

PRIVATE SECTOR PARTICIPATION IN THE TRANSPORT SECTOR: TRENDS, ISSUES AND INSTITUTIONS IN THE ASIA-PACIFIC REGION

A.S.M. Abdul Quium*

ABSTRACT

This paper deals with the current trend of private sector participation in the transport sector with a focus on Asian developing countries. The demand for transport infrastructure and services is increasing rapidly owing to growth of production and domestic and external trading activities and incomes and ongoing urbanization. As the availability of public funds to meet the growing demand remains limited, Governments in the region increasingly see the necessity of private involvement through various forms of partnership arrangements to supplement the public sector programmes. The paper discusses recent trends in private participation and forms of participation in the transport sector and special facilitation units in Governments and legal instruments to promote private sector participation in countries of the region. The paper concludes with a number of suggestions and raises issues which require attention by Governments and international bodies to promote public-private partnerships in infrastructure development in the region.

INTRODUCTION

Governments worldwide have increasingly turned to the private sector for additional resources, increased efficiency and sustainable development in many fields, including that of transport infrastructure

* Economic Affairs Officer, Transport Policy and Tourism Section, Transport and Tourism Division, ESCAP, Bangkok. The author wishes to thank the Private Sector and Infrastructure Network of the World Bank Group for providing data from its PPI database, as well as Mr. John Moon and Mr. Hiren Sarkar for useful discussions and their comments on the paper. The views expressed in the paper are those of the author and do not necessarily reflect the views of the United Nations.

and services. Following trends in other fields, private sector involvement in the transport sector has now become quite common in many countries in the Asia-Pacific region. To facilitate private involvement, sector reforms have been initiated, albeit at a slow pace, and many Governments are also considering various other steps. Existing assets including public transport systems are being privatized and deregulated. As a result, highways, urban rail systems and new port and airport facilities are increasingly being built following various models of private sector participation.

The trend of private sector participation in infrastructure development that began in a few countries in the 1970s and 1980s has gradually spread to other countries during the last decade. Developing countries have been at the forefront of this trend and are pioneering innovative approaches to provide infrastructure services by the private sector. Now almost all these countries have some private activity in infrastructure development. Many Governments in the Asia-Pacific region have spelled out their policy and regulatory frameworks. The private sector and Governments are now working together increasingly on projects that are materially improving the supply of infrastructure and public services. In some countries, Governments have gone further, beyond their usual tasks of policy formulation, streamlining of administrative Processes and creating a supportive legal environment. They have established specialized units and devised suitable instruments to provide active support for private sector activities in infrastructure sectors.

Although Governments have increasingly turned to the private sector since the early 1980s, the history of private participation in infrastructure development is quite old. Private sector participation (PSP) in the transport sector dates back to seventeenth century canal and road concessions in Europe and the United States of America. Private companies built the American railways in the nineteenth century. Many early public transport systems in European and American cities were also developed in this century by the private sector under various municipal charter or franchise arrangements with revenues coming from fares and land development (ADB 2000; Menckhoff and Zegras 1999). The situation in many countries in Asia was not very different either.

For example, railways in the Indian subcontinent were first introduced in 1853 through private initiatives.¹

At later dates, owing to various reasons Governments nationalized many of the earlier transport systems developed by the private sector. However, more recently and as in other sectors of the economy, the paradigm shift towards a market economy has led to a revival of private sector participation in the transport sector.

Unfortunately, as in other infrastructure sectors, private participation in the transport sector was badly affected during its infancy by the financial crisis of the late 1990s. The crisis-affected national economies are now recovering, however. Furthermore, the ongoing process of globalization has greatly expanded the scope for international trade in goods and services, with consequent unprecedented demand for transport infrastructure and services for the movement of goods and people both within and across the national boundaries of the countries in the Asia-Pacific region. The increasing level of urbanization in the region is also creating additional transport demand.² In the face of continuing public budget constraints and inefficiencies, as well as a desire to involve all stakeholders that can assist in the development process, it is expected that private participation in this sector will be revived to meet these growing demands.

Against this background, this paper provides an overview of recent trends in private participation in the transport sector in the Asian developing countries. In addition to providing an overview of recent trends in private participation the paper discusses forms of participation and presents an overview of the special public-private partnership (PPP) units and special purpose instruments devised by many Governments in the region for the promotion of private activity in infrastructure sectors. Finally, some concluding remarks are made based on the observations and findings presented in the paper.

¹ The Great Indian Peninsular Railway Company introduced the first railways in India near Mumbai.

² An estimated 37 per cent of the Asian population now live in urban areas, and that is expected to increase to 46 per cent by 2020 and 53 per cent by 2030. In terms of absolute numbers, the urban population was 594 million in 1975, increased to 1,352 million in 2000 and is projected to increase to 1,970 million by 2020 (United Nations 2000). Now, 17 of the world's 19 megacities are located in Asia.

I. TRENDS IN PRIVATE SECTOR PARTICIPATION IN TRANSPORT INFRASTRUCTURE³

A. Global trend of development in infrastructure sectors

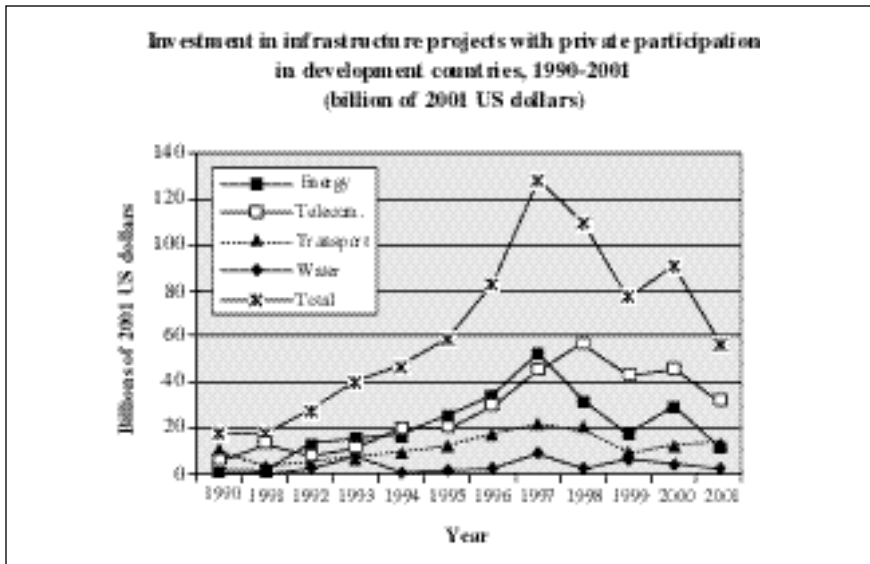
Data from the World Bank shows that between 1990 and 2001 the cumulative total of investments in the infrastructure sector with private sector participation in all developing countries was about US\$ 754 billion.⁴ Within this period, private sector participation in infrastructure development grew dramatically between 1990 and 1997, but gradually declined from its peak level in 1997 as a result of the financial crisis that began in mid-1997. As shown in figure 1, the total investment fell from US\$ 128 billion in 1997 to US\$ 119 billion in 1998 and to US\$ 77 billion in 1999. Although it went up in 2000 to US\$ 90 billion, it dropped again in 2001 to its 1995 level of US\$ 57 billion.

More than twothirds of investments were used for the creation of new assets and the remaining one third went to Governments as the sale proceeds of some existing assets. Telecommunications and energy have led the growth of private sector activity in infrastructure sectors. Cumulative investments in these two sectors in 1990-2001 represented about 77 per cent of flows to all infrastructure sectors in that period. The shares for the transport and water sectors were 18 and 5 per cent, respectively (figure 2).

The financial crisis that started in mid-1997 has affected all infrastructure sectors. However, the impact has been worst in the energy and transport sectors. In both of these sectors, private activity in 1999

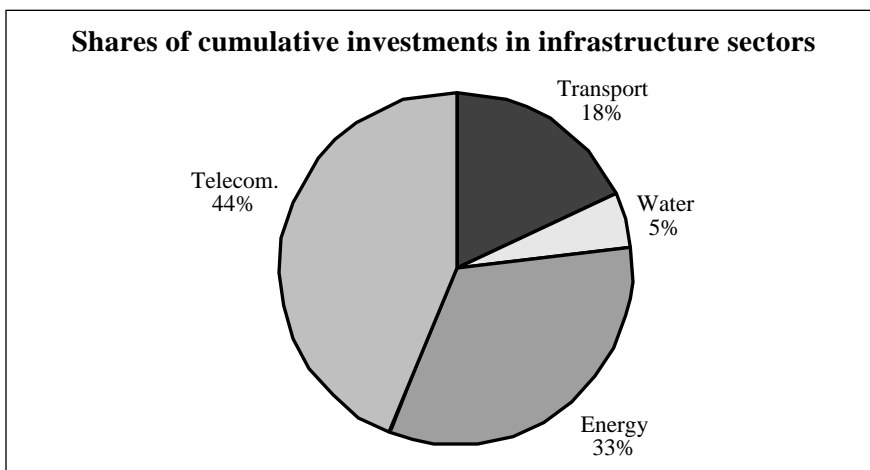
³ The data presented in this section are mostly from the World Bank's PPI (private participation in infrastructure) database and were obtained through personal communications and from notes prepared by the Private Sector and Infrastructure Network of the World Bank Group. These notes are available at <<http://rru.worldbank.org/viewpoint/index.asp>>. As mentioned in this paper, Asian developing countries means countries in the ESCAP region, unless otherwise stated.

⁴ The World Bank's PPI database records total investment in infrastructure projects with private participation and not private investment alone. All values are in 2001 US dollars. The PPI database deflates the nominal figures by using the United States consumer price index.



Source: Based on data provided in Note Number 250, prepared by the Private Sector and Infrastructure Network of the World Bank Group.

Figure 1. Investment in infrastructure projects with private participation in developing countries, 1990-2001



Source: Based on data provided in Note Number 250, prepared by the Private Sector and Infrastructure Network of the World Bank Group.

Figure 2. Shares of cumulative investments in infrastructure sectors, 1990-2001

dropped to about one third of the respective pre-crisis levels in 1997. While private activity in telecommunications and water has started to recover, there has been only marginal improvement in the transport sector and the energy sector is still declining.

Among the regions, Latin America and the Caribbean, and South-East and East Asia have led the growth in private sector participation. These two geographical regions together have captured more than 75 per cent of the total investments.

B. Trends in the development of infrastructure sectors in the Asian region

A global analysis of private activity in developing countries revealed that about 33 per cent of total investments were made in Asian developing countries (excluding the Central Asian countries). Among the top 10 countries in the world, 7 were from Asia. As shown in table 1, China, Malaysia, the Republic of Korea, the Philippines, Indonesia, India and Thailand (in that order according to size of investments) attracted a total commitment of about US\$ 236 billion, which was about 95 per cent of total investments in Asian developing countries. With the exception of India, the remaining 6 countries were from East and South-East Asia. In total, the 7 countries made investments in 697 projects in all infrastructure sectors. The average size of involvement was lowest in China (US\$ 190 million) and highest in the Republic of Korea (US\$ 1.28 billion).

C. Trend in the transport sector

The share of the transport sector with private participation in all developing countries was 18 per cent during the period 1990-2001. While total investment flows to South-East and East Asian developing countries fell slightly between 2000 and 2001, in the same period investment flows to the transport sector in those countries rose from US\$ 5.4 billion to US\$ 7.5 billion.

Within the transport sector, the share of road projects with private participation in all developing countries was about 57 per cent during 1990-2001. In that period, the road sector in developing Asian countries

Table 1. Top seven Asian countries by investment in all infrastructure sectors with PSP, 1990-2001

Country	Total investment (billions of US dollars)	Number of projects in all infrastructure sectors
China	53.8	283
Malaysia	36.6	63
Republic of Korea	33.2	26
Philippines	32.1	67
Indonesia	28.9	62
India	27.7	122
Thailand	23.9	74
Total	236.2	697

Source: World Bank, "Public policy for the private sector", Note Number 250, available at <<http://rru.worldbank.org/Viewpoint/index.asp>>

had a cumulative flow of US\$ 34.60 billion, which was about 59 per cent of investments in road projects in all developing countries. In the same period, cumulative flows in railway projects, port facilities and airport projects in developing Asian countries were US\$ 10.14, 10.97 and 3.22 billion, respectively. The details of investments by country and subsector are shown in table 2.

Some of the main findings as revealed from analyses of investment data from the World Bank's PPI database on infrastructure projects and other sources are summarized in the following paragraphs.

Private sector participation in infrastructure projects has grown rapidly, but the public sector still dominates. Although no reliable overall figures are available, understandably the private sector shares only a fraction of total investments in infrastructure sectors. For example, even in Malaysia, which is the second-most-successful country in attracting private investments in infrastructure, the government allocation planned for the transport sector during 2001-2005 is about RM 21.22 billion against an expected total of RM 3.5 billion by the private sector, which is about 14 per cent of the total investments by

Table 2. Transport sector project investments in Asian countries with private sector participation, 1990-2001 (millions of 2001 US dollars)

Transport subsector							
Ports		Airports		Rail		Roads	
China	3,139.85	China	1,737.64	Malaysia	5,585.70	China	16,604.75
Indonesia	2,180.05	Philippines	519.90	Thailand	2,415.11	Rep. of Korea	8,221.97
Malaysia	2,140.88	Turkey	432.49	China	2,140.42	Malaysia	6,003.41
India	1,110.44	Cambodia	204.42	Philippines	862.10	Philippines	1,306.90
Philippines	608.72	India	149.26			Indonesia	1,147.29
Pakistan	479.05	Malaysia	138.19			Thailand	857.07
Rep. of Korea	429.95	Thailand	20.40			India	452.29
Turkey	353.23	Viet Nam	16.94				
Sri Lanka	255.11						
Thailand	124.32						
Viet Nam	89.18						
Myanmar	56.45						
Total for Asia (billions of US\$)	10.97		3.22		10.14		34.60
Global total (billions of US\$)	18.00		12.80		28.80		77.00
Global share of subsector (percentage)	13.18		9.37		21.08		56.37
Asian share of subsector (percentage)	18.61		5.46		17.21		58.71
Asian share of the global total for subsector (percentage)	60.93		25.15		36.21		44.92

Source: Based on data from the PPI database of the World Bank and the BOT Centre of the Philippines.

- Notes:*
- (1) The original figures were rounded to two places after the decimal, and as such they may not sum up to the totals shown in the table.
 - (2) The PPI database did not include figures for two urban rail projects in Manila. All calculations shown in the table are based on the exclusion of these two projects.
 - (3) Total for Asia means total for the countries shown in the table.

both sectors.⁵ In other countries, the private sector's share is expected to be even smaller.

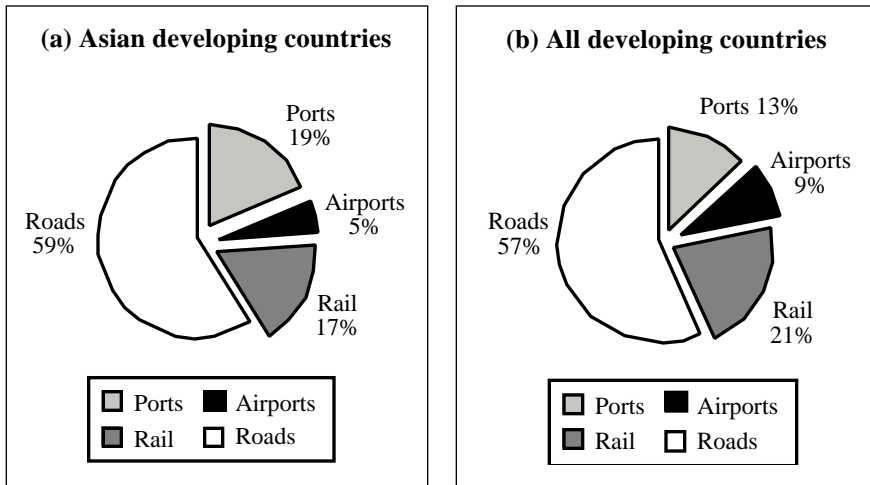
Initially, private sector projects in all infrastructure sectors were concentrated in only few countries of the world. They have now spread to most of the developing countries. At the beginning of the 1990s, the top 10 countries accounted for 98 per cent of annual investment flows, which came down to 67 per cent in 2001. Although it has now spread to more countries, private participation has still remained concentrated in a few countries, particularly in the transport sector.

Globally, of the top 10 countries, 7 are from Asia (China, Malaysia, the Republic of Korea, the Philippines, Indonesia, India and Thailand). These 7 Asian countries attracted 95 per cent of all private activities in Asian developing countries. This concentration of private involvement was slightly higher for the transport sector, which was almost 97 per cent.

While the global share of the transport sector PSP projects was 18 per cent, in Asian developing countries it was about 22 per cent. Only 16 Asian developing countries in the ESCAP region have some form of private sector involvement in transport infrastructure projects. However, only 3 countries, China, Malaysia and the Republic of Korea, accounted for more than 78 per cent of investment commitments in the transport sector.

Within the transport sector, the global share for road projects was about 57 per cent. It was slightly higher (about 59 per cent) for the Asian countries. The investment share of port projects in Asian countries (18.61 per cent) was also higher than its global share (13.18 per cent). Consequently, investments in airport and rail projects in Asian countries were relatively lower than their respective global levels (figure 3).

⁵ *Eighth Malaysia Development Plan*, pp. 300-301.



Source: Based on data provided in Note Number 250, prepared by the Private Sector and Infrastructure Network of the World Bank Group.

Figure 3. Share of transport subsectors

Private participation in port projects was relatively widespread compared with other subsectors in transport. Although port projects drew 18.61 per cent of transport sector investments in Asian developing countries, 12 countries had port projects. In contrast, the road projects drawing 58.71 per cent of investments were limited to the 7 major countries and concentrated in China, the Republic of Korea and Malaysia. There were airport projects in 8 countries and only 4 countries had rail projects.

The total number of airport projects was 19, the majority of which (10) were located in China. While India and Cambodia had two projects each, the Lao People’s Democratic Republic, Malaysia, the Philippines, Thailand and Viet Nam had a single project each.

The 65 port projects with private participation were located in 12 Asian countries. In addition to China, the major countries were Indonesia, Malaysia and India. Although Thailand had a number of port projects, the total investment in them was much smaller than in the other countries.

The 14 rail projects were located in 4 countries: Malaysia, Thailand, China and the Philippines. The majority of these were urban rail projects. These rail projects marked the re-emergence of private railway operation in Asian developing countries after a long period of nationalization and public sector management. The implementation of urban rail mass transit projects with private participation in Bangkok, Kuala Lumpur, Beijing and Manila has inspired many other countries in the region to consider similar projects for other big cities in the region.

The 175 road projects were all located in the 7 major countries with China clearly being the lead country in terms of both number of projects and their value. The two other countries with large investment commitments in this subsector were the Republic of Korea and Malaysia. India also had a large number of road projects (25) with private sector participation, most of which were initiated in recent years.

II. THE ASIAN EXPERIENCE OF PRIVATE PARTICIPATION

A. Form of participation

Table 3 provides information on the forms of private participation in 14 Asian countries for 465 projects closed in 1997-2001. It is clear from the table that unlike Latin American countries, which favoured the simpler operation and management contracts type of participation to improve sector efficiency, Asian countries have favoured more complex forms of participation, namely, the BOT type (i.e., concessions and greenfield projects), whereby a private entity enters into a long-term contract with the public sector to undertake major capital investments and also assumes different project and investment risks. The primary motive for favouring the BOT form of participation in Asian developing countries was that the Governments did not have the funds for the creation of new infrastructure facilities necessary to meet the growing demand for such infrastructure services.

**Table 3. Form of PSP in 14 Asian countries
for projects closed in 1997-2001
(number of projects)**

Sector	Form of private sector participation							Total
	BTO	ROT	BROT	BOT	BOO	Divestitures	Others	
Energy			3	47	50	50	1	151
Telecommunications			19	21	72	13	–	125
Transport	3	33	15	30	4	26	8	119
Water		10	7	46	1	3	3	70
Total	3	43	44	114	127	92	12	465

Source: Ueda, 2002.

Notes: BTO = Build-transfer-operate; ROT = Rehabilitate-operate-transfer; BROT = Build-rehabilitate-operate-transfer; BOT = Build-operate-transfer; BOO = Build-own-operate.

Table 4 provides more detailed information about private participation in the transport sector by regions, which attracted most of the Asian private investment flows in this sector. It provides information for a longer period, greater number of countries and much larger number of projects than that provided in table 2.⁶ As can be seen from the data in table 3, the preferred form of participation was not similar for all infrastructure sectors. While BOO was clearly the preferred form of participation in the energy and telecommunication sectors, BOT or ROT types of participation were more common in the transport and water sectors.

The data provided in table 4 show a clear preference for greenfield and concession projects than the two other types: divestitures and management contracts. Of the total 270 transport projects, the shares of these two less preferred types of participation were approximately 11 and 4 per cent, respectively. Preference concerning the form of private participation was very similar in both subregions.

An important feature of private participation was that greenfield projects represented more than half of the investment commitments in

⁶ Unfortunately, the classification of participation forms in the two tables is somewhat different as data were not available in the same format. Nevertheless, they are similar and do not distort the overall picture.

Table 4. Infrastructure projects with private participation in South-East and East Asia, and South Asia by sector and type of participation, 1990-2001 (number of projects)

Sector	South-East and East Asia					South Asia				
	D	G	M	C	Total	D	G	M	C	Total
Airports	7	4	1	5	17	0	1	1	0	2
Ports	2	24	6	20	52	0	8	0	5	13
Rail	2	6	1	2	11	0	0	0	0	0
Roads	18	41	1	89	149	0	14	1	11	26
Total	29	75	9	116	229	0	23	2	16	41

Source: PPI database, World Bank.

Notes: D = Divestitures; G = Greenfield project; M = Maintenance and lease contracts; C = Concessions.

Asian developing countries, particularly in low-income countries. The focus has been more on the creation of new infrastructure facilities to keep pace with the growth of demand for such new facilities. This has also been the case because in many of these developing countries very little infrastructure was in place. However, aggravated by the financial crisis of the late 1990s, there appears to be a change in government strategy in many countries. Izaguirre and Rao (2000) note that in 1999, for the first time, private activity in divestitures exceeded that in greenfield projects in the developing countries in South-East and East Asia.

B. Experience of completed projects

The Asian Development Bank conducted a detailed study on private participation in infrastructure in Asian countries (ADB 2000). The Bank's study was based on case studies of private participation in infrastructure projects in its member countries. It observed that in Asia's roads sector, private participation has been equated with major toll roads involving large investments. However, after more than a decade of making efforts, not many road projects have been implemented

outside China and most of them are concentrated in only a handful of countries.⁷

The experience of project implementation has been mixed in most countries. Frustrating experience for those concerned is not uncommon. In many instances toll collection has been a serious problem. For example, many BOT road projects in India are facing serious problems in toll collection. The developer of the first BOT road project in the Indian State of Tamil Nadu (the Coimbatore bypass) faced serious financial problems due to difficulties in toll collection.⁸ A second BOT project in the state and the Mumbai-Pune Expressway has also faced similar problems. However, in the case of a number of other projects in India, this has not been a problem. An important observation about private road projects in Asian developing countries is that very few projects are profitable on a stand-alone basis without government support and their cumulative impact on expanding the capacity of the road network so far has been small.

In contrast to the mixed experience about private participation in the roads sector, the Asian Development Bank study notes positive results in both the airport and port sectors. Private participation in ports, however, has rarely involved pure privatization as land and infrastructure are not generally sold. Private investment in port infrastructure has generally been limited to cargo terminals. In general, the transfer of cargo-handling facilities to the private sector has been very successful. For the airport sector, private participation in terminal operations has produced significant improvements in financial performance and quality of service.

The number of rail projects has been very small and some of these are still in the implementation stage. As such, it is difficult to

⁷ China was considered as a special case for various reasons which do not apply to most other countries.

⁸ *The Financial Express* of India, in its 29 April 2002 issue (available at <www.financialexpress.com/fe_full_story.php?content_id=7764>), reported that the developer could collect an average daily toll of only 75,000 rupees against a daily operating expense of 50,000 rupees and another 90 million rupees of yearly interest costs alone for the borrowed capital. This implies that, after meeting the operating expenses, the remaining toll revenue was barely sufficient to cover just about 10 per cent of the interest costs.

generalize the experience of private participation in this subsector at this stage. However, the limited experience from Bangkok and Kuala Lumpur suggests that ridership levels did not meet the expectations of the private operators and the projects faced financial difficulties. Importantly, the public sector ultimately had to come forward in support of these projects in both Bangkok and Kuala Lumpur.⁹

However, it may be worthwhile to mention here that at least in the case of Bangkok, the project objectives have been achieved to a large extent. An interesting study on the city's popularly known "Skytrain" project illustrated the potential external benefits that the project can generate under different scenarios. It estimated the present value of net benefits over 25 years of project life due to reduced levels of congestion on the roads at one third of the cost of the project, a benefit that cannot be captured by the operator.¹⁰

III. PSP/PPP FACILITATION UNITS AND SPECIAL INSTRUMENTS

A. Dedicated units

The number and success of private sector projects depends greatly on the capacity of government agencies to identify, formulate and manage such projects, examine suitable options for private participation or partnership arrangements with the public sector and negotiate with the private sector for project implementation. Knowledge

⁹ The Government of Malaysia took over the two light rail transit projects in Kuala Lumpur (STAR and PUTRA) and arranged refinancing measures for them. In the case of Bangkok's elevated BTS rail transit, the Bangkok Metropolitan Administration has come forward to finance two vital extensions of the system at a total cost of 1,500 million baht in order to boost ridership and make the whole system financially viable. While initially the BTS project was financed by the private sector in full (the land for the depot, however, was provided by the Government), it is interesting to note here that in the case of the city's first underground rail mass transit project, which is now under construction, the private sector is only investing in the equipment (trains, signalling, communications, electric supply, etc.), representing about 20 per cent of the total project cost.

¹⁰ IFC, 2001. *Bangkok Mass Transit (Skytrain) Externalities Study*, final report, prepared by Policy Appraisal Services Pty. Ltd. and Economic and Policy Services Pty. Ltd., Australia.

of public-private partnerships and the necessary skills in the management and financing of PSP/PPP projects is often lacking in the public sector. In most countries, the laws governing each sector, together with the regulatory agencies, oversee the participation of the private sector. As a solution to this problem, some Governments in the region have created dedicated PPP units to consolidate skills and bring forward portfolios of projects crossing all sectors. Although the number of such units in Europe is growing and they are structuring more and more successful projects, the number of such units in the Asian and Pacific region to date is not many. It is only in a few countries, namely, Bangladesh, India (at the provincial level), the Philippines and the Republic of Korea, that such units are known to exist.¹¹ However, this may not be surprising given that private sector participation has been concentrated only in a few countries. In this section, a discussion on PPP facilitation units in these countries follows.¹²

1. Bangladesh

The Government of Bangladesh attaches great importance to private sector participation in infrastructure development and has taken a number of policy initiatives in this regard. Legislative and regulatory frameworks for private investments have been established in many fronts. For example, the Bangladesh Telecommunication Regulatory Commission was established in January 2002 and the Energy Regulatory Commission is in the process of being set up. Bangladesh now has a declared policy of involving the private sector in infrastructure development and to this end a private sector first policy is in the process of being institutionalized.

In order to further expedite the involvement of the private sector in infrastructure development, Bangladesh has established a number of entities directly under the Economic Relations Division of the Ministry

¹¹ Sri Lanka does not have a special PPP unit like these countries but has established a special section called the Bureau of Infrastructure Investment (BII) within the Board of Investment (BOI). The Bureau operates under the umbrella of the country's BOI law. Its functions are similar to special units in other countries. BII follows a project approval process and has established procedures for both solicited and unsolicited projects.

¹² Three articles in this volume provide further details about these facilitation units in Bangladesh, the Philippines and the Republic of Korea.

of Finance. Two such entities are the Infrastructure Investment Facilitation Centre (IIFC) and Infrastructure Development Company (IDCOL) established in 1999 and 1997 respectively.

IIFC is a 100 per cent government-owned entity established with assistance from the International Development Agency (IDA), the Canadian International Development Agency and the Department for International Development of the United Kingdom. The services provided by IIFC include project development, policy development and capacity-building. Services in these three areas are provided through agreements with government departments and agencies.

IIFC assists government ministries and agencies and other public sector bodies in infrastructure sectors in project identification for the private sector. In the areas of project development and implementation, IIFC's activities include project structuring, bid preparation, evaluation, drafting contract agreements, contract enforcement and project monitoring. The Centre also assists the Government in capacity-building of public sector officials for negotiations as well as for identifying and packaging viable BOT projects. The Planning Commission of the Government has an agreement with IIFC to provide technical services for introducing private sector infrastructure projects in the annual development programme. IIFC also provides assistance in policy development to create an enabling environment for private participation in the infrastructure sector. It has developed a "private sector first policy" for infrastructure with the aim of prioritizing private sector opportunities in the national planning and implementation process. Recently, the Centre has prepared a number of transport projects for private participation.

The second entity, IDCOL, was also established with assistance from IDA. It operates as a non-banking financial institution and its share capital is fully subscribed by the Government. One of the main functions of IDCOL is to participate in the financing of private infrastructure projects by providing structured finance in the form of senior and subordinated loans. It also provides refinancing of small projects implemented by NGOs and other private entities. So far, IDCOL's activities have been limited to the energy sector.

2. India

In India, like most other countries in the region, the laws governing each sector together with the regulatory agencies oversee the participation of the private sector in infrastructure projects. Although this is the case at the national level and also for most of the states in India, the State of Gujarat has made a difference by establishing special institutions for this purpose.

The Gujarat Infrastructure Development Act, 1999 (the BOT law of Gujarat) was enacted to provide a framework for private sector participation in the financing, construction, maintenance and operation of infrastructure projects in the State of Gujarat in India.¹³ This law is the first of its kind in India and was evolved after consultations with the industry, investors, developers and various other agencies. The law established procedures for private sector participation which are based upon clear-cut enunciation of the project cycle required for timely and effective completion of infrastructure projects.

The Gujarat Infrastructure Development Board (GIDB) was established under this BOT law. The Board is headed by the Chief Minister of the State. This was to ensure that the Board has the capacity to take policy-level decisions and can fulfil its wide-ranging mandates. Most of the ministers connected with infrastructure and industrial development and top officials of the concerned department are also represented on the Board. The Board has an Executive Committee, headed by the Minister of Industries, which acts as the first stage of screening for projects and also as a forum for extensive debate on the issues arising out of the projects which need to be taken up. The Board is supported by a technical secretariat.

GIDB removes policy-related or other bottlenecks, identifies and prepares projects, conducts feasibility studies, recommends risk-sharing mechanisms and monitors the progress of projects. Traditionally, private sector participation in infrastructure has been deterred by the fact that the projects are risky and have long gestation periods. To reduce the uncertainties due to long gestation periods and mitigate the high risks

¹³ Available at <<http://www.gidb.org/botchap-1.htm>>.

attached with infrastructure projects, the Board has worked out a project cycle for their implementation.

GIDB operates a revolving facility for carrying out prefeasibility studies. The state government supports this corpus through budgetary grants. If after a prefeasibility study a project is found bankable, it could be offered to the private sector for execution. These studies are conducted by reputed consultants. A successful public-private partnership entails distribution of project risks among the parties involved in its development. This is achieved through the mechanism of “concession agreements”, which detail the risk allocation. The state government has already come out with such agreements for various sectors such as power, gas and roads and felt that upfront allocation of risk helps the investors in judging the project better and facilitates their decision-making. The various types of concession agreements that the state government can enter into have also been specified in the state’s BOT law. The Board has a mandate for 22 infrastructure sectors, but among them it is currently focusing on the following 11 sectors: power, ports, roads, airports, railways, urban infrastructure, water supply, information structure, industrial parks, gas grid and tourism.

The Board has been successful in initiating quite a number of infrastructure projects, many of which have already been completed. In the port sector, six projects have been awarded to the private sector involving an investment of US\$ 2.14 billion. These projects include greenfield port sites at Maroli, Pipavav and Mundhra. The road sector has seen six projects being completed in the recent past. The amount of investment was around US\$ 250 million. Some of the major road projects include Ahmedabad-Vadodara Expressway, the Vadodara-Halol toll road and the Ahmedabad-Mehsana toll road. Apart from the projects already commissioned, a number of road projects which are under implementation through private participation are likely to be bid out soon. Gujarat has also attracted sizeable investment in the power sector. In this sector, 10 independent power producers have already commenced power generation. The capacity addition in these projects was around 3,000 MW, requiring an investment of around US\$ 2.85 billion. The power projects include the Essar project at Hazira, the GPEC power project at Paguthan and GSEG projects at Hazira.

3. Philippines

Private sector participation is a key strategy of the Government of the Philippines. The Built-Operate-Transfer (BOT) Law (Republic Act No. 6957 of 1991 as amended by Republic Act No. 7718 of 1994) spells out the policy and regulatory framework for private sector participation in infrastructure projects and other public services in the country. The BOT Centre¹⁴, a government agency attached to the Department of Trade and Industry (DTI), has the mandate to coordinate and monitor the implementation of the BOT Law. The Centre's main function is to find financial, technical, institutional and contractual solutions to help implementing agencies and local governments to make BOT projects work. Headed by an Executive Director, who reports directly to the Secretary of DTI, the Centre is organized in two groups: the project development group and the programme operations group. The project development group is composed of four sectoral divisions (transport, power and environment, information technology, social infrastructure and special concerns), and the programme operations group is composed of three divisions (programme monitoring and management information, marketing and resource mobilization, administration and finance).

The BOT Centre prepares and periodically reviews and updates the screening guidelines for projects applying for project funding under the project development facility, prepares the terms of reference for technical assistance to implementing agencies, reviews and moves to amend the Implementing Rules and Regulations for PSP and assists government agencies in expediting the implementation of private projects through facilitation and problem-solving interventions and monitoring of private activities/projects.¹⁵

¹⁴ The Coordinating Council of the Philippine Assistance Program (CCPAP), established in 1989 under an administrative order, was the first predecessor of BOT Centre. Later, in 1999, CCPAP was converted to the Coordinating Council for Private Sector Participation (CCPSP), which was again reorganized in 2002 as the present BOT Centre.

¹⁵ <<http://www.geocities.com/ccpsp/about/histover.htm#Units%20&%20Functions>>.

The BOT Law of Philippines is quite comprehensive and includes provisions for both solicited and unsolicited projects. The original law, however, did not have provisions for unsolicited projects. A total of nine unsolicited projects from various sectors with an estimated investment commitment of about US\$ 2,872 million is now under implementation. The private sector is solely responsible for the equity and debt financing of such infrastructure projects. In case of unsolicited projects, the Government does not provide any loan guarantee or direct subsidy but may consider fiscal incentives and allows a longer concession period of 50 years.

The private sector has been very active in the development of major infrastructure projects in the Philippines under the BOT Law. The Law, considered as a model of public-private sector partnership in Asia, has brought in private capital of more than US\$ 16 billion in 42 completed/operational projects, including power plants, mass transit systems and expressways. Of these, there were three projects in the transport sector with an estimated cost of US\$ 1,205 million. Another six transport projects are under construction at an estimated cost of US\$ 2,287 million.¹⁶

4. Republic of Korea

The Republic of Korea enacted the Act on Private Participation in Infrastructure 1999 (as amended) to attract investors to fund infrastructure projects at both the central and provincial government levels.¹⁷ The Act is commonly referred to as the PPI Act. The Act and its subsequent enforcement regulations are intended to promote, guide and facilitate private sector participation in infrastructure development for both solicited and unsolicited projects. Subsequently, regulations concerning the establishment, role and functions of a private investment project committee and a specialized institution to provide technical and administrative support to the committee, government agencies and the private sector have been formulated. The procedures and general

¹⁶ Information as at September 2002, provided by the BOT Centre, Philippines.

¹⁷ An English version of the Act is available at <<http://www.moleg.go.kr/mlawinfo/english/htms/html/law06.html>>.

guidelines on PPI project preparation, submission, scrutiny and approval have also been formulated.

The Private Investment Project Committee under the leadership of the Minister of Planning and Finance is the main policy-level decision-making body. Its major functions include deliberation on matters relating to formulation of major policies concerning private sector investment in infrastructure projects, formulation of an annual plan containing a portfolio of projects for private sector participation, approval of project proposals which meet the prescribed criteria and designation of a concessionaire for the approved project.

An annual plan for private participation is an important instrument for implementation of the Act. As required by the Act, the Government formulates and announces an annual plan for private sector participation in infrastructure. The plan is prepared with due consideration of national investment priorities and mid- and long-term plans for infrastructure. The annual plan includes sectoral policies for infrastructure, a portfolio of projects, the investment, management and operational requirements of each project and available government support for projects.

Under the provisions of the PPI Act, the Ministry of Planning and Budget, established the Private Infrastructure Investment Center of Korea (PICKO) in 1999 with assistance from the World Bank.¹⁸ PICKO was established at the Korea Research Institute for Human Settlements to support all the technical and administrative procedures in private sector participation in infrastructure investment from investment consulting services to project proposal review, negotiations and preparing concession agreements. Matters related to the organization and management of PICKO are determined by Presidential Decrees.

Sectoral agencies on infrastructure may request support from or commission PICKO in developing new projects, conducting feasibility studies, reviewing unsolicited project proposals, formulating instructions for project proposals, reviewing and evaluating project proposals and drafting concession agreements. PICKO also provides support in

¹⁸ <<http://picko.krihs.re.kr/eng/about/about1.htm>>.

formulating policies and plans related to private investment projects, the PPI annual plan and mid- to long-term plans for private investment projects, etc.

PICKO assesses proposals for infrastructure projects and also provides consultancy/advisory services to foreign enquirers. In order to meet foreign investors needs' and demands and to facilitate a better investment environment, PICKO provides English versions of documents related to private investment projects such as the PPI Act and its enforcement decrees, the PPI annual plan and instructions for proposals. It also conducts promotional activities such as PPI presentation meetings in the Republic of Korea and abroad and organizes capacity-building programmes for both public officials and related personnel from the private sector. PICKO not only handles the administrative and technical support in promoting private investment projects, but also acts as a one-stop service centre for private investment in infrastructure facilities in investment consulting, marketing, etc.

B. Special instruments

1. Japan

Public-private partnership (PPP) is a generic term for a range of initiatives that involve the private sector in providing public services. There are various forms of PPP. The private finance initiative (PFI) is a special form of PPP. The PFI model is a more recent innovation which has been used in Japan and some other countries to facilitate private activities in infrastructure projects. In this model, the private sector is involved in the design, finance, construction and operation of public facilities. The Government awards a long-term contract to the private sector to finance the construction of a new facility and provide management services for the facility. The Government may, however, provide substantive services in the new facility (for example, clinical services in a hospital). Thus, the Government spreads the cost of new construction and the responsibility for support services is transferred to private companies.

An important difference between PFI and conventional ways of providing public services is that the public sector does not own the

assets. In this form of PPP, private sector participation transforms the role of the public sector from being an owner of assets and direct provider of services into a purchaser of services through a long-term agreement. The public sector makes pre-defined payments to the private company, which provides the infrastructure and associated facilities management services. Payments are made for the service only if it meets specified performance standards. In the build-own-operate (BOO) type of arrangement (and its other variants), the private sector builds, owns and operates a facility and sells services to its users or beneficiaries, whereas in the PFI model, the private sector, as in the BOO model, builds, owns and operates a facility, and the public sector on behalf of the users or beneficiaries purchases services from the private sector through a long-term agreement and delivers them to the users.

It is argued that by aggregating design, construction and operation of infrastructure services into one contract, important benefits could be achieved through creation of synergies. As the same entity builds and operates the services, and is only paid for the successful supply of services at a pre-defined standard, it has no incentive to reduce the quality or quantity of services. Compared with the traditional public sector procurement model, where design, construction and operation aspects are usually separated, this form of contractual agreement reduces the risks of cost overruns during the design and construction phases or of choosing an inefficient technology, since the operator's future earnings depend on controlling costs. The public sector's main advantages lie in the relief from bearing the costs of design and construction, the transfer of certain risks to the private sector and the promise of better project design, construction and operation.

There are, however, additional costs of having recourse to the private sector – usually the cost of borrowing money is higher for the private sector than for the public sector and there are administrative costs for the management of PFI contractual regimes. Theoretically, a PFI scheme is favoured only when its generated benefits exceed these additional costs. To ensure this, government regulations guiding PFI schemes establish some value for money or public sector comparator criterion.¹⁹ Following this criterion, the public sector entity awarding

¹⁹ For example, in the United Kingdom the net present value of the project as a PFI scheme is compared with its value if implemented by the public sector.

a PFI contract is required to establish that by undertaking the project as a PFI scheme, government gets better value for money.

It may be mentioned here that the PFI scheme was first launched in the United Kingdom in 1992 and has become the dominant model of procurement of public facilities such as new hospitals, schools and prisons. The transport sector in the United Kingdom has also seen the implementation of a large number of PFI projects. By 2001 almost 400 PFI deals were signed with capital values of 17 billion pounds.^{20, 21}

Styled after the PFI programme in the United Kingdom, the PFI scheme in Japan was launched in 1999 with the passage of the PFI Law in 1999 (Law No. 117 of 30 July 1999). Public facilities as defined in the PFI Law of Japan include transport infrastructure, public office buildings, public housing, educational and cultural facilities, waste treatment, hospitals, social and welfare facilities, IT facilities, energy supply facilities, tourist facilities, etc. Based on certain fundamental policies concerning various aspects of procurement as established by the Prime Minister and considering the clearly defined allocation of roles between various levels of the Government, the concerned public authority can enter into a contract with a private enterprise for the delivery of a public service after going through a prescribed procurement process.

The Prime Minister formulates the fundamental policies after consultation with the heads of relevant administrative organs of the Government, i.e., the concerned ministers, and after deliberation by the “PFI Promotion Committee” as established under this Law. The Committee is established within the Prime Minister’s Office and has nine members nominated by the Prime Minister. The committee investigates and deliberates on matters that fall under its jurisdiction,

²⁰ To learn more about the PFI programme in the United Kingdom, readers are referred to a report prepared by David Rowland and Allyson Pollock, *Understanding the Private Finance Initiative*, London, UNISON, 2002. The report also provides an interesting critical analysis of some PFI projects and points out some dubious assumptions under which they were justified as PFI schemes. The report is available at <<http://www.unison.org.uk/acrobat/12174.pdf>> (28 February 2003).

²¹ Debande (2002) provides an assessment of the United Kingdom’s experience in private financing of transport infrastructure.

helps to formulate policies related to fundamental principles and project implementation, oversees project evaluation and selection of contractors, and monitors project implementation.

By the end of 2002, the implementation of 79 projects with a total capital value of US\$ 1,845 million had been announced, many of which have been completed (Ueda 2002). Of these projects 76 per cent have a contract period of 15 to 20 years, 20 per cent 25 to 30 years and the rest less than 10 years. An analysis of these projects showed that the majority (62 per cent) were for selling their services to the public sector, 25 per cent were joint ventures between the public and private sectors and the remaining 13 per cent were financially free-standing. One of the biggest PFI projects in the transport sector was a US\$ 126 million container terminal at Hibikinami, Kitakyushu. Other projects in the transport sector included parking facilities in different cities.

2. Turkey

Turkey is one of the first few countries in the world to have introduced the BOT form of public infrastructure projects through the enactment of a BOT Law (BOT Law No. 3096) back in 1984. In accordance with this Law, a consortium bidding on a project is allowed to design a project and raise and secure financing to construct, manage, operate and maintain it. The Government guarantees to buy the products or services of the investment at a certain price over a certain period of time to cover debt service, operational expenses, repatriation of paid-in equity and return on equity. At the end of the contract period, the facilities are transferred to the Government in good operating condition, without any cost and free from any liabilities.

The projects opened to the private sector within the framework of the BOT Law include power plants, free trade zones, underground transport, ports, bridges, tunnels, communications, highways, railways and airports. A State economic enterprise, a public corporation or a concerned ministry authorized by the High Planning Council can assist and make an agreement with a qualified investor for the initiation and operation of a BOT project within the framework of the Law.

Despite being one of the pioneering countries of BOT projects, only a limited number of BOT projects have been implemented so far, most of which have been in the energy sector. This has been due primarily to legal problems in executing the Law. However, some transport and other infrastructure projects have been implemented. The most well-known projects in other sectors include Antalya and Istanbul-Ataturk airport terminal projects and the Izmit domestic and industrial water supply project.²² The new airport terminal and multi-storey car park at Istanbul airport was completed in 2000 at a cost of US\$ 306 million.

An inadequate legal framework provided by the Law and certain provisions in the country's Constitution created serious problems related to the jurisdiction of authorities to exercise power vested in the Law as well as other legal uncertainty and administrative problems in executing BOT projects. As has been observed in an analysis, the BOT Law and regulations have created greater barriers to foreign investments than other factors like political uncertainty or instability of the local currency.

However, the Government has taken a number of important steps to address these problems, which include suitable amendments to the Constitution, amendment of the original BOT Law and enactment of a new law. A new law called the Build-Operate (BO) Law has been enacted to avoid the legal interpretation and associated jurisdiction problems of "concession" arrangements under the BOT Law. The legal framework in support of private sector participation has improved after these steps were taken and constitutional amendments recognizing international arbitration in public sector contracts were made. However, the execution of the BOT/BO Laws is still considered to be complex. A number of public sector agencies have expressed mixed opinions about BOT projects. While some agencies favour BOT projects, others contend that the costs of such projects are very high and completion of planned long-term public sector projects would make them redundant in the future.

²² <<http://www.dolph.com.tr/energy.htm>>.

IV. SOME OBSERVATIONS ON THE ASIAN EXPERIENCE AND SUGGESTIONS

The role of government and the policy environment

The demand for transport infrastructure facilities will continue to increase owing to growth of production and domestic and external trading activities, incomes and ongoing urbanization. However, given the inadequate government budget allocations, the inefficiencies of public sector organizations and other constraints of the public sector, public provision alone would not be sufficient to meet the growing demands for transport infrastructure and services. If countries in the region are to remain competitive in an increasingly globalizing world, improve the quality of life of their populations and meet the Millennium Development Goals,²³ complementary investments by the private sector in physical infrastructure need to be placed high on the list of serious concerns to governments at all levels, national, provincial, urban/local. However, proliferation of private sector policies by Governments in the region suggests that the current debate is not so much related to whether Governments should promote private participation but to how they should involve the private sector and what institutional arrangements are required for that purpose.

In order to gainfully involve the private sector, there is a need for public policy makers to develop a better appreciation as well as be aware of the limitations of the role of the private sector while not overlooking the social and political obligations of the Government. Over the years, transport has acquired the perception of a public good, which is of special significance, particularly in developing countries. This perception of transport as a public good has made the tasks of policy makers more difficult as Governments have had to deal with efficiency and equity issues simultaneously.

However, it is important to realize that private participation does not mean that the public sector loses control over this seeming

²³ The Millennium Development Goals (MDGs) are an agenda of the United Nations for reducing poverty and improving lives that world leaders agreed on at the Millennium Summit in 2000. Details on the MDGs can be found at <<http://www.undp.org/mdg/>>.

“public good” but rather it adopts a set of new rules whereby it assumes the role of facilitator and regulator, based on its comparative advantage and ability to apply its leverage to achieve the social objectives of government. Private participation in infrastructure development requires the Government to continue to play a key role in planning, policy formulation and regulatory matters. Further, in order to promote private participation, the Government needs to implement a series of economic, financial and legal reforms which only it can initiate. Getting the policy fundamentals right should see a revival of private activity. However, it is also true that policies evolve and all policies may need to be changed or refined from time to time to meet the changing situation in the internal and external environment. While certain basic policies are essential, it is neither feasible nor necessary to start with a near-perfect policy environment.

Effective private participation in infrastructure development requires the Government to create a conducive environment for PPPs. In this regard, liberalization of the market, removal of sector inefficiencies and participatory approaches to decision-making need to be promoted. Sector inefficiencies have been a major deterrent to private participation in transport infrastructure. The existence of barriers such as public monopoly and distortion in the pricing of competing transport modes is a serious problem for the motivation of the private sector in many countries. In many ways the pricing problem has been viewed as an issue of political economy and remains to be resolved. Transport is also a sector where technological change has been less pronounced and political barriers to reform can be strong.

PSP/PPP model

A wide range of private participation models has emerged. However, there is no single model that can satisfy all conditions concerning a project’s locational setting and its technical and financial features. The most suitable PSP/PPP option should be selected taking into account the country’s political, legal and sociocultural circumstances and the financial and technical features of the projects and sectors concerned.

Until now, the Asian focus has been more on new capital-intensive BOT projects but they are very complex to administer, particularly in view of the institutional weaknesses and capacity constraints of the public sector. Because of these constraints, the performance of many of these projects has been reported to be less than satisfactory. In many cases the legal and regulatory framework for contract enforcement was not in place. The experience of the financial crisis also suggests that greater attention needs to be placed on more rational forms of participation aiming at increasing efficiency of existing assets through improved operation and modernization. The hard lessons learned from the Asian financial crisis suggest that project financing will be more important than corporate financing. Growth of local currency financing as evidenced in China, Malaysia, Thailand, the Republic of Korea and India is an encouraging sign.²⁴ However, further innovations in project financing and financing structures are required.

Several case studies from around the region point to many caveats contained in public sector policy. Chief among them is financing of BOT projects where the developer is to recover its investment from toll revenues and bundling of projects. While toll collection is not a serious problem in relatively higher-income countries, it could be a problem in low-income countries. Often, bundling of financially viable projects with others for which there are no takers has made the whole project unviable. The privatization of the airline industry in India is a case in point. Because of the bundling of profitable routes with non-profitable ones, many private operators have gradually disappeared from the industry.²⁵ The commercial risk assessments of many projects also appeared to be problematic, and socio-political realities did not receive due consideration in some cases.

The issue of pro-poor elements in PSP/PPP projects

The issue of pro-poor elements in private projects has been much neglected in the past. A common concern has been raised that the poor

²⁴ An article by Makoto Ojira in the forthcoming volume 73 of the *Bulletin* discusses this development in China.

²⁵ See an article by Arpita Mukherjee in the forthcoming volume 73 of the *Bulletin* for more details on this issue.

and other disadvantaged groups have not benefited much from private infrastructure projects providing public services. PPP experts attending a recent meeting held the view that in many countries, the general perception and understanding about PPPs, the role of the private and public sectors and imperfections in market structure were not favourable to the creation of a conducive environment for pro-poor PPPs.²⁶ They mentioned that there was also a general belief that involvement of the private sector resulted in higher prices and fewer jobs and that the profit motivation of the private sector was not compatible with the idea of pro-poor projects. Furthermore, the concept of partnership was not well understood by the bureaucracy. In many cases, the existing regulatory environment was conservative and too restrictive. Often, the lack of relevant market regulations leads to monopoly and sector inefficiencies which discourage private participation.

There should be a built-in mechanism in designing private projects to protect the interests of disadvantaged groups as well as increase the visibility and social acceptability of this approach. The experts at the above-mentioned meeting were also of the opinion that promotion, regulation and facilitation may be considered as the tactical means to create a conducive environment for pro-poor PPPs and suggested some measures in this regard. Education and training programmes for both the public and private sector need to be organized and demonstration projects should be implemented to create positive impressions of PPPs. Information dissemination through the media and other means should be enhanced. Subsidies that are transparent, targeted and non-distorting could be devised. Policies and regulations guaranteeing government support for pro-poor PPP projects should be implemented. It is important to follow certain core principles of good governance, namely, transparency and accountability, to promote pro-poor PPPs. Promotion of pro-poor PPP projects through incentives and technical assistance to the private sector can also be a government policy.

²⁶ Consultative Meeting on Public-Private Partnership (PPP) Units for Delivery of Basic Services, organized by ESCAP at Bangkok on 27 and 28 March 2003.

Special PPP unit in government

A special PPP unit in government can be very effective in promoting PPPs. Countries like Bangladesh, India, the Philippines and the Republic of Korea in the region have recognized the need to establish special units. The experience of these countries has been very positive. These units have been quite successful in playing an important catalytic role in promoting and implementing private projects. Although China, Indonesia, Malaysia and Thailand do not have any special PPP facilitation units, they have also been successful in attracting private sector participation in infrastructure development. However, as pointed out in an ADB study, the case of China is quite special for many unique reasons,²⁷ while Indonesia, Malaysia and Thailand have been helped by some special conditions like an early start and prevailing more favourable general conditions for development that may not exist in most other countries. It may be mentioned here that PPP facilitation units also exist in many European countries such as Greece, Ireland, Italy, the Netherlands and the United Kingdom. The experience of these countries is also known to be very positive.²⁸

At this stage it is not clear how the absence of such units affects private sector participation. It is important to mention here that in most countries specialized institutions exist for the promotion of investment in the manufacturing sector. However, this is not yet the case for infrastructure development despite the fact that infrastructure projects may require more capital, are liable to many different types of risks and require specialized skills for project structuring and implementation.

In reviewing the structures and functions of existing PPP units in Asia, it was apparent that despite similarities in their functions, their structures are quite different and they follow different approaches to achieve roughly similar objectives. The difference in structures of PPP units is more a reflection of different systems of government and overall administrative structures in those countries than of any functional or

²⁷ Details can be found in ADB (2000), appendix 2, p. 3.

²⁸ A paper prepared by the ECE secretariat for the Working Party on International Legal and Commercial Practice, fiftieth session, 11-13 March 2002 (*TRADE/WP.5/2002/13*) provides a review of PPP for infrastructure development in Europe and selected four case studies of PPP units/task forces.

organizational matter. As the system of government and its overall administrative structure vary from one country to another, it is not possible to consider any common structure for such a unit that can be applicable to all countries. It should be country-specific.²⁹

Experiences from both within and outside the region suggest that Governments need to pay special attention to institutional development and capacity-building in the public sector. Without institutional development and capacity-building of the public officials who are involved in the planning and management of private sector projects and management of the PPP/PSP contractual regime, it would be difficult to see much progress despite the fact that the growing demand requires additional investments by the private sector.

Finally, it is important to point out that existence of a PPP unit alone is not sufficient for the promotion of PPP. Other necessary conditions must also be fulfilled. Nevertheless, the establishment of such a unit in government can be very helpful for many purposes. In addition to addressing the common problem of public sector capacity in the management of private sector activity, a PPP unit in government can help sectoral coordination in overall planning, project development, evaluation, promotion and ensuring uniformity of policy standards and optimum resource allocation across the sectors. It can also help in the formulation and review of government policy for the infrastructure sector. Since adequate supply of essential infrastructure is a major challenge faced by most developing countries in the region, countries without a PPP unit can share the experiences of existing PPP units in Asia and elsewhere to learn how establishing similar units could benefit them.

CONCLUDING REMARKS

Private sector participation in infrastructure projects has now spread to almost all developing countries in the region. In the transport

²⁹ PPP experts at the above-mentioned meeting deliberated on issues related to the main elements of successful pro-poor PPPs, which included the functions and structures of PPP units. They prepared a set of recommendations about the functions and structures of PPP units that are contained in the report of the meeting, copies of which are available from the Transport and Tourism Division of ESCAP.

sector, however, it has remained concentrated only in few countries and the share of the sector is much lower compared with the energy and communications sectors. While technological innovations and sector reforms have favoured investments in some other areas of infrastructure, private participation in transport has been stifled for various reasons such as caveats in government policy, unresolved issues in political economy, sector inefficiencies, resistance to reform and lack of technological innovations.

The positive experiences of countries which have set up special PPP units in government need to be seriously considered by other countries. A special PPP unit in the Government can effectively address the capacity problem of the public sector and promote private participation in a planned and coordinated manner taking into consideration the overall sectoral needs and cross-cutting issues. Such a unit in government can also help to ensure social acceptability and transparency of private projects through institutionalization of project identification and approval processes.

The United Nations and its agencies and other international and regional bodies can play a key role in promoting private sector participation in infrastructure sectors as well as finding ways to address some of the social concerns of involving the private sector. They can provide support to countries in three main areas, namely, (a) creating a conducive environment in countries, (b) building the capacity of public sector officials to introduce regulatory regimes and make contractual arrangements that are fair to both the private and public sectors and sensitive to social and environmental concerns and (c) promoting the idea of setting up special PPP units in Governments and forming an alliance of these units to share experiences and good practices. Initiatives may be taken to establish a network of special PPP units in Governments in order to facilitate dissemination of information concerning the development of PPPs, public policies and good practices in the region and collaboration between such special units. Although some initiatives in these areas have already been taken by some agencies such as the United Nations Economic and Social Commission for Asia and the Pacific, much still needs to be considered in line with the countries' requirements.

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