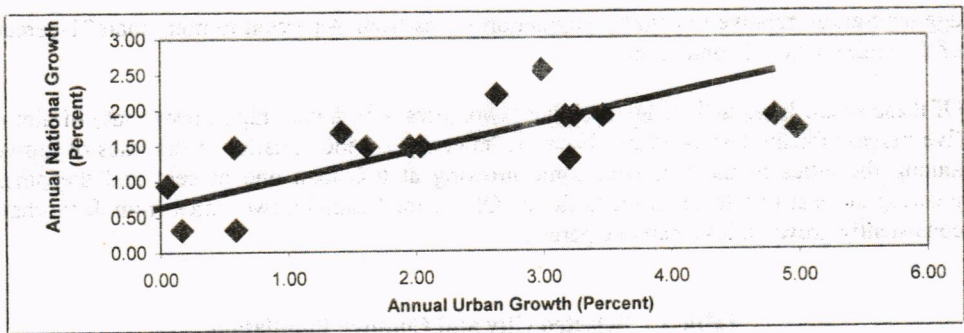
Of these areas, India and Bangladesh host two cities with a very high growth rate of almost five percent for the last 14 years. There is, however, a wide variance in the rates of growth among the cities in the list, with some growing at less than one percent and the others growing at least two to three times faster. Of the total sample, two cities from Japan have consistently grown at less than one percent.

**Table 2 : Selected City and Country Population**

Megalopolis	City Population (million)		Average Annual Growth Rate (percentage)	Country	Country Population (million)	Ave. National Growth Rate (percentage)
	1985	1999	1985-1999		1999	1985-1999
Calcutta	10.3	15.9	3.18	India	1,000.0	1.90
Bombay	9.5	14.8	3.24			
Delhi	7.0	13.4	4.81			
Madras	4.9	7.9	3.47			
Bangalore	3.7	5.2	2.40			
Ahmedabad	3.0	5.1	3.97			
Shanghai	12.1	13.1	0.58	China	1,275.0	1.48
Beijing	9.3	12.2	1.95			
Tianjin	8.0	10.0	1.61			
Hongkong	5.2	6.8	2.04			
Shenyang	4.1	5.5	2.10			
Tokyo-Yokohama	17.5	19.0	0.59	Japan	126.8	0.32
Osaka-Kobe	8.4	8.6	0.17			
Metro Manila	7.1	10.2	2.64	Philippines	75.8	2.20
Seoul	10.1	10.1	0.05	Korea	47.1	0.94
Pusan	4.0	5.8	2.68			
Jakarta	7.8	9.5	1.42	Indonesia	209.4	1.68
Dacca	4.8	9.4	4.98	Bangladesh	130.0	1.71
Karachi	6.2	9.3	2.99	Pakistan	138.6	2.55
Lahore	3.4	5.0	2.84			
Bangkok	5.9	9.1	3.21	Thailand	62.6	1.30

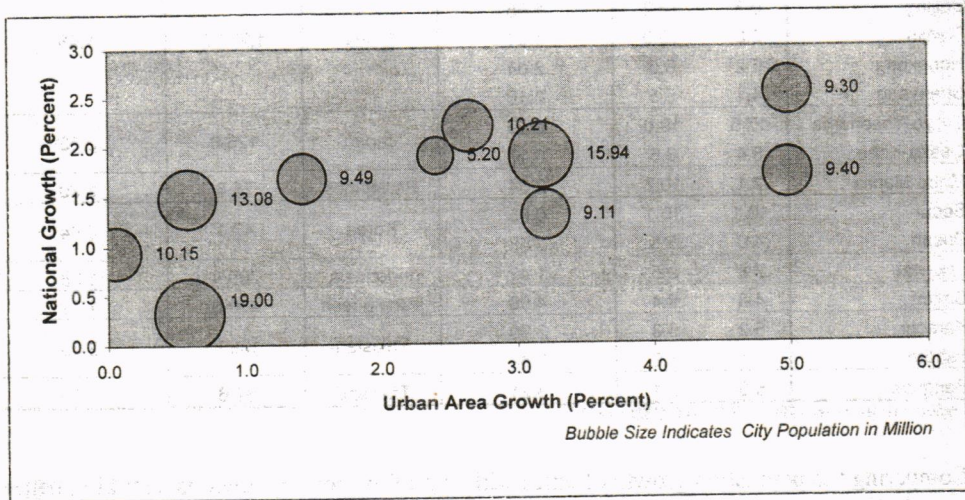
[References: Asiaweek 1999, UNDP 1985, UNDP 1978]

Comparing the population growth of cities with that of the country, there is a striking pattern that shows a strong correlation ( $R_{x,y} = 0.746$ ) between national and city population growth rates (Figure 1). Countries showing a higher growth rate tend to exhibit a similarly high rate in the city. With cities growing at a higher rate, this may imply that the scale of the national trend is magnified at the site of large cities, expectedly due to higher opportunities and better services found in the latter.



**Figure 1 : City and National Population Growth For Cities with Six Million People or More (1985-1999)**

Whether the rate of growth is affected or not by the size of the urban population base is explained in **Figure 2**. Taking only the largest population base in each country from the sample, there is no general pattern between rate of growth and size of population. Except for Japan as a special case, there are no indications from the sample countries that growth has slowed down for larger cities. Regardless of the size of the population base, however, the general relationship between national and city growth rates remains the same.



**Figure 2 : Relationship Between City and National Growth For Samples From Each Asian Country**

### 3. KEY CHARACTERISTICS AND CURRENT TRENDS

A summary of key infrastructure and socio-economic indicators for selected cities in Asia is given in **Table 3**. While there seems to be a wide variance in inter-city and inter-country indicators, there are some striking patterns in intra-regional values. For example, telephone



density in Manila is eight times as concentrated as those at the national level, next to Dhaka which has 43 times more telephones than the whole of Bangladesh. All the other cities showed a concentration of less than twice of the national density.

The Gross Domestic Product (GDP) per capita of most cities in the sample, did not grow as fast as that of their respective countries, perhaps an indication that the productivity at the local level has diminished despite the concentration of resources and amenities. A more graphical inquiry into the performance of cities compared with their respective countries is summarized in the radar charts in **Figure 3**.

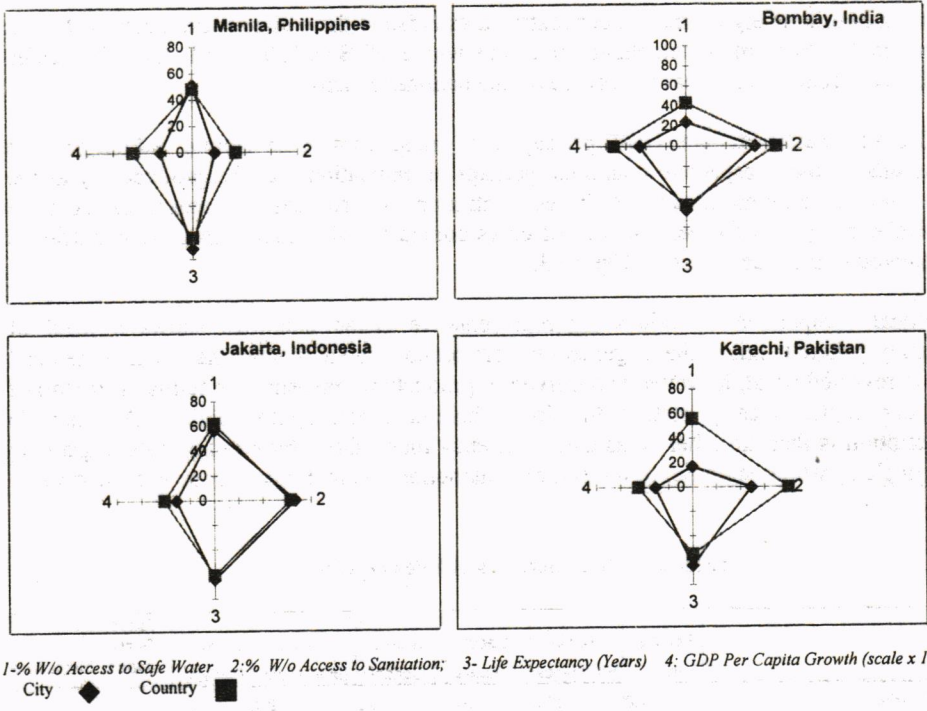
A vertical comparison of values for representative Asian countries shows a level of deficiency (where it exists) that is generally more pronounced at the national than at the local level. A reversed trend, however, is observed in productivity measured in terms of growth of GDP per capita, clearly stating the irony behind urban agglomeration. A plausible interpretation is that the other areas gain efficiency much faster by relating with a growing urban nucleus, which regresses as a result of constriction and inability to cope with growth.

**Table 3 : Characteristics of Selected Cities**

City	Bombay	Manila	Seoul	Jakarta	Dhaka	Karachi	Tokyo- Osaka	Singapore
Country	India	Philippines	S.Korea	Indonesia	Bangladesh	Pakistan	Japan	
City Population	14.8	10.2	10.1	9.5	9.4	9.3	27.6	3.9
Country Population (million)	1,000.0	75.8	47.1	209.4	130.0	138.6	126.8	3.9
Average Income US\$	2,515.50	13,549.65	12,714.53	7,665.11	839.80	6,961.73	44,921.58	24,337.59
Inflation %	3.6	10.2	7.5	9	6.5	6.1	0.3	-0.3
Unemployment Rate (%)	14.7	9.8	7.6	12	4.9	12	5.6	3.3
Criminal Cases per 10,000	16.9	155.9	344	0.2	9.6		199.7	124
Average Class Size (students/class)	53	40	36.6	40	96	40	30.6	37.5
Hospital Beds per 1000 Persons	1.4	1.5	5.3	2	0.9	1	13.2	2.9
Life Expectancy (years)	63	72.1	74.4	64	57	64	79.9	77.3
Pollution (micrograms/cum)	240	200	72	193	1989	144	45	35
Vehicles per Km of Road	219	435	260	230	72	400	141	173
Commute Time (mins)	85	58	60	20	53	45	71	60
TV Sets per 1,000 Persons	77	250	454	100	49	100	976	354
Phones Per 1,000 People(City)	37	297	538	55	130	36	690	465
Phones Per 1,000 People(Country)	22	37	476	29	3	20	667	465

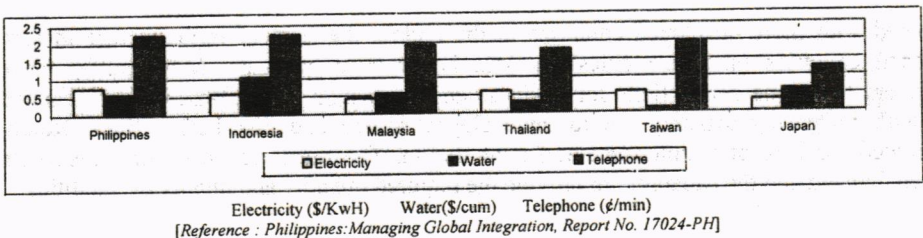
[References : Asiaweek 1999, UNDP 1985]

Compared with more developed countries in the region, the state of infrastructure in less developed countries (and also cities) in Asia is far from adequate. Many suffer from insufficient telephone connections for business and residential areas. Water supply cannot cope with increasing demand due to undeveloped source and distribution lines. Roads deteriorated for lack of maintenance and poor design. The main reason is the mismatch between demand and the capability to provide the required quantity and quality of facilities.



**Figure 3 : Indicators of State of Socio-economic Infrastructure**

The ultimate product of the deficiency is the increased cost of accessing infrastructure services. This is manifested in terms of increase in direct operating cost, additional expense in privately providing for the service and constrained productivity. Commercial establishments, private individuals and the industry respond by using privately provided alternative facilities such as radio and cellular mobile telephones for communication. The higher cost is the price business is willing to pay in lieu of not being able to compete in the information-and-communication-intensive market. A comparison of costs to industry (Figure 4) highlights the generally lower rate of providing services in more developed countries.



**Figure 4 : Cost of Providing Services to Industry**



#### 4. SOURCES OF FINANCING

There are two basic sources of local revenues to finance expenditures, classified in this paper as local and external sources. Local sources include local taxes, services, and other sources, which may include non-traditional taxes such as stamp tax, luxury tax, and other less significant ones. External sources include grants, shares from other government entities (more commonly the national government) and borrowings. Most cities rely on local sources to finance expenditures (Table 4), with no sign of trend reversal.

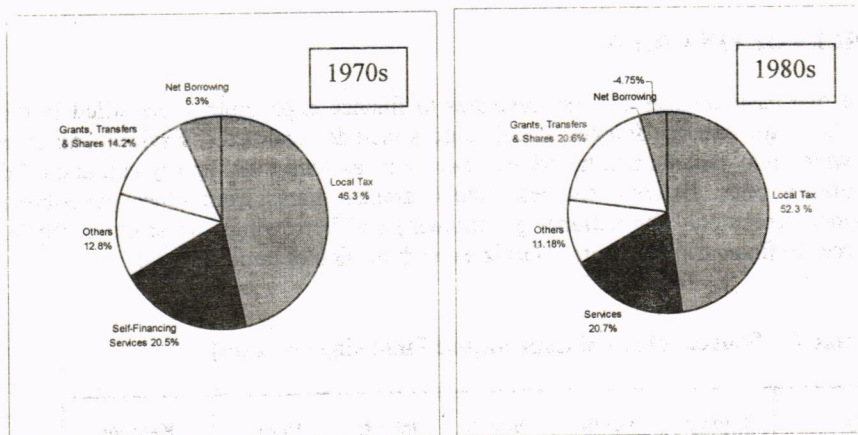
**Table 4 : Sources of Local Expenditure Financing (Percent)**

City		Bombay		Manila		Seoul		Jakarta		Dhaka		Karachi	
Country		India		Philippines		Korea		Indonesia		Bangladesh		Pakistan	
Year		1971	1982	1970	1985	1971	1983	1973	1982	1983	1975	1982	
Local Sources	Local Tax	38	36	55	58	30	39	41	39	49	68	93	
	Services	39	42	10	6	36	27	15	18	31	2	1	
	Others	8	4	5	7	13	6	23	9	34	14	7	
	Total	85	82	70	72	67	71	79	66	113	84	101	
External Sources	Grants & Tax Share	1	1	30	24	16	22	21	39	35	3	3	
	Net Borrowing	14	18		4	4	7		-5	-48	13	-5	
	Total	15	18	30	28	20	29	21	34	-13	16	-2	

[Reference: Bahl, Roy 1992]

Comparing the average utilization of various sources by the sample cities, there are no significant changes in the utilization of local taxes, services and other sources between the decades of 1970s and 1980s. The utilization, however, of grants-transfers-shares and net borrowing have substantially changed, with the former increasing and the latter decreasing in percentage values (Figure 5).

Among the traditional sources, local tax constitutes a large share of the total revenues. Property tax, in the form of real estate tax, transfer tax and tax on rental, among others, is prevalent in most countries and a significant source, accounting for 10 to 60 percent of the total local taxes. Also popular as sources of local revenues are motor-vehicle-related taxes and entertainment taxes. Motor vehicle-related taxes may come as a single tax payment prior to registration or transfer of ownership, annual taxes on registration renewal and tax on fuel consumed, while entertainment may include tax levied on theaters, restaurants, gaming, gambling and lotteries. The other sources of local tax base, however, do not seem to contribute significantly to the total local revenue source (Table 5).



**Figure 5 : Average Composition of Sources of Financing**

An interesting form of local tax found in some countries is the *octroi*, which is a significant source for those that subscribe to this taxation scheme. It is a form of tax imposed on goods and materials coming into the city for either consumption or processing. Computed in terms of value, weight or absolute number of units, the *octroi* is collected from the conveyor of the taxable goods at major transport nodes such a rail station, ports, airports and road checkpoints

**Table 5 : Composition of Local Tax Revenues (Percent)**

City	Bombay		Manila		Seoul		Jakarta		Dhaka	Karachi	
	India		Philippines		Korea		Indonesia		Bangladesh	Pakistan	
	1971	1982	1970	1985	1971	1983	1973	1982	1983	1975	1982
Property	56	52	62	60	56	87		10	60	46	27
Motor Vehicle	4	1	2		22	9	80	75	1		
Entertainment				7	16	4	24	14	4		
Industry & Commerce			32	31		1			4		
Octroi	38	47							32	50	72

Note : Numbers do not add up to 100 due to round-off errors  
 [Reference: Bahl, Roy 1992]

The other locally-sourced revenues include self-financing services such as user charges and other less significant sources such as a variety of licenses and fees. External sources, on the other hand, can also represent a significant increment in project finance but their major drawback is the often long list of conditionalities attached with the ensuing relationship between the local government and the source. The general characteristics and the basic features of all possible sources, including their strengths and weaknesses, are all summarized in **Annex 1** for ease of comparison.



The choice of revenue source to explore depends on many factors including administrative ease, adequacy of the tax yield, stability and predictability, elasticity to local income and other socio-political factors. A good revenue source should be easy to collect and administer, and with a revenue yield that is proportionately higher in magnitude than its administrative cost. It should not be a source of graft and corruption, which is often a reason behind low collection in less developed countries. Since an erratic inflow of revenues will render expenditure programming very difficult, it is most desirable to have a source that is stable and predictable in terms of time and scale. Finally, revenue sources, which are reflective of the economic vitality, is also worth looking at together with their public acceptability. A good pricing policy is the key to a robust revenue source that is not socially undesirable. How the traditional sources score on the above factors are also given in **Annex 1**, which highlights the need to comprehensively assess each scheme in relation with local conditions, given the complex of desirable and undesirable features.

An emerging source of local public finance is the private sector. Private-sector finance have come in the form of joint venture, concessions, lease agreements, turnkey projects and, more recently, in Build-Operate-Transfer and related schemes. Arguments in favor of utilizing the private sector have been the basis of new initiatives in many Asian countries such as the EDSA MRT in the Philippines, the North-South Highway Project in Malaysia, the River Hub Project in Pakistan, and the Bangkok Metropolitan Expressway Project for Thailand, to cite a few. While there are also initiatives at the local level like the Mandaluyong Public Market, in Manila, the utilization of private sector finance for cities in developing Asian countries has been relatively negligible.

On the basis of the menu of revenue sources, megalopolitan areas can possibly augment their revenues for financing infrastructure projects using familiar approaches, but only to a limited extent. The huge requirements in terms of infrastructure backlog, at both city and country levels, and the decreasing proportion of resources available from the national government and finance institutions render the traditional approaches inadequate to respond to the need. The precarious relationship between national and large city finance is further complicated by the state of debt financing in many less developed countries (**Table 6**). About 30 percent of the total foreign debt of these countries are accounted for by economic infrastructure projects. In some countries, even government deficits are financed by debt, a phenomenon that compels many to aggressively reduce the debt level. Ironically, the reduction is often achieved by decreasing spending on public infrastructure investments, operations and maintenance, thereby feeding the cycle of infrastructure deficiency and low productivity.

**Table 6 : Foreign Debt of Selected Countries (1996)**

Country	India	Philippines	Indonesia	Bangladesh	Pakistan
GDP Per Capita (US\$/year)	380	1,190	1,144	259	456
External Debt (\$ Billion)	93	42	129	16	23

[Reference: OECF 1998, 1999]

Privately financed infrastructure projects are often more efficiently operated than their public counterparts (**Figure 6**). Driven by their entrepreneurial nature, the private sector

generally operates with greater efficiency and at comparatively lower cost than the public sector.

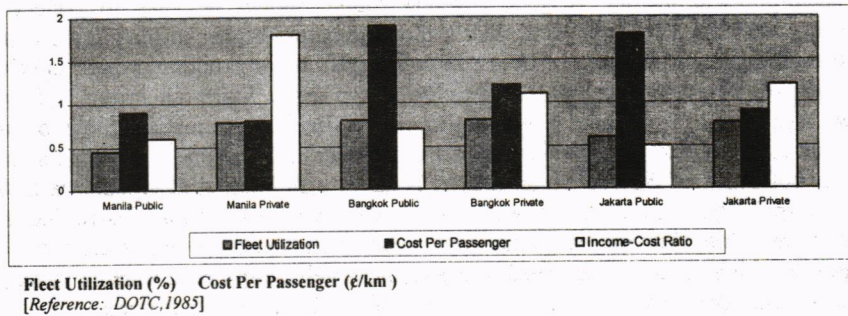


Figure 6 : Comparative Efficiencies of Bus Services

The risks involved in the provision of the facility are often shared across many stakeholders. The general relationship across the many stakeholders, lumped into three major groups is shown in Figure 7 . The success of most public-private initiatives hinges on how strong and how fast the linkages are made to close on each other.

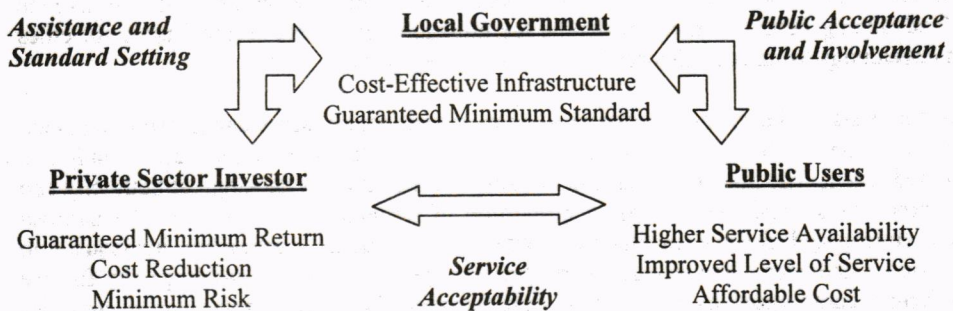


Figure 7 : The Relationships Among Major PPI Stakeholders

5. STRATEGIC ISSUES

The preceding discussions emphasize a number of issues confronting the growth of large cities, the resulting infrastructure deficiencies and how local governments are trying to cope with it . The objective of this section is to draw a list of key issues to define a framework for addressing more comprehensively the problem of financing urban infrastructure for megalopolitan areas. The issues in order of relevance to the framework are:

**Development Controls.** As there is clear evidence of declining productivity when population concentrates urban policies should be geared toward a more rational and effective land use and development control. Population concentration adversely affects the capability of urban areas to effectively provide for the needed social services and economic infrastructure. Unless there is assurance that despite the increasing level of



agglomeration there will be adequate infrastructure for the city to remain at competitive productive levels, population agglomeration should not be allowed to proceed unabated.

**Productivity through Adequate Infrastructure.** Constraining the provision of adequate infrastructure taxes the productive capability of the city, making the generation of resources even more difficult as the city loses competitive advantage. A policy of curtailing the investments on infrastructure development and maintenance magnifies the backlog as facilities deteriorate faster and demand-supply gap widens. The relationship is clear\_ with less productive infrastructure, urban areas end up with less resources to manage their development and existence, thereby fueling the cycle of infrastructure deficiency.

**Preservation of Environmental Integrity.** Also an area that has been proven in a number of research studies to affect the long-term viability of infrastructure is the concurrent efforts to preserve the integrity of the environment. Maintaining the livability of urban areas entails the preservation of ecological balance. Demand for environmental control infrastructure such as solid waste collection and disposal facilities, sewerage and wastewater treatment, air and noise pollution control, among others, increase in quantity and complexity as a result of urban agglomeration.

**Pricing of Infrastructure.** There are indications that users are willing to pay more for a better service. The willingness to pay has been illustrated through the innovative ways by which urban dwellers in less developed Asian countries have responded to the infrastructure deficiency. The fault of most governments is the failure to price appropriately by virtue of the various implicit subsidies. This only serves to advance the deterioration of facilities for lack of maintenance and the increasing infrastructure deficiency, both due to non-availability of funds. Fully exploiting the strength of user charges where each user is billed in accordance with the marginal benefits derived from the service is a logical strategy.

**Financing of Projects.** While there are a number of untapped revenue sources which large cities can explore, the choice should be aligned with national context. Nonetheless, the amount anticipated from traditional sources may not be sufficient considering the magnitude of backlog and projected future needs of most large developing Asian cities. New sources can be provided by the private sector, which aside from providing the funding additionality can also infuse the efficiency measures lacking in urban infrastructure management. The key element in successfully tapping the private sector for public provision of infrastructure is the robust relationship among the many stakeholders that include the local government, the users and the private investors as the major participants.

**Inter-government Structure.** There are reasons to believe that there is a place for metropolitanization in Asian cities that can benefit from inter-government cooperation. Common and related infrastructure facilities such as solid waste, water sources, power supply and sewage treatment, among other facilities, can be more efficiently provided through cooperative multi-city and multi-government efforts. Economies of scale are achieved at higher levels of aggregated demand while retaining development controls at manageably sized local government groupings.

## 6. CONCLUSION

That there are indeed various options available for improving the provision of infrastructure services to ensure a desirable level of productivity for large urban agglomeration are illustrated in the foregoing sections. While the more transparent phenomena can be seen at all levels of population agglomeration, the situation in the larger cities are unique in the sense that the ironies of urban agglomeration are more pronounced

Unlike at the national level, tapping the private sector has never been extensively used in local settings. This is so despite the fact that the main engine of private sector initiatives are the facility users who are more directly related to the city than to the national government.

The paper concludes that there are other strategic issues that need to be considered in addressing the infrastructure financing problems of large urban agglomerations

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**Annex 1 Various Sources of Local Expenditure Finance**

Financing Source	Characteristics	Strengths	Weaknesses
<b>LOCAL TAXES</b> Property Tax	<ul style="list-style-type: none"> <li>• Most common source of local revenue.</li> <li>• Normally assumes three basic forms, based on:                             <ol style="list-style-type: none"> <li>1. Capital value of land and improvements</li> <li>2. Rental Value</li> <li>3. Zonal valuation of land</li> </ol> </li> </ul>	One of the few revenue sources clearly under the custody and control of the local government units	<ul style="list-style-type: none"> <li>• Politically unpopular as a revenue instrument.</li> <li>• Difficult to administer effectively.</li> <li>• Objective assessment of property value is difficult due to :                             <ol style="list-style-type: none"> <li>1. Difficulty in monitoring ownership, state of occupancy and value; and</li> <li>2. Lack of a consistent procedure for assessment and exemption.</li> </ol> </li> <li>• Since not directly related to any public service, incentive to pay is low.</li> </ul>
Sales Tax	Generally takes any of the following forms : <ol style="list-style-type: none"> <li>1. Manufacturer's tax</li> <li>2. Wholesale tax</li> <li>3. Retail Sales tax</li> <li>4. Turn-over tax; and</li> <li>5. Value-added tax</li> </ol>	Has a good revenue potential and based on prevailing strength of economic activity.	<ul style="list-style-type: none"> <li>• Generally not stable and predictable.</li> <li>• High collection cost.</li> <li>• Difficult to administer due to :                             <ol style="list-style-type: none"> <li>1. Proliferation of informal business activities and small retail establishments;</li> <li>2. Prone to tax evasion; and</li> <li>3. Regressive character.</li> </ol> </li> </ul>
Motor Vehicle Tax	<ul style="list-style-type: none"> <li>• Revenue yield grows fast.</li> <li>• Typical forms are :                             <ol style="list-style-type: none"> <li>1. Single tax payment on the registration of motor vehicle or transfer of ownership;</li> <li>2. Annual license tax on motor vehicle; and</li> <li>3. Tax on fuel consumed.</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>• Takes advantage of increasing tax base for most urban areas.</li> <li>• A good measure to control social cost associated with motor vehicle use.</li> </ul>	There is often a powerful political opposition to vehicle taxation as it is viewed as a form of restriction.
Business Tax (Tax on Industry & Profession)	Typical types are : <ol style="list-style-type: none"> <li>1. Tax on business capital;</li> <li>2. Annual value tax on business real estate; and</li> <li>3. Flat charges for business license.</li> </ol>	<ul style="list-style-type: none"> <li>• Revenue yield is high for large cities and has the potential for rapid growth.</li> <li>• Often unaffected by central government restrictions.</li> </ul>	<ul style="list-style-type: none"> <li>• The tax base is difficult to establish.</li> <li>• It is difficult to administer due to :                             <ol style="list-style-type: none"> <li>1. Presence of many small firms without systematic record of accounts;</li> <li>2. Non-comprehensive identification of firms; and</li> <li>3. Difficulty in collection and prone to tax evasion.</li> </ol> </li> </ul>



**Annex 1 Various Sources of Local Expenditure Finance (Continued)**

Financing Source	Characteristics	Strengths	Weaknesses
<b>LOCAL TAXES (Continued)</b>			
Entertainment Tax	Tax levied on theaters, movies, restaurants, hotels, gaming, gambling and lotteries.	Easily taxable and generally desirable	<ul style="list-style-type: none"> <li>• Difficulty in assessment and collection.</li> <li>• Prone to graft and corruption.</li> </ul>
Octroi	<ul style="list-style-type: none"> <li>• Tax levied on goods entering a city for local processing and final consumption.</li> <li>• Assessment typically based on value, weight, or absolute number of units transported.</li> <li>• Collected at Octroi stations normally located at road blocks, ports, airports &amp; rail stations.</li> </ul>	Significant source for countries which have adopted it.	<ul style="list-style-type: none"> <li>• Increases transport cost.</li> <li>• Prone to graft and corruption.</li> <li>• Distorts the price of goods.</li> <li>• A major disincentive for metropolitan integration.</li> </ul>
<b>GRANTS, TRANSFER AND TAX SHARES FROM CENTRAL GOVERNMENTS</b>	<p>A form of access to central government tax instruments</p> <p>Typical forms are :</p> <ul style="list-style-type: none"> <li>• Specified share of national taxes;</li> <li>• Annual appropriations which are voted upon; and</li> <li>• Reimbursement of Costs incurred by local government units.</li> </ul>	<ul style="list-style-type: none"> <li>• Can be an instrument for redistribution of resources to effect equity among local government units.</li> <li>• Allows access to central government resources.</li> <li>• Encourages investment in projects/activities with wider scope or coverage.</li> </ul>	<ul style="list-style-type: none"> <li>• Often translates into reduced local autonomy.</li> <li>• May distort budgeting process if not predictable and stable.</li> </ul>
<b>USER CHARGES</b>	Fees charged for the provision of services by the local government units.	<ul style="list-style-type: none"> <li>• A good instrument for increasing efficiency if properly priced.</li> <li>• Best for LGUs since link with users is direct.</li> </ul>	Most affected are the marginalized sector of society.
<b>BORROWINGS</b>	<ul style="list-style-type: none"> <li>• In developed countries may be done through issuance of municipal bonds and through the capital markets.</li> <li>• In developing countries, may be accessed from the central government, specialized credit institutions &amp; commercial institutions.</li> </ul>	<ul style="list-style-type: none"> <li>• Spreads the cost of providing the services through several administration periods and across many beneficiaries</li> <li>• Allows investment in larger and more strategic projects.</li> </ul>	<ul style="list-style-type: none"> <li>• Credit-worthiness of the local government is diminished by non-revenue projects.</li> <li>• Credit intermediaries have historically not performed effectively.</li> </ul>
<b>PRIVATE FINANCING</b>	May come in various forms including management contracts, concessions, lease agreements, joint ventures, or build-operate-transfer schemes and its variants.	Generally more efficient as private sector is risk-averse and more capable of monitoring project performance.	Weak where market competition is restricted by intervention and market distortions.