adb's involvement in the greater mekong subregion

introduction

1. The Asian Development Bank

The Asian Development Bank (ADB) is a regional multilateral development bank (MDB) established in 1966. The Bank's mandate is to help its developing member countries (DMC's) in reducing poverty and improving their living conditions and the quality of life through loans, technical assistance, policy dialogues, grants, guarantees and equity investments. In 2003, the ADB's total lending volume was US$6.1 billion: technical assistance, which is used for preparing and implementing projects, supporting advisory activities, and undertaking regional activities, amounted to US$176.5 million; and grants totaled US$483.5 million.

The ADB has been promoting regional and subregional cooperation since it was established in 1966, and the bank has sponsored the building of regional cooperation mechanisms in South Asia, Southeast Asia and Central Asia.[1]

2. The Greater Mekong Subregion (GMS) countries

The Greater Mekong Subregion refers to five countries (Burma, Laos, Thailand, Cambodia and Vietnam) and the Yunnan Province of China where the Mekong River[2] flows from its source in Qinghai Province of China, near the snow-fed plateau of Tibet border, all the way down to South China Sea. From Qinghai Province, the Mekong River crosses Yunnan Province (China), and forms the border between Burma and Laos and most of the border between Laos and Thailand. It then flows across Cambodia and Southern Vietnam into a rich delta before emptying into the South China Sea.

2.1 The Mekong River is the longest river in Southeast Asia (12th longest in the world) about 4,200 km long (2,610 m). The Mekong River provides food, water, transport and economic sustenance to more than 50 million people lives in the basin. It supports a unique and rich ecosystem. The Mekong freshwater system is the third most diverse in the world, with more than 1,200 fish species, many of which are endemic to specific tributaries of the Mekong.

2.2 Lands and natural wealth. The combined lands of the GMS countries are about 2.3 million square kilometers. It is an area of vast environmental, social, cultural and economic wealth and diversity. The natural wealth of this region (rich agricultural base, water, fisheries, timber, forest products and energy in the form of hydropower and coal and petroleum reserves, and medicinal plants to gemstones and minerals) provides the strong base for diverse domestic and local economies.

2.3 Population. There are more than 250 million people who inhabit the GMS, and about 80 percent of the population depends on agriculture (farming and fisheries) as their main source of livelihood, much of it at the subsistence level.

2.4 Ethnic groupings. There are 11 major ethnic groupings in the GMS countries divided into two major groups, one are the so-called majority peoples and the other one are considered the highland peoples. **Table 2** shows major ethnic groupings in GMS.

Table 1: Basic Information of GMS Countries

	Yunnan Province (PRC)	Burma	Thailand	Laos	Cambodia	Vietnam
Area	1,115,000 sq km (about 430,400 sq mi);	676,552 sq km (261,218 sq mi).	513,115 sq km (198,115 sq mi)	236,800 sq km (91,400 sq mi)	181,035 sq km (69,898 sq mi)	331,690 sq km (128,066 sq mi)
Population	42 million (ADB 2002 estimate)	47,305,319 (1998 estimate)	60,037,366 (1998 estimate)	5,260,842 (1998 estimate)	11,339,562 (1998 estimate)	76,236,259 (1998 estimate)
Urban/Rural Breakdown		27% Urban 73% Rural (1997 estimate)	21% Urban 79% Rural (1997 estimate)	24% Urban 76% Rural (1997 estimate)	20% Urban 80% Rural (Estimate)	20% Urban 80% Rural (1997 estimate)

Note: (1) 1998 estimate, except Yunnan (2000 estimate)
Sources: East Asia updates and regional overviews produced by World Bank (WB 2000a). Global poverty monitoring website of World Bank (WB 2001), and Asian Development Bank (ADB). http://www.thewaterpage.com

3. Poverty situation in the GMS Countries

The ADB estimates that poverty incidence (those living below US$1 a day) in the four Mekong countries (Cambodia, Laos, Burma, and Vietnam) remains high. The Mekong River Commission estimated that "nearly 40 per cent of the popu-

Table 2: Major Ethnic Groupings in GMS						
Major Groups	**Cambodia**	**Yunnan (PRC)**	**Laos**	**Burma**	**Thailand**	**Vietnam**
National Majority Peoples						
Khmer	6,467,000					
Han		24,692,000				
Lao			3,000,000			
Burman				21,533,000		
Thai					59,000,000	
Kinh						65,051,000
Highland Peoples						
Tibeto-Burman		7,468,884	159,500	9,692,008	620,800	32,432
Sino Thai		2,059,800	674,085	3,362,400	758,000	5,099,997
Hmong-Mien		1,233,100	260,000	10,000	155,000	1,079,700
Mon-Khmer	115,961	1,280,700	854,449	2,380,100	1,577,857	2,880,395
Austronesian	255,000			7,000	3,115,500	590,000
Subtotal	370,961	12,042,484	1,948,014	15,451,508	6,227,157	9,682,524
Other		542,100			1,423,000	
Ethnic Population Estimate	**6,837,961**	**37,213,584**	**4,948,014**	**36,984,014**	**66,650,157**	**74,733,524**

PRC – People's Republic of China.
Note: The enumeration of population by major ethnic groupings is not accurate or up to date. As a result, in all countries except Thailand, the ethnic population estimate is less than the estimate for total population. In Thailand, the ethnic population estimate seems to indicate that some people have been counted as both an ethnic minority and Thai.
Source: Asian Development Bank quoting Grimes, Barbara F., and Joseph E. Grimes (eds). 2003. Ethnologues: Languages of the Worlds.

lations of Cambodia, Laos and Vietnam live below the poverty line (in Thailand, the proportion is 16 percent)[3]."

Table 3 indicates the percentage of GMS population living on less than US$1 day.

Table 4 shows the gap between urban and rural poverty in the GMS countries. Poverty incidence in the GMS countries is a prevalent phenomenon especially in the rural areas.

Table 3 Poverty in the Mekong Region: *% of GMS population living on less than US$ 1 per day*		
Country	**1990**	**2000**
Burma	*n.a*	*n.a.*
Cambodia	48.3	34.0
China	31.3	16.5
Laos	53.0	31.5
Thailand	12.5	3.5
Vietnam	50.8	9.1

Sources: East Asia updates and regional overviews produced by World Bank (WB 2000a). Global poverty monitoring website of World Bank (WB 2001).

Table 4 Poverty in the GMS: national poverty and inequality indicators *Poverty (headcount) % of population Inequality*					
Country	**Total**	**Urban**	**Rural**	**Income ratio** *d*	**Gini** *e*
Cambodia	(99) a 35.9	(99) 25.2 *b*	(99) 40.0	(99) 4.7	(99) 0.2
Yunnan (China)	(99) 35.9	*n.a.*	*n.a.*	*n.a.*	*n.a.*
Laos	(97-98) 38.6	(97-98) 26.9	(97-98) 41.0	(97-98) 5.7	(97-98) 0.36
Burma	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*
Thailand	(2001) 13.0	(2001) 5.5	(2001) 16.6	(2001) 14.9	(2001) 0.533
Vietnam	(98) 37.0 *c*	(98) 9.0	(98) 45.0	(98) 5.6	(98) 0.35

Sources: Cambodia, China, Lao PDR, Vietnam data from Asian Development Bank Key Indicators (ADB 2001a). Yunnan data from Asian Development Bank's Greater Mekong Subregion website. Thailand data from National Economic and Social Development Board (Chakramon Phasukavanich 2002).

Notes: a Year of measurement in parentheses. b Cambodian urban poverty figure excludes Phnom Penh where poverty incidence in 1999 was 9%. c Vietnam headcount poverty figure based on the expenditure poverty line using results of the Vietnam Living Standards Survey (VLSS), details of which are discussed elsewhere in this report. d Income ratio refers to highest earning 20% of the population divided by the lowest earning 20%. e The Gini coefficient has a possible range from 0 to 1. It is a measure of inequality in income distribution in a population. 0 equates to perfectly equal. 1 would equate to perfectly inequal.

4. Characteristics of the poor in the GMS

According to the ADB most of the poor in the Mekong Region share some common characteristics.

1. They are mostly concentrated in rural areas and are usually engaged in agriculture.
2. Household heads are mostly illiterate or have very little education.
3. Households have a high proportion of children.
4. They are poor but not starving as they can rely on the relatively abundant natural resources from the wild. However, this dependence is becoming increasingly unsustainable (ADB 2001b, 2001c) due to natural resource degradation, especially harvests from forests and rivers (Mingsarn Kaosa-ard et al. 2000).

the gms program (1992-2002)

When the ADB entered into the picture in 1992, the Bank initiated an ambitious master plan for the Mekong region: the **GMS Economic Cooperation Program** (also known as the GMS Program). The GMS Program is an ADB-supported comprehensive program of economic cooperation among the countries of the Greater Mekong Subregion.

1. The goal of the GMS Program is to promote economic and social development by strengthening economic linkages. Specifically, the GMS Program seeks to:

1. Realize and enhance development opportunities,
2. Encourage trade and investment among GMS countries,
3. Resolve or mitigate cross-border problems, and
4. Meet common resource and policy needs.

The ADB, the GMS governments and the co-financiers are investing in the 8 sectors covered under the GMS Program, such as:

1. Energy
2. Environment and natural resources management
3. Human resource development
4. Investment
5. Tourism
6. Telecommunications
7. Transport
8. Trade

Table 5.1: ADB-Assisted Loan Projects to GMS, as of 31 December 2002				
	TOTAL PROJECT COST *(US$ million)*	FINANCING		
		ADB	Government	Co-financing
1. National Projects with Subregional Dimensions (8)	1,864.7	655.0	907.2	302.5
2. Purely Subregional Projects (7)	320.6	232.0	88.6	
TOTAL (15 Projects)	**2,185.3**	**887.0**	**995.8**	**302.5**
Source: Asian Development Bank				

Since 1992, the ADB has been enthusiastically promoting the development of the GMS. The ADB initiated meetings, dialogues and conferences to foster co-operation among GMS countries and laying down the foundation of economic integration. The ADB became a key player in the push to build dams, roads, railways and other infrastructure in the GMS as key ingredients in attaining the objective.

2. ADB-Assisted Loans and Technical Assistance

There are two types of loans provided to GMS countries. One refers to projects with a subregional dimension (for GMS cooperation and integration), and the other one refers to specific projects.

Tables 5.1 and 5.2 show the ADB-assisted projects with subregional dimensions. These tables show that from 1992 – 2002, the ADB provided 15 project loans to GMS amounting to US$887.0 million and 63 technical assistance amounting to US$42.411 million.

Table 5.2: ADB-Assisted Loan Projects to GMS, as of 31 December 2002					
Projects	TOTAL PROJECT COST *(US$ 000)*	FINANCING			
		ADB		Government	Co-financing
		TASF	JSF		
1. Core Projects	11,958.0	2,770.0	7,600.0	670.0	918.0
2. Feasibility Study/Project Preparation	21,723.5	1,510.0	14,148.0	2,295.5	3,770.0
3. Advisory TA	32,069.0	4,878.0	11,505.0	5,459.0	10,227.0
TOTAL (63 TAs)	**65,750.5**	**9,158.0**	**33,253.0**	**8,424.5**	**14,915.0**
Source: Asian Development Bank					

Table 6: Breakdown of cumulative ADB lending to 5 GMS countries, as of 31 December 2003 (in US$ million)						
	Cambodia	Myanmar	Lao PDR	Thailand	Vietnam	Total
Agriculture and Natural Resources	176.9	316.1	153.8	709.1	897.9	2,253.8
Transport and Communications	173.0	42.5	None	1,214.5	601.2	2,031.2
Social Infrastructure	164.3	99.1	253.3	758.7	752.4	2,027.8
Multisector	122.7	None	20.0	500.0	None	642.7
Energy	92.8	31.8	244.4	1,672.3	276.3	2,317.6
Others	25.6	None	10.9	None	53.5	90.0
Finance	20.0	20.0	69.0	494.5	147.0	750.5
Industry & Non-fuel Minerals	None	21.4	None	39.0	130.0	190.4
Total	**775.2**	**530.9**	**1,085.4**	**5,388.1**	**2,858.3**	**10,637.9**
Source: Asian Development Bank						

There are 3 types of technical assistance the ADB extended to GMS, the Core Projects (9 projects), the Feasibility Study/Project Preparation (22 projects), and the Advisory TA (32 projects).

3. Cumulative lending to each GMS country.

The ADB's total assistance to loans of Purely National Dimension (country specific loans) is US$10.637 billion, as of 31 December 2003. The ADB together with cofinanciers and the GMS governments has provided US$79 million in technical assistance for project preparation and for studies to promote effectiveness.

Table 6 shows the cumulative the ADB extended to each GMS country.

the 10-year gms strategic framework (2004-2014)

Built from what the ADB claimed as its success on the 10-year GMS Program, the Bank put forward a new 10-year strategic plan, entitled, "Building on Success: A Strategic Framework for the Next Ten Years of the Greater Mekong Subregion Economic Cooperation Program" (or the 10-Year GMS Strategic Framework).

The GMS Strategic Framework articulates and translated the vision for Mekong subregion that is more integrated, prosperous and equitable. Still, this new strategic plan is anchored on ADB's overarching objective on poverty reduction.

GMS Strategic Framework identified five strategic thrusts:

1. Strengthen infrastructure linkages with multi-sectoral approach;
2. Facilitate cross-border trade and investment;
3. Enhance private sector participation and improve its competitiveness;
4. Develop human resources and skills competencies; and
5. Protect the environment and promote the sustainable use of shared natural resources.

To operationalize the GMS Strategic Framework, the ADB outlined 11 Flagship Projects. These 11 flagship projects are aimed to link more closely the 6 Mekong countries and facilitate cross-border trade and investments.

The first three flagship projects (economic corridors[4]) are considered as key connectivity facilities for region-wide integration (Appendix A):

(1) **North-South Economic Corridor** aimed at facilitating trade and development between and among Laos, Thailand, Viet Nam, and Yunnan Province of China;

(2) **East-West Economic Corridor** aimed at to further strengthening economic cooperation and to facilitate trade and development and among Lao PDR, Myanmar, Thailand and Viet Nam;

(3) **Southern Economic Corridor** aimed at promoting regional cooperation, foster economic and social integration, support increased trade and investment, and facilitate exchange and development along the East-West axis between and among Cambodia, Thailand and Vietnam.

The next three flagship projects aimed at linking the three economic corridors:

(4) **Telecommunications Backbone Development**, to allow the interconnection of the national telecommunications networks of the six GMS countries;

(5) **Regional Power Interconnection and Trading Arrangements**, to facilitate the construction of transmission lines that would interconnect the various GMS power system;

(6) **Facilitating Cross-Border Trade and Investment**, to promote competitiveness of the sub-region and stimulate business expansion in the GMA border areas.

These two flagship projects aimed to fuel economic activities by mobilizing domestic capital and utilizing human resources:

(7) **Enhancing Private Sector Participation and Competitiveness** by supporting SMEs and indigenous private sector in the region through a network to promote business, trade and investment in GMS,

(8) **Developing Human Resources and Skills Competencies**, aimed at supporting systems to harmonize training standards and skills certification systems through capacity building on technical and vocational training institutions and

other centers of excellence, and address cross-border related issues, such as health and social issues.

These three flagship projects deals with the managing of the preservation while utilizing the GMS vast natural resources and its environment:

(9) **Strategic Environment Framework** for the GMS through the establishment of institutions for the improvement of natural resources management and utilization.

(10) **Flood Control and Water Resource Management** for the strengthening of structural measures to control damage from flooding through land use planning among GMS countries.

(11) **GMS Tourism Development** aimed to augment hard currency earnings among GMS countries.

the regional cooperation and strategy program (rcsp)

In 2004, a five-year medium-term development plan was crafted by the ADB for the GMS: the five-year Regional Cooperation and Strategy Program[5] (or RCSP, dubbed as GMS – Beyond Borders). The RCSP (2004-2008) is based from the 10-year GMS Strategic Framework (2004-2015). It is consistent with its predecessor: the GMS Program. It contains the ADB's continuing approach to enhanced regional economic cooperation towards integration of the GMS countries.

The ADB Vision under the RCSP was simplified in the 3 C's:

(1) Enhanced CONNECTIVITY
(2) Increased COMPETITIVENESS, and
(3) Greater sense of COMMUNITY among GMS countries.

The ADB Strategy under the RCSP is to support pro-poor and sustainable growth through:

(1) Strengthening connectivity and facilitating cross-border movements and tourism;
(2) Integrating national markets to promote economic efficiency and private-sector development;
(3) Addressing human development through health and other social, economic, and capacity-building issues associated with subregional linkages; and
(4) Environmental and shared natural resources management (especially the watershed systems of the Mekong River) to help ensure sustainable development and conservation of natural resources.

Table 7.1: GMS Indicative Assistance Pipeline for LENDING PRODUCTS: 2004-2006

Sector/Project/Program	Countries involved	Total Project Cost *(US$ 000)*	Cost (US$ million)			
			ADB		Govt.	Co-financing
			OCR	ADF		
2004 Firm Loans						
Transport and communications						
1. Yunnan Dali – Lijiang Railway Project	PRC	542.0	200.0		342.0	
2005 Firm Loans						
Energy						
2. GMS Nam Theun 2 Hydropower Development	LAO	120.0	120.0		Tbd	
Social Infrastructure						
3. Communicable Disease Control in Border Areas	CAM/ LAO/ VIET	30.0		30.0	Tbd	
Transport and Communication						
4. GMS Information and Communication Technology Project	CAM/ LAO	35.0		35.0	Tbd	tbd
5. GMS Kunning-Haipong Transport Corridor	VIET	90.0		60.0	30.0	tbd
2006 Firm Loans						
Energy						
6. GMS Power Interconnection, P-1	LAO	60.0		15.0	5.0	40.0
7. GMS Power Interconnection, P-1	VIET	40.0	30.0		10.0	
Social Infrastructure						
8. Pro-poor Tourism Development	CAM/ LAO/ VIET	40.0		40.0	Tbd	
Transport and Communication						
9. GMS Southern Coastal Corridor	VIET	90.0		60.0	30.0	
10. GMS-ECS Cooperation Bridge	LAO	30.0		10.0	Tbd	20.0
11. GMS Restructuring of Royal Railway of Cambodia	CAM	50.0		40.0	10.0	tbd
Standby for 2006						
Agriculture and Natural Resources						
GMS Food Management	CAM/ LAO/ VIET	121.8		85.0	26.8	10.0
Overall Total Lending		**1,248.8**	**350.0**	**375.0**	**453.8**	**70.0**

Source: ADB. The GMS Beyond Borders, RCSP

The 10-Year GMS Strategic Framework only outlines the 11 Flagship Projects. The 5-year RCSP, the ADB and the GMS countries, identified the specific projects under these 11 flagship projects.

Table 7.2: GMS Indicative Assistance Pipeline for NON-LENDING PRODUCTS: 2004-2006						
	Countries involved	Sources of Funding				Total
		ADB		Others		
2004		Source	Amount (US$ `000)	Source	Amount (US$ `000)	(US$ `000)
Agriculture and Natural Resources						
1. Promoting Safe Migration for Women and Prevention of Trafficking of Girls in the GMS	GMS	Tbd	---	tbd	700.0	700.0
2. Unmasking Cross-border Poverty in the GMS	GMS	tbd	---	tbd	750.0	750.0
3. Capacity Building for Promoting Sustainable Agriculture in the GMS	GMS	TASF	800.0	tbd	----	800.0
4. Capacity Building for Promoting Sustainable Development in the GMS	GMS	TASF	500.0			500.0
5. Study on Cooperation Opportunities between ADB and Mekong River Commission	GMS			tbd	45.0	45.0
Energy						
6. GMS Nam Theun 2 Hydropower Development Project – P-II		TASF	1,000.0			1,000.0
7. Delivering Energy Services to the Poor-Learning from the Mekong		tbd	600.0	tbd	----	600.0
Finance and Industry						
8. GMS Trade and Investment Facilitation	GMS	JSF	600.0	tbd	---	600.0
9. Mekong Project Development Facility	CAM/ LAO/ VIET	TASF	300.0	tbd	---	300.0

10. Human Resources Development for Trade in GMS	GMS	TASF	500.0			500.0
Social Infrastructure						
11. Communicable Disease Control in Border Areas in the GMS	CAM/ LAO/ VIET	JSF	---	tbd	600.0	600.0
12. Awareness and Capacity Building for Sustainable Water and Watershed Utilities	CAM/ LAO/ VIET	TASF	500.0	tbd	---	500.0
13. GMS ICT and HIV/AIDS Preventive Education – P-II	GMS	TASF	1,000.0	tbd	---	1,000.0
14. GMS Tourism Sector Strategy Study	GMS	TASF	800.0	tbd	160.0	950.0
15. GMS Poverty Reduction through Education of Ethnic Minorities on Cross-Cutting Issues	GMS	TASF	300.0	---	700.0	1,000.0
Transport and Communications						
16. GMS Restructuring of Royal Railway of Cambodia and Rehabilitation of Track	CAM	JSF	---	tbd	500.0	500.0
17. GMS Information and Communication Technology Project Phase 1	CAM/ LAO	TASF	450.0			450.0
18. GMS-ECS Cooperation Bridge	LAO	TASF	150.0			150.0
19. Multimodal Transport Sector Study	GMS	TASF	1,000.0			1,000.0
Other/Multisector						
20. Promoting Subregional Cooperation in the GMS – P-VI	GMS	JSF	800.0	tbd	---	800.0

21. GMS Development Triangle	CAM/ LAO/ VIET	TASF	150.0	tbd	---	150.0
22. Infrastructure Connections in Northern GMS	LAO/ VIET	TASF	150.0			150.0
23. Mekong Basin Natural Resources Initiative: Knowledge Base	GMS	tbd	150.0			150.0
2005						
Agriculture and Natural Resources						
24. Expansion of Subregional Cooperation in Agriculture Sector	GMS	tbd	500.0	tbd	---	500.0
25. GMS Food Management	CAM/ LAO/ VIET	tbd	1,000.0	tbd	2,700.0	3,700.0
26. Regional Business Initiative for Rural Development	GMS	tbd	200.0			200.0
27. GMS Cooperation in Agriculture Biotechnology	GMS	Tbd	500.0			500.0
28. Improving Food Standards and Safety Enforcement in the GMS	GMS	TASF	700.0			700.0
Finance and Industry						
29. Custom Harmonization Program	GMS	TASF	800.0	tbd	---	800.0
30. GMS Industrial Standards Harmonization	GMS	TASF	800.0	tbd	---	800.0
Social Infrastructure						
31. Pro-poor Tourism Development	GMS	tbd	900.0	tbd	160.0	1,060.0
32. ICT Enhanced Education Partnership for education Quality Improvement and Community Development		tbd	700.0			700.0

33. GMS Phnom Penh Plan for Development Management – P-II	GMS	TASF	800.0	tbd	---	800.0
Others/Multisector						
33. Implementing the GMS Agreement on Facilitation of Cross-Border Transport of Goods and People, P-II	GMS	tbd	800.0	tbd	---	800.0
34. Asian Economic Community-Roadmap for 2020	GMS	tbd	300.0	tbd	---	300.0
35. GMS Development Triangle	CAM/ LAO/ VIET	TASF	2,400.0	tbd	---	2,400.0
36. Supporting GMS Sector Working Groups	GMS	TASF	800.0	Tbd	---	800.0
37. Sustainable Livelihoods Protection and Natural Resources Management in the Mekong Subregion: Emerging Issues and Concerns	GMS			PRF	1,500.0	1,500.0
Transport and Communications						
38. Northern GMS Transport Network Improvement	LAO	tbd	800.0	tbd	---	800.0
39. GMS Southern Coastal Corridor	VIET	JSF	---	tbd	1,000.0	1,000.0
40. Developing the Airport Authority	LAO/ CAM	tbd	450.0	tbd	---	450.0
2006						
Agriculture and Natural Resources						
41. Subregional Environmental Governance and Institution Building Project (SEF P-III)	GMS	tbd	1,000.0	tbd	1,000.0	1,000.0

Energy						
42. GMS Northern Power Transmission	LAO	tbd	800.0	tbd	---	800.0
43. GMS Interconnection P-II	LAO/ THAI/ VIET	tbd	700.0	tbd	---	700.0
Others/Multisector						
44. Promoting Subregional Cooperation in the GMS – P-VII	GMS	tbd	800.0	tbd	---	800.0
Overall Total Non-Lending			**25,500.0**		**8,815.0**	**34,315.0**
AD – Asian Development Bank; GMS – Greater Mekong Subregion; CAM – Cambodia; LAO – Laos; VIET – Vietnam; THAI – Thailand; TASF – Technical Assistance Special Fund; JSF – Japan Special Fund. *Source: ADB. The GMS Beyond Borders, RCSP*						

The 11 flagship projects are supported by a three-year (2004-2006) rolling investments and technical assistance program.

Tables 7.1 and 7.2 showed that the 3-year lending and non-lending assistance to the GMS via the RCSP (2004–2006) is US$1.283 billion, of which the US$750.5 million will come from the ADB. The difference shall come from GMS governments and co-financiers.

Table 7.1 showed that the 3-year lending assistance for GMS is US$1.2 billion, of which the US$725 million will come from the ADB.

Table 7.2 represents the total non-lending or technical assistance for the GMS amounting to US$34.315 million, of which the US$25.5 million will come from the ADB.

The purpose of providing Technical Assistance is to:

(1) **Harmonize the legal and regulatory frameworks** among GMS countries to create a GMS market,
(2) Support **community participation and human resource development** to offset negative externalities, and
(3) Support the **development of the private sector**. **(see table 7.2)**

issues and concerns

Although the ADB heralds the GMS Program, the 10-Year Strategic Framework and the RCSP as solutions for effective and rapid poverty reduction, non-government organizations (NGOs), people organizations (POs), and civil society organizations (CSOs)are skeptical with the ADB Programs. The Bank's activities in the last decade have had disastrous effects to the people's livelihoods and the region's environment.

1. The damming of Mekong River

Environmentalists already warned that the impact of constructing dams in the Mekong River to the rivers hydrology, its environment and the peoples' livelihood.

a. Because of dams, silt rich in nutrients does not find its way downstream, depriving farmers in the river basin as well those in the Tonle Sap.

b. The unseasonal flooding caused by unscheduled discharge from dams are disrupting the farming cycle depriving most farmers to till the lands for a living.

c. The sudden change in water climate after the discharge by dams destroys the fish and plant life and results in low fish catch among fishermen in the Lower Mekong.

d. The clearing of the river destroys the natural habitats and endangered the 1,200 fish and other mammals in the Mekong River and another 215 species in the Tonle Sap.

e. The construction of dams disrupts the seasonal migration patterns for fish and wildlife in the Mekong River and Tonle Sap Lake.

f. The construction of dams results in a low level of water and may potentially allow saltwater to flow upstream, thereby contaminating the Mekong's fresh water and rendering the water undrinkable and unacceptable for agricultural use.

g. The control and the unscheduled releases of waters from dams resulted in deaths, and threaten the lives of people living near the banks due to flooding.

h. The construction of dams may result in severe drought and muddy water in some areas.

Table 8: The Lancang-Mekong Dams

Dam / Site	Height *(m)*	Installed Capacity *(MW)*	Status	Completion
Manwan	126	1,500	Completed	1996
Dachaoshan	110	1,350	Completed	2003
Xiaowan	300	4,200	Under construction	2012
Jinghong	118	1,500	Under construction	2010
Nuozhadu	254	5,000	Feasibility study	2017
Gonguoqiao	130	750	?	?
Ganlanba	?	150	?	?
Mengsong	?	600	?	?

Source: International River Network (IRN) and Towards Ecological Recovery and Regional Alliance (TERRA)

2. The involuntary resettlement and unclear compensation

Many people were displaced due to the construction of roads and dams. The Highway 1 in Cambodia serves as a link between economic corridors and for cross border trading already displaced people in the communities. Worse, this happened without consultation, proper compensation and resettlement.

Farmers and indigenous peoples affected from the construction of dams were relocated in areas where their livelihoods are not feasible and sustainable.

3. The Bank's accountability is questionable

The ADB's lack in transparency and consultation provided for affected communities on ADB's projects put the Bank's accountability into question. The Bank has made no credible attempts to involve local communities, indigenous peoples, regional NGOs and other sectors of civil society in any of its plans for the region, in direct contradiction to its own guidelines on participatory development.

Many projects supported by the ADB are proceeding on the basis of feasibility studies and environmental impact assessments that ignore or dismiss all major impacts of these projects on national economies, rivers, forests, and local communities, and among others.

In some cases, the Bank has been known to withhold information on the adverse effects of their projects to the environment and peoples' livelihood, such as dams.

analysis and conclusion

1. The ADB's concept of poverty is misleading

The concept of liberating one-third of GMS people from US$1 a day poverty line is misleading. Even US$2 a day may not be enough to free a household from poverty.

2. The ADB's economic philosophy is already discredited

The ADB insisted and convinced the GMS governments that economic integration and cooperation through enhanced cross border trading will propel economic activities and thus will trickle down to ordinary people thus increase their income.

This trickle-down approach is already discredited and this is not anymore true to all economies. Ten years after the ADB's involvement in the Mekong region poverty incidence in rural areas is still very high as compared to urban areas. This is an indicator that the economic philosophy of the ADB is lacking on redistributive mechanism to spread the gains from increased economic activities to the greater number of people.

3. The ADB's Connectivity, Competitiveness and Sense of Community will benefit outsiders

3.1 The past and present development blue prints are ADB's continuing free trade agenda for Mekong. The bias of the GMS Program (1992-2002), the GMS Strategic Framework (2004-2015), and the RCSP (2004-2008) on economic cooperation, cross border trading through policy change and infrastructure projects are ADB's agenda to lead the GMS region as a single market towards global integration.

3.2 Enhanced connectivity will expose GMS countries more to trade deficits. The ADB's connectivity is not limited to infrastructure such as roads, network of transportation, and power grid. This is not also limited to a Mekong-wide free trade. What the ADB's agenda is to lead the GMS countries into a broader integration to Asian and global economies. This GMS exposure to a broader economic integration may expose them to further problems from trade deficits because they cannot compete against the industrialized countries. Except for Thailand, the three countries (Laos, Vietnam and Cambodia) are already suffering from trade deficits for the last 10 years due to imbalance of trade from the industrialized countries.

3.3 The Mekong-wide power grid will only benefit few. The construction of the Mekong power grid to supply Thailand and Vietnam with power for commercial purposes will benefit a Thailand electric company who will buy cheap power from other Mekong countries, in the hopes of selling that to the ASEAN grid to supply power to Malaysia and Singapore. This is one reason why despite of social and environmental effects from damming of Mekong River, the ADB is still supporting the construction of dozen dams in the Upper Mekong (Yunnan in China and the controversial Nam Theun 2 in Laos).

3.4 Competitiveness will be limited to GMS cheap labor. The GMS countries have a huge reserve of labor. The private sector, both local and foreign, will only exploit this cheap labor. Core Labor Standards are not observed, if not totally ignored, in most GMS countries.

3.5 Sense of Community is only rhetoric and will not lead to greater sharing from the fruits of economic activities. In reality, what the ADB means is a community of globally integrated economies, where foreign interests equal with these of locals in exploiting human and natural resources.

4. The ADB interferes in the GMS countries internal economic policies using technical assistance money.

In the GMS Strategic Framework and the RCSP, the purpose of providing money for Technical Assistance is to:

(1) Harmonize the legal and regulatory frameworks among GMS countries to create a GMS market, eliminating all protective measures for each domestic market,

(2) Support community participation and human resource development to offset negative externalities, by building capacity of the GMS governments attuned to the requirements of an increasingly deregulated, an open economy and privatization, and

(3) Support the development of the private sector, by creating an enabling environment for private sector but limited only to few SMEs and emphasizing the mobilization of foreign capitals to exploit human and natural resources in the region.

The ADB, through its financial influence and its enhanced role ("honest broker" and mediator) endorsed by GMS leaders — resource mobilization[6], project planning and monitoring — will push the integration of GMS into the global economy.

5. The poverty reduction objective is just sugarcoating the ADB's destructive projects in the GMS

The ADB is propagating poverty reduction program to convince GMS governments to weigh down destruction of the environment and economic displacement of people. The ADB is convincing the GMS that infrastructure projects, such dams and roads, are measures to alleviate poverty in the region.

endnotes

[1] Central Asian Regional Economic Cooperation Unit (CARECU), Greater Mekong Subregion (GMS), South Asia Subregional Economic Cooperation (SASEC) Initiative, Indonesia, Malaysia, Thailand Growth Triangle (IMT-GT) and the Brunei, Indonesia, Malaysia, Philippines - East ASEAN Growth Area (BIMP-EAGA). ADB is pushing the formation of 12 DMCs in Pacific and the China-Mongolia cooperation.

[2] Known in Tibet as *Dza-chu*, China as *Lancang Jiang* and Thailand as *Mae Nam Khong*.

[3] While poverty levels overall have fallen in the Lower Mekong Basin, most of the decline is due to economic growth in urban areas rather than a more equitable distribution of wealth. In remote rural areas where ethnic minorities live, poverty levels are extreme, according to the Mekong River Commission.

[4] An economic corridor is a geographic area in which infrastructure investments are linked directly with trade, investment, and production opportunities.

[5] The RCSP is similar to ADB's Country and Strategy Program (CSP) for borrowing member countries, but RCSP extends to an entire region. A CSP Update is prepared every year taking into account the continued relevance of the CSP, its implementation, and ADB's operational program for the next three years. The ADB divides its lending activities into the following regions: East and Central Asia, Mekong, Pacific, South Asia, and Southeast Asia. In 2003, RCSP for the Pacific was published by ADB.

[6] ADB is tapping resources from its rich members countries, particularly in the North (this is also called official co-financing), which include Japan, Australia, Canada, Finland, Norway, France, Singapore, Sweden, Switzerland and the United Kingdom. It is important to bear in mind that co-financing is tied money: Japan or Norway are not likely to put up finance for projects in which lucrative contracts go to companies in a third country.

adb and the mekong power grid

introduction

The combined electric power capacity of the world in 2000 stood at 3,400,000 megawatts (MW).[1] Of this, about 45 percent (1,500,000 MW) is produced in developing countries where economies continue to grow rapidly. Some estimate that by 2020 developing countries will need to double their generation capacity. This raises concerns about how developing countries will expand power generation considering huge capital requirements and the need for appropriate technologies that are environment-friendly. Fossil fuels, the main contributor to pollution, account for about two-thirds of the world generating capacity. Renewables account only for three percent, nuclear is ten percent and hydro is twenty percent.

An overarching challenge—also long overdue—posed for the governments in developing countries is the electrification of rural areas where an estimated 2.8 billion people live without adequate energy services. In China, India, and Indonesia—the world's most populated developing countries—there are about 1.6 billion people have no access to reliable modern forms of energy like electricity, and liquid fuels. According to the World Energy Council "the vast majority of these people are dependent on the traditional fuels of wood, dung and crop residue, often using primitive and inefficient technologies. For many, this combination barely allows fulfillment of the basic human needs of nutrition, warmth and light, let alone the possibility of harnessing energy for productive uses which might begin to permit escape from the cycle of poverty."

The restructuring in the 1990s has washed over power utilities around the world with profound effect on technologies, costs, prices, institutions, and regulatory frameworks.[2] Restructuring is resulting in independent power production and competition in generation; decentralization; privatization; unbundling of generation and transmission; and even competition in distribution. Along with these changes are a broad variety of new institutional and contractual forms within the power sector.[3]

power trading and interconnections

Parallel to power sector restructuring worldwide is the introduction of power trading and exchange—the buying and selling of electricity—either through bilateral or multilateral arrangements.

A bilateral power trading arrangement is an agreement (usually in a form of a power purchase agreement or PPA) between two countries (or two power utilities) where one party agrees to buy and the other agrees to sell electricity for an agreed rate for a define number of years. An example is the Memorandum of Understanding (MoU) between Laos and Thailand, where Laos committed to export 490 MW to Thailand for a given period. There are also PPAs between independent power producers (IPPs) and distribution utilities or power-deficient generation utilities.

A multilateral power trading arrangement is known to power sector as power pooling. This involves several utilities or countries where electricity is bought and sold in the power pool and the prices fluctuates, thus, giving some countries (or a utilities) an opportunity to buy the cheapest offered rate (similar to a stock or commodity market). In power pooling local power plant operators can bring in bulk revenues from selling their electricity, while neighboring countries that need power would no longer need to spend enormous amounts of money to build new power plants. An example of power pooling is the South African Power Pool (SAPP) where 12 power utilities from 12 Southern African nations are pooled in together. In a power pooling a dispatch center maintains and controls the flow of electricity over the grid, supplying electricity to meet the demand.

In the United Kingdom the power pooling arrangement was decided upon in 1989[4] after legislators enacted laws breaking up the Central Electricity Generating Board (CEGB) into generation and supply and privatizing government utilities[5] to create a competitive market where retailers could purchase electricity from a power pool. The UK electricity market consists of central scheduling and economic dispatch into an electricity pool. The pool prices are set by the half hour.

In the late 1990s, the Nordic countries (Sweden, Norway, Denmark and Finland) established the Nordic pool, the first international electricity exchange, allowing consumers and power producers to trade freely. The exchange is based in Oslo operated by an equal partnership between the Swedish and Norwegian grid companies (Svenska Kraftnet and Statnett). The overland and underwater power links were already established between the four countries, reducing the physical barriers to establishing an open market.

In the United States high-voltage electrical transmission lines are divided into three separate grids (the Western Interconnection, the Eastern Interconnection, and the Electric Reliability Council of Texas [ERCOT] Interconnection) that make up what is often called the national power grid, covering the contiguous 48 states and parts of Canada and Mexico.

In the early 1990s, anticipating a prolonged Asia-Pacific economic boom, the idea of an ASEAN[6] Power Grid was brought to the planning table to address the anticipated upsurges in the demand of energy. The ASEAN Power Grid is a power pooling project aimed at integrating the power generating industry in the ASEAN region by linking key regional power generation sources with future large hydro dams like those on the Upper Mekong (Yunnan Province in China), Mekong tributaries (Laos and Vietnam), and the Salween River (Burma).

The interconnection requires a transmission grid, a high-voltage network for long-distance electric power transmission that made up of power stations, substations, and transmission circuits[7]. A distribution grid is a medium-and-low-voltage network for local distribution of electric power to end-users. An interconnection of various power systems[8] is also called a power grid.

adb's involvement in the power sector

The Asian Development Bank (ADB) believes in a link between energy, economic development and poverty reduction. More than half of the world's poorest people live in the developing member countries (DMCs) of ADB, and the majority of these countries' rural populations lack access to commercially supplied energy.

Since ADB's establishment in 1966, energy has been one of the mainstays of its portfolio, about 20 percent of its total lending—currently averaging slightly below US$1 billion per year. Since 1966, ADB has made 284 public sector loans, totaling US$19.1 billion, to the energy sector.

From 1967 to 1994, ADB's total lending in energy is US$12.68 billion (231 out of 1,288 projects). The percentage share of energy to ADB's US$51.12 billion

Table 1: Past energy operations of ADB: 1967-1994 and 1995-1999

Item	1967-1994		1995-1999	
	Number	Amount *(in US$)*	Number	Amount *(in US$)*
Loans, total ADB	1,288	51.12 b	364	31.19 b
Loans, energy sector	231	12.68 b	40	4.83 b
Share of energy sector *(% share)*	*17.9%*	*24.8%*	*11.0%*	*15.5%*
TA operations, total ADB	2,786	970.5 m	1,438	811.1 m
TA operations, energy sector	317	101.3 m	141	74.1 m
Share of energy sector *(% share)*	*11.4%*	*10.4%*	*9.8%*	*9.4%*

b = billion; m = million; TA = technical assistance
Source: Asian Development Bank

total loans is 24.8 percent. ADB's technical assistance to energy sector of the same period is US$101.3 million (equivalent to 317 TA's of total 2,786 TA's). The percentage share of energy TA's to overall TA's is 10.4 percent. **(Table 1)**

From 1995 to1999, ADB's total lending to energy is US$4.83 billion (40 out of 364 projects). The share of energy to ADB's US$31.19 billion total loan is 15.5 percent. ADB's technical assistance to energy sector is US$74.1 million, equivalent to 141 TAs of the total 1,439 TA's. **(Table 1)**

In 2000 – 2001, ADB's total lending to the energy sector was US$1,803 million (13 projects out of 134 projects) of the total US$11,189 million ADB loans. Technical assistance to the energy sector of the same period is US$253.4 million of the total US$253.4 million. **(Table 2)**

The ADB's assistance has focused mainly on the electricity subsector, rather than the petroleum and gas subsector. This is partly because ADB believe that electricity[9] is the most convenient form of energy for most purposes and it has well known development impacts. On the other hand, the other commercial sources of energy (petroleum and natural gas) have been predominantly explored and developed by private companies.

Most of the loans the ADB extended to electricity subsector have targeted (1) additional power generation capacities, and (2) improvement of power transmission and distribution, or (3) increasing natural gas transmission capacity.

Table 2: Recent energy operations of ADB: 2000-2001

Item	2000		2001	
	Number	Amount *(in US$)*	Number	Amount *(in US$)*
Loans, total ADB	74	58.50 b	60	53.39 b
Loans, energy sector	8	11.41 b	5	662 b
Share of energy sector *(% share)*	10.8%	19.5%	8.3%	12.4%
TA operations, total ADB	233	136.9 m	206	116.5 m
TA operations, energy sector	15	9.2 m	16	9.4 m
Share of energy sector *(% share)*	6.4%	6.7%	7.8%	8.1%

b = billion; m = million; TA = technical assistance
Source: Asian Development Bank

ADB's Changing Energy Policy

Behind these ADB loans to the energy sector is the Bank's energy policy. Over the last three decades, ADB's investments in energy development have undergone a change in priorities. In the late 1970s and 1980s, it focused only on developing indigenous energy resources due to the energy crisis.

In the 1990s, the aim was to involve the private sector in energy generation and distribution. Accompanying this trend has been an increasing number of policy loans directed at restructuring the energy sector to make it more conducive to competition and private sector participation.

"Energy 2000" is the ADB's energy policy that recommends a reorientation of the energy sector activities to address regional and global environmental impacts. ADB's push for privatization in the power sector also spelled out in "Energy 2000" aimed at "promoting private sector involvement: by restructuring the energy sector and creating an enabling environment for private investors" and stresses the Bank's bias for the private sector because their "(e)xperience has shown that when properly regulated and operating under competitive market conditions, the private sector can generally use resources more efficiently than the public sector."

The Energy 2000 also aimed at "promoting regional cooperation: by helping Developing Member Countries (DMCs) identify and implement export-oriented hydropower- and natural gas-based generation and transmission projects."

the mekong power grid

The proposed Mekong Power Grid (also known as the Regional Power Interconnection and Trading Arrangements) is an interconnection of various power systems among countries in the Greater Mekong Subregion (GMS)[10] to facilitate power trading towards private sector investment in the power sector. This Regional Power Interconnection and Trading Arrangements is one of the 11 Flagship Initiatives of ADB under its "10-Year GMS Strategic Framework (2004-2014)" and in its medium-term "Regional Cooperation and Strategy Program" or RCSP (2004-2006).

Goals and Objectives

In one of the ADBs publications, they state that the goal of regional cooperation is "to promote a commercially-based energy system that reliably and competitively supplies electricity to all areas of the Mekong subregion in a manner that minimizes environmental and social costs." To realize this goal, ADB promotes transmission grid interconnection and power development in order to rationalize the supply and use of electricity on a subregional basis. The ADB and other financial institutions will finance the construction of transmission lines that would interconnect various power systems, mobilize private sector investments in power, and develop a corps of technical personnel for integrated power operations.

Additional objectives of regional cooperation include enhancing power generation from subregional sources, rural electrification –especially of isolated towns and villages of the subregion–, pricing energy on a commercial but more equitable basis, and mitigating the social and environmental costs of power projects.

The Mekong Context

According to the ADB, the electricity consumption in the GMS is estimated to increase more than six times in the period 1993-2020, from about 90 Terawatt hour (TWh)[11] to about 600 TWh, with Thailand accounting for two-thirds of the total. The hydropower potential in the GMS is enormous, more than ten times (over 1,000 TWh/a) current generation. If fully developed, this potential could provide about 250,000 MW in installed capacity[12]. Yunnan Province of China accounts for the largest share of the hydropower potential, followed by Burma, Laos and Viet Nam. To date, only two percent of the hydropower potential has been harnessed. The annual per capita electricity consumption in the four countries in GMS averages only 220 kWh,[13] which is just a fraction of the consumption levels in the industrialized countries.[14]

The GMS is rich in energy resources but these are unevenly distributed, according to the ADB. If evenly distributed, these can provide opportunities for expanding economies.

Milestone

Discussion of Mekong-wide power cooperation started in April 1995, in the so-called Inception Meeting, in Rangoon, Burma. This was followed up by another six meetings from December 1995 up to December 2000. The creation of GMS Electric Power Forum (EPF) in 1995 and the Expert Group on Power Interconnection and Trade (EGP) [15]in 1998 are the results.

In June 2001, the GMS energy experts met to review findings of the ongoing study on the Regional Master Plan for GMS Power Interconnection, and to finalize the draft of the Inter-Governmental Agreement (IGA) on Power Trade. In December 2001, the GMS energy officials and experts held back-to-back meetings in Hanoi, Vietnam to review the Power Interconnection Plans and to finalize the Power Trading Arrangements in the GMS. In May 2002, the GMS countries finalized both the Master Plan on Power Interconnection and the Agreement on Power Trade.

In November 3, 2002, the six GMS countries signed the Inter-Governmental Agreement (IGA) on Regional Power Trade in the Greater Mekong Subregion creating of a high level body, the Regional Power Trade Coordination Committee (RPTCC) that will coordinate the implementation of regional power trade and to represent countries involved in the trade. The RPTCC determines how to establish and implement regional trading arrangements, including drafting a subregional Power Trade Operating Agreement (PTOA) that will include rules for governing power trade. The IGA also provides for dispute settlement, ratification, and entry into force, and prescribes relationships with other agreements.

The signing of the IGA was pivotal in the promotion of the proposed 230-kilovolt (kV) transmission line from Cambodia to Viet Nam and another 115-kV line from Cambodia to Thailand by the 2008.

The ADB supported these meetings since the 1995 inception meeting up to the signing of regional power cooperation.

Components of the Mekong Power Grid

The regional cooperation program of ADB for GMS consists of four major components or groups. First, ADB seeks to interconnect various national power systems into the subregional grid.[16] The priority of interconnection is the East-West Corridor route of GMS linking Laos, Thailand, Vietnam and Burma. Interconnections are priority in the following areas:

a. Interconnection for bulk power supply to Cambodia, one from Southern Viet Nam (Phnom Penh Chau Doc 230-kV line) and one from Thailand to Western Cambodia, both in 2004;

b. Meshed 500-kV grid for Thailand, Lao PDR, and Viet Nam, needed to reinforce the north-eastern Thai grid, from 2006-2007. This includes 500-kV double circuit lines Tha Tako- Chaiyaphum, Chaiyaphum- Udon Thani, and Chaiyaphum-Roi Et. Other lines such as the Roi Et-Savannakhet would be needed from 2008 to 2010;

c. Grid connection from Nam Mo in Laos to Viet Nam in 2008;

d. 230-kV interconnection at Vientiane in 2009, linking Nam Ngum 2 with Udon Thani;

e. Grid connections linking Thailand with hydropower projects in Burma (Tasang HPP), and Yunnan (Jinghong HPP) from 2012; and

f. Grid connection between Yunnan and Viet Nam (Malutang hpp), to take place from 2012 to 2019.

Second, ADB seeks to mobilize the private sector to invest in the power sector by improving the GMS countries' policy and regulatory environment. Laws and policies will be enacted to create a favorable climate and opportunities for the private sector to invest in the subregional grid, such as co-financing with independent power producers (IPPs) through build, operate and transfer (BOT) schemes for power generation and transmission[17].

Third, ADB seeks to implement a power market trading system consistent with encouraging power sector investments, including structuring power tariffs on a commercial basis. The ADB will provide assistance to the GMS in the amount of US$183 million for power market/power trade system development. The Bank will also extend technical assistance amounting to US$0.85 million to develop the Power Trade Operating Agreement (PTOA) and lay down the basic principles and specific rules of power trading.[18] The ADB will be extending loans to Laos and Vietnam to facilitate power trade in these countries through improved transmission system structures.

Fourth, ADB will develop a corps of technical personnel to run and manage the integrated power sector operations in the GMS. The project cost for human resources development (training and capacity-building) is US$0.4 million.

Financing the Mekong Power Grid

The regional power interconnection and trade consists of 34 projects with estimated total financing requirement of US$4.69 billion. Of these, 17 are technical assistance projects with estimated total cost of US$20.4 million; 17 are loan projects with total cost of US$4.67 billion. International River s Network (IRN), an NGO based in Berkeley, California, USA, claims that the Mekong Power Grid will cost US$43 billion including the controversial Nam Theun 2 Dam in Laos, the Nuozhadu and Jinghong dams on the Upper Mekong in China, the Tasang Dam in Burma and Sambor Dam on the Mekong mainstream in Cambodia, among others.[19]

Funding for interconnections will come from internal corporate funds and/or borrowings from multilateral development banks (ADB and World Bank), commercial banks, or from export credit agencies. Transmission lines may be financed as part of generation component which will rely on private investment.

The ADB will extend technical assistance to all six GMS countries, but Cambodia, Laos and Vietnam are countries that will receive energy-related investment projects.

Institutions Behind Mekong Power Grid

The institutions that are involved in the Mekong Power Grid are the two leading multilateral banks, the Asian Development Bank (ADB) and the World Bank (WB); the bilateral development agencies or overseas development program of rich countries, such as the Japan International Cooperation Aid (JICA) of Japan, the Norwegian Agency for Development Cooperation (NORAD) of Norway, the Swedish International Development Agency (SIDA) of Sweden, the Australian Agency for International Development (AusAID) of Australia and the Agence Française de Développement (AFD)of France; creditor banks, such as the Japan Bank for International Cooperation (JBIC) and KfW of Germany; the big companies that in the energy business and consultancy, such as the Tokyo Electric Power Company (TEPCO) of Japan, Vattenfalls and Swedpower of Sweden, the Electricite de France (EdF), and Norconsult, a Norwegian consulting firm commissioned to draft the Regional Indicative Master Plan on Power Interconnection in the GMS[20], and lastly, the Mekong River Commission (MRC), a trans-river basin body for joint river management.

issues and concerns

1. The Mekong Power Grid is promoting the utilization of hydropower, and this means dam-building in Mekong River and some of its tributaries. These activities threaten their fragile ecosystem where over 80 million people (90% of riparian population) get their livelihood from food (fisheries and agriculture), water (drinking and irrigation), transport (water navigation) and economic sustenance. The GMS Master Plan study has identified priority interconnections from promising hydropower projects in the Upper Mekong (Yunnan Province of China, Burma and Laos) for export to Thailand and Vietnam.

The Jinghong and Nuozhadu dams in the Yunnan Province of China are part of Mekong Power Grid, and also two of the eight cascading dams in the Upper Mekong. These dams already threaten the livelihood of millions of people in the downstream countries (Cambodia, Vietnam and Thailand) and severely disrupt the Mekong's flood-drought cycle and block the flow of rich sediments that nourish the fertile and rice-growing areas downstream. People in the downstream already experience low fish catch attributed to the dams in the upper Mekong.

In Burma, the electricity generated from Tasang Dam will pass through a planned transmission line to Thailand. People living near the Tasang Dam are suffering from the military regime's forced relocation, forced labor, extra judicial killings and intimidation. The construction of Tasang Dam would devastate the lives of ethnic minorities living along the Salween River. To fund the construction of Tasang Dam and interconnection to Thailand would mean the further legitimization of the brutal military regime in Burma.

In Laos, the controversial Nam Theun 2 is an integral part of the Mekong Power Grid, with planned transmission interconnections with Thailand, and eventually Vietnam. The dam will displace 4,500 indigenous people and severely impact the Xe Bang Fai River where around 120,000 people depend on it for fishing, gathering wild vegetables and irrigating their rice fields.

Aside from Nam Theun 2 there are seven other dams in Laos that are integral parts of the Mekong Power Grid: the Nam Mo, Nam Theun 1, Nam Ngum 2, Xe Pian – Xe Namnoy, Xe Kaman 1, Nam Kong 1, and Xe Kaman 3. The feasibility assessments have been completed for the proposed Nam Ngum 3 Hydropower Project in Laos.

In Cambodia, the planned Sambor Dam may be added to the Mekong Power Grid. The Se Kong-Se San River Basin Study (both in Cambodia and Vietnam) has identified possible hydropower developments.

To date, there is no assessment of the cumulative impacts of existing and planned hydropower projects in the Mekong basin had completed. The negative experience of villagers affected from Thailand's Pak Mun Dam, the Yali Falls Dam in Vietnam and the Theun-Hinboun Dam in Laos are cause to worry about the promotion of hydropower and dam-building.

2. A power pooling is still under study. The study will review similar operating agreements in other power markets such as the South African Power Pool (SAPP), Union for the Coordination of Transmission of Electricity, Nordpool (Scandinavia), Centrel, South America Power Market, etc.[21] Will a true and open power market work in the Mekong Region? Or, will a country or an entity exercise control over the power pool? The three Mekong countries of Cambodia, Laos and Burma are not ready for a power pooling arrangement. The impetus comes from Thailand, the biggest market of electricity generated from the dams in Yunnan, Burma and Laos. Thailand's EGAT had the advantage over the other countries in Mekong Grid.

As of 2003, according to Probe International, Thailand's power system has 26,000 MW of installed capacity and an over-capacity of 4,500 MW (in addition to its 3,500 MW reserve capacity). EGAT points to ASEAN countries, where power demand is expected to double within the next decade, as a growing market for power supply. EGAT thus envisions ASEAN to the south as its new market for 'surplus' hydropower from dams along the Salween and Mekong Rivers.

3. Privatization and deregulation of power utilities, as actively promoted by the

ADB and WB, has been eliminating incentives for utilities to do demand-side management (DSM). Privatized utilities under a deregulated environment may no longer be obligated to meet all future customer demand, and obligation which had DSM make sense.[22]

Utility spending on energy efficiency programs in the United States dropped to US$1.6 billion in 1997 from US$2.7 billion in 1994 as companies anticipated increased deregulation.[23] In Norway, deregulated utilities slashed their energy efficiency program staff after deregulation.[24]

In developing countries, established programs may be similarly jeopardized. For example, the Global Environment Facility (GEF) and the Thai government have expended large resources to develop a highly capable DSM office in the Thai national electric utility over the past several years. Now that the utility is being privatized, no one is sure what to do with this office or how to fund it, and there are fears it could be disbanded.[25]

4. The lack of participation and transparency in the process of developing the Mekong Power Grid as a whole initiative left no room enough for those directly affected by the transmission lines or hydropower projects to raise their concern. The merit of Mekong Power Grid as a whole initiative has not been discussed or debated among civil society in the Mekong Basin.

analysis and conclusion

1. The Mekong Power Grid is part of a much larger ASEAN Grid. In the short-term the interconnections and transmission of electricity will always lead to Thailand and Vietnam through bilateral power trading. But, in the long-term this bilateral power trading will become integrated into the ASEAN Power Grid. It is the ultimate goal of Regional Power Interconnections and Power Trade Arrangements to establish an ASEAN power pool aimed at integrating the power generating industry in the ASEAN region by linking key regional power generation sources with future large hydro dams on the upper Mekong (Yunnan Province in China), Mekong tributaries (Laos and Vietnam), and the Salween River (Burma). Power pooling arrangement was attached to the entire Mekong Power Grid project.

The proposed high-capacity (500-kV) transmission lines is considered the "backbone" of an even more ambitious plan to link the six-country Greater Mekong Subregion grid with the power grids of ASEAN countries south of Thailand.

During the 22nd ASEAN Ministers on Energy Meeting in June 9, 2004, the Heads of ASEAN Power Utilities/Authorities *(HAPUA)* reported that they are preparing a common policy for the power interconnection and trade through an appropriate ASEAN cooperation agreement, as well as in enhancing the ASEAN Power Grid's implementation through the possible commissioning of five power interconnection projects within the period 2005-2009. Three of the five interconnections are in GMS: 1) the Laos – Thailand interconnection; b) the Cambodia – Thailand interconnection; and c) the Cambodia - Vietnam interconnection. The other two are outside the GMS: 1) the Sumatra – Peninsular Malaysia interconnection, and 2) the Sarawak – West Kalimantan interconnection.

2. The Mekong Power Grid will result in further damming of the Mekong River and some of its tributaries. The major sources of electricity that will pass through major interconnections or transmission grids are hydropower from the dams in

the Yunnan Province in China, in Laos, and one in Burma. There is a possibility that additional sources may come from Sambor Dam in Cambodia, Nam Ngum 3 Hydropower Project in Laos, and perhaps from another dam in Se Kong-Se San River both in Cambodia and Vietnam.

The silence of ADB on Chinese damming on the Upper Mekong (Lancang) is due to the fact that the Bank is funding the two transmission lines[26] for the Dachaoshan and Xiaowan dams in Yunnan, part of the Mekong Power Grid. The support of the ADB for the Nam Theun 2 Hydroproject in Laos can be understood from the perspective that Nam Theun 2 is an integral part of the Mekong Power Grid.

3. Thailand will emerge as the major player in Mekong Power Grid through power pooling. As of now, the Thai government is the biggest, if not the sole, market of electricity generated from the dams in Yunnan Province, Laos and Burma. Thailand already had an excess of electricity and will continue to buy electricity from Laos, Yunnan and Burma to sell to ASEAN countries, such as Singapore and Malaysia through the ASEAN power pool. From this position, Thailand may have a command advantage over other countries on electricity rates. Thailand's EGAT occupies a strategic position both in the GMS and ASEAN energy cooperation. The ASEAN Interconnection Master Plan Study *(AIMS)* Working Group tasked to formulate an ASEAN Interconnection Master Plan is chaired by EGAT.

4. The establishment of Mekong Power Grid and the ASEAN Grid signal the restructuring of power sector in the region towards privatization, deregulation and power trading. Private power generation has been introduced in a limited way and the distribution is being corporatized. The next stage in this reform is the introduction of power pooling.

endnotes

[1] This capacity represents a cumulative investment of perhaps $3-4 trillion and annual fuel costs of perhaps $150-250 billion.

[2] According to Eric Martinot in his paper "Power Restructuring and Environment: Trends, Policies, and GEF Experience (MAY 2002).

[3] Eric Martinot quoting Gilbert et al. (1996), Kozloff (1998), USAID (1998e), ESMAP (1999), Bacon and Besant-Jones (2001).

[4] Initially, 30% of the market was opened to competition for customers with a peak demand of 1 MW or more. In 1994, customers with demand in excess of 100 kW were allowed to select electricity suppliers. In 1998, the entire market should be open to competition.

[5] The UK

's National Grid Co. plc retained its monopoly status.

[6] Association of Southeast Asian Nations.

[7] Energy is usually transmitted as a 3-phase alternating current (AC). At the generating plants the electricity is produced at a relatively low voltage of 10-15 kV, then stepped up by the power station transformer to a high voltage of 220 - 400 kV AC for transmission over longer distances to grid exit points (the substations). (Wikipedia)

[8] A power system is usually composed of 6 main components (involving power generation, power transmission, distribution and retailing) broken down into: 1) the power station (or power plant) that transform other types of energy (hydro, fossil fuel, nuclear, coal, wind, etc.) into electrical energy (also known as electricity or electrical current), 2) a set of transformers to convert and step up the electricity generated into different voltages before using the transmission lines, 3) the transmission

lines used for directing the transmission of energy, 4) the substations (exit points) where the power is reduced to the voltage for the distribution lines, 5) the distribution lines, and 6) the transformers that lower the distribution voltage to the level used by the consumer's equipment.

[9] Electricity, as one of the basic forms of energy, is an extremely versatile form of energy. Electricity is generated, transmitted, and converted into heat, light, motion, and other forms of energy through natural processes, as well as by devices built by people. It can be generated in many ways and from many different sources. It can be sent almost instantaneously over long distances. Electricity can also be converted efficiently into other forms of energy, and it can be stored. Because of this versatility, electricity plays a part in nearly every aspect of modern technology. Electricity provides light, heat, and mechanical power. It makes telephones, computers, televisions, and countless other necessities and luxuries possible (Encarta).

[10] Greater Mekong Subregion composed of countries in the Lower Mekong (Cambodia, Thailand and Vietnam) and countries in the Upper Mekong (Burma, Laos and Yunnan Province of China).

[11] Terawatt hour (TW·h) is a unit for measuring energy. It corresponds to 1,000,000,000 kW·h (kilowatt hours). It is the amount of energy that would be produced by a 1,000,000 MW generator over a period of one hour, or a 114 MW generator over a period of approximately one year. The terawatt hour is commonly used for large amounts of electrical energy, since it may be easier to understand in a practical context than the proper SI unit for energy, the joule, which is a watt second (W·s).(Wikipedia)

[12] Assuming that at least 50 percent is economically and environmentally feasible, the hydropower potential still represents a generating capacity of about five times the current total electricity generation, according to the ADB.

[13] In Cambodia, Laos and Burma, the per capita consumption ranges between 55-60 kWh, while in Thailand is about 900 kWh.

[14] In Germany, the corresponding figure is 5,595 kWh, in the Republic of Korea over 3,000 kWh, in Japan 6,400 kWh, and in the USA 10,500 kWh.

[15] The EGP was established to provide recommendations on cooperation programs in the power sector. The EPF and EGP have provided important directions on several major energy initiatives, including formulating an indicative master plan on power interconnection in the GMS.

[16] The largest component is the ASEAN Mekong Basin Development Cooperation (AMBDC) 500-kilovolt (kV) backbone system to pull the ASEAN into GMS power market development through its ongoing ASEAN Interconnection Master Plan Study.

[17] The largest component in the build-operate schemes and co-financing is the Jinghong power project in Yunnan, China, amounting to US$1.2 billion.

[18] The Regional Power Trade Coordination Committee (RPTCC) will coordinate the implementation of regional power trade and draft the regional power trade operating agreement (PTOA).

[19] IRN. "ADB Plan Supports a Dozen More Dams for the Mekong." 08-05-2003.

[20] The US$1.4 million Master Plan was funded by the Norwegian government and the Asian Development Bank.

[21] The technical assistance (TA) for the study of regional power trade operating agreement in the GMS will start in August 2003 and be completed by December 2005.

[22] Eric Martinot quoting Hirsh and Serchuk (1999).

[23] Eric Martinot quoting Hirsh and Serchuk (1999).

[24] Eric Martinot quoting Nadel (1996).

[25] Martinot, Eric. "Power Restructuring and Environment: Trends, Policies, and GEF Experience." May 2002.

[26] Yunnan Daochaosan Power Transmission, Loan: PRC 30474-01 (US$100 million); and Yunnan Xiaowan Power Transmission Project, PPTA: PRC 36470-01 (US$500,000.00).

adb's involvement in cambodia

introduction

Cambodia is a land of paddies and forests dominated by the Mekong River and Tonle Sap, with per capita GNP of US$260, was considered one of the poorest countries in the world and particularly in Asia, according to the Japan International Cooperation Agency (JICA). In 1997, an estimated 36.1% of the 12 million Cambodians live below the basic needs poverty line[1]. The poverty rate in rural areas is 40.1%, much higher than in Phnom Penh's 29.9%. In rural areas approximately 85% of the labor force are employed in agricultural activities including crop farming, livestock raising, fishing (Mekong River and Tonle Sap Lake), and forestry.

Against the backdrop of poverty is the richness of natural environment and resources of Cambodia is dependent on external funds. In the 1980s, it relied heavily on multilateral aid and on bilateral economic assistance from Comecon[2], an economic organization among communist countries from 1949 to 1991. The former Soviet Union was the largest donor, followed by Vietnam. In June and September 2002, Cambodia and Russia reached an understanding on the broad terms for the pre-cutoff date, but further negotiations are required for the post-cutoff date.

To date, the International Financial Institutions (IFIs) that are extending loans to Cambodia are the World Bank (WB), the International Monetary Fund (IMF),

Table 1: Shareholding and Voting Power of Cambodia in ADB	
Number of shares held:	1,750 (0.050% of total shares)
Votes:	15,635 (0.36% of total membership, 0.55% of total regional membership)
Overall capital subscription:	US$26.00 million
Paid-in capital subscription:	US$4.43 million
Source: Asian Development Bank	

and the Asian Development Bank (ADB). There are also donor-countries who provide assistance to Cambodia in a form of Overseas Development Assistance (ODA)[3] or through bilateral agreements.

The ADB is the largest of the world's regional multilateral development banks and a powerful development institution operating in Asia and the Pacific. When the ADB was established in 1966, Cambodia was one of its 31 founding members. Cambodia is the 27th largest shareholder in ADB among its regional members. Overall, Cambodia is the 35th largest shareholder.

the adb's ride with cambodia's political turmoil

The ADB's first loan to Cambodia was in 2 April 1970, the Phnom Penh High Voltage Transmission (Loan No. 0032-CAM), amounting to US$1.67 million. When the Khmer Rouge forces captured Phnom Penh in April 1975 and established a communist government[4] the ADB suspended its assistance to Cambodia. It was then that Comecon countries provided helping hands to Cambodia to get much-needed funds in building a socialist Cambodia.

When the Khmer Rouge was thrown out of power in 1978 by a Vietnamese invasion and the eventual signing of the Paris Accord[5] in 1991, the ADB resumed its lending to Cambodia in 1992. Following the UN-sponsored election, Cambodia became a multiparty liberal democracy under a constitutional monarchy[6] established in September 1993. Cambodia regained its seat and representation at the General Assembly of the United Nations. Consequently, the ADB's loans to Cambodia steadily increased until the collapse of Cambodia's coalition government in 1997. This resulted in one-year suspension of lending from ADB. The Bank only renewed its lending in 1998 following the formation of a new coalition government after the second round of national elections.

In 1999, Cambodia became a full member of the Association of South East Asian Nations (ASEAN). In 29 July 2002, the Royal Government of Cambodia cemented its relationship with the ADB by entering a Poverty Reduction Partnership Agreement (2002 to 2015).

However, after the July 2003 election a political stalemate ensued, bringing everything to a halt. While the ruling Cambodian People's Party (CPP), of Prime Minister Hun Sen, won a clear majority in July 2003 election, it lacked the two-thirds majority required by the constitution to form a new government. The nearest rival of CPP, the Funcipec, the royalist party of Prince Norodom Ranariddh, forged an alliance with the Sam Rainsy Party to block any CPP's attempt to form a new coalition. The Cambodian economy drifted for a year. In order to end the political wrangling, Hun Sen has forced to clinch a new coalition deal with Prince Ranariddh in June 2004. The result of the compromise is a huge increase in government posts, including no fewer than seven deputy prime ministers.

This 11-month post-election stalemate did not stop the ADB from extending loans and assistance to Cambodia. In fact, a month after the July 2003 election, the ADB announced its plans to allocate about US$239 million in loans to Cambodia over the next three years (2004-2006). This commitment was spread under the Country Strategy and Program (CSP) for Cambodia (2004-2006). This CSP was endorsed by the ADB's Board of Directors.

where the adb's money went

During the 1992-2002 periods, the ADB provided lending products of 26 public sector loans to Cambodia, totaling about US$675.310 million **(Table 2)** from the Asian Development Fund (ADF) resources (The updated table covering 2 April 1972 - December 2003 is on page 87.) Of these 26 loans, 4[7] were intended to enhance the Greater Mekong Subregion (GMS) cooperation for about US$121 million.

Table 2: List of Loans Approved by Sector Extended by ADB to Cambodia

(1992-2002)

No.	Loan No.	Project name	Amount (US$ million)	Date Approved
I. AGRICULTURE AND NATURAL RESOURCES				
1	1445-CAM	Agriculture Sector Program	30.00	20 June 1996
2	1385-CAM	Rural Infrastructure Improvement	25.10	28 Sept. 1995
3	1741-CAM	Rural Credit Savings	20.00	27 April 2000
4	1753-CAM	Stung Chinit Irrigation and Rural Infrastructure	16.00	05 Sept. 2000
5	1862-CAM	Northwestern Rural Development	27.20	27 Nov. 2001
6	1939-CAM	Tonle Sap Environmental Management	10.91	26 Nov. 2002
		Subtotal:	**129.10**	
II. ENERGY				
7.	1345-CAM	Power Rehabilitation	28.20	15 Dec. 1994
8.	1794-CAM	Provincial Power Supply	18.60	05 Dec. 2000
		Subtotal:	**46.80**	
III. FINANCE AND INDUSTRY				
9.	1859-CAM	Financial Sector Program Loan (Subprogram I)	10.00	15 Nov. 2001
10.	1951-CAM	Financial Sector Program Loan (Subprogram II)	10.00	28 Nov. 2002
		Subtotal:	**20.00**	

IV. OTHERS				
11.	1953-CAM	Commune Council Development	10.00	03 Dec. 2002
12.	1969-CAM	Mekong Tourism Development (GMS)	15.60	12 Dec. 2002
		Subtotal:	**25.60**	
V. MULTI-SECTOR				
13.	1199-CAM	Special Rehabilitation Program	67.70	26 Nov. 1992
		- Agriculture Component	*10.00*	
		- Energy Component	*18.20*	
		- Education Component	*7.20*	
		- Transport Component	*32.30*	
14.	1824-CAM	Emergency Flood Rehabilitation	55.00	21 Dec. 2000
		- Part A: National Transport Network	*30.90*	
		- Part B: Flood Control & Irrigation	*10.80*	
		- Part C: Rural Infrastructure	*6.20*	
		- Part D: Education	*5.80*	
		- Part E: Health	*1.30*	
		Subtotal:	**122.70**	
VI. SOCIAL INFRASTRUCTURE				
15.	1368-CAM	Basic Skills	20.00	29 Aug. 1995
16.	1446-CAM	Basic Education Textbook	20.00	20 June 1996
17.	1864-CAM	Education Sector Development Program (Program)	20.00	04 Dec. 2001
18.	1865-CAM	Education Sector Investment Project (Project)	18.00	04 Dec. 2002
19.	1447-CAM	Basic Health Services	20.00	20 June 1996
20.	1940-CAM	Health Sector Support Project	20.00	21 Nov. 2002
21.	1468-CAM	Phnom Penh Water Supply and Drainage	20.00	26 Sept. 1996
22.	1725-CAM	Provincial Towns Improvement	20.00	17 Dec. 1999
		Subtotal:	**158.00**	
VII. TRANSPORT AND COMMUNICATION				
23.	1503-CAM	Siem Reap Airport (GMS)	15.00	12 Dec. 1996
24.	1659-CAM	Phnom Penh to Ho Chi Minh City Highway (GMS)	40.00	15 Dec. 1998
25.	1697-CAM	Primary Roads Restoration	68.00	21 Sept. 1999
26.	1945-CAM	GMS Cambodia Road Improvement (GMS)	50.00	26 Nov. 2002
		Subtotal:	**173.00**	
		GRAND TOTAL:	**675.31**	
Source: ADB, Country Assistance Program Evaluation for Cambodia, January 2004				

During the same period, the ADB also provided nonlending products and services to Cambodia. During the 1992-2002 periods, the ADB extended 29 Project Preparatory Technical Assistance or PPTAs amounting to US$14.970 million, and 68 Advisory Technical Assistance or ADTAs totaling to US$51,537 million ***(Table 3)***. The PPTA is for the preparation of feasibility studies and detailed engineering for bankable projects. The ADTA, on the other hand, is for supporting institutional strengthening, sector and policy studies, and non-project-related human resource development.

Table 3 shows that the top three sectors where the ADB extended loans are the following: 1) transport and communication sector (US$173 million); 2) social sector (US$158 million); and, 3) agriculture, rural development and natural resources / environmental management (US$129.210 million).

Under the PPTA, the top three sectors are: 1) agriculture, rural development and natural resources / environmental management (US$6.125 million); 2) social sector (US$4.700 million); and, 3) transport and communication sector (US$2.245 million).

Under the ADTA, the top three sectors are: 1) "others" (US$15.229 million); 2) multi-sector (US$10.150 million); and, 3) agriculture, rural development and natural resources / environmental management (US$9.451 million).

Releases of these 26 loans, 29 PPTAs and 68 ADTAs were based on the ADB's three operational strategies for Cambodia. Each strategy outlined the priority projects with corresponding amount. The ADB funds were released at three different periods established by the three strategies.

The first strategy was developed in 1992 (during the Rehabilitation and Restora-

Table 3 : Composition of Approved Loans and Technical Assistance by Sector *(1992 – 2002)*

	Loans				PPTAs				ADTAs			
Sector	No.	%	$`000	%	No.	%	$`000	%	No.	%	$`000	%
Agri., Rural Dev. & Natural Resources/ Environmental Mgt.	6	23.1	129,210	19.1	10	34.5	6,125	40.9	11	16.2	9,451	18.3
Energy	2	7.7	46,800	6.9	2	6.9	600	4.0	4	5.9	1,395	2.7
Finance	2	7.7	20,000	3.0	1	3.4	800	5.3	6	8.8	3,540	6.9
Social Sector	8	30.8	158,000	23.4	9	31.0	4,700	31.4	13	19.1	7,218	14.0
Transport	4	15.4	173,000	25.6	6	20.7	2,245	15.0	7	10.3	4,554	8.8
Multisector	2	7.7	122,700	18.2	0	0	0	0	4	5.9	10,150	19.7
Others	2	7.7	25,600	3.8	1	34	500	3.3	23	33.8	15,229	29.5
Total	**26**	**100.0**	**675,310**	**100.0**	**29**	**100.0**	**14,970**	**100.0**	**68**	**100.0**	**51,537**	**100.0**

Source: ADB, Country Assistance Program Evaluation for Cambodia, January 2004 tion period of 1992-1995). Dubbed as Interim Strategy (IS), rehabilitation was the strategic objective of ADB by focusing on the three priority areas: 1) physical infrastructure, 2) social infrastructure, and 3) capacity-building and institutional strengthening.

In this four-year period, the ADB had poured in a total of US$141 million: US$25.10 million went to agriculture and natural resources sector; US$28.20 million for energy; US$67.70 million for multi-sector; and US$20 million for social infrastructure. (To see the specific projects and its corresponding amounts released by the ADB to Cambodia for 1992-1995 periods, see **Table 2**)

In this period the ADB's money for ADTA went to macroeconomic development and planning about US$5.905 million and another US$1.130 million for governance. **(Table 3)**

The second strategy was approved in 1995 (during the Transition and Disruptions period of 1996-1998). This is a full-fledged Country Operational Strategy (COS), unlike the IS in 1992-1995 period. This COS centered on steady poverty reduction by focusing on four identified priority areas: 1) capacity-building and institutional strengthening, 2) sustainable economic growth, 3) increased access to growth benefits, and 4) environmental protection.

In this three-year period, the ADB had extended loans to Cambodia a total of US$145 million: US$30 million went to agriculture and natural resources sector; US$60 million for social infrastructure; and US$55 million for transport and communications. (See specific projects and its corresponding amounts for 1992-1995 periods in **Table 2**)

The third strategy was prepared in 2000 (during Consolidation and Structural Change periods of 1999-2002). This COS keeps its track on poverty reduction with emphasis on: 1) sustainable economic growth through agriculture and rural development, 2) human resources and social development, and 3) creating an enabling environment for private sector development.

In this four-year period, the ADB had extended loans totaling to US$433.61 million: US$74.11 million went to agriculture and natural resources sector; US$62.90 million for energy; US$10 million for "other" sector (Commune Council

Development); US$55 million for multi-sector (emergency flood rehabilitation); US$73.6 million for social infrastructure; and US$50 million for transport and communications. (See specific projects and its corresponding amounts for 1999-2002 periods in **Table 2**)

It was only in this period that Tonle Sap Lake[8] became part of COS (approved in 2002). The inclusion of Tonle Sap was a result from the 1998 initiative funded by the ADB and the government of Finland, the Protection and Management of Critical Wetlands in the Lower Mekong Basin (5822-REG; 1998). This is to prepare a detailed proposal for investment to develop and support community-based integrated management systems for the fisheries, forestry, and agricultural resources of the Tonle Sap.

Table 4: Tonle Sap Initiative Activities

Activities	Objective	Amount (US$)	Donors
1. (5822-REG; 1998) **Protection and management of Critical Wetlands in the Lower Mekong Basin** (Cambodia)	To prepare a detailed proposal for investment to develop and support community-based integrated management systems for the fisheries, forestry, and agricultural resources of the Tonle Sap.	1.65 million	ADB Finland
2. (T42120-CAM; 2003) **Establishment of the Tonle Sap Basin Management Organization**	To design, and plan the development of, the institutional framework for integrated basin planning and management.	135,000	ADB
3. (T3993-CAM; 2002) **Improving the Regulatory and Management Framework for Inland Fisheries**	To improve the regulatory and management framework for inland fisheries, with special attention to the subdecree on community fisheries.	560,000	ADB
4. (T3997-CAM; 2002) **Chong Kneas Environmental Improvement**	To prepare a project to improve the social and natural environment at Chong Kneas.	997,000	Finland
5. (T4025-CAM; 2002) **Capacity Building of the Inland Fisheries Research and Development Institute**	To kick-start the Inland Fisheries Research and Development Institute as an efficient, effective, and relevant research and development institute.	900,000	ADB
6. (L11939-CAM; 2002) **Tonle Sap Environmental Management** (on-going)	To enhance systems and develop the capacity for natural resource management coordination and planning, community-based natural resource management, and biodiversity conservation in the Tonle Sap Biosphere Reserve.	1,091 million	ADB

The ADB recognized that sustainable management and conservation of natural resources and biodiversity should be considered from the perspective of the river basin feeding the Tonle Sap. The Bank approved loans for the Tonle Sap Environment Management for about US$10.91 million in 26 November 2002. The money came from the ADB's Special Funds resources. Other grants amounting to US$3.9 million came from Global Environment Facility (GEF) and UNDP (about US$623,000).

Table 4 enumerates the Tonle Sap Initiatives from 1998 to 2003. Five activities are already completed and 1 is still on-going.

Despite the unfavorable political and economic conditions of Cambodia, the ADB's assessment on Cambodia portfolio performance is generally good in compliance with loan conditionality. The ADB claimed that there are 5 finished projects with satisfactory ratings. However, there is no update on another 8 projects that already expired in 2002 and 2003.

cambodia's economic performance (1992-2002)

It is very important to assess the Cambodia's economic performance within the periods where the ADB was extending assistance.

From 1992 to 2002, Cambodia's economy showed some positive signs. Investments in Cambodia climbed since 1992. Cambodia's gross domestic investments as percentage share to GDP continue to expand, from 11.8% in 1992 up to 22.2% in 2002. Opening to outside world, the foreign direct investments (FDI) shot up from US$33 million in 1992 jumped to US$151 million in 1995, and reached its peak of US$294 million in 1996. It slowed down during the Asian Crisis but stood at three-digit level up to US$150 million in 2001. As a consequence of Cambodia's open economy, its garments exports shoots up from a measly US$2 million in 1994 jumped to US$102 million in 1996, then leaped to US$564 million in 1999, and reached to US$1.012 billion in 2000 and US$1.294 billion in 2002.[9]

But, Cambodia's economic performance is not spectacular. The Cambodian economy is still unstable. **Table 5** shows that in other areas of economy Cambodia did not perform well.

The following are characteristics of Cambodia's economy:

1. Cambodia's economy is vulnerable from political events. The collapse of the coalition government in 1997 sent the economy down to 3.7% in 1998 from a previous rate of 6.8%. After the 2003 national elections a political stalemate ensued. This led to a stagnation of the country's growth rate at 5.5%.

2. Cambodia's economy is also vulnerable and wobbles from external shocks. Cambodia's exposure to its Asian neighbors pulled down its growth rate to 3.7% in 1998 from 6.8% due to the recessionary impact of the 1997-98 Asian Financial Crisis. The crisis also shrunk Cambodia's export earnings from cross-border trading with GMS countries.

Cambodia's GDP in 2001 and 2002 went down as the global economy cooled down. The increasing economic globalization made Cambodia's economy vulnerable to externalities.

This vulnerability can be seen through the three economic sectors. The performance of agriculture, industry and services were greatly affected by the political turmoil and the Asian Crisis in 1998 **(see Table 5).**

3. Cambodia's economic growth way below the required growth to make dent against poverty. The GDP annual growth of Cambodia since 1992 up to the present, with exception in 1994, 1999 and 2000, are way below the required 7% - 8% annual GDP growth to make a real dent in poverty.

Despite of GDP per capita improvement to US$296 in 2002 from US$219 in 1992, Cambodia is still one of the poorest countries in the world.

Table 5: Selected Economic Indicators
(1992 – 2002)

Item	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
A. Growth and Income											
1. GDP	7.1	4.1	9.0	6.9	5.0	6.8	3.7	10.8	7.0	5.7	5.5
- *Agriculture*	1.9	(1.0)	11.2	3.3	1.0	6.4	5.8	3.4	(1.5)	2.2	(2.7)
- *Industry*	15.7	13.1	17.2	23.2	5.2	19.6	(2.5)	19.3	30.7	12.9	17.7
- *Services*	8.5	11.2	(2.0)	8.4	7.8	10.9	4.8	10.9	5.7	4.2	4.5
2. Sectoral shares (%) of GDP)											
- *Agriculture*	47.8	47.3	48.4	50.3	47.2	47.0	47.1	44.9	39.6	37.5	35.5
- *Industry*	13.2	12.9	14.5	15.0	15.7	17.1	17.9	19.1	23.3	25.6	28.0
- *Services*	39.9	39.8	37.0	34.6	37.0	35.8	34.9	35.9	37.0	36.8	36.4
3. GDP per capita ($, current prices)	219	261	274	322	312	286	252	275	279	283	296
B. Government Finance (%) of GDP)											
1. Revenue	6.0	4.3	8.5	7.8	8.3	8.9	8.1	10.1	10.3	10.5	11.1
2. Expenditure and Onlending	9.5	9.1	14.2	15.1	14.7	12.8	13.5	13.9	15.3	16.0	17.6
3. Overall Fiscal Balance (excluding grants)	(3.5)	(4.8)	(5.8)	(7.3)	(6.4)	(3.9)	(5.4)	(3.8)	(5.0)	(5.5)	(6.5)
C. External Payments Indicators											
1. Gross Official Reserves ($ million)	30	71	70	110	164	262	390	422	484	548	663
2. External Debt Service (% of exports goods and services)	–	–	–	–	–	23.2	17.9	14.2	10.1	3.8	3.4
3. Total External Debt (% of GDP) (excluding Russian and US debt)	–	–	–	–	–	7.7	11.2	12.3	11.0	11.3	11.3

Source: Asian Development Bank

4. Cambodia's economy is heavily dependent on external assistance. Cambodia's total external debt services as percentage share of its export earnings went down to 3.4% in 2002 (from 23.2% in 1997). Cambodia's external debts as percentage share to its GDP went up to 11.3% in 2001 and 2002 (excluding Cambodia's debts to the US and Russia). The ADB viewed Cambodia's external debts as manageable.

However, looking at Cambodia's external debts from the perspective of how foreign aid relates to other important economic quantities, the figures in **Table 6** are considered dangerous — Cambodia's economy is highly dependent on foreign aid.

Table 6: Importance of External Assistance, 1998

As a percentage of	Total external assistance (US$404 million)a	Technical Assistance $231 million)b
GDP	14	8
Exports	57	33
Domestic exports	70	40
Exports of services	370	211
Net foreign investment	335	191
Government revenue	167	95
Tax revenue	226	129
Government current expenditure	169	96
Non-defense current expenditure	305	174

A = Total external assistance includes investment project assistance, budgetary And balance-of-payments support, food aid, and emergency and relief assistance as well as technical assistance;
B = There are two types of technical assistance—free-standing ($208 million in 1998) and investment-related ($23 million).

Source: Cambodian Rehabilitation and Development Board; National Bank of Cambodia; Ministry of Economy and Finance.

Using 1998 data, the total foreign aid to Cambodia is equivalent to 57% of its total export earnings. On the other hand, the total technical assistance to Cambodia is 33% of its total export earnings. These external aids and technical assistance are very high as compared to Cambodia's revenues from domestic exports (mainly from garments, for which 1998 was a good year), exports of services (mainly tourism, for which 1998 was a terrible year), net foreign investment, government and tax revenues, and government current expenditure.[10]

Table 7: Directions of Cambodia's exports, within GMS and the World (1992 – 2002) (in US$ million)											
From Cambodia To	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	Annual Growth
PRC	0.2	1.1	0.9	5.2	6.3	45.6	42.2	8.9	23.8	16.7	17.7	59.8%
Lao PDR	__	2.7	2.4	2.5	2.7	0.0	---	0.3	3.1	0.8	0.9	---
Myanmar	---	---	---	---	---	---	0.0	0.2	---	---	---	---
Thailand	84.7	94.9	114.7	146.0	43.4	131.5	77.0	18.5	22.9	7.6	9.6	(19.6%)
Viet Nam	6.1	6.9	16.1	21.4	16.2	156.9	175.9	106.8	19.4	24.5	26.6	15.9%
GMS	90.9	105.7	134.1	175.2	68.6	334.0	295.1	134.7	69.2	49.6	54.7	(5.0%)
World	165.3	267.3	243.1	357.3	292.9	625.8	933.5	1,040.0	1,122.6	1,295.8	1,697.7	26.2%

Source: ADB. Country Assistance Program Evaluation

Cambodia's budget deficit widens more to –6.5% in 2002 from –3.5% in 1992. This will put pressure to Cambodia to rely on external borrowings to finance its public expenditures.

5. Cambodia did not gain from free trade. The export earnings of Cambodia from cross-border trading with the rest of GMS countries slowed down in 1998, and decelerated further in 2000 – 2002. Its compounded annual (1992-2002) growth rate is –5.0% **(Table 7)**. Worse, the exports earning of Cambodia in 2002 of US$54.7 million is below from the US$90 million in 1992.

Export earnings from the rest of the world improved dramatically since 1992, with a compounded annual growth rate of 26.2%, from US$625.8 million in 1997 to US$1.122 billion in 2002. Cambodia has increased its exports to the United States since 1998. There is now a growing dependence of Cambodia's exports to non-GMS countries.

Nevertheless, Cambodia never gained from free trade. **Tables 7 and 8** show that Cambodia sufferings from trade deficits both from trading with the GMS countries and with the rest of the world.

Table 8 : Origin of Cambodia's imports, within GMS and the World (1992 – 2002, in US$ million)											
To Cambodia From	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	Annual Growth
PRC	14.0	22.4	38.8	56.8	69.7	56.6	95.7	85.9	112.9	86.9	139.6	25.8%
Lao PDR	___	___	___	___	___	0.1	___	___	0.0	0.0	0.0	___
Myanmar	___	___	___	___	___	0.2	___	0.1	0.1	0.1	0.1	___
Thailand	72.4	197.3	286.4	367.5	398.9	198.1	168.5	195.2	221.8	503.9	544.0	22.4%
Viet Nam	7.1	105.8	85.0	104.1	108.9	107.8	90.7	85.6	91.5	109.5	118.8	32.6%
GMS	93.5	325.4	410.2	528.4	577.6	326.8	354.9	366.8	426.4	700.5	802.5	24.0%
World	751.2	981.4	1,151.5	1,573.5	1,632.0	1,116.4	1,128.9	1,243.0	1,424.2	1,455.6	1,801.4	9.1%

Source: ADB. Country Assistance Program Evaluation

6. Cambodia is a highly dollarized economy. The government policies that have focused on promoting Foreign Direct Investment (FDI) to the neglect of local, small and medium-sized investors, are time-bombs at the heart of the national economy, according to Kang Chandararot, economist with the Cambodia Development Resource Institute.

Dollarization makes Cambodia's economy without financial foundation. The trouble will start when the foreign dollars that power the economy become scarce. Cambodia already experienced the tremors of such situation by the impact of the severe acute respiratory syndrome (SARS) on the once thriving Southeast Asian tourism industry.

social and environmental costs from adb projects

Cambodia cannot exclude and insulate itself from the social and environmental costs resulting from ADB-assisted projects (dams and energy for communications and industries, roads and highways for cross-border trading, and among others) upstream.

Conservationists and other NGOs already warned of the effects of the existing and planned dams financed by the ADB and other IFIs. These dams and the blasting of rapids at the upper Mekong (Yunnan) for navigational purposes will affect the unique hydrological cycle of Mekong River and Tonle Sap, the quality of water, and the fish catch in Mekong River, all the way to the Tonle Sap Lake in Cambodia.

The hydrological cycle of Tonle Sap Lake and its vast areas of seasonably flooded low forest and shrubs that it creates results in a very biodiversity of fish, reptile, mammal and plant species. The flooded area offers seasonal breeding and nursery grounds and forage areas for fish that migrate to Mekong River.

Damming the Mekong River

Thaweevong Seeburee, director of the Institute of Environmental Analysis at Chulalongkorn University in Bangkok, said that the dam projects restrict the water flowing downstream, which resulted in severe drought and muddy water.

The Mekong River Commission reported that the river's levels in 2004 have perhaps the lowest in 20 years. Seeburee warned that if the level of the Mekong River remains too low over time saltwater may eventually flow upstream, thereby contaminating the Mekong's fresh water and rendering the water undrinkable and unacceptable for agricultural use. Another problem Seeburee pointed out is the depletion of the underground water table. Seeburee predicted that in the dry season, villagers who dig wells will have to dig deeper to get to the water.

Milton Osborne Lowy of the Institute for International Policy, based in Sydney, Australia, is concerned about the several effects of dams. One, the silt rich in nutrients for crops is not finding its way downstream. This deprived farmers in the river basin as well as those in the Tonle Sap. Second, the unseasonal flooding caused by unscheduled discharge by dams may disrupt the farming cycle. Third, there maybe a sudden change in water climate after the discharge destroys the fish and plant life. Fourth, the clearing and dredging of the river will destroy its natural habitats. Lastly, dams block of seasonal migration patterns of fish and wildlife in Mekong River and Tonle Sap Lake.

About 1,200 fish species have been identified in the Mekong River system, and another 215 species in the Tonle Sap and the rest in the Lower Mekong. The giant catfish of Mekong used for food and as cash crop disappeared, observed by Milton Osborne Lowly.

Mak Sithirith, coordinator of the Cambodian Fisheries Action Coalition Team, commented "the ADB's grand design of building hydropower dams will bring more harm and exploitation to the people of the Mekong river basin. Dams in China and Laos, supported by the ADB, will disrupt the river's fisheries and hydrology, destroying the livelihoods of millions living downstream."[11]

The Mekong Power Grid

Despite the environmental and social impacts, the ADB is supporting the construction of twelve more dams in China, Burma and Laos, according to the International Rivers Network (IRN), is connected with ADB's plan to build the Mekong grid that will sell power to Thailand and Vietnam.

The construction of generation and transmission system will cost US$43 billion which includes the controversial Nam Theun 2 Dam in Lao PDR, the Nuozhadu and Jinghong dams on the Upper Mekong in China, the Tasang Dam in Burma and Sambor Dam on the Mekong mainstream in Cambodia, and among others.[12]

In reality, this power grid may be backed up by commercial forces in Thailand, who would like to buy cheap power from other Mekong countries, in the hopes of selling that to the ASEAN grid to supply power to Malaysia and Singapore.

In addition to a few projects planned in the Southwest of Cambodia and one in the Northwest, the master plan explains forthrightly that Cambodia will be reliant on power from Vietnam (for Phnom Penh) and Thailand (for Western Cambodia). The effect of this reliance on Cambodian consumers is unknown, but is likely to mean, as subsidies are phased out and power utilities are made self-reliant, the cost of power will increased, and Cambodians will pay more for power than their Thai or Vietnamese counterparts.

The proposed Sambor Dam in Cambodia will flood more than 310 square miles, displacing 60,000 people and endangering habitat where Irrawaddy dolphin swim and tigers still roam. The completion of China's two dams (Manwan and Dachaoshan) and the construction of another two (Xiaowan and Jinghong) are already having negative impacts on river flows. In Vietnam, the second dam known as Se San III may have already begun. This is the second of the six planned dams in Se San River, one of the tributaries in Mekong River.

Damming the Mekong, Cambodia's Burden

Flooding in Cambodia is now common. In fact, the Yali Falls Dam in Se San River of Vietnam had already cost Cambodian families dearly with unannounced water releases claiming 39 lives.

Milton Osborne Lowy, reported that the dams are now leaving its mark. This was highlighted by record-low fish catches in Cambodia. By the end of March this year (2004), the annual fish catch - based on data collected from the Tonle Sap and the Lower Mekong Basin - was down 50% on the same period a year ago amid unusually low rainfall. This followed a 15% fall on stocks for 2002 and again in 2001.

In 29 July 2004, the Cambodia Daily quoted Touch Seang Tana, a fisheries specialist with the Council of Ministers, as saying fish prices have skyrocketed in the recent weeks because of "drastically" lower fish stocks. Average fish prices at the market increased by 13 percent compared to last month, according to the Consumer Price Index. Catfish prices increased from about $1.25 in June to $1.49 per kg this month - a nearly 20 percent increase compared with June 2003, the index shows. Experts blame the diminished fish stocks on severa1 factors, the largest being the low water level of the Mekong River. Upstream dams, especially those in China, have contributed to the Mekong's low water level, said Yim Chea, a researcher with the Cambodian Development Resource Institute.

This trend of lower fish catch threatens around 50 percent of Cambodians who are directly and indirectly dependent on Tonle Sap resources. There are around 1 million Cambodians who live in fish-dependent communities. Tonle Sap Lake provides 40 – 70% of the protein intake of the Cambodian population.

With 40% of the rural population of Cambodia living in or near poverty, fish are a key food security concern (Murshid 1998, ADB 2001). Fish provide up to 75% of all animal protein for rural Cambodians. Freshwater fisheries are particularly important, with 88% of all fish coming from freshwater sources (FACT 2001).[13]

Table 9 shows the estimate annual national catch in Tonle Sap Lake, including rice field fisheries and other family-scale subsistence fishing, at 290,000–430,000 tons (van Zalinge et al. 1999) depending on the season. **Table 9**

However, there are deficiencies of the data above. Some estimated that the total catch "might easily be 500,000 tons or higher." This catch was estimated to be

Table 9: Freshwater fish catch and value in Tonle Sap
(including rice field fisheries and other family-scale subsistence fishing)

Type of fishing catch	At landing place (in tons)	Value in $million per year
Commercial fishing lots & dais	40,000-60,000	24-36
Commercial mobile fisheries (licensed)	30,000-40,000	18-24
Family mobile fisheries (no licence needed)	50,000	20
Total	**120,000-150,000**	**62-80**

Source: Mekong River Commission and Cambodian Department of Fisheries project team in MRC et al., Volume 1 (1998) worth about US$300 million per annum (Degen et al. 2000). This equates to approximately 10% of official Cambodian Gross Domestic Product and is obviously of great national significance.

Dams however are affecting this process and with new ones currently being built (e.g. the Nam Theun 2 Dam in Laos) and others being planned, this sensitive ecosystem is at risk. With Cambodia's population growing at 300,000 people per year, this could have a significant impact on Cambodia's ability to feed its people.

Fishing conflicts are already alarming throughout Cambodia. The year 2003 marked by at least 100 fishery related conflicts and several deaths. According to Mak Sithirith of the Cambodian Fisheries Action Coalition Team, this is happening around the Tonle Sap Lake where people's access to fishing for subsistence living has been denied by fishing concessionaires. Despite the government's efforts to crackdown on illegal fishing, these concessionaires were unchanged as they seek to maximize their income in order to pay operational costs, government auction fees and numerous informal payments.

The industry remains politically charged and under poor management. Unregulated growth of fishing lots, centralized fishing policies and a surge in local populations has contributed to an increase in confrontations, according to some government officials. The expansion of private fishing lots on the Tonle Sap Lake, which can produce thousands of dollars worth of fish each month, leaves limited fishing grounds for local fishing communities.

While the Cambodian government is serious in cracking down on illegal logging, the Forest Concession Review report by ADB falls short of recommending the cancellation of concessions on the basis of concession performance and legal conduct. It was only the ordinary people who are dependent on the forest as their source of livelihood who were driven away. The military and those who have connections with the government are the people who benefit from the forest resources. Most of these activities are illegal.

The Tonle Sap Initiatives

Mekong Watch, an NGO based in Japan, expressed their concern about the possible impact from ADB-assisted Tonle Sap Initiatives. The Chong Kneas Environmental Improvement Project (TA CAM 36176-01), according to the Mekong Watch poses threats to the natural and social environment of Tonle Sap. The NGO is concerned with the construction of modern harbor inside Tonle Sap Lake.

The harbor plan will increase activity in the floodplain of the lake. The plan will induce in-migration, increased boat traffic and other floodplain activities. As consequences, natural resource extraction will increase because the modern harbor will attract large-scale commercial fishing. Large commercial fishing will marginalize local fishers and threatens their livelihood.

The increased activities in the floodplain will increase volume and risk of pollution inside the lake from increased boat traffic (especially for fuel transport), road transportation, in-migration, and the development of the area.

The increased activity in the floodplain will lead to increased conflict over the limited resources in the lake threatening the food security in the area.

The ADB-financed roads and highways

The ADB is funding road projects in Cambodia. The Phnom Penh- Ho Chi Minh City Road is the first project to be implemented under the Bank's Greater Mekong Subregion (GMS) Initiative. The purpose of this road project is to assist the Cambodian and Vietnamese Governments in improving the crossborder section of Highway 1 linking Phnom Penh in Cambodia to Ho Chi Minh City in Vietnam, thereby increasing the potential for cross-border trade. This project involves significant resettlement on local communities.

The project construction entails road widening, which has a number of adverse social and economic effects on communities situated on Highway 1 mainly associated with forced relocation. The project, according to an ADB social impact survey, is expected to require the acquisition of approximately 210 hectares of land, 200 of which include building structures, and to affect 5,920 people living in 1,184 dwellings.

Unfortunately, the Government of Cambodia has failed to address the affected communities' concerns in a satisfactory way, according to Bank Information Center. The following exacerbates the problem associated with the Highway 1 project:

1. Lack of Communication and Information. A survey conducted by the Working Group on Development Banks of the NGO Forum on Cambodia found that 55% of those interviewed did not have a clear understanding of the Cambodian Government's policy regarding compensation. These people also did not understand what distance in meters they would have to move their dwellings from the road axis. Most interviewees also stated that government authorities (Provisional Resettlement Sub-Committee) came to measure their houses and then asked them to fingerprint a document without further explanation. The authorities later returned to ask house owners to sign agreements to move their houses and receive the government's compensation.

2. Poor Resettlement Plan. The resettlement plan fails to provide for relocation in cases where the affected communities do not have a land title or land beyond the 30-m right-of-way on Highway 1. The NGO Forum's survey found that 65 % of the people interviewed do not have land elsewhere to which they can relocate. The failure to assure resettlement for people without land titles constitutes a violation of the ADB Loan Agreement Schedule, which states that "Project Affected People shall not be required to have formal legal title to the land used by them in order to be eligible for compensation" (Schedule 6.2)

3. Inappropriate Compensation and Intimidation Tactics. Case studies by the NGO Forum on Cambodia showed that the compensation allocated by the Government was substantially lower than the actual price for relocation and reconstruction of most dwellings. Even though the amount of compensation was insufficient, 60% of the people surveyed agreed to the government's compensation believing they had no alternative.
Twenty seven percent of the people surveyed did not find the Government's compensation sufficient. Only 7% agreed knowingly to the lower compensation. The Government of Cambodia used intimidation tactics to coerce people into

accepting an inadequate resettlement plan.

These tactics included spray painting large numbers or question marks, clearly visible from the road, on the outside walls of most affected people's houses who does not agree with the compensation offered.

As of March 2001, there were several problems with the implementation and monitoring of the resettlement and compensation plans. Affected stakeholders had not yet received compensation for wells and crops. The border of the right-of way had not been marked clearly on the ground, making it difficult for affectees to know where to relocate their houses and how to assess their compensation needs.

The Cambodian government failed to observe some of ADB Policies on Involuntary Resettlement (Operations Manual, Section 50) in the planning and implementation of the project.

> **Paragraph 34(v):** The affected people should be fully informed and closely consulted on resettlement and compensation options. Where adversely affected people are particularly vulnerable, resettlement and compensation decisions should be preceded by a social preparation phase to build up the capacity of the vulnerable people to deal with the issues.

> **Paragraph 38:** Resettlement plans should be built around a development strategy; and compensation, resettlement, and rehabilitation packages should be designed to generally improve or at least restore the social and economic base of those to be relocated. Monetary compensation for land alone may not be adequate.

Daniel Ten Kate and Kay Kimsong said that the Route 1 — the 105-km road from Neak Leoung to the Bavet border — is beset with questionable result in terms of quality.[14]. This is a $24 million project financed by the ADB. Several workers voiced their concern in the rush to complete the road. The Nopawong (a construction company) has not followed the proper procedures to compress the dirt that forms the road's foundation.

Compressing the dirt is usually done methodically in a time-consuming, step-by-step process, said Veng Thea, a Nopawong construction worker who has been working with compression crews on the road. Instead of compressing just a little amount of dirt at a time, he said crews were speeding up the process by compressing larger amounts of dirt at once.

Who benefits from these road projects? There is a discrepancy between Cambodians and foreigners working on road projects. In addition to the other costs of the project, "consulting services" for this project totaled $4,697,790. That's $782.95 per kilometer.

The Lack of Consultations and Transparency of the ADB

The environmental and social impact assessment was done by the ADB without the knowledge of the local people. The study did not consult the communities, particularly those affected by the road construction. The result of the findings has never been communicated to affected communities for their opinions.

"The construction of dams without consultation, the promotion of river clearances and the extension of Chinese trade down the river sit alongside other aspects of China's steady push to assert its position of dominance in the region," Osborne said.

Finally, NGOs criticized the ADB for its lack of accountability. ADB has a part of these failures, not just the Government of Cambodia. ADSB has a part in these failures, not just Government of Cambodia.

the adb's myopic view on poverty and poverty reduction

The UNDP's definition of poverty is encompassing. The UNDP characterized poverty as 1) low income and consumption, 2) poor nutritional status, 3) low educational attainment, 4) less access to public services including school and health services, 5) less access to economic opportunities, 6) vulnerability to external shocks, and 7) exclusion from economic, social and political processes.

For the ADB, absolute poverty means a person who is earning only US$1 a day. To reduce their numbers is to increase the ones daily income above the US$1 a day. This can only be attained through an increased trade and the participation of private sector. Thus, governments have to provide enabling environment through policy change and infrastructures. All the ADB projects and program aimed at enhancing trade through opening up countries economic border to spur economic activities.

This is a narrow concept of poverty and poverty reduction.

adb's neoliberal agenda

Behind the overarching poverty reduction strategy is the ADB's neoliberal agenda for Cambodia, and the rest of Mekong Region. The ADB believes that an increased cross-border trade between Cambodia and GMS countries will increase the income of common people. This will uplift the economic status of the people in Cambodia and the entire Mekong region.

The ADB also stressed the central importance of private sector development and foreign capital, a reduced role for the state, and lending for structural adjustment and policy objectives as opposed to individual project.

Cambodia is in transition, both in its form of government as well as its economy. From centralized planning, the ADB successfully pushed Cambodia towards a market economy. How the ADB did it? Loan conditionalities were included to pressure the DMC government to open up and liberalize their economy.

Andrew Nette observed that "over the last decade the ADB has greatly increased the use of conditionalities across all aspects of its loan operations." The Bank is using conditionalities attached to its loans "to promote macroeconomic, legal and other broader policy changes, a trend that is having far-reaching impacts in its Developing Member Countries (DMCs)." Thus, ADB is moving more in line with the approach advocated by the World Bank (WB) and International Monetary Fund (IMF).[15]

Andrew Nette also observed that the ADB is very up-front that just as important as loans are the conditions attached to them, especially in terms of influencing DMC government policy.

How the ADB managed to influence Cambodia in changing their economic policies is very subtle. There is evidence in the ADB's Country Assessment Program Evaluation for Cambodia that the Bank is using advisory and technical assistance money as their tools to influence Cambodia policies.

The bulk of advisory assistance (ADTA) was given to the so-called "Other" sector totaling US$15,229 million cornering almost 30% of the entire ADTAs in 1992-2002 periods. A closer look in this "Other" sector reveals that most of the money went to activities preparing the government of Cambodia towards a market economy.

Breaking down into three periods, it was during the 1992-1995 where the ADB's money for ADTA went to macroeconomic development and planning (US$5,905 million) and for governance (US$1,130 million). The two sectors were prepared by the ADB for long-term development management. In the 1996-2000 periods, ADB's money for ADTA went again for macroeconomic and development planning (US$3,501 million). In this period the ADB moved another steps forward by allocating US$736,000 for private sector development. The ADB viewed the private sector as the engine of economic growth.

conclusion

The main reason why despite the political instability in Cambodia the ADB continued to provide loans to Cambodia (US$239 million over the next three years [2004-2006]) is because Cambodia is part of the ADB's fantasy of creating a Mekong-wide free trade area under the 10-Year GMS Strategic Framework and its medium-term plan, the Regional Cooperation Strategy Program (RCSP).

The theoretical underpinning of the ADB's poverty reduction strategy is the already-discredited trickle down approach. Infrastructure projects (dams, power and highways) towards regional integration and cross-border trading lack any redistributive mechanism. The ADB's emphasis on private sector participation manifests their intention. Only a few people with capital will benefit from the free trade. This is what is happening in Cambodia, as can be seen from poverty situation. While Phnom Penh has reduced the poverty, records will show that the poverty incidence in the rural areas is still high.

The absence of redistributive mechanisms marginalized more rural people. The signs are already seen in the case of fisherfolks and farmers affected by the ADB-assisted dams and the farmers displaced by Highway 1.

The Tonle Sap initiatives, in reality, are distinct from the context of protecting the Mekong River where the Tonle Sap Lake is part of the unique ecological and hydrological systems. This is evident from the ADB's bias in supporting the construction of dams (Nam Theun 2 in Laos and dozen more at upper Mekong and China). The ADB must approach the Tonle Sap initiatives from the perspective of protecting and preserving the Mekong River by preventing many destructive activities at the upper Mekong.

The roads and highways constructed in Cambodia for enhanced cross-border trading between Cambodia, Thailand, Vietnam and China, the data from the ADB **(see Tables 7 and 8)** showed that Cambodia would not gain from this. These highways will only serve as funnel to swamp Chinese, Thai and Vietnamese goods to Cambodia. The entire GMS free trade area will also serve as funnel for foreign goods and services. Policy change in GMS countries to open up for foreign capitals shall serve as "tools" for foreign capitals to exploit untapped resources.

The ADB's intervention in drafting legislation regarding public access to natural resources, it is more likely that the Bank is drawing up a governance framework whereby private companies have greater access to these resources. This is what happening in the access of ordinary Cambodians to fisheries and forests/logging.

Furthermore, the ADB's performance in building the capacity of the Cambodian government to draw up legislation independent of the ADB has been weak according to their own reports. If the ADB are not successful in this, governance loans constitute a form of dependency for the government.

Any poverty reduction strategy must at least zero-in on the characteristics of poverty defined by the UNDP. The Cambodian people must participate in economic, social and political processes through democratic consultations. The economy of Cambodia shall be built founded on real sustainable growth and development that is insulated or less vulnerable from external shocks, with redistributive character, and sound environment policies.

Finally, local communities, and all stakeholders, must organize and fight for their rights against these development aggressions sponsored by the ADB and other International Financial Institutions. They have to engage constructive negotiations. The struggle shall be fought in the local and global levels.

endnotes

[1] Absolute poverty line was calculated by JICA in terms of a minimum expenditure per person per day of 881 riels in rural areas and 1,185 riels in Phnom Penh, and a large proportion of the population is clustered around this line. UNDP characterized poverty in Cambodia by low income and consumption, poor nutritional status, low educational attainment, less access to public services including school and health services, less access to economic opportunities, vulnerability to external shocks, and exclusion from economic, social and political processes.

[2] Also known as the Council for Mutual Economic Assistance existed from 1949 to 1991, linking the USSR with Bulgaria, Czechoslovakia, Hungary, Poland, Romania, East Germany (1950–90), Mongolia (from 1962), Cuba (from 1972), and Vietnam (from 1978), with Yugoslavia as an associated member. Albania also belonged between 1949 and 1961. Its establishment was prompted by the Marshall Plan. Comecon was formally disbanded in June 1991.

[3] The major donors are: Japan, United States, Australia, France, Sweden, United Kingdom, and European Union.

[4] After a five-year struggle, the Khmer Rouge took over Cambodia and ordered the people to evacuate all cities and towns and move to the countryside. The Khmer Rouge established an agrarian society. Bruce Sharp wrote that over 1.5 million displaced people died from execution, enforced hardships, or starvation.

[5] The Paris Peace Agreements, a comprehensive political settlement for the restoration of peace in Cambodia, were signed on October 23, 1991 by the four main Cambodian political parties, 19 countries, and the United Nations. Under the agreements, the United Nations was in charge of creating conditions for a

long-lasting peace, laying the groundwork for a pluralistic democracy, rehabilitating the country's infrastructure, and repatriating over 300,000 Cambodian refugees and displaced persons. As a result of the accords, a U.N sponsored general election was held in May 1993 to elect members of a Constituent Assembly which to draft a new constitution.

[6] The hereditary king is the head of state and the Prime Minister is the head of government. The Prime Minister is appointed by the King after receiving a vote of confidence from the elected national assembly.

[7] Siem Reap Airport (US15 million), GMS: Phnom Penh-Ho Chi Minh City Highway (US$40 million), GMS: Cambodia Road Improvement (US$50 million), and GMS: Mekong Tourism Development (US$15,600 million).

[8] The Tônlé Sap is a shallow lake in western Cambodia which is part of the Mekong River system. It is the largest lake of Southeast Asia and is fed by numerous streams. During the dry season it drains by the Tônlé Sap River southeast to the Mekong River. During the wet monsoon season of June to November, the high waters of the Mekong River reverse the flow of the Tônlé Sab River and increase the size of the lake from 2,600 to 10,400 sq km (about 1,000 to 4,020 sq mi). When the high waters of the Mekong River recede, the flow reverses. This natural mechanism provides a unique and important balance to the Mekong River down stream of the lake and ensures a flow of fresh water during the dry season into the Mekong delta.

[9] Based from the ADB Country Assistance Program Evaluation (CAPE) for Cambodia, January 2004.

[10] Martin Godfrey. How important is External Assistance to Cambodia? Phnom Penh Post, Issue 9/7, (March 31 - April 13, 2000)

.

[11] IRN. ADB Plan Supports a Dozen More Dams for the Mekong, 08-05-2003.

[12] IRN. ADB Plan Supports a Dozen More Dams for the Mekong, 08-05-2003.

[13] Chou Meng Tarr. Fishing lots and people in Cambodia.

[14] Daniel Ten Kate and Kay Kimsong. Making the Grade. Beset by Delays, Route 1 Construction Races Toward Completion. The Cambodia Daily [Dec. 27-28, 2003)

[15] "The Asian Development bank and conditionality – if it's not part of the solution . . ." The Reality of Aid. Ibon Foundation, 2002.

selected bibliography and appendices

selected bibliography

"ADB Plan Supports a Dozen More Dams for the Mekong," International River Network. (08-05-2003).

"ADB to study poverty in Mekong region." Washington Times. (August 4, 2004).

"ASEAN Grid gets green light." Pattaya Mail, Vol. XI No. 28, (July 11-17, 2003).

Bank Information Center – USA (http//:www.bec-usa.org).

"Building on Success: A Strategic Framework for the Next Ten Years of the Greater Mekong Subregion Economic Cooperation Program." Asian Development Bank. http://www.adb.org.

Chou Meng Tarr. "Fishing lots and people in Cambodia."(2003).

"CIA Fact Book." (2004).

"Country Profile Study of Poverty: Cambodia.". Japan International Cooperation Agency. (March 2003).

"Country Strategy and Program Update 2004-2006. Cambodia." Asian Development Bank. (July 2003).

Dacillo, Ronnie. "The Mekong Region: Towards a Free Trade Area?," Bankwatch, Vol. 2, No. 2,(October 2003).

Dossani, Sameer "Cambodia and the ADB: Some Introductory Thoughts." (Briefing Paper, 2004).

"Energy 2000." Review of the Energy Policy. Asian Development Bank. (June 2003).

"Fighting Poverty in Cambodia. The Tonle Sap Initiative Pipeline." Asian Development Bank. (May 2004).

"GMS Economic Cooperation Program (1992-2002)." Asian Development Bank. http://www.adb.org.

"GMS Flagship Initiatives. Regional Power Interconnections and Power Trade Arrangements." International River Network.

Godfrey, Martin. "How important is External Assistance to Cambodia is?" Phnom Penh Post (March 31 - April 13, 2000).

Guttal, Shalmali. "Marketing the Mekong: The ADB and the Greater Mekong Subregion – Economic Cooperation Programme." Focus Asien, A Handbook on the Asian Development Bank. (November 2003).

Hunt, Luke. "Mekong River report damns Chinese dams." Phnom Penh Post. (July 30 – August 12, 2004).

Kate, Daniel Ten and Kay Kimsong.. "Making the Grade. Beset by Delays, Route 1 Construction Races Toward Completion.." The Cambodia Daily (December. 27-28, 2003).

Lewis, Stuart. "Power Pooling Worldwide Responds to Market Change." http://tdworld.com (1966).

Martinot, Eric. "Power Restructuring and Environment: Trends, Policies, and GEF Experience. (Discussion Paper) UNEP/IEA Brainstorming Meeting. "Power Sector Reform and Sustainable Development." MAY 21-22, 2002, PARIS, FRANCE, Global Environment Facility, Washington, DC, May 2002.

Nette, Andrew. "The Asian Development bank and conditionality – if it's not part of the solution . . . . The Reality of Aid 2002." Ibon Foundation.

"Powering Economic Development and Poverty Reduction with Energy." Asian Development Bank.

"Regional Cooperation Strategy and Program 2004-2008 (The GMS—Beyond Borders)," Asian Development Bank. http://www.adb.org (March 2004).

Report of the 22nd ASEAN Ministers on Energy Meeting (AMEM). June 9, 2004, Philippines.

Ryder, Grainne. "Behind the ASEAN Power Grid." Analysis of the Asian Development bank's Master Plan for Regional Power Interconnections and Power Trade in the Greater Mekong Subregion. Probe International. (December 2003).

Ryder, Grainne. "Behind the Mekong Power Grid: ADB Master Plan serves power monopolists not the powerless." Watershed, Vol. 9, No. 2, (November 2003-March 2004).

Sharp, Bruce. "The Banyan Tree: Untangling Cambodian History." http://www.mekong.net/cambodia/banyan1.htm

Sithirith, Mak. Social and Environment Impact of ADB Development Projects on the Livelihood of Cambodian People. "Summary of Presentation at Conference on `Accounting Development,'" University of Sydney. (June 23-24, 2000,).

"Sizing Up the Grid: How the Mekong Power Grid Compares Against the Policies of the Asian Development Bank." International River Network. (January 2004).

"Summary. GMS Flagship Initiatives. Regional Power Interconnections and Power Trade Arrangements." Asian Development Bank.

"Technical Assistance Activities." Asian Development Bank. (March 1999).

"The Asian Development Bank: Financing Destructive Development in the Greater Mekong Subregion." International River Network.

"The GMS Beyond Borders. "Regional Cooperation Strategy and Program 2004-2008."
Asian Development Bank. (March 2004).

The Mekong River Commission (http://www.mrcmekong.org).

"Trading the Future Away. The Mekong Power Grid " International River Network. (June 2003).

Wikipedia Internet Encyclopedia (http://www.wikipedia.com).

appendix a

List of Loans Approved by Sector Extended by ADB to Cambodia
Updated, as of 07 January 2004

No.	Loan No.	Project Name	Amount (US$ million)	Date Approved
I. AGRICULTURE AND NATURAL RESOURCES				
1.	1445-CAM	Agriculture Sector Program	30.00	20 June 1996
2.	1385-CAM	Rural Infrastructure Improvement	25.10	28 Sept. 1995
3.	1741-CAM	Rural Credit Savings	20.00	27 April 2000
4.	1753-CAM	Stung Chinit Irrigation and Rural Infrastructure	16.00	05 Sept. 2000
5.	1862-CAM	Northwestern Rural Development	27.20	27 Nov. 2001
6.	1939-CAM	Tonle Sap Environmental Management	10.91	26 Nov. 2002
7.	2022-CAM	Agriculture Sector Development Project	25.00	26 Nov. 2003
8.	2023-CAM	Agriculture Sector Development Project	4.70	26 Nov. 2003
9.	2035-CAM	Northwest Irrigation Project	18.00	08 Dec. 2003
		Subtotal:	**176.91**	
II. ENERGY				
10.	0032-CAM	Phnom Penh High Voltage Transmission	1.67	02 April 1970
11.	1345-CAM	Power Rehabilitation	28.20	15 Dec. 1994
12.	1794-CAM	Provincial Power Supply	18.60	05 Dec. 2000
13.	2052-CAM	Power Transmission Project (GMS)	44.30	05 Dec. 2000
		Subtotal:	**92.77**	
III. FINANCE AND INDUSTRY				
14.	1859-CAM	Financial Sector Program Loan (Subprogram I)	10.00	15 Nov. 2001
15.	1951-CAM	Financial Sector Program Loan (Subprogram II)	10.00	28 Nov. 2002
		Subtotal:	**20.00**	
IV. OTHERS				
16.	1953-CAM	Commune Council Development	10.00	03 Dec. 2002
V. MULTI-SECTOR				
17.	1199-CAM	Special Rehabilitation Program	67.70	26 Nov. 1992
		- Agriculture Component	*10.00*	
		- Energy Component	*18.20*	
		- Education Component	*7.20*	
		- Transport Component	*32.30*	
18.	1824-CAM	Emergency Flood Rehabilitation	55.00	21 Dec. 2000
		- Part A: National Transport Network	*30.90*	
		- Part B: Flood Control & Irrigation	*10.80*	

		- Part C: Rural Infrastructure	*6.20*	
		- Part D: Education	*5.80*	
		- Part E: Health	*1.30*	
		Subtotal:	**122.70**	
VI. SOCIAL INFRASTRUCTURE				
19.	1368-CAM	Basic Skills	20.00	29 Aug. 1995
20.	1446-CAM	Basic Education Textbook	20.00	20 June 1996
21.	1447-CAM	Basic Health Services	20.00	20 June 1996
22.	1468-CAM	Phnom Penh Water Supply and Drainage	20.00	26 Sept. 1996
23.	1725-CAM	Provincial Towns Improvement	20.00	17 Dec. 1999
24.	1864-CAM	Education Sector Development Program (Program)	20.00	04 Dec. 2001
25.	1865-CAM	Education Sector Investment Project (Project)	18.00	04 Dec. 2002
26.	1940-CAM	Health Sector Support Project	20.00	21 Nov. 2002
27.	1969-CAM	Mekong Tourism Development	15.60	12 Dec. 2002
28.	2013-CAM	Provincial Towns Improvement (Supplementary Loan)	6.30	28 Oct. 2003
		Subtotal:	**179.90**	
VII. TRANSPORT AND COMMUNICATION				
29.	1503-CAM	Siem Reap Airport	15.00	12 Dec. 1996
30.	1659-CAM	Phnom Penh to Ho Chi Minh City Highway	40.00	15 Dec. 1998
31.	1697-CAM	Primary Roads Restoration	68.00	21 Sept. 1999
32.	1945-CAM	GMS Cambodia Road Improvement	50.00	26 Nov. 2002
		Subtotal:	**173.00**	
		GRAND TOTAL:	**775.28**	

appendix b:
map of the region