



# THE ASIAN DEVELOPMENT BANK AND DAMS

By Arturo Nuera

NGO Forum on ADB Guidebook Series  
November 2005

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Writer:

Arturo Nuera

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## ABBREVIATIONS

ADB	-	Asian Development Bank
ADF	-	Asian Development Fund
AfDB	-	African Development Bank
BPKP	-	Bholisat Phattana Khed Phoudoi; also known as Mountain Region Development Company
CDM	-	Clean Development Mechanism of Kyoto Protocol
CO <sub>2</sub>	-	Carbon Dioxide
DDF	-	Dams and Development Forum
DDP	-	Dams and Development Project
DMC	-	Developing Member Countries
DSM	-	Demand-side Management
EdL	-	Electrisite du Laos
EGAT	-	Electricity Generating Authority of Thailand
EIA	-	Environment Impact Assessment
EMD	-	Environmental Management Division
EPs	-	Equator Principles
ER	-	Emissions reduction
FIVAS	-	Foreningen for Internasjonale Vannstudier (Association for International Water and Forest Studies)
FPIC	-	Free, Prior and Informed Consent
GHG	-	Greenhouse Gases
GMS	-	Greater Mekong Subregion
GW	-	gigawatt
HP	-	Hydropower
ICOLD	-	International Commission on Large Dams
IFC	-	International Finance Corporation
IFI	-	International Financial Institutions
IHA	-	International Hydropower Association
IPDP	-	Indigenous Peoples Development Plan
IRN	-	International Rivers Network
ISA	-	Initial Social Assessment
IUCN	-	International Union for the Conservation of Nature and Natural Resources
JBIC	-	Japan Bank for International Cooperation
JV	-	Joint Venture
KGA	-	Khali Gandaki A
km	-	kilometers
kV	-	kilovolt
kWh	-	kilowatt hours
Lao PDR	-	Lao People's Democratic Republic
m	-	meters
MCP	-	Mitigation of Compensation Program

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## ABBREVIATIONS

MDB	-	Multilateral Development Bank
MW	-	megawatt
MWh	-	megawatt-hours
NBCA	-	National Biodiversity Conservation Area
NEA	-	Nepal Electric Authority
NGO	-	Non-Government Organizations
NT2	-	Nam Theun 2 Hydropower Project
NTPC	-	Nam Theun 2 Power Company Limited
OCR	-	Ordinary Capital Resources
OECF	-	Overseas Economic Cooperation Fund
PAFs	-	Project Affected Families
PKK NP	-	Phou Khao Khouay National Park
PKK Park	-	Phou Khao Khouay Conservation Area
PRC	-	People's Republic of China
PV	-	Photovoltaics
RETA	-	Regional Technical Assistance
SPAFs	-	Seriously Project Affected Families
TA	-	Technical Assistance
THHC	-	Theun-Hinboun Hydropower Company
THPC	-	Theun-Hinboun Power Company Ltd.
TVA	-	Tennessee Valley Authority
TWh	-	Terrawatt hour
UNEP	-	United Nations Environment Program
USA	-	United States of America
WAFED	-	Water and Energy User's Federation - Nepal
WB	-	World Bank
WCD	-	World Commission on Dams
Ws	-	watt second
WS & I	-	Water Supply & Irrigation
WSS	-	Water Supply & Sanitation
WWF	-	World Wide Fund

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Finally, this guidebook is dedicated to the people of Cordillera who successfully prevented the building of dams along the Chico river.

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## PREFACE

**D**ams are among the oldest landmarks symbolizing human's triumph over nature. Dams display how human beings can subjugate and tame rapid and furious rivers. Dams are considered engineering marvels—block and impound water stream to irrigate arid lands for agriculture, supply population's drinking needs and generate electricity for industries. But, dams destroy riverine ecosystems, alter hydrological cycles and physically and economically displace people. Hence, the quest for alternatives to dams continues to be a contentious issue.

This guidebook shall serve as a shuttle to readers from basic understanding about dams, its different purposes, its contribution to development, its impacts to the environment and people.

Three cases of ADB-funded dams are presented to best illustrate and describe these impacts. However, the heart of this guidebook are the World Commission on Dams (WCD) findings and its recommended decision-making framework for future dam-building as an alternative to “balance-sheet” approach to dam-building. Equally important is the ADB's role in dam-building and the Bank's response to WCD's recommended framework.

To complete the journey, the later part of this guidebook enumerates options and alternatives from dams.



Arturo Nuera  
Research and Publications Officer  
NGO Forum on ADB

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## FOREWORD

Jawaharlal Nehru, India's first prime minister, called large dams the "*temples of modern India*". Angana Chatterji says "*Dams are not the temples of India. They are her burial grounds.*" According to the World Dam Commission these large dams uprooted 40-80 million people, while 60% of the world's rivers have been affected by dams and diversions.

Large dams emerged as one of the most significant and visible tools for the management of water resources. The more than 45,000 large dams around the world have played an important role in helping communities and economies. However, World Dam Commission found that, while the benefits, which include food security, local employment and skills development, rural electrification and the expansion of physical and social infrastructure such as roads and schools, are believed sufficient to justify the enormous investments made (total investment in large dams worldwide is estimated at more than \$2 trillion), the debate over the displacement of people, damage to environment and the question of its long-term success is highly significant.

Asia has the most number of large dams (31,340) and World Bank is the major player in the dam business in Asia. However, ADB, being the regional financing institution in the Asian region, also made a very significant role in the dam-building industry. Since 1970, ADB has approved a total of 86 water-sector loans with dam components that include 29 large dams with 4,386 USD million investments. However, ADB's decision-making process is unacceptable to the local communities.

As a response to a letter of the WCD Chairperson, ADB President Mr. Tadao Chino said that "*ADB will re-examine its own procedures, including our environment and social development policies, and determine the extent to which the report's recommendations may necessitate changed on these procedures.*" However, ADB resumed its dam business in 2005 by approving the US\$ 120-million loan to the controversial Nam Theun Dam project in Laos after changing its water policy.

In this context, NGO FORUM on ADB saw the need to revisit the history of dam building in Asia and the involvement of the ADB, thus, this guidebook.

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We hope this guidebook will assist ADB and the member-governments to reconsider their involvement in the dam business, and think of alternative sustainable ways to achieve the targets. Also, we hope this guidebook will assist the anti-dam activists, community groups and the civil society involved in the monitoring of ADB-funded dam-building projects to prevent social and environmental destructions caused by dam-building.

Finally, I thank Mr. Arturo Nuera, the author of this guidebook for all the hardwork.

A handwritten signature in black ink on a light blue background. The signature is cursive and appears to read 'Hemantha Withanage'.

Hemantha Withanage  
Executive Director  
NGO Forum on ADB