

# **Infrastructure in East Asia: the Way Forward**

## **Issues Paper for an ADB-JBIC-World Bank Flagship Study**

### **A. Objectives and Coverage of the Study**

1. A re-assessment of infrastructure provision in East Asia and the Pacific (EAP) is now overdue. Six years after the impact of the Asian financial crisis, action is urgently needed to make effective and sustainable provision of infrastructure services a reality throughout the region. This study aims to provide a sound policy basis for this action, which takes account of different country circumstances. The resulting strategy will ensure a balance of public and private sector approaches, complemented by transparent and effective public policy. It will also respond to a number of emerging challenges and opportunities in the region due to urbanization and decentralization, changing demographics and increased regional integration. The study will culminate in a flagship report to be jointly published by the Asian Development Bank (ADB), the Japan Bank for International Cooperation (JBIC), and the World Bank.

2. The basic objectives of the study are to:

- Highlight the important role that infrastructure can play in reducing poverty and achieving the Millennium Development Goals (MDGs) by supporting economic growth and improving access to services.
- Provide practical guidance to senior policy makers on how to engage in infrastructure service provision and financing in light of recent experience and future challenges.
- Support a process of dialogue and communication on infrastructure issues with decision makers and development partners in the region.
- Inform future strategies and programs of the ADB, JBIC and the World Bank.

3. The proposed coverage of the study is as follows:

- The study will cover all developing (low and middle-income) countries in East Asia and the Pacific. To simplify the analysis, while highlighting the diversity of experience, these countries will be grouped according to common characteristics such as size and income (see Figure 1). Relevant experience will be drawn from all countries in the region and elsewhere in the world.
- The sectoral coverage will focus on so-called economic infrastructure: especially power and piped gas, transport, information and

communications technology, and water and sanitation – in both urban and rural areas. For some aspects of the water supply and power sectors, it may be necessary to look at upstream issues of water resource management or fuel supply. However, the primary focus of the study will be on broad themes rather than specific sectoral issues, and on the delivery of infrastructure services rather than upstream extraction or production.

Figure 1: Country Coverage and Groupings

	<b>Population Size</b>		
	<i>Large</i>	<i>Medium</i>	<i>Small</i>
Middle Income	China Philippines	Malaysia Thailand	Fiji Kiribati Marshall Islands Micronesia Palau Samoa Tonga Vanuatu
Low Income	Indonesia Vietnam	Cambodia Lao PDR Mongolia Myanmar PNG	Solomon Islands Timor Leste

Note: Low-income is US\$745 per capita and below; middle-income is US\$746 per capita to US\$9,205 per capita. Large population is over 70 million; medium population is 1 million to 70 million; and small population is under 1 million.

4. The study will draw on the operational experience and analytical work of all three institutions, as well as other sources. Key references are shown in the attachment. In addition, the World Bank is currently undertaking country studies on infrastructure provision in selected countries (Indonesia, the Philippines and Vietnam), as well as compiling a basic set of statistics on various infrastructure sectors in all countries of the region. A series of regional workshops and country visits is also planned to provide feedback and guidance on the study’s progress. Interested parties are invited to make oral or written submissions to the study team. All of these activities will help define the final shape and content of the flagship report.

## **B. Regional Context for the Study**

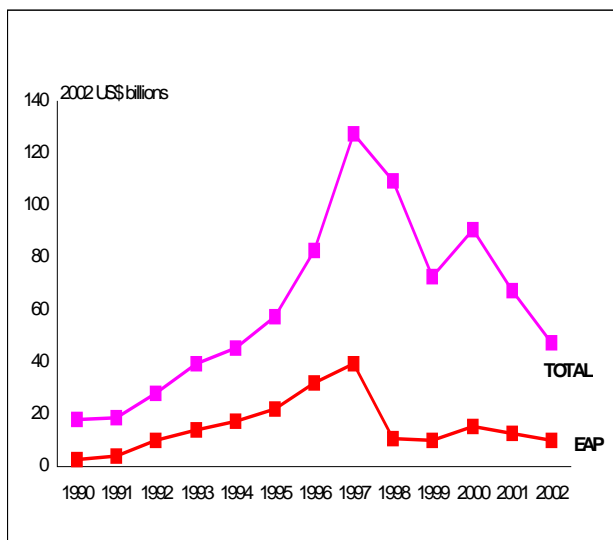
5. Infrastructure has always played a central role in the East Asian development model.<sup>1</sup> In the early stages of industrialization, investments in sites and services, energy supplies and port facilities were vital in getting the East Asian “miracle” off the ground. In more recent years, infrastructure for industry and trade has been complemented by investment in housing, telecommunications and urban amenities that support the huge influx of people into the cities, with the associated demand for a more livable environment and to contain the resource footprint of urban areas. With high-tech industries increasingly dependent on just-in-time delivery, production networking and speedy fulfillment of orders, efficient logistics and IT facilities are now the lifeblood of modern industry and producer services. All of these infrastructure investments have complemented spending on directly productive activities and supported the growth of total factor productivity. They have also provided a source of demand during periods of slow growth. Finally, infrastructure investments have contributed to regional integration, by lowering transport costs between and within countries.

6. However, the seemingly miraculous development record of East Asian countries suffered a severe setback with the financial crisis in 1997. Growth stalled in many countries and weaknesses in fiscal policy, financial systems and governance were exposed. While infrastructure requirements were temporarily suppressed, the crisis raised larger questions about the capacity of both the public and the private sectors to meet future infrastructure needs in a sustainable manner. Budget funds became scarce and many private sector infrastructure projects in the region went sour. Investment in infrastructure projects with private participation in the EAP region fell sharply from a peak of US\$41 billion in 1997 to only US\$12 billion in 1998, and has stayed below US\$20 billion per annum in subsequent years (see Figure 2). Official lending for infrastructure, especially in the power sector, has also declined sharply since the mid-1990s. Annual infrastructure lending in the EAP region by the World Bank, ADB and JBIC fell from over US\$10 billion in the five years before the crisis to less than US\$8 billion in 1998-02 (see Figure 3). This trend reflected country financial conditions, as well as expectations for private financing and concerns about the environmental and social impact of large-scale infrastructure projects.

---

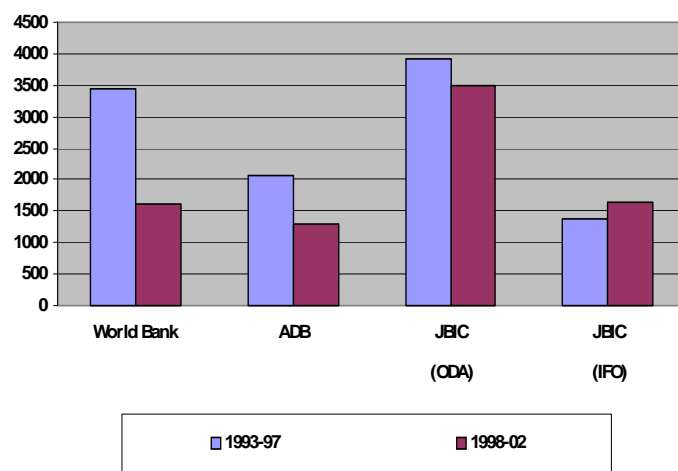
<sup>1</sup> For a historical review of development in East Asia, see Stiglitz and Yusuf, Editors (2001). The role of infrastructure is elaborated in Mody (1997).

**Figure 2: Investment in Projects with Private Participation**



Source: World Bank, PPI Project Database. Data include all commitments (public and private) to invest in projects with private participation.

**Figure 3: Official Lending for Infrastructure Projects in EAP Region (US\$ million per annum)**



Note: Data are for fiscal years ending in March (JBIC), June (World Bank) and December (ADB). Data are provisional and exclude program lending and some infrastructure components in rural and community-based projects.

7. Now, six years on, the region is recovering from the effects of the crisis.<sup>2</sup> Countries like China and Vietnam were little affected in the first place and continue to grow at 7-8% per annum. South Korea, Malaysia and Thailand are also back onto higher growth paths. However, the Philippines and Indonesia are still struggling to overcome weaknesses in public sector governance and improve the private sector investment climate. And many of the smaller low-income countries of East Asia and the Pacific are yet to see the benefits of sustained growth. Within countries there are also growing signs of inequality, as the poor struggle to gain access to the benefits of economic growth and the provision of basic services. This diversity in experience across the region will have to be factored into the study. Each country faces its own challenges and the study will attempt to tailor its conclusions to different country situations. The study will also look at regional aspects of infrastructure, especially in the Mekong region and across the scattered islands of the Pacific.

8. The financial crisis also distracted attention from some longer-term trends that will affect all countries in the region to a greater or lesser extent. Perhaps the most dramatic is urbanization.<sup>3</sup> Over the next 20 years, the urban population in EAP is projected to increase by 500 million -- an increase of 60%. By 2015, more than half the region's population will live in urban areas. While the growth of

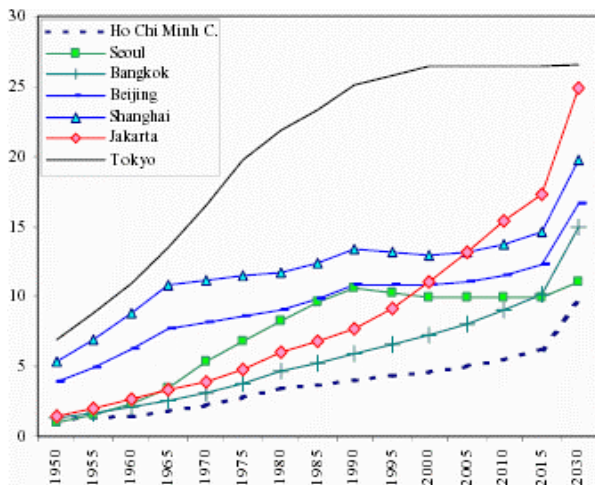
<sup>2</sup> For a discussion of recent development and short-term prospects in the region, see the World Bank (2003d).

<sup>3</sup> For a review of East Asia's urban transformation, see the World Bank (2003a).

“megacities” is dramatic (see Figure 4), the concentration of the urban population varies from country to country. Indeed, most urban dwellers reside in small and medium-sized cities with less than 1 million people. All of these urban areas will face mounting infrastructure pressures, especially on the provision of basic services for the poor. At the same time, countries will have to address infrastructure bottlenecks in rural areas, which reduce income-generating opportunities in agriculture and non-farm activities, and induce the migration of people to the cities to find work.

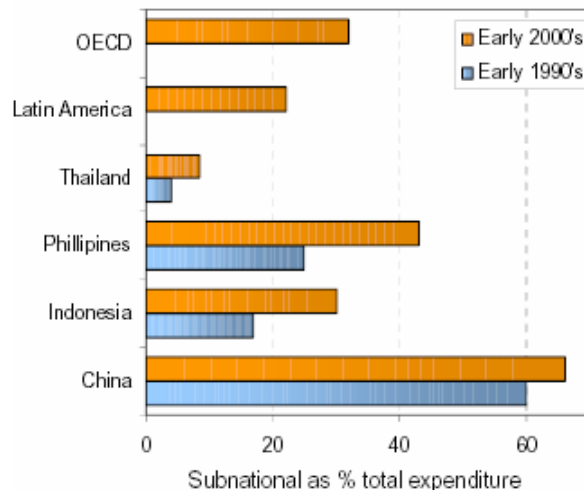
9. Urbanization goes hand in hand with greater decentralization of government administration and fiscal responsibilities. As shown in Figure 5, China is already highly decentralized, with more than 60% of government spending at the sub-national level. The Philippines (40%) and Indonesia (30%) are rapidly moving in this direction. With decentralization, sub-national governments will be expected to take on increased responsibility for infrastructure development and service provision. The challenge will be to ensure that they have the necessary resources and capacity to take on these responsibilities effectively – with appropriate oversight, coordination and support from higher levels of government. A particular challenge will be to ensure effective development of large-scale infrastructure networks (e.g., electricity grids, primary transport connections) which need to cross more than one sub-national area.

**Figure 4: Population of Asian Megacities**



Source: World Bank, World Development Report 2003.

**Figure 5: Decentralization of Public Spending**



Source: World Bank, “East Asia Update: From Cyclical Recovery to Long Run Growth” (EAP Region, October 2003).

10. At the same time as governments are becoming more decentralized, the region as a whole is becoming more integrated.<sup>4</sup> The role of external trade as a dynamo for growth in East Asia is well known. But what is perhaps less well known is that trade between the emerging economies in East Asia has grown faster than their trade with any other market. This reflects the complementarities of production and exports among what are very diverse economies. The recent emergence of China as a major regional supplier and market has reinforced this trend. But economic integration has to be managed carefully so that its benefits can be broadly shared by poorer countries and the poor within countries. This requires *inter alia* attention to the infrastructure bottlenecks that prevent poorer regions and countries from actively competing in regional and global markets.

11. Apart from trade, one of the main ingredients of East Asia's development success has been the region's high levels of savings and investment. Looking forward, demographic changes will result in more people moving into the work force, reducing dependency rates and raising savings rates even higher in most developing countries in the region. The challenge will be to find ways to intermediate these savings into longer-term financing for infrastructure projects. Some of this may come through the budget in the form of higher tax revenues and fiscal space. But the primary mechanism should be through the financial sector. To date, most of the financial sector reforms in the region have focused on restoring confidence in the banking system following the Asian crisis. But it's now time to give more attention to developing non-bank financial institutions, including equity, bond and municipal finance markets.

12. The result of these trends is likely to be a very different pattern of infrastructure requirements, financing sources and service provision in the future. Analyzing all of these developments, identifying key lessons learned, and converting them into practical recommendations for policy makers is undoubtedly a challenging objective. In addition, infrastructure requirements, issues and options will vary greatly across countries and sectors, and the study will have to tailor its recommendations accordingly. Carrying out such a study is therefore an ambitious undertaking. However, recent discussions with policy makers and development partners in the region have clearly indicated that such a study is now overdue. There is also broad agreement on the key themes and issues to be covered by the study. The following list reflects feedback received from the Manila workshop and the Tokyo launch seminar in January 2004, as well as from visits to the Philippines, Singapore, Vietnam, Hong Kong SAR (China) and Indonesia.

---

<sup>4</sup> For a discussion of regional integration issues, see the World Bank (2003b) and Carruthers, Bajpai and Hummels (2003).

### C. Proposed Themes and Issues

13. Given this regional context, the main themes and issues to be covered by the study, along with some of the related topics for background papers, are summarized below.

#### I. The role of infrastructure in reducing poverty through economic growth and access to basic services

14. Main issues:

- Despite East Asia's impressive development record over the past three decades, the region is still home to 200 million people living on less than US\$1 per day and 700 million people living on less than US\$2 per day. There are also large gaps in achieving the MDGs. Close to 500 million people in the region still don't have access to clean water and child mortality is greater than 100 per 1,000 in Cambodia, Lao PDR, Mongolia and Papua New Guinea.
- There is now widespread recognition that infrastructure services play a key role in reducing poverty and achieving the MDGs.<sup>5</sup> For example, recent evidence shows clearly that infrastructure to provide clean water, modern energy and transport access to health facilities is one of the primary determinants of health outcomes.<sup>6</sup> More generally, the opportunities provided by economic growth are essential to increase the incomes of poor families and allow them to access the basic social services they need to improve their lives. However, because of the indirect effects through growth and access to services, and the long time it usually takes for these effects to be realized, infrastructure doesn't always receive the priority it deserves in decisions on development policies and programs.
- The study will pull together the evidence from recent research on the contribution of infrastructure to poverty reduction in the EAP region. Poverty reduction will be broadly defined to include non-income aspects as reflected in the MDGs. The study will also look at examples of success and failure to learn how the poor did or did not benefit from infrastructure projects, and to draw lessons for future policies and investments. Particular attention will be paid to poorer and more remote areas, which may not benefit from general growth without improved access to affordable infrastructure services.

---

<sup>5</sup> See, for example, the ADB (2003), Cook (2003), DFID (2002), GRIPS Development Forum (2003), Prakash (2003), and Willoughby (2001).

<sup>6</sup> See Leipziger, Fay, Wodon and Yepes (2003) and Wagstaff (2002).

15. Background paper:

- **Ia:** Assessment of the contribution of infrastructure to growth, service delivery and poverty reduction in the region.

**II. The appropriate roles of the public and private sectors in infrastructure development and service provision**

16. Main issues:

- Many East Asian countries have relied heavily on the public sector to develop and operate their infrastructure services. While there were expectations in the early and mid-1990s that the private sector would play a larger role,<sup>7</sup> the actual experience has been mixed. Following the Asian crisis (and the global crashes in the telecommunications and electricity sectors), many private investors, especially from Europe and the United States, became reluctant to increase their exposure further in the region. In some cases, this reflected losses associated with past investments. But, more generally, it reflected longer-term concerns about the underlying investment climate in many countries. This is especially true for infrastructure projects, which often involve large upfront costs and long gestation periods. At the same time, there was growing public disillusionment in many countries about the benefits of privatization.<sup>8</sup> This reflected concerns about the transparency of transactions and the affordability of infrastructure services.
- The study will review the experience with private participation in infrastructure – both within the region and elsewhere in the world.<sup>9</sup> It will consider differences between sectors and what sectors can learn from each other. For example, it should be possible to attract private investment into areas such as telecommunications and power generation – provided the regulatory environment is sound. Any subsidies or guarantees provided in those sectors should be very limited and short term. However, in other areas, such as water and sanitation, some form of longer-term public involvement will often be required. The challenge is to find ways to fund public participation in a transparent manner, which minimizes the costs to the government, while ensuring the delivery of affordable services to the poor. The study will look at a range of issues (such as financing, risk

---

<sup>7</sup> See, for example, the World Bank (1994).

<sup>8</sup> This is especially true in Latin America. East Asian countries have generally gone less far than Latin American countries in privatizing the delivery of infrastructure services. Most private investment in recent years has been in upstream, greenfield projects, such as independent power producers, often selling their output to single public utilities. This approach creates its own set of problems, often weakening competitive market pressures, increasing fiscal exposure and making it more difficult to set appropriate tariff levels.

<sup>9</sup> For a review of the experience with private participation, see ADB (1999), Harris (2003), OED, OEG and OEU (2003) and O'Sullivan (2000).

allocation, subsidies, competition, unbundling and sector investment planning) that impact on the scope for effective private participation and on the access, affordability and continuity of infrastructure service provision.

- The study will also draw lessons for the future role of the public sector in supporting infrastructure service provision and financing. In particular, the study will look at different institutional models of policy-setting, infrastructure planning and infrastructure service provision, and analyze which have fared best. This section will examine the institutional challenges of coordinating sector policy across government agencies and of long-term expenditure planning in an era of fiscal consolidation, private participation and decentralization. It will also look at the challenge of regulating infrastructure providers, whether public or private, focusing on the appropriate institutional and contractual arrangements for regulating infrastructure, and on the most effective regulatory rules and methods. Issues such as balancing autonomy and accountability, building regulatory capacity, and ensuring predictability and transparency will be addressed. It will consider how other countries (most notably the United States and Latin American countries) have blended regulation and competition, as well as public and private provision of infrastructure. Throughout this section, particular emphasis will be placed on political economy considerations, including how best to sequence, pace and communicate reform measures.

17. Background papers:

- **IIa:** Private sector perceptions of challenges and opportunities -- based on surveys of: (i) infrastructure users; and (ii) infrastructure investors.
- **IIb:** How have private investor appetites differed across infrastructure sectors and why? To be preceded by sector notes on: (i) telecommunications; and (ii) water and sanitation.
- **IIc:** What can be learnt from the recent challenges faced by power reforms in the region and elsewhere in the world?
- **IId:** Whither planning?

**III. Managing the environmental and social impacts, and governance risks, of infrastructure projects**

18. Main issues:

- Over recent decades, there has been growing awareness that infrastructure development raises complex issues regarding the interaction between man-made structures, the activities they support, and the environment in which they occur – either due to the natural resources on which they draw or to the discharge of waste and other byproducts into surrounding land, air and water systems, generating externalities and thus raising upstream,

downstream and cumulative impact concerns. Some infrastructure projects also involve controversial land acquisition and resettlement issues, and can significantly affect the social context where they take place, raising special concerns in the case of ethnic minorities and indigenous people.

- In response, countries in the EAP region have introduced environmental and social laws, policies and regulations that are implemented by a variety of regional, national and local authorities. There are numerous examples of legally-mandated Environmental Impact Assessments (EIAs) leading to better project design and more sustainable outcomes. However, the capacity to use EIAs and other methods of assessing, monitoring and evaluating environmental and social impacts of infrastructure investments is often weak. More fundamentally, even if agencies responsible for infrastructure are sensitive to environmental and social issues, and willing to address them, it is often the case that the underlying causes lie outside of their control. It is therefore essential to mainstream environmental and social concerns into the policies and programs of all government agencies.
- The study will: (a) examine the linkages between infrastructure, the environment and social issues; (b) identify the key environmental and social concerns that have typically arisen under various types of infrastructure project design and implementation; (c) identify the trends in responses given to the typology of problem situations, and their cost and relative effectiveness; (d) assess the current regulatory and institutional framework for environmental and social impact management in the region; and (e) provide a general framework to address risk and uncertainty associated with environmental and social impacts in infrastructure project design and implementation, indicating approaches that maximize the benefits. These themes will be illustrated through mini-case studies of specific infrastructure projects and programs.
- There has been an increased focus on the governance aspects of infrastructure projects since the East Asia crisis of 1997. In some cases, poor decision making and accountability, as well as corruption, have raised project costs, distorted project design and selection, and reduced the potential benefits of infrastructure projects. Resulting contractual risks have also undermined private investor interest in infrastructure projects. The study will look at recent efforts by countries to address these issues through: (a) broad improvements in governance systems, including judicial reforms, stronger regulatory and accountability mechanisms, and better procurement, contracting and financial management practices; (b) finding ways to ensure contractual transparency and predictability, despite weaknesses in the overall governance environment; and (c) providing greater scope for public participation in infrastructure project selection, design and implementation, especially at the local level (community-based projects).

19. Background papers:

- **IIIa:** Managing the environmental and social implications of infrastructure choices.
- **IIIb:** Improving accountability and eliminating corruption in infrastructure provision – examples of good practices.

**IV. The impact of longer-term structural changes on infrastructure development in the region**

20. Main issues:

- Infrastructure decisions today have to be designed for a very different world tomorrow – with more integrated trade and investment flows, greater urbanization and more decentralized government. Infrastructure and logistical systems will play a major role in determining costs and the ability of countries to compete and realize the benefits of growth. At the same time, infrastructure development in a more decentralized world will pose special challenges for local governments, including issues of resource mobilization, fiscal transfers, capital market development, and coordination across jurisdictions.
- Urbanization is emerging as a key challenge for the region (see para. 8). While urbanization is often associated with economic development and poverty reduction at the macro level, it can also have negative effects on the quality of urban living conditions, especially for the poor, if not managed well. Furthermore, cities now provide over 75% of national GDP in many countries and so if their economies are to stay competitive, governments need to ensure that the challenges of rapid urbanization and the concomitant infrastructure requirements are met. The study will look at: (a) the major factors behind urbanization, including rural-urban migration and conversion of rural areas; (b) policy options to disperse urban growth, including the impact of infrastructure on location choices; (c) the infrastructure needs of local business development and service-oriented cities; (d) ways to manage inter-city competition and coordination; and (e) the role of infrastructure networks between cities.
- Decentralization in East Asia is being implemented at an impressive pace (see para. 9). Several countries in the region are already almost as decentralized as the United States in terms of public spending. This presents special challenges for infrastructure, as sub-national governments (in both urban and rural areas) need to strengthen their management and financial capacity for providing quality infrastructure services. The study will look at: (a) current problems encountered in infrastructure provision at the local level; (b) the role of public/private partnerships and inter-governmental coordination in responding to these problems; and (c) ways

to strengthen the financing mechanisms for infrastructure development by municipal and local governments.

- Regional integration and competitiveness issues are increasingly seen as key priorities for decision makers in East Asia (see para. 10). The study will look at both intra-regional and inter-regional trade issues as well as the “new transport agenda”, focusing on “soft” issues such as logistics, customs and red-tape. Particular attention will be paid to infrastructure bottlenecks that prevent poorer regions and countries from actively competing in regional and global markets. Many of these are country-specific problems that need to be addressed in national strategies. But there will also be a need for regional solutions, especially for isolated and land-locked countries. Therefore, ways to coordinate regional infrastructure, particularly in energy and transport, will also be reviewed. This will draw on ongoing work focusing on development in the Mekong region and the Pacific Islands.

21. Background papers:

- **IVa:** Urbanization and decentralization – what do they mean for future infrastructure requirements, financing and delivery mechanisms?
- **IVb:** Shifting trade patterns – how will they impact infrastructure needs in EAP?
- **IVc:** Crossing the frontier: regional integration through cross-border infrastructure – where’s the potential?

## **V. The economic and financial context for infrastructure development in the region**

22. Main issues:

- Recent estimates suggest that countries in the East Asia and Pacific region will require at least US\$200 billion per annum to meet their infrastructure needs over the remainder of this decade.<sup>10</sup> The study will update these estimates, taking account of the projected macroeconomic context in the countries and the structural shifts noted above. It will consider changes in the infrastructure stock over the past decade, and project requirements for the next 20 years. Resource requirements will be disaggregated by country and sector as well as between investment and maintenance. Special attention will be paid to the time dimension of infrastructure requirements, and how to ensure that bottlenecks don’t arise as growth stays strong or recovers in many countries. The fact that projections of infrastructure needs depend heavily on price levels, and that financing for infrastructure services comes from a variety of sources including small-scale providers and self-provision, will be emphasized.

---

<sup>10</sup> See, for example, Fay and Yepes (2003).

- The study will also discuss the various sources of funding for infrastructure development, including user fees, taxes, private equity, domestic and foreign financial markets, and official loans. Emphasis will be put on the steps that can be taken to facilitate the mobilization of domestic financing, in light of projected demographic trends and savings rates. The potential for local capital market development and municipal financing will be discussed, as will the advantages and disadvantages of local *versus* foreign financing. The study will also look at the implications for public financing and external assistance, in light of projected fiscal constraints and the future role of the public sector. This section will consider: (a) the explicit and implicit fiscal costs of infrastructure provision; (b) the impact of public and private provision on fiscal costs; (c) the case for public subsidies and government guarantees; (d) ways to constrain the fiscal costs and risks in private infrastructure; and (e) designing “meta rules” to shape fiscal policy toward infrastructure.

23. Background papers:

- **Va:** Updated estimates of resource requirements for infrastructure investment and maintenance.
- **Vb:** Fiscal challenges and infrastructure provision – containing deficits, optimizing subsidies, and avoiding huge contingent liabilities.
- **Vc:** Long-term financing for long-term infrastructure: what are the big issues?

24. The final report will pull together the findings of the background papers and other inputs into a consistent and coherent storyline, organized around the main themes identified above. There will be an annex of statistical information on infrastructure access, affordability, quality, efficiency, financial performance and market structure/governance – for major countries and sectors. The main lessons for policy makers will be summarized in a 30-40 page overview. The report will provide a way of thinking through policy options in different country and sector situations, rather than a blueprint for action. It will also identify opportunities for effective financing from development agencies, including potential areas for collaborative action (such as the power sector in Indonesia). However, specific operational responses will be the responsibility of each institution.

## D. Organization of the Study

### Team Composition and Coordination

25. Overall leadership of the task team is provided by Mark Baird (consultant, markbaird@hotmail.com). The task team draws its members from JBIC, ADB, and the World Bank. The respective task managers are:

- Yasuo Fujita, Senior Economist and Director, Development Policy Research Division, JBIC Institute, JBIC (y-fujita@jbic.go.jp);
- Rita Nangia, Director, Finance and Infrastructure Division, Regional Sustainable Development Department, ADB (ritanangia@adb.org); and
- Jonathan Walters, Lead Economist, Infrastructure Unit, East Asia and Pacific Region, World Bank (jwalters@worldbank.org).

26. Contributors to the study will be managed primarily by the task manager responsible for the applicable funding source. This will include the drafting of terms of reference, the contracting process, supervision, and editing. However, all terms of reference, proposed selection of consultants and drafts of papers will be reviewed by the whole core team prior to finalization.

### External Consultation

27. The study will be discussed as an integral component of the country dialogues conducted by the three agencies at a country, sectoral and project level. There will also be a series of regional workshops designed to solicit the views of technical experts and stakeholders, and to disseminate the issues broadly. Wide press coverage will also be employed to solicit stakeholder views. Background papers and workshop proceedings will be posted on the Country Analytic Work website ([www.countryanalyticwork.net](http://www.countryanalyticwork.net)).

### Timetable

28. The study will be undertaken from September 2003 to January 2005. The objective is to provide maximum opportunities for feedback and dissemination of findings throughout the study process. The final report is an important product of this process, but not the only vehicle for fostering debate and action on infrastructure issues in the region.

29. Activities already completed are as follows:

- **September 2003:** Approval of PHRD and Japan Special Fund contributions to the study. Core team meets in Tokyo and agrees on broad scope of study work program. Joint press release is issued.

- **November 2003:** Core team meets in Manila, and agrees on agenda and participants for planning workshop. Draft issues paper is reviewed, including list of background papers. Core team holds discussions with country counterparts in the Philippines and Vietnam.
- **December 2003:** Issues paper is finalized. Core team holds discussions with country counterparts in Indonesia. PPIAF grant is approved.
- **January 2004:** Planning workshop is held in Manila, with broad regional representation from government, private sector and civil society. This is followed by formal launch seminar in Tokyo.

30. Planned activities over the remainder of the year are as follows:

- **February 2004:** Issues paper and terms of reference for all background papers are finalized.
- **May 2004:** First set of background papers is completed. Core team will have extended country discussions to 2-3 other countries which represent the range of infrastructure needs and issues in the region.
- **June 2004:** Second workshop is held to review first set of background papers. Remaining background papers are completed.
- **August 2004:** Remaining background papers are reviewed.
- **October 2004:** Draft report is reviewed by the three institutions.
- **December 2004:** Final workshop to review draft report.
- **January 2005:** Report is completed and released.

### **Dissemination**

31. The report will be published in January 2005 and publicized through a regional book tour. This book should reach a wide range of public policymakers, development partner agencies, academics, NGOs, and the private sector at both local and national levels in the region. Other forms of dissemination will also be considered. For example, a television documentary film may be produced and targeted toward local constituencies with the aim of promoting a better understanding of the findings and of the available options for effective infrastructure provision and financing. The study findings can also be used as the basis for course development for capacity building on infrastructure provision (using the Global Distance Learning Network and other communications vehicles).

32. It is hoped that the study will identify further opportunities for collaboration and cooperation between the ADB, JBIC and the World Bank, as well as with other development partners in the region. However, each institution will manage its own process to follow-up the findings of the study and to integrate them into country strategies, policy dialogue and project preparation. These activities will be funded and implemented separately from the study activity.

**February 18, 2004**

## References

Asian Development Bank (1999), "Private Sector Participation and Infrastructure Investment in Asia: The Impact of the Financial Crisis." A background paper for the Sixth APEC Finance Ministers Meeting, May 15-16, 1999.

Asian Development Bank (2003), "Assessing the Impact of Transport and Energy Infrastructure on Poverty Reduction." Draft Final Report, October 15, 2003.

Carruthers, Robin, Jitendra Bajpai and David Hummels (2003), "Trade and Logistics in East Asia: A Development Agenda." World Bank, EASTR Working Paper No. 3, June 2003.

Cook, Cynthia (2003), "The Role of Infrastructure and Infrastructure Services in Poverty Reduction." A background paper for the ADB Poverty Reduction Strategy Review.

Dubash, Navroz, Editor (2002), *Power Politics: Equity and Environment in Electricity Reform*. World Resources Institute, June 2002.

DFID (2002), "Making Connections: Infrastructure for Poverty Reduction." January 21, 2002.

Fay, Marianne and Tito Yepes (2003), "Investing in Infrastructure: What is Needed from 2000 to 2010?" World Bank Policy Research Working Paper, July 2003.

GRIPS Development Forum (2003), "Linking Economic Growth and Poverty Reduction: Large-Scale Infrastructure in the Context of Vietnam's CPRGS". November 2003.

Harris, Clive (2003), "Private Participation in Infrastructure in Developing Countries: Trends, Impacts and Policy Lessons." World Bank Working Paper No. 5.

Leipzig, Danny, Marianne Fay, Quentin Wodon and Tito Yepes (2003), "Achieving the Millennium Development Goals: A Multi-Sectoral Approach Revisited." Abstract, May 17, 2003.

Mody, Ashok, Editor (1997), "Infrastructure Strategies in East Asia: The Untold Story." World Bank, EDI Learning Resources Series.

OED, OEG and OEU (2003), "Power for Development: A Review of the World Bank Group's Experience with Private Participation in the Electricity Sector." Conference Edition, presented in Manila Group Evaluation Workshop, November 5-6, 2003.

O'Sullivan, Sean (2000), "Best Practices for Promoting Private Sector Investment in Infrastructure." Excerpt from the ADB publication entitled *Developing Best Practices for Promoting Private Sector Development in Infrastructure*, April 2000.

Prakash, Brahm (2003), "Are Infrastructure Investments Poverty Reducing?" A revised version of the paper presented at the ADB Institute Conference on "Infrastructure and Poverty Reduction: What do We Know?" held on June 12-13, 2003.

Stiglitz, Joseph and Shahid Yusuf, Editors (2001), *Rethinking the East Asian Miracle*. World Bank and Oxford University Press.

Wagstaff, Adam (2002), "Intersectoral Synergies and Health MDGs: Preliminary Cross-Country Findings, Corroboration and Policy Simulations." Paper prepared for the Development Committee paper on Accelerating Progress Towards the MDGs, First Draft, December 6, 2002.

Willoughby, Christopher (2001), "Infrastructure and Pro-Poor Growth." DFID background paper, December 2001.

World Bank (1994), *World Development Report 1994: Infrastructure for Development*. Oxford University Press.

World Bank (2003a), "East Asia Update: Looking Beyond Short-term Shocks." East Asia and Pacific Region, April 2003.

World Bank (2003b), *East Asia Integrates: A Trade Policy for Shared Growth*. East Asia and Pacific Region, June 2003.

World Bank (2003c), "Infrastructure Action Plan." Paper presented at an Informal Board Meeting on July 8, 2003.

World Bank (2003d), "East Asia Update: From Cyclical Recovery to Long Run Growth." East Asia and Pacific Region, October 2003.

World Bank (2003e), "Averting an Infrastructure Crisis: A Framework for Policy and Action." Draft Report for Indonesia, December 2003.