ADVANCE EDITION

CONNECTING EAST ASIA

A NEW FRAMEWORK FOR **INFRASTRUCTURE**

ASIAN DEVELOPMENT BANK
JAPAN BANK FOR INTERNATIONAL COOPERATION
THE WORLD BANK

Connecting East Asia: A New Framework for Infrastructure

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Countries Covered by This Study

This study focuses on the developing countries in East Asia and the Pacific Region, which are members of the Asian Development Bank and the World Bank. These countries include Cambodia, China, Fiji, Indonesia, Kiribati, the Lao People's Democratic Republic (Lao PDR), Malaysia, Marshall Islands, the Federated States of Micronesia, Mongolia, Myanmar, Palau, Papua New Guinea, the Philippines, Samoa, the Solomon Islands, Thailand, Timor-Leste, Tonga, Vanuatu, and Vietnam.

Developing countries are low- and middle-income countries as defined in the World Bank, *World Development Indicators,* 2004. The findings of this study are also relevant to other developing countries within the region and elsewhere in the world.

This publication follows the World Bank practice of reference to countries. In the Asian Development Bank, Hong Kong (China) and Taiwan (China) are recognized as Hong Kong, China and Taipei,China, respectively.

Foreword

Infrastructure has always played a central role in the East Asian development model: to promote economic growth, to share the benefits of growth with poorer groups and communities, and to connect countries within the region and with the rest of the world. There is little doubt that infrastructure development—by both the public and private sectors—has contributed to the region's enviable record on growth and poverty reduction.

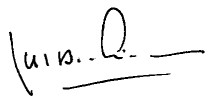
At the same time, questions and concerns have often been raised about the impact of infrastructure development on the environment and local communities, about waste through corruption in public spending and private contracts, and about the appropriate roles of the public and private sectors in infrastructure financing, ownership, and management. While infrastructure can be a force for good, we also have to make sure it is done well.

These questions are the motivation for this joint study by the Asian Development Bank, the Japan Bank for International Cooperation, and the World Bank. The report is organized around four main themes: inclusive development, coordination, and accountability and risk management. It is aimed at senior policy makers and development practitioners who have to look at infrastructure in the context of countrywide policies and programs. It does not provide detailed recommendations by country and sector. But it does provide a new way of thinking about infrastructure issues, which is relevant to all countries in the region.

These three agencies support infrastructure development through project financing and guarantees, as well as by assisting governments to put in place policies to improve public sector performance and to attract private investment. Therefore, this study is also relevant to our own operations. We look closely at the implications for our technical assistance, capacity building, financing, and guarantee activities. Each agency will follow its own operational strategy in each country. We hope this new framework will enable us to take a more coherent and consistent approach. We will also look for more opportunities to work together—as experienced recently in Indonesia.

The recent Indian Ocean tsunami took many lives and devastated communities in its path. In Indonesia alone, the damages and losses are estimated at US$4.5 billion, of which about 20 percent would be required to rebuild infrastructure. This report is not about the tsunami. But many of the policy lessons—about coordination, community involvement, and accountability, for example—are also relevant to infrastructure reconstruction. Similarly, in the design of new infrastructure projects, we must take into account their vulnerability to natural disasters, to reduce the risk of future damage.

We offer this report as a contribution to the ongoing debates about the role of infrastructure in promoting growth and reducing poverty. We realize from our own consultations that policy makers in the region do not have to be convinced about the importance of infrastructure. They are keen, however, to learn from the experiences of other countries about how to better manage infrastructure. We hope you will find that this report provides a refreshing and provocative look at familiar issues—and sheds new light on the way forward.



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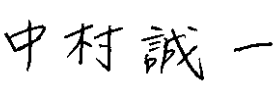

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Abbreviations and Acronyms

ADB	Asian Development Bank
APEC	Asia-Pacific Economic Cooperation
ARBAC	Bucharest Agency for Water and Sewerage Regulation
ASEAN	Association of Southeast Asian Nations
BAPPENAS	Badan Perencanaan Pembangunan Nasional
BOI	Board of Investment
BOT	build-operate-transfer
BRT	bus rapid transit
CALA	Cavite-Laguna Provinces
CDD	community-driven development
CoC	cost of capital
CoE	cost of equity
CPC	Communist Party of China
CPRGS	comprehensive poverty reduction and growth strategy
DAT	Department of Air Transportation
DEL	direct exchange line
DfID	Department for International Development
EAP	East Asia and Pacific
ECTEL	Eastern Caribbean Telecommunications Authority
EdL	Electricité du Laos
EDI	electronic data interchange
EGAT	Electricity Generating Authority of Thailand
EIA	environmental impact assessment
EKUIN	Coordinating Ministry for the Economy and Industry
EPA	extraordinary price adjustment
ERR	economic rate of return
ESB	Eastern Seaboard
FDI	foreign direct investment
GDP	gross domestic product
GMS	Greater Mekong Subregion
GNI	gross national income
GVRD	Greater Vancouver Regional District
HIPC	heavily indebted poor countries
ICD	inland container terminal

ICT	information and communications technology
IPP	independent power producer
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
JETRO	Japan External Trade Organization
KDP	Kecamatan Development Project
LAC	Latin America and the Caribbean (developing countries only)
LRT	light rail transit
MDGs	Millennium Development Goals
MEA	Metropolitan Electricity Authority
MIME	Ministry of Industry, Mines and Energy
MoF	Ministry of Finance
MoT	Ministry of Transport
MPI	Ministry of Planning and Investment
MRT	mass rapid transit
MWSS	Metropolitan Water Supply and Sewerage System
MWCI	Manila Water Company, Inc.
MWSI	Manual Water Services, Inc.
NDRC	National Development and Reform Commission
NEDA	National Economic and Development Authority
NESDB	National Economic and Social Development Board
NGO	nongovernmental organization
NPC	National Power Corporation
NRB	National Roads Board
NRW	nonrevenue water
NT2	Nam Theun 2
OBA	output-based aid
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
PASO	Pacific Aviation Safety Office
PERPAMSI	Indonesian Water Supply Association
PDAM	Perusahaan Daerah Air Minum (Local Water Supply Enterprise)
PLDT	Philippine Long Distance Telephone Company
PLN	Indonesia State Electricity Utility
PPA	power purchase agreement
PPI	private participation in infrastructure

PPIAF	Public-Private Infrastructure Advisory Facility
PPP	public private partnerships
PPWSA	Phnom Penh Water Supply Authority
PSC	public sector comparator
PSTN	public switched telephone network
ROCKS	Road Cost Knowledge System
SAR	South Asia region
SEA	strategic environmental assessment
SEZ	special economic zones
SOE	state-owned enterprise
SPUG	Small Power Utilities Group
TEU	twenty foot equivalent units
USAID	U.S. Agency for International Development
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
VoIP	voice over Internet protocol
WSS	water supply and sanitation
WUA	Water Users Association

Units of Measure

gw	gigawatt
km	kilometer
kWh	kilowatt hours
mW	megawatt
VA	volt-amp

Note: All dollar figures are in U.S. dollars, unless otherwise noted.