



Meeting the Poverty and Environment Challenges of the Tonle Sap

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ADB's approach to management of water, land, and biotic resources in the Tonle Sap basin considers the basin as a whole.

The Tonle Sap basin covers 44% of Cambodia's total area and is by far the largest of the Mekong River's sub-basins. It is an environmental hotspot of regional and worldwide importance; it is a major source of protein for the people of the lower Mekong basin; it is the means of livelihood for nearly a third of Cambodia's young and rapidly growing population; it is prey to myriad threats.

Threats to the Tonle Sap

Climate Change	Cumulative Impact of Built Structures on the Hydrology of the Mekong Basin	Deforestation in the Watersheds	Agricultural Expansion
Industrial and Urban Pollution	Conversion of the Flooded Forest to Agriculture	Overexploitation of Fisheries and Wildlife Resources	Agricultural Runoff
Mining	Habitat Fragmentation	Collection of Fuel Wood from the Flooded Forest	Introduction of Non-Native Species

Source: ADB. December 2004. *Future Solutions Now: The Tonle Sap Initiative*. Manila.

These threats must be considered from the perspective of the basin as a whole and the Tonle Sap basin must be treated holistically.¹ However, it is impossible to tackle all of them at the same time. Therefore, for practical reasons, ADB's approach encompasses the following important tactics:

- Geographical phasing of interventions,
- Development of the institutional, policy and regulatory framework,
- Acquisition and dissemination of knowledge,
- Enablement of stakeholders, and
- Forging of partnerships.

Geographical phasing of interventions. Central to the Tonle Sap Initiative is a geographically phased sequence of loan projects. These started at the heart of the Tonle Sap basin with the *Tonle Sap Environmental Management Project*, which became effective in early 2003. That loan project meets challenges to the Tonle Sap Biosphere Reserve² by strengthening natural resource management coordination and planning, organizing communities for natural resource management, and building management capacity for biodiversity conservation. In the buffer zone, access to capital assets will be promoted through the *Tonle Sap Sustainable Livelihoods Project*, which is nearing the end of its

¹ See ADB. 2005. *Fighting Poverty in Cambodia: The Tonle Sap Basin Strategy*. Manila. The strategy aims to reduce poverty. Toward this goal, its development objectives are to foster, promote, and facilitate (i) pro-poor, sustainable economic growth, (ii) access to assets, and (iii) management of natural resources and the environment. The strategy focuses on two core areas (i) rural development and the environment, and (ii) human development.

² The core areas are located in Prek Toal, Boeung Tonle Chhmar, and Stung Sen. The buffer zone—an area of about 540,000 hectares—surrounds the core areas up to the outer limit of the flooded forest. The transition area of about 900,000 ha lies between the outer boundary of the buffer zone and Highways No. 5 and No. 6.

preparatory phase and should lead to a loan project effective early next year. It is anticipated that it will build the capacities of community organizations, invest in livelihoods and natural resources, and strengthen capacity for project implementation and management. You will hear more about these two loan projects later.³

Moving from the buffer zone to the transition area, the emphasis will switch from conservation and fisheries to enhanced agricultural production through the *Tonle Sap Lowland Stabilization Project*, with particular regard to small-scale irrigation rehabilitation and development.⁴ Fact-finding for this loan project has recently been completed and preparation is expected to commence later this year. Finally, the *Tonle Sap Watershed Management Project* will take us to the basin's uplands with the absolute imperative for their protection through sustainable management of native vegetation and reduced land degradation while affording means of livelihood to those living in these upland areas.

It is envisaged that most elements of this cycle will go through a number of iterations and they therefore incorporate piloting of interventions. These core loan projects, however, must be buttressed in key areas.

Development of the institutional, policy, and regulatory framework. Strengthening and creating organizations can only be effective if they operate within an appropriate institutional, policy, and regulatory framework and so support is being given to the development of this. Attached to the *Tonle Sap Environmental Management Project* was an advisory technical assistance for *Improving the Regulatory and Management Framework for Inland Fisheries*, which prepared an amended Fisheries Law and subdecree on community fisheries. (This currently awaits ratification in the National Assembly.) It also prepared a five-year Tonle Sap fisheries management plan and set standards and guidelines for formulation and dissemination by the Department of Fisheries of community and commercial fisheries management plans.

An appropriate organizational framework must also be put in place to meet the requirement within the Tonle Sap basin for an integrated, cross-sectoral, and multi-disciplinary approach that promotes understanding and awareness of the interconnectedness of social, economic, and environmental factors and facilitates effective interagency cooperation. Therefore, ADB is helping the Cambodia National Mekong Committee to develop a *Tonle Sap Basin Management Organization*. Recognizing that this is a long-term process, the Tonle Sap Initiative allows for annual advisory technical assistance. The first stage concluded in early 2004 and produced the outline design of an overall basin management organization as well as that of sub-basin management organizations. The designs are being refined and elaborated, as you will hear later.

Acquisition of knowledge. Knowledge is fundamental to progress and its acquisition through research and studies is integrated with the loan projects. Examples of advisory technical assistance for

³ Quite recently, a decision has been made to accelerate the formulation of a *Tonle Sap Rural Water Supply and Sanitation Sector Project*. Loan processing is about to begin and should lead to a loan project effective early next year.

⁴ Advisory technical assistance would be extended together with this loan project for *Enabling Activities to Implement the Stockholm Convention on Persistent Organic Pollutants*.

knowledge acquisition include *Capacity Building of the Inland Fisheries Research and Development Institute*, an advisory technical assistance that began in 2004 and is about to move into its second phase. It is helping the institute to become efficient, effective, and relevant. Through a *Study of the Influence of Built Structures on the Fisheries of the Tonle Sap*, scheduled for this year, understanding of the influence of built structures on the lake's hydrology will be enhanced, in terms of the livelihoods of the population that depends on its fisheries and biodiversity. A *Study of Inland Aquatic Resource Trade Patterns*, also scheduled for 2005, will improve awareness and understanding regarding trade of living aquatic resources, with special attention to international and domestic transactions in fresh fish and *prahoc*, so that we may leverage marketing and trade policies for poverty alleviation. A study for *Enhancing the Role of Women in Inland Fisheries*, to be conducted in 2005 too, will improve awareness and understanding of the contribution of women and identify ways to raise its value by offering better access to human, social, and financial capital.

Dissemination of knowledge. But, there is no point in acquiring knowledge if it cannot be shared. Under the *Tonle Sap Environmental Management Project* there is an output for *Promoting Biodiversity Conservation Awareness, Education, and Outreach*. In support of this and other future awareness-raising, a pilot and demonstration activity is *Developing and Testing Methodologies and Tools for Environmental Education and Awareness*. Its results are being integrated into a mini-strategy for environmental education on the Tonle Sap, which we hope to drive through each loan project. Advisory technical assistance for *Capacity Building for the Tonle Sap Poverty Reduction Initiative* started earlier this year and will run for two years. It is delivering a program of skills and awareness building to a wide range of stakeholders in the Tonle Sap Initiative. It is also setting up and managing a Tonle Sap database for networking knowledge amongst all involved in management and development of the Tonle Sap. This advisory technical assistance may well be the forerunner to the establishment of a Tonle Sap Institute in Cambodia.

Enablement of stakeholders. Stakeholders must be enabled to achieve their conservation or utilization objectives by making accessible financial, infrastructural, and organizational support. This is being facilitated through all the loan projects but stakeholder enablement is also being supported through advisory technical assistance. The ongoing *Participatory Poverty Assessment of the Tonle Sap* will improve awareness and understanding of the causes and nature of poverty in the Tonle Sap region, and of the needs and priorities of the poor concerning livelihoods. Improved participatory flood risk management in targeted communities in the lower Mekong River basin is the objective of an advisory technical assistance for *Community Self-Reliance and Flood Risk Reduction*, scheduled for 2005.

Forging of partnerships. Partnerships constitute a crucial tactical element to the achievement of the development objectives of the Tonle Sap Basin Strategy. Employing this tactic does not just recognize the financial imperative of sourcing funds from as many donors as possible: it also ensures that donors and other international agencies are harmonized in their approach to meeting the needs of the Tonle Sap and that all resources are deployed most effectively, be these the skills of supporting implementation

agencies or the engagement of the most relevant elements of civil society. Already, a number of international partners are involved. They include the Ministry of Foreign Affairs of Finland, the Department for International Development of the United Kingdom, the Food and Agriculture Organization of the United Nations, the Global Environment Facility, the United Nations Development Programme, and the WorldFish Center. In Cambodia, partnerships with government agencies already include the Ministries of Agriculture, Forestry, and Fisheries; Rural Development; Water Resources and Meteorology; Environment; Planning; the Cambodia National Mekong Committee; and, of course, the Council for Agricultural and Rural Development. Numerous associations are also being built with nongovernment organizations and training institutes. All these partnerships need continuous strengthening and expansion, and it is hoped that today's briefing will contribute to this.