



Transboundary Environmental Challenges

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The Mekong River, which provides livelihoods for a significant majority of the basin's 65 million people, is often taken as a symbol of the Greater Mekong Subregion's transboundary environmental challenges. There are other major international rivers in the subregion, e.g., the Red River (People's Republic of China–Viet Nam), and the Irrawaddy River (PRC-Myanmar). However, the transboundary environmental challenges of the Mekong River exhibit complexity to the highest degree: all six countries of the subregion are riparian and all are eager to boost development using the Mekong River basin's water and related resources. Notwithstanding, their perspectives are not the same:

The Mekong River Basin at a Glance

Country	Average Flow from Catchment Area (m ³ /sec)	Share of Total Average Flow (%)	National Population (million)	Mekong River Basin Population (million)	GNP (\$ billion)	Electricity Consumption (KWh/per head/yr)	Fish (kg/per head/yr)
PRC	2,410 ^a	16	1,271.1	5.9	1,062.9	260 ^a	—
Cambodia	2,860	18	13.1	8.7	3.1	55	13
Lao PDR	5,270	35	5.3	4.6	1.5	55	7
Thailand	2,560	18	62.9	22.1	121.6	900	15–27 ^b
Viet Nam	1,660	11	78.9	14.0	30.4	140	21–30 ^c
Myanmar	300	2	51.1	0.4	—	60	—

Note: — = data not available.

^a Yunnan Province only. ^b Northeast Thailand only. ^c Mekong delta in Viet Nam only.

Sources: ADB; MRC; World Bank.

For these reasons, several scenarios exist for alteration of the Mekong River's hydrological regime. They include dams on the Mekong River in Yunnan Province and on its tributaries in Lao PDR and Cambodia, expansion of irrigation in Lao PDR and Thailand, and inter-basin water diversion plans in Thailand. The cumulative effects of such plans have potential for downstream impacts. In the Mekong delta, for example, floods that every so often damage infrastructure and crops leave silt on the flood plain. They also maintain agricultural productivity by controlling salinity intrusion in the Mekong delta. Inland fisheries, which provide almost 80% of the protein consumed in Cambodia, are vulnerable to fluctuations in the annual flooding regime and changes in sedimentation load. And, the subregion's aquatic ecosystems also harbor extraordinary biodiversity, much of which depends on the hydrological regime. Aquatic plants, for instance, provide a source of food and income for millions of people in the lowlands.

Hence, the changes brought about by alterations upstream can have real impacts on local livelihoods (such as the availability of fish and drinking water) and national well being (such as availability of water in important food-producing centers). Yet, although it is easy to portray downstream users as victims, it is important to understand the range of perspectives that exist in the basin, including those of upstream users faced with limited options for enhancing livelihoods and supplementing national budgets. And it is also important to remember that upstream-downstream linkages are borne by decisions made at many scales of management in many places.

In recent years, a deteriorating environment in the Mekong River basin has led to a greater awareness of the need for cooperation. The most significant cooperative effort has been the Mekong River Commission.¹ Policymakers have also begun to pay more attention to factors that affect the timing, quantity, and quality of water, and not just water flows. But much more is needed to meet transboundary environmental challenges. Cambodia, Lao PRD, Myanmar, Thailand, Viet Nam, and Yunnan Province must share the costs of, and responsibility for, altering the hydrological regime. Opportunities for enhancing environmental governance are plentiful and include:

Enhancing Environmental Governance

Institutional Structures	Governance Practices
<p>National governments, regional institutions, and the donor community should:</p> <ul style="list-style-type: none"> • Interpret the environment in broader terms to invite dialogue and cooperation on the full range of transboundary environmental challenges, not just water issues. (Others transboundary environmental challenges include recovering habitat and species stability, halting forest conversion, and preventing air pollution.) • Work together to identify which transboundary environmental problems are best handled at each level of governance and give their backing to plans that recognize the dynamics of change and the need for timely adjustment of roles and responsibilities. • Take advantage of regionalization trends that broaden linkages among political, economic, and environmental cooperation efforts. • Institutionalize transboundary environmental impact assessments. 	<p>National governments, regional institutions, and the donor community should:</p> <ul style="list-style-type: none"> • Deepen accountability mechanisms downwards to increase environmental sustainability and social equity. • Intensify efforts to involve the public through multi-stakeholder dialogues. • Promote transparency through the provision of information to stimulate debate, deepen understanding, and nurture new perspectives on transboundary environmental challenges.

¹ In March 2000, ADB and the Mekong River Commission signed a partnership arrangement by which the two parties agreed to cooperate on issues related to water resources planning and management, environment, navigation and river works, energy, human resource development, agriculture, fisheries, forestry and watershed management, poverty reduction, and tourism. The parties agreed that the cooperation would be established at both policy/programming and project implementation levels. They are now determining possibilities for enhanced cooperation.