Transboundary Environmental Governance

Principles and Practice in Mainland Southeast Asia

Nathan Badenoch

WORLD RESOURCES INSTITUTE

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I. INTRODUCTION

On March 4, 2000, the water level in the Se San River rose suddenly, causing loss of life and livelihood to fishermen and farmers in Cambodia's Ratanakiri Province. The unexpected surge was caused by a release of water from the Yali Falls Dam, the largest dam on the lower Mekong River system, located upstream in Vietnam. Cambodian non-governmental organizations (NGOs) and local communities brought forward details of the damage and encouraged the national and international public to consider the implications of this transboundary incident. During the incident, the flow of information between Cambodian and Vietnamese officials was minimal, and there was virtually no communication between the provincial governments on either side of the border. The government of Vietnam issued an apology and assured the Cambodian government that such an unannounced release of water would not happen again (Chapman, 2000).

In the meantime, the Cambodian government appealed to the Mekong River Commission (MRC) to investigate the incident. The ensuing examination drew attention to mistakes committed years before, during the initial project planning process. In particular, planning for the dam had not included sufficient attention to potential environmental and social impacts in Ratanakiri. Knowing that plans for other dams on the Se San River were being considered by the Asian Development Bank (ADB), local and international NGOs in Cambodia put pressure on the Bank to reassess its involvement (Öjendal et al., 2002). Subsequently, the ADB suspended plans for the project until adequate studies on potential environmental and social impacts could be conducted.

These transboundary challenges highlight the need for decision-making processes that go beyond the borders of individual nation-states. They illustrate the necessity of creating administrative structures designed to nurture ecologically sustainable and socially acceptable development that function on many levels. On the one hand, national governments occupy a central position within almost all decisionmaking processes in Mainland Southeast Asia; their participation is needed for any viable long-term solution to the area's environmental problems. On the other hand, the role of regional institutions is increasing as they begin to provide more effective channels for cooperation and collaboration among a number of stakeholders.

The Yali Falls incident demonstrates that regional governance structures and practices in Mainland Southeast Asia are still not sufficiently robust to address transboundary environmental challenges effectively. For example, the lack of channels for direct communication among the full range of stakeholdersin this case, between and among local communities, subnational governments, and regional institutions-is part of a larger problem of access to information and transparency in decision-making. The failure to include social and environmental studies across the border in Cambodia in the dam's planning points to the transboundary implications of the lack of concern for sustainability. The history of the Yali Falls Dam is complex, and the institutional setting has changed since the plans were formulated. The purpose of this report is not to examine the details of this particular incident but to consider the transboundary environmental issues it highlights and investigate the implications for environmental governance in the Mainland Southeast Asia (MSEA) region. Indeed, these types of governance failure at the regional level may have significant implications for effective natural resources management, national development needs, and the equity of environmental outcomes.

This analysis will draw upon recent developments in the MSEA region—which comprises Cambodia, Laos, Myanmar, Thailand, Vietnam, and Yunnan Province of China—and relevant global experience to examine how improved governance practice could be applied to the region's transboundary environmental challenges. The analysis focuses on the roles of three regional institutions—the Asian Development Bank, the Mekong River Commission, and the Association of Southeast Asian Nations—to address the following questions:

- What are the most pressing transboundary environmental challenges in the MSEA region?
- What are the regional forces at play, and how are regional institutions responding?
- What are the gaps in the current institutional structures and governance practices?
- What are the most promising approaches and options that could enhance environmental governance at the regional level?

There are multiple definitions of the Mainland Southeast Asia region, including: an ecologically bound region defined by the

Mekong River Basin; a development-driven unit of investment and trade that includes the nations of Mainland Southeast Asia plus the Chinese province of Yunnan; and a political grouping in which Mainland Southeast Asian nations are part of a larger regional institutional framework. (*See Map 1.*) This study adopts a concept of "region" that captures a broad range of policy fora relevant to the environment and natural resources, and it explicitly examines the interplay among the different definitions. The analysis emphasizes those environmental dynamics that are directly transboundary in nature rather than the full range of shared environmental challenges in the region.

In order to more successfully meet transboundary environmental challenges, institutions of the region will need to refine the structures and processes through which cooperation is pursued. This report argues that improved institutional structures that can better deal with multiple interests and complex human-environment interactions, along with refined governance practices to enhance the breadth and depth of stakeholder involvement, will contribute to more sustainable and equitable environmental outcomes.

II. THE LANDSCAPE OF TRANSBOUNDARY ENVIRONMENTAL CHALLENGES

Environmental challenges, such as achieving efficient water allocation, recovering habitat and species stability, halting forest conversion, and preventing air pollution, are important domestic issues, but they ignore national political boundaries as well. The fact that MSEA countries share the forest, water, and biodiversity resources that make the region environmentally one of the richest in the world means that they must also share responsibility for managing transboundary ecosystems (MRC, 1997b). Indeed, ecosystems often span national borders and create international environmental linkages (WRI, 2000). The mosaic of national development interests creates a situation in which competition for resources at the regional level may increase with further economic development (REPSI and YIG, 2001; Ratner, 2000). Poverty in rural communities has led to overexploitation of forest, land, and water resources, with environmental implications that extend

beyond the immediate communities. Large-scale development activities and illegal exploitation also threaten local and regional environments.

This section briefly introduces three aspects of the transboundary environmental challenge in the MSEA region—international rivers and watershed management, trade in forest products, and the development of regional transport and energy infrastructure. While this selection is just a sample of the many and complex transboundary linkages that characterize the region's ecosystems, it does provide the context for the analysis of institutional dynamics of regional environmental governance that follows.

UPSTREAM-DOWNSTREAM DYNAMICS ON INTERNATIONAL RIVERS

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 MSEA region's transboundary environmental challenges. There are other major international rivers in MSEA, such as the Red River (China-Vietnam), the Irrawaddy River (China-Myanmar), and the Salween River (China-Myanmar), which supply important rice production areas, provide drinking water, support fisheries, produce power, deposit silt, maintain biodiversity, dispose of waste, and invite recreation. (*See Map 2.*) However, the transboundary environmental challenges of the Mekong River exhibit a degree of complexity all their own. All six countries of the MSEA region are riparian; all rely on the Mekong River as a source of economic development.

Scenarios for alteration of the Mekong River's hydrological regime—dam plans for the Mekong mainstream in Yunnan and on tributaries in Laos and Cambodia, expansion of irrigation schemes in Laos and Thailand, and inter-basin water diversion plans in Thailand—have the potential for significant downstream impacts. The relationships between upstream activity and downstream impacts are complex. In the Mekong Delta, floods that periodically cause damage to infrastructure and crops on almost 2 million hectares of land also leave silt behind on the flood plain. This silt is crucial to farmers' ability to produce the rice that feeds much of Vietnam and provides foreign exchange earnings for the government (Le Quang Minh, 2001). The floods are also important in maintaining agricultural productivity and livelihood security by flushing out saline water that intrudes up through delta areas. Inland fisheries, which provide almost 80 percent of the protein consumed in Cambodia, are similarly vulnerable to fluctuations in the annual flooding regime and changes in sedimentation load. The region's aquatic ecosystems harbor a vast wealth of biological diversity, much of which depends upon the natural fluctuations in the hydrological regime for its spawning and migration patterns.

The concept of ecosystem management has been developed to deal with the diversity and complexity of environmental linkages and human-environment interactions (WRI, 2000). In particular, policymakers have begun to pay more attention to factors that affect the timing, quantity, and quality of water, in addition to water flows. The linkages between land use and hydrology, for example, are now vocally debated within policy circles. In MSEA, an important issue is how shifting cultivation-the dominant agricultural system in the mountainous areas of Laos1-affects downstream areas such as Cambodia's wetlands through changes in the hydrological regime and increased sedimentation. The lower Mekong Basin countries-Laos, Thailand, Cambodia, and Vietnam-occupy both upstream and downstream positions within the hydrological system, and they must share the costs of, and responsibility for, altering the flow regime.

Such upstream-downstream linkages result from decisions made at many scales of management in many places within the basin, and alteration of upstream areas can result in cumulative impacts that accrue downstream in the ecosystem. The changes brought about by such decisions 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 nationally important food-producing centers). Although it is easy to portray the downstream users as victims, it is important to understand the range of perspectives that exist throughout the system, including those of upstream users faced with limited options for enhancing livelihoods and supplementing national budgets with resource-based industry.

LEGAL AND ILLEGAL TRADE IN FOREST RESOURCES

Forest resources in the region have been declining because of overexploitation, mismanagement, agricultural expansion, and urbanization (ASEAN, 2001a). Many of the forces that drive forest resource degradation are regional, and cannot be adequately addressed by measures in one country alone (EIA and Telapak, 2001). For example, in addition to the internal forces that drive the trade in legal and illegal timber in Myanmar's border areas, the situation is also exacerbated by demand from neighboring countries. This trade flourishes because of high demand, porous borders, weak enforcement, and strong incentives for short-term and intensive exploitation on both sides of Myanmar's borders with India, Laos, Thailand, and China (Brunner et al., 1998; Brunner et al., 1999). Map 3 shows the extent of forest cover in the MSEA region by forest type. Much of this forest, however, is degraded.

Because of widespread forest degradation and extreme flooding attributed to deforestation in upper watersheds, the Thai government issued a logging ban in 1989. After the historic flooding of the Yangtze in 1998, China also issued a ban on logging in natural forests. One effect of the Thai logging ban has been to shift forest degradation to its neighbors, Laos, Cambodia, and Myanmar (MRC, 1997b; Hirsch, 1995), whose exports of legal and illegal logs have increased to meet Thai demand. The Chinese ban is creating a similar but intensified situation (EIA and Telapak, 2001), in which China's timber demand is being met by increased imports from neighboring countries. Nevertheless, the trade in legal and illegal timber is not solely the product of Chinese or Thai policies. From the Lao government's point of view, there are few realistic short-term economic development alternatives to commercial forestry other than hydropower development; this high demand for timber puts intense pressure on the remaining forests and the people who live in them.

Most of MSEA's terrestrial biodiversity is in the border areas, where the majority of the intact forests are located, such as the remote triangle where Laos, Vietnam, and Yunnan meet (Donovan ed., 1998). Overexploitation, forest loss, and habitat fragmentation threaten the future integrity of the region's biodiversity (Dillon and Wikramanayake, 1997; Donovan ed., 1998). With rapidly improving transport infrastructure, it is becoming increasingly easy to access previously remote areas of high biodiversity. Moreover, with rising incomes in China, the huge demand for medicinals has significantly increased the number of species on threatened and endangered lists (Tan Ee Lyn, 2001; Nooren and Claridge, 2001). This demand is acute in Laos, where the commercial trade in plant and animal species is overwhelmingly dependent upon Chinese markets (Nooren and Claridge, 2001).

Domestic factors also contribute to the challenge. Domestically, national-level regulatory and enforcement policies influence trade in forest products. Since 1995, the Lao government has increased monitoring and enforcement efforts regarding trade in endangered species. However, Lao's long and porous borders provide considerable opportunities for evading even these increased enforcement efforts, and the volume of trade in endangered species continues to rise (Nooren and Claridge, 2001). Traditional approaches to forest crimes overemphasize centralized regulation and often ignore opportunities for involving communities in monitoring forest resources (Brunner et al., 1999). In short, conventional regulatory methods continue to be unsuccessful, and feasible alternative approaches to protecting threatened biodiversity are few and far between.

EXPANSION OF **R**EGIONAL INFRASTRUCTURE

The governments of the region, with support from the Asian Development Bank (ADB) and other bilateral donors, such as the Japanese government, have developed plans for a network of road projects scheduled for completion in 2006 that will strengthen regional transportation linkages. Its proponents hope that the development of a transport infrastructure will stimulate economic growth by facilitating the movement of people and goods. Such a development strategy seeks to promote "development corridors" along newly constructed highways and bring previously remote communities within the reach of economic markets and government services. For example, supporters argue that the proposed East West Transport Corridor, including road, port, and bridge infrastructure projects to improve linkages among Vietnam's port Danang, Lao's Savannakhet, Thailand's Mukdahan, and eventually Myanmar's Mawlamyine, will provide an economic stimulus to both national and local economies by increasing the flow of goods through these countries.²

Improved and expanded transport linkages will likely bring both direct and indirect environmental impacts (ADB, 1997; Dobias and Talbott, 1995). Direct impacts include altered land use patterns, disturbances in water drainage, disrupted animal migrations, soil erosion, and soil and air pollution. Indirectly, roads may facilitate encroachment on forests and other biologically important areas, and expansion of agriculture and logging activities (NUOL, 1999). Environmental impact assessments (EIAs), if conducted at appropriate points in a project development cycle, can help to identify and mitigate possible negative environmental outcomes.

Plans for a regionally integrated power grid are a major part of the effort to increase the infrastructure foundations for future economic development. The plans, which are supported by the ADB and many of the region's national governments, envision a system in which the supply and demand of electricity are linked through a network of power stations with transboundary transmission lines.³ The regional trade in electricity not only produces international economic linkages but it is also accompanied by the upstream-downstream environmental dynamics introduced above.⁴ The policy circles driving the regional energy grid and those dealing with international river management do not coincide to the extent that a coherent and integrated planning process can be ensured.

In many such cases, the issues may be best addressed at the bilateral level through EIAs implemented jointly on both sides of the border. Yet because these plans are being developed at the regional scale, the involvement of regional institutions such as the ADB and the MRC is critical to ensuring that potential cumulative impacts and other environmental concerns are incorporated into the larger programmatic planning and priority-setting processes. In summary, the management of freshwater resources, forest resources trade, and regional infrastructure in MSEA is a significant challenge that requires a coordinated regional response.

III. TRENDS AND ACTORS IN MSEA REGIONALIZATION

The extreme diversity of political and economic systems among Mainland Southeast Asian countries presents unique challenges for regional cooperation. Thailand is taking the implementation of democratic reforms set out in its 1997 Constitution seriously, and it has significant experience with a market-driven economy. Cambodia, having recently emerged from an extended period of conflict that devastated virtually all social, political, and economic institutions, is concentrating its reconstruction efforts for the foreseeable future on building the basic institutions for national governance. Vietnam and Laos are single-party states that are beginning a shift from centralized economic planning to a more market-oriented development agenda, although broad-based democratization proceeds at a slower pace. Yunnan, as a province of an increasingly market-oriented China, enjoys a notable degree of autonomy in its relations with neighboring countries, but it is nonetheless subject to national interests articulated from Beijing. Myanmar is a relatively new actor in regional fora after more than 30 years' isolation from the regional and global communities; its military regime continues to hold back the transition to democracy.

This diversity of political and economic systems hampers the development of a regional civil society. In particular, differing degrees of political freedom-notably the political space provided for non-governmental voices and the degree of direct public representation in national political processesconstrain the scope of non-governmental activities that might be undertaken regionally. In other areas of the world, a vibrant civil society has proved to be an important part of the regional institutional framework. In the Latin America and Caribbean region, for example, non-governmental actors have been brought into the national environmental policy and planning processes, and in Europe civil society has contributed to the development of a major regional agreement on environmental procedures. (See Section V below.) In MSEA, some networking efforts focus on specific issues of common interest, such as regional efforts by international conservation groups, research and capacity building among academic institutions, and, occasionally, opposition to development projects.⁵ However, the emergence of robust non-governmental actors that

represent specific interests within the region and across national borders has not yet occurred, meaning that central government agencies still dominate the articulation of environment and development priorities.

Despite its recent turbulent history, MSEA has not been devoid of cooperation and collaboration among governments. In the current era of peace and growing cooperation, forces of regionalization are creating three interlinked and overlapping regional identities that influence the form and function of environmental governance in MSEA. This section focuses on three regional institutions—the Association of Southeast Asian Nations (ASEAN), the Asian Development Bank (ADB), and the Mekong River Commission (MRC)—and how they contribute to regional trends in political cooperation, economic integration, and environmental awareness.

POLITICAL COOPERATION: THE ASEAN IDENTITY

With Cambodia's entry in 1999, ASEAN completed its expansion to include Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. The grouping has shed its Cold War identity to assume a more active role in strengthening regional stability and cooperation. The new ASEAN identity is particularly important for the MSEA region because of its diverse political systems, economic growth trends, and level of social development. Under the ASEAN umbrella, the MSEA governments of Vietnam, Thailand, Laos, Myanmar, and Cambodia can come together to discuss common challenges. The group also engages in regular ASEAN+3 parallel dialogue with the neighboring countries of China, Japan, and Korea.

ASEAN functions through high-level ministerial meetings guided by the principles of non-interference in domestic matters and consensus-based decision-making. This arrangement means that the perspectives of all members are discussed until a unanimous decision is achieved, and careful attention is given to respect for national sovereignty. Consultation and negotiation are carried out to maintain harmony and avoid direct confrontation among the member governments. Although criticized for emphasizing talk over action (Vatikiotis, 1996), an expanded and confident ASEAN is a significant development, with implications for the future of more inclusive political cooperation among MSEA nations. Nonetheless, the formulation of ASEAN policy has always been a slow and cautious process, and compliance with stated policy is voluntary. With the inclusion of Laos, Cambodia, Myanmar, and Vietnam (collectively referred to as the LCMV countries), the lowest common denominator of consensus decision-making has been further lowered, with additional interests and uneven capacity among the members. Even the Free Trade Area, the Asian Investment Area, and other seemingly popular ASEAN economic schemes are hampered by domestic politics and vested interests (Soh, 2001).

Although frequently described as a political grouping, ASEAN has in fact been shifting away from a focus on political cooperation per se toward a regional approach to collective economic development. Indeed, given the extreme political and economic diversity among its members—particularly the levels of political and economic openness—and the demonstrated reluctance to apply pressure among members concerning domestic issues, the prospects of ASEAN's taking a position of leadership in promoting changes in environmental governance at the regional level are small. (*See Box 1.*) Encouragingly, however, some ASEAN officials have joined outside observers in arguing for revising ASEAN's non-intervention principle (Kao and Kaplan, 1999), which might enhance the political effectiveness of cooperation among the member nations.

ECONOMIC INTEGRATION: THE MOMENTUM OF THE GREATER MEKONG SUBREGION

The ADB has promoted a regional program of economic development in the MSEA region. The Greater Mekong Subregion (GMS) Program supports economic liberalization and regional integration in Cambodia, Laos, Myanmar, Thailand, Vietnam, and China's Yunnan Province and is significant in light of the 240 million people living in the subregion. The idea of a GMS economic unit has been bolstered by the common national priorities of many countries in the region that are increasingly committed to marketbased economic development. Since the inception of the GMS in 1992, the ADB has provided US\$770 million in loan financing and US\$230 million in cofinancing to 10 priority projects focused primarily on transportation and energy. An additional US\$46 million has been provided for technical assistance and other studies in the GMS.⁶

The central government of China has given the green light for Yunnan's further integration into the GMS economy, a decision that bodes well for its long-term prospects. Through GMS Program activities, a collective vision of development is emerging that unites the ASEAN nations with Yunnan. The economic attraction between Yunnan and MSEA countries is mutual because both see opportunities for expanding markets. For these reasons, the GMS concept offers a distinct geographic, economic, and environmental coherence that has made it extremely relevant for the region's governments. Because the GMS Program is backed by financial assistance from the ADB and other donors such as the Japanese and Australian governments, it is all the more attractive to the MSEA governments, as is the ADB policy of non-interference in domestic political affairs.

The GMS is developing an identity beyond that of the ADBled program. In recognition of the GMS as an economic entity, institutions other than the ADB have pledged support. Notably, the Economic and Social Commission for Asia and the Pacific (ESCAP) is promoting the Decade of GMS Development, and Japan's Comprehensive Forum for the Development of Indochina has been expanded to correspond geographically with the subregion. Economic integration and development cooperation have increased the number of ways in which the region's national governments interact by providing a larger menu of common interests than those offered by political fora. Although poverty alleviation is stated to be central to many of these development initiatives, some observers have charged that the neoliberal development trajectory driving the GMS Program has left behind an unacceptably large portion of society (Rigg, 1997; Watershed, various issues). Marginalized communities are missing out on the benefits of economic development, even as they confront massive structural and political barriers to their more active participation in planning and implementing the strategies that are meant to help them.

Box 1 ENVIRONMENTAL ACCOUNTABILITY IN THE ASEAN CONTEXT

In 1985, the ASEAN Agreement on Conservation of Nature and Natural Resources established that one country should pay for conservation efforts in another country under certain circumstances (Tay et al., 2000). This innovative approach to transboundary environmental accountability through funding requirements was never implemented because political support from the governments for the agreement, which was drawn up by a Western conservation organization, was insufficient.

The "ASEAN Way" of non-intervention and consensus-based decision-making does not provide a firm foundation on which to build accountability mechanisms for holding national and other actors responsible to each other for transboundary environmental impacts. However, the haze emergency of 1997-98, caused by forest fires attributed primarily to the clearing of land for oil palm plantations, produced an unprecedented degree of international scrutiny of Indonesia's domestic policies. There was even talk of Brunei's pursuing legal action in Singapore against Indonesia for damages caused by the fires. In the end, the problem was resolved through a Regional Haze Action Plan consisting of joint monitoring and prevention measures, agreed upon in 1997 (ASEAN, 2001b). In fact, ASEAN already had a Plan of Cooperation to prevent and manage haze, negotiated in 1995 (Tay et al., 2000).

Although the significance of the haze response should not be overstated, it does signal that the existing norms of the region may be evolving incrementally. On the eve of Cambodia's entry into ASEAN in 1999, the viability of the non-intervention principle was discussed. Cambodia's membership was, in fact, delayed because of its domestic political situation. Although some countries had already experimented with "flexible engagement" or "constructive intervention," such as Thailand's initiatives to discuss human rights and other domestic political issues with Myanmar, the tension between new and old member countries has not yet led to a major revision of the "ASEAN Way" (Thayer, 1998).

SHARED ENVIRONMENT: DEVELOPMENT AND CONSERVATION

A deteriorating environment has led to a greater awareness of the need for cooperation among the governments of the MSEA region (MRC, 1997a). The Mekong River⁷ has long been a symbol of the natural linkages among the riparian countries, but the idea of addressing these environmental challenges cooperatively is relatively recent.

The most significant cooperative effort has been the Mekong River Commission, one of the only regional institutions to survive the difficult period of conflict in Indochina. The MRC-which comprises Thailand, Laos, Cambodia, and Vietnam—was initially created in 1957 as the Mekong Committee, and sought to facilitate exploitation of the lower Mekong River's hydropower potential. The organization's mandate was expanded by the 1995 Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (the Mekong Agreement), which established the Mekong River Commission in its current form. The MRC works toward more effective flood control, water allocation, and water quality monitoring, and more integrated basin development based on the principle of fair and equitable utilization.8 The Agreement also called for the institutionalization of capacity to recognize and address socio-economic and environmental issues associated with large-scale water management. With the official start of the MRC Basin Development Plan in 2002, the Commission has made a significant step towards realizing its interest in a more ambitious role in coordinating activities in the basin.

The MRC is an inter-governmental agency comprising three branches—the Secretariat, the Joint Committee, and the Council—and is supported by National Mekong Committees in each country. As such, the authority of the MRC is derived directly from the interaction of representatives from the member countries. Notably, China and Myanmar are not members of the MRC, as they have found little common interest with the lower basin nations regarding water management, but do have limited engagement with the MRC through their "dialogue partner" status.

Prior to 1999, the MRC had long been regarded as a closed and technocratic organization. Since then, however, with changes in senior management, the MRC has demonstrated a new commitment to openness and transparency in its operations, a shift facilitated by increased political and economic openness in the MSEA region more generally. Bilateral and multilateral donors have also been important in encouraging these changes. At the same time, the donor community has provided much-needed support to the Water Utilization Program (WUP), the Basin Development Plan (BDP), and the Environment Program—the core programs in the new MRC. The Mekong Agreement also provides the necessary foundation for conflict prevention and resolution among member nations, issues that were not addressed under the previous structures. Yet it is important not to overemphasize the political significance of the changes that have taken place. Although the MRC Secretariat has made efforts to engage outside actors and orient its style toward that of a provider of services to its "clients," its decision-making structures and processes remain firmly rooted in the black box of high-level inter-governmental negotiation.

A less formal example of environmental regionalism is the attempt to instate mechanisms to promote biodiversity conservation in valuable border forests (ASEAN, 2001b). The international conservation community has been instrumental in providing technical input and suggestions for a workable mechanism for dialogue and exchange. For example, the Indochina Biodiversity Forum-initiated by the World Wildlife Fund for Nature (WWF) in 1997 to enhance biodiversity protection and increase stability in border areasprovided a platform for international dialogue and cooperation to increase mutual awareness and understanding (Dillon and Wikramanayake, 1997). This example is notable because it encouraged the participation of scientists, academics, individuals from local government, and, to some extent, local communities, in addition to national government representatives. The problems inherent in this approach, however, are great. In addition to the shortage of technical capacity, the scarcity of information, and the difficulties in accessing important biodiversity areas, political will has proved to be a formidable constraint owing to the perception that joint conservation efforts might threaten national sovereignty (Dillon and Wikramanayake, 1997).

INSTITUTIONAL PLURALISM AND REGIONAL GOVERNANCE

As these identities mature, "the line separating domestic and regional matters has blurred, or even evaporated. This trend has been exacerbated by the increasing inter-relationship between economic and non-economic issues" (Kao and Kaplan, 1999). Against this backdrop, to what extent can we say that regional governance really exists? How much decision-making is done at the regional level? Each regional institution has its own principles or norms-ASEAN's noninterference, ADB's apolitical development support, and the MRC's fair and equitable utilization-that determine how it cooperates and defines the space in which it can engage with other actors (Dore, 2001b). One common theme running through the above regionalisms is the prevalence of state actors and official processes. Concern about threats to national sovereignty has been identified as an important challenge to transboundary environmental issues in the region (He et al., 2001). Yet even with the dominance of national governments, the expansion of regional institutions' influence over the political, economic, and environmental situation has occurred at a pace that is striking.

What then is the most appropriate regional institution for promoting improved environmental governance? Perceptions vary. Some suggest that regional institutions that directly represent national interests and national governments (such as the MRC and ASEAN) are more effective because they link directly into the national processes that shape governance interactions (Le Quy An et al., 2001). Others would argue that the GMS Program is better suited to a regional approach, in part because it includes Yunnan, in part because it recognizes the economic regionalism underway, and in part because it may provide more opportunities for non-governmental interaction (Zuo, 2001).

Still others argue that the interaction of these institutions, along with the specific dynamics of integration associated with each national actor, provides a large playing field on which environmental governance reform can be addressed (Kao, 2001). It is likely that institutional richness—a diverse range of institutions with overlapping and complementary mandates and with multiple channels of communication and accountability—will result in the more effective governance of transboundary issues (Lipschutz, 1997). The direction this institutional interplay takes is largely determined by the structures and practice of governance, how decisions are made and by whom.

The previous sections highlight some of the pressing transboundary environmental challenges faced by the region, and introduce three key regional institutions that have begun to respond to these challenges. The next sections demonstrate how changes in institutional structures and governance practices can enhance the capacity of regional actors to achieve more effective transboundary environmental management.

IV. INSTITUTIONAL STRUCTURES FOR ENVIRONMENTAL COOPERATION

Given the complexity and scale of the region's environmental challenges, no one regional organization can deal with all aspects and all levels of the regional environment and development challenges (Le Quy An et al., 2001). Basic institutional failures are common throughout the transboundary environment of MSEA (Nilsson and Segnestam, 2001). In large part because national-level institutional failures-such as policies that promote the externalization of environmental costs, ignore indigenous resource management regimes, impose unrealistic or inappropriate regulatory frameworks, and fail to integrate environmental issues-have had a substantial negative impact on the environment (Prachoom, 2001), the need for regional institutions that maintain a sufficiently broad perspective is pressing. This perspective should be one that provides a comprehensive view of systemic cause-effect linkages, supply-demand dynamics, and human-ecosystem interactions, while possessing a flexible, responsive, and specialized capacity to understand local conditions.

Drawing upon specific examples, this section assesses the structural arrangements of relevant MSEA institutions using four criteria—appropriate mandate and adequate capacity, location of authority at the appropriate level, representation of relevant jurisdictions, and integration of environmental matters. Recognizing that these criteria are certainly just a subset of the necessary characteristics of successful institutions, this analysis asserts that they are fundamental aspects of transboundary environmental management in MSEA. Consideration of the international experience provides useful nuance to the examination of each of these criteria.

APPROPRIATE MANDATE AND ADEQUATE CAPACITY

Institutional mandates provide frameworks for the roles and responsibilities of regional organizations. The position of environmental matters within an institution's mandate defines the scope for its engagement with environmental problems. Mandates are highly varied among the regionallevel institutions of MSEA. This analysis examines a river basin management organization (MRC), a multilateral financial institution (ADB), and a regional political grouping (ASEAN). None was specifically set up to address environmental problems. Although they all have relevance for the transboundary environment, each is constrained by the fact that its immediate priorities and existing strengths with respect to the environment are in technical matters. Nevertheless, all these institutions have shown a degree of flexibility in reconsidering their mandates to allow for more comprehensive and cooperative approaches to solving environmental problems.

Successful implementation of an environmental mandate requires capacity that often does not exist within the relevant institutions (REPSI, 2001). Gaps in capacity to implement good governance practice—public consultation, integrated environmental impact assessments, information management, and transparency, to name a few—can exacerbate the environmental challenges discussed above. The ability of national governments, local communities, and regional institutions to respond to the challenges of transboundary environmental impacts and to take advantage of the opportunities presented by regional integration is often limited by a lack of awareness, methods, skills, and resources (REPSI-MREG, 2001).

So far, no single institution in the MSEA region has matched a specific mandate for resolving environmental problems with a broad-based foundation for engaging relevant stakeholders. Nevertheless, the MRC now has a mandate to address environmental issues, including those that transcend national borders, arguably putting it in the best position to coordinate a regional response to water-related transboundary challenges (Öjendal et al., 2002). The GMS Program is now required by ADB policy to consider transboundary impacts in infrastructure investments, and it can financially support the development of national government capacity to implement such assessments. Although ASEAN has a broad political mandate to facilitate coordination of policies among member nations, it has not taken an active role in promoting harmonization of national environmental policies.

International experience suggests that a clear focus on environmental management and political recognition can be essential for an institution's effectiveness. For example, the Helsinki Commission embodied a high-level commitment from the governments that shared both responsibility for and losses from degradation of the Baltic Sea. The Commission was given a mandate to address the specific environmental problems of the Baltic by providing a broad platform for political cooperation. As an institution that bridged the ideological differences of the Cold War, the Commission's founders recognized that without the full political support of each government, it could not mobilize the collective action necessary to reduce pollution levels in the Baltic (Momose et al., 1995). However, a similar level of support for a regional environmental agenda is not yet evident in MSEA.

SUBSIDIARITY PRINCIPLE: AUTHORITY AT THE LOWEST APPROPRIATE LEVEL

The Rio Declaration asserts that authority should be located at a level of decision-making appropriate to the scale of the environmental issue. Typically, national governments are the primary level of environmental decision-making, and indeed this may be the most appropriate level for many issues. But the allocation of authority at different levels recognizes that environmental decision-making powers can be unbundled, with certain rights and responsibilities vested in different agencies or societal groups. Thus, achieving an appropriate level of decision-making often includes shifting responsibilities upward to regional and global bodies, and downward to sub-national governments.

The rationale behind the decision to delegate transboundary environmental problems to regional institutions is based on the realization that no single nation can adequately address such challenges as international river basin management, international trade in endangered species, regional infrastructure development, and regional air pollution. In particular, the allocation of water among users in an international river basin may require some decision-making powers at the supranational level. Other issues may best be dealt with directly by sub-national governments, local communities, or other private actors. For all environmental issues, the appropriate level of decision-making should provide for representation of the largest number of interests at stake.

The renewed interest in the Mekong River Commission after the 1995 Mekong Agreement⁹ indicates that the region's governments are beginning to take the notion of multi-level water governance more seriously. The Mekong Agreement requires each signatory nation to provide notification of fluctuations in water flows, but this requirement is the only legally binding point in the Agreement (Öjendal et al., 2001). However, it is a first step toward locating formal responsibility at a level above that of the nation-state. When completed, the MRC's Water Utilization Plan will provide a basis for negotiating water allocation among member nations, but it will not be a supra-national institution with full regional authority over water resources exploitation.

The Yali Falls incident suggests that local governments, if provided with greater authority to communicate and interact with regard to transboundary environmental issues, could play a key role in facilitating the flow of information and providing a local perspective on the implications of environmental decision-making. Some decentralized local modes of cooperation on environmental management already exist. Local actors on the Yunnan-Vietnam and Yunnan-Laos borders work together on transboundary fire control and other environmental issues that cannot be effectively managed by central governments (Zuo, 2001). The Chinese central government's recognition that the Yunnan provincial government is much better equipped to deal with these issues aids the process of decentralized management. The Thai-Myanmar Township Border Committees, in which district-level authorities negotiate directly on border security issues, shows how even extremely sensitive matters are sometimes best handled at a distance from the politics of international diplomacy.

In many areas of the world, increased regional cooperation is changing governance structures and making subsidiarity an essential component of how different actors interact at different levels of decision-making in a broader selection of policy arenas. The European Union is perhaps the world's most advanced experiment in subsidiarity, in which central governments share significant authority over decisionmaking-agenda setting, policymaking, implementation, and dispute mediation-with supra-national and subnational actors interacting in a multi-level governance system (Marks et al., 1996). Although the EU was not created to manage transboundary environmental problems, the European experience does show how the application of the subsidiarity principle allows for roles and responsibilities to be distributed among multiple layers of government and civil society actors in a way that is most appropriate for each specific issue. In MSEA, the trajectory of economic integration and political cooperation provides an environment that may be increasingly conducive to the establishment of regionally acceptable norms of subsidiarity in environmental matters.

FULL REPRESENTATION OF RELEVANT NATIONAL GOVERNMENTS

Transboundary environmental management requires the involvement of all countries that influence or are influenced by the resource or system being managed. In the context of a river basin, such as the Mekong River, this requirement means that all riparian countries should be included in the decisionmaking processes that affect the basin and its people. Similarly, transboundary conservation efforts that do not have the full participation of the countries where biological diversity is found and where it is marketed will not likely achieve their objectives. Without the inclusion of each government, this regional vision would likely fall victim to national self-interest and the opportunity to implement integrated ecosystem management would be lost.¹⁰

The representation question is particularly important to the effectiveness of the MSEA institutions and is related to the scale of the environmental challenge. As previously mentioned, the MRC is constituted exclusively of the lower basin countries. Myanmar and China are not official members, but Box 2

IMPERFECT NATIONAL REPRESENTATION AND LIMITATIONS TO GOVERNANCE

Dam building is not the only activity with threats of downstream effects. In 2001, China, Laos, Thailand, and Myanmar concluded an agreement on commercial navigation on the upper reaches of the Mekong River. Under this agreement, dredging and clearing rapids to allow 500-ton ships to pass between ports have begun. The four countries have conducted an environmental assessment and determined that impacts will not be significant, but the assessment covered only the upper reaches of the Mekong and considered possible changes over a short time frame. Cambodia will be most affected by the river's alteration-expected impacts include new siltation patterns, changes in current speed, and abnormal water levels in the dry season. However, precise projections for these changes are not available. The MRC is powerless to intervene because China and Myanmar are not within the Commission's jurisdiction.

Under this agreement, the Thai government planned to enlarge the Chiang Khong port in anticipation of larger vessels and heavier traffic. The Lao government voiced concerns that the construction would shift the water flow, speeding erosion of the riverbank downstream in Lao territory, and deposit garbage and other debris on the Lao side. Because the Mekong Agreement covers development of the mainstream and both Thailand and Laos are members of the MRC, this problem falls under the jurisdiction of the MRC. The Commission requested a halt to the construction, but final resolution of the issue was left to direct bilateral negotiations.

These events show how multilateral cooperation among upstream nations can bypass existing institutional arrangements for regulating environmental impacts. The MRC's capacity and authority to handle these disputes are limited by China and Myanmar's absence from the Commission and member nation's prerogative to negotiate directly with their upstream neighbors. However, issues that clearly fall under the Mekong Agreement have been mediated by the MRC with encouraging success.

Excerpted from *The Daily Yomiuri*, January 2, 2002; *Asahi Shinbun*, December 14, 2001; and *Bangkok Post*, November 2, 2001.

each has dialogue partner status. For example, the Joint Committee and representatives from the governments of China and Myanmar have held Dialogue Meetings.¹¹ Although these meetings may ensure a minimal flow of information and interaction among the members and non-members, the incomplete national representation is still a significant problem for an organization seeking to promote sustainable development of the river basin. The completion of the Manwan and Dachaosan dams and the prospects of six more dams in Yunnan signal the need for a more representative body capable of negotiating the development of the entire river basin. (*See Box 2.)* Indeed, dam building on the Yunnan stretch of the upper Mekong is a prime example of a distressing lack of regional governance (Dore, 2001b).¹²

The membership of the Asian Development Bank is broad, covering the entire extent of Asia, but the GMS Program provides a special forum for the MSEA countries to cooperate on shared economic development interests. Importantly, the GMS Program is able to include Yunnan in its activities, a fact that strengthens the Program's economic influence, but also makes it geographically relevant for addressing transboundary environmental issues. Yunnan's participation has opened an important channel for regional dialogue, which could potentially do more to address the many transboundary environmental linkages that bind Yunnan and the other countries of MSEA.

ASEAN's national representation extends beyond MSEA. Inclusion of Cambodia, Laos, Vietnam, and Myanmar was a milestone in achieving the level of representation needed to make ASEAN relevant for MSEA regional environmental issues, but Yunnan's absence is still a major gap in the geographic coverage. Nevertheless, ASEAN officials are well aware of the importance of China, and there is some scope for including discussion of regional environmental issues within the continued ASEAN+3 dialogue.¹³ This forum would potentially allow China and its southern neighbors to build mutual confidence and understanding around regional or transboundary issues other than the sensitive hydropower question.

The importance of achieving national representation in political and economic institutions that maps appropriately to the extent of the environmental challenge is demonstrated in

other regions. For example, in 1989, the governments of Central America formed the Central American Commission on Environment and Development (CCAD)-a politically, economically, and ecologically coherent grouping of nations with interdependent environmental concerns-to realize a vision of regional integration and environmental cooperation based on improving local livelihoods and environment.¹⁴ The Central American heads of state empowered the CCAD to establish the Mesoamerican Biological Corridor, a development that reflects a high-level political commitment from all concerned countries to a regional approach to biodiversity conservation. Without the engagement and commitment of each of the nations in the region, the CCAD vision for regional cooperation would not have emerged, and the opportunity to implement a regional approach to transboundary ecosystem management would have been lost (Miller et al., 2001). Similarly, full representation of national governments in environmental decision-making processes is critical to the sustainability of the MSEA's ecosystems.

INTEGRATION OF ENVIRONMENTAL CONCERNS IN DEVELOPMENT PLANNING

The Rio Declaration called for including the principles of environmental sustainability in all aspects of development. The MSEA nations and regional institutions have made basic commitments to integrating environment and development. Following on the heels of its 1998 Environment Policy, the MRC established an Environment Program in 2001 with the primary objective of increasing its member countries' capacity to integrate environmental concerns with development priorities. The Program, which makes special mention of socio-economic, gender, and ethnic issues, is committed to building member countries' capacity and infrastructure to create and use environmental information, monitor and assess the state of the environment, support environmental policy reform, create awareness of environmental problems, and enhance the coordination of development activities (MRC, 2000). In addition, the MRC has also recently created a transboundary working group (MRC, 2000). One of the group's first activities was to consider the World Commission on Dams (WCD) report, which calls for further integration of environmental concerns into dam-building decisions based on a rights-and-risks approach.

The ADB's policy is to mainstream environmental considerations into all stages of the project cycle, country operational strategies, and country assistance plans (ADB, 2000a). The Bank's Office of Environment and Social Development advises on environmental policy issues, monitors projects, and provides external and internal capacity building. The ADB's Strategic Environmental Framework (SEF) represents a recent effort to mainstream environmental considerations into the Bank's fundamental planning processes.¹⁵ These efforts may suggest a somewhat heightened awareness of the importance of integration, but they do not necessarily reflect a fundamental shift in the way projects are planned or how development priorities are set (ADB, 2001b). Amid criticism that it has given inadequate consideration to environmental issues, the Bank has admitted that it must do a better job of reviewing project implementation (ADB, 2000b).

The ADB created a GMS Working Group on the Environment shortly after the Rio Summit in 1992. The objective of this working group was to ensure that environmental sustainability was integrated into GMS economic development plans and to encourage environmental cooperation among the developing member countries (DMCs). Although the Working Group on the Environment has participated in directing GMS program support to the environmental sector, it has not achieved significant results in bringing more environmental sustainability to the basic development paradigm of the GMS or specific ADB programs (Peoples' Forum Statement, 2000; Dore, 2001b). However, under pressure from the regional and international communities to take potential environmental impacts seriously, the ADB did decide to suspend its involvement in two controversial hydropower projects-Nam Theun II in Laos and Se San 3 in Vietnam-because of environmental and social concerns,¹⁶ but discussions on Nam Theun II were subsequently restarted.17

Transboundary environmental assessments (EA—including environmental and social impact assessments, and strategic environmental assessments that take the upstream EIA processes into consideration in the decision-making process) provide an opportunity to further integrate environmental concerns into development projects and to enable actors from all affected countries to participate (REC, 1999). National

Box 3 ASSESSING ENVIRONMENTAL IMPACTS ACROSS BORDERS

European countries committed to transboundary public participation through the Espoo Convention on Environmental Assessment in a Transboundary Context (1991), a framework for transboundary environmental impact assessment.^a The process laid out in the Convention calls for early notification of potentially affected parties; public hearings on policies, programs, and project plans; and extended discussion involving actors on both sides of the border. Experience from Scandinavia, where the four countries—Sweden, Norway, Denmark, and Finland—are taking a coordinated approach to implementing the Espoo Convention, shows that direct and horizontal interaction among stakeholders is critical to the success of transboundary EIAs. Given the importance of national legal and administrative practices in facilitating or hindering public involvement, any successful implementation of participatory transboundary EIAs will require modification and harmonization among national policy frameworks (Tesli and Husby, 1999).

The transboundary participatory framework embodied in the Espoo Convention could be assessed for relevance to the MSEA region. For example, the MRC and ADB, with support from the Cambodian and Vietnamese governments and involvement from local communities and interest groups, could test methodologies for transboundary EIAs in the Se San Basin as they try to assess the full range of impacts from the Yali Falls incident. Another illustrative example is found in the siting of a lignite-fired power plant on the Myanmar side of the border with Thailand. Local Thai communities and activists argued that the project would cause transboundary pollution problems (Supradit, 2001). A jointly implemented EIA—with local involvement from both sides and possibly facilitated by the previously mentioned Thai-Myanmar Township Border Committees-could result in better environmental and social outcomes.

^a See Espoo Convention website, www.unece.org/env/eia/ (February 20, 2002). governments have created the policy framework for EAs within development projects, but internalization of the procedures has been slow. Virtually no examples of transboundary environmental impact assessments (EIAs) can be found in the MSEA region; in fact, basic EIA practices are still not well established at any level. Although the ADB policy on EIAs stipulates that environmental assessments must be conducted for all environmentally sensitive public and private sector lending (ADB, 2001c), the record of practice has been more problematic (*Watershed*, various issues).¹⁸

The 1995 Mekong Agreement establishes the principle of environmental protection, and the current MRC workplan includes the establishment of a regional environmental impact assessment process that will be used in conjunction with national EA procedures to prevent and mediate transboundary conflict (MRC, 1998). The challenge is to develop incremental procedures for dealing with aspects of EIA that are specific to transboundary impacts. The MRC's Basin Development Plan and Water Utilization Program each have provisions for assessing environmental impacts of proposed activities, particularly within the Irrigation and Hydropower Programs. The institutionalization of credible EA procedures at both the national and regional levels remains a key challenge for transboundary environmental management in MSEA. (*See Box* 3.)

Policies for integrating environment and development within national governments and regional institutions are inextricably intertwined. On the one hand, because the MSEA institutions are inter-governmental organizations, the degree to which integration of environment and development has occurred in the national context helps determine the effectiveness of, for example, the ADB's integration efforts. On the other hand, well-integrated donor support can assist national governments to achieve deeper integration within the national policy frameworks.

The Southeast Asia report to the World Summit on Sustainable Development (WSSD), coordinated by ESCAP, laments the extremely low level of integration achieved in national development planning since 1992 (ESCAP, 2001). However, some multi-jurisdictional institutions have succeeded in integrating environmental concerns with development

planning in other areas of the world. In Australia,¹⁹ the Murray-Darling Basin Commission-considered transboundary because the river crosses through several provincial jurisdictions-has been working to implement an integrated catchment management approach to development. The Commission has recognized the environment as a water user in its consideration of flow allocation, thus strengthening the system's integrity and ability to provide ecosystem goods and services. A cap on total allowable water withdrawals has helped to reduce salinity in the basin, to the benefit of downstream users and general environmental quality (Dore, 2001a). Recognition of the environment as a user, thereby securing a minimum level and timing of water flows to sustain transboundary freshwater ecosystems, is a positive step toward ensuring that environmental concerns figure prominently in water resources development plans in MSEA.

As seen in the above discussion, gaps in the institutional structures of the regional institutions hinder their ability to deal with transboundary environmental problems. Mandates for addressing environmental issues are varied and are relatively undeveloped. The regional institutions do not reflect the need for environmental management at multiple scales, which may require decision-making authority above or below the level of the national governments. The representation of Myanmar and China in the ADB-GMS framework is an important recognition of regional economic trends, but China's official absence from the MRC and ASEAN is a serious constraint to their ability to deal with environmental issues. Although environmental concerns have been increasingly integrated into some MSEA regional institutions' decisionmaking processes, taking environmental assessments further upstream in prioritization and planning remains a challenge.

V. Environmental Governance in Practice

The trends in economic, political, and environmental regionalization described earlier have brought about some changes in governance practices. They include a certain degree of progress within the institutional structures in addressing transboundary environmental problems. However, the emergence of vocal opposition to the ADB (Peoples' Forum Statement, 2000; *Watershed*, various issues), continued criticism of the MRC (*Watershed*, various issues), and skepticism about the relevance of ASEAN (Tay et al., 2000; Vatikiotis, 1996) all signal the need for further analysis of the potential for improved governance policies and practice within these institutions.

The terms of the global debate on environmental governance were largely defined by the principles set forth in the Rio Declaration. Three of these principles—access to information, participation in decision-making, and accountability in environmental matters—assert that fundamental changes are required in the way decisions are made in order to combat social and environmental problems. Other principles, such as the precautionary principle, are also important components of environmental governance. Implementation of these principles will require a thorough rethinking of the ways in which government interacts with society at large (Petkova and Veit, 2000). For the purposes of this analysis, three basic principles can guide an examination of governance practice:

- I Transparency and access to information: Does the institution provide the public with reliable and timely information concerning the institutions' operational policies and procedures? Does the public have access to information concerning environmental status and trends, and the potential environmental impacts of projects?
- **I Participation**: Does the institution provide for representation and participation of the many interests in their decisions, including those of local communities, women, and minorities?
- Accountability: Are there mechanisms for holding institutions accountable to affected stakeholders across boundaries?

Recognizing that this selection does not represent the full range of environmental governance principles coloring the international debate, this analysis suggests that these three are important foundations for good governance practice and can serve as catalysts for implementing other principles.²⁰

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TRANSPARENCY AND ACCESS TO INFORMATION

Securing rights to information about the state of the environment may be considered the first step toward meaningful public participation (REC, 1999). Access to information is critical to good decision-making. In many cases, especially with regard to transboundary environmental matters, reliable information either does not exist or is guarded by its holder. Access to information regarding basic environmental conditions and the possibility of environmental threats can empower potentially affected stakeholders, enabling them to participate more meaningfully in dialogue concerning the environment. Furthermore, information about official decision-making processes—including projects, programs, and policies—that would help stakeholders to understand their roles, rights, and options can strengthen their ability to articulate their interests in decision-making processes.

In the MSEA region, key institutions have begun efforts to increase transparency. Until recently, information concerning the policies, operating practices, and decision-making guidelines of regional institutions were not easily accessible. Advances in information technology have made it possible for regional institutions to make more information available about all of these areas. A researcher today can find information and data about specific policies, projects, and upcoming events on the websites of the MRC, the ADB, and ASEAN. But although the Internet may provide certain sectors of society with access to information, it is no substitute for directly communicating policies, programs, and projects to affected local communities. The poor provision of basic information to the public in the Samut Prakarn wastewater project, an ADB project in Thailand, indicates that basic notification of project plans has still not been institutionalized (Somrudee et al., 2001).

Similarly, information regarding the current status and trends in regional and national environments is gradually becoming more readily accessible. ASEAN, the ADB, the MRC, and ESCAP have begun issuing regional state of the environment reports that provide a broader geographic scope than those provided by national governments.²¹ In Thailand, the government produces a yearly State of the Environment Report, and The Green World, an independent Thai environmental group, issues an alternative state of the environment report (Somrudee et al., 2001). The Vietnamese Ministry of Agriculture and Rural Development, for its part, recently established an Information Center for Agriculture and Rural Development, which is working to create a center for information compilation, analysis, and exchange among government officials and researchers.²² Yet despite these generally encouraging developments, the resources, communication channels, and official commitment required to create and disseminate information on a broad basis are still scarce, and sources of public information on the environment remain insufficient.

The MRC sees itself in part as a clearing house for environmental information in the Mekong River Basin. This open information policy approach visualizes the MRC as a central data-holding center accessible by the member governments and other interested parties. But although the MRC Environment Program has begun to compile data on transboundary issues, much of that information is not yet accessible because national governments are reluctant to allow public access to data that is considered sensitive to national interests. (See Box 4.) Thus, information sharing has not advanced as quickly as was hoped by many non-governmental groups that could benefit from access to the baseline information being gathered. In 2001, the four lower basin governments approved procedures for sharing information about water resources among themselves.²³ Similarly, information about dams in China is not made publicly available (WCD, 2001). It is clearly difficult for potentially affected downstream actors to plan for the various changes to the hydrological regime in the absence of this information.

Because of the low level of digital connectivity in MSEA, there may be a danger in MSEA institutions' being overly reliant on the Internet for dissemination of information. In the meantime, however, the Internet is providing a new opportunity for discussion and debate, and greater information disclosure will encourage this trend.

Globally, transparency and access to information about decision-making processes have proved important for the success of regional institutions. The Inter-American Strategy for the Promotion of Participation in Sustainable Development Decision-making (ISP), for example, was founded on the principle that civil society should be integrated into the

Box 4 GOVERNANCE OF WATER RESOURCES: A NEW ROLE FOR THE MRC SECRETARIAT?

The 1995 Mekong Agreement enshrined the principle of fair and equitable utilization of the Mekong's waters. But it was not until the arrival of a new CEO in 1999 that the MRC began discussing its more integrated approach to basin management with the general public. Under its new management, the MRC became much more open, and dedicated time and energy to the integration of environmental, socio-economic, gender, and ethnicity concerns within the Water Utilization Program (WUP) and the Basin Development Plan (BDP).

The push toward integration was seen as an effort to keep the MRC relevant because other institutions were adopting the language of poverty alleviation and environmental sustainability. But the transition from addressing the problems of water management to addressing those of poverty reduction is not easy. The staff was largely unprepared for the requirements of engagement, consultation, and participation being placed on them. A large influx of donor funds to support the WUP and BDP has begun to help solidify the policy of increased engagement.

Implementation of a more open and integrated approach has met with obstacles. Staff of the MRC Secretariat (MRCS), the agency with authority over the WUP, are long on technical

formulation of policies and programs at the regional (Latin America and Caribbean) and national levels. Under the auspices of the Organization of American States, the ISP was established to implement an open and transparent process based on regular dialogue between government and civil society on development project implementation, assessment and reform of legal frameworks, production and dissemination of information, and strengthening of civil society capacity.²⁴

In Europe, both the Helsinki Commission for the Baltic Sea and the Program for the Protection of the Danube River have worked to create basin-wide information systems. In both cases, information gathering is done primarily on a regional basis and is conducted by scientific experts, academicians, and expertise and short on applied environmental know-how. And although on paper the role of the National Mekong Committees (NMCs) is vital, the NMCs are characterized by shortages in human and financial resources and therefore remain largely isolated from the main decision-making processes at the national level.

Providing the MRCS with more latitude to engage directly with local stakeholders might facilitate more effective public involvement. With expanded scope for direct interaction, it is possible that the MRCS could mobilize more assistance for capacity building and mainstreaming of NMCs and their secretaries in national processes. However, this development depends upon the MRC national governments and their willingness to empower the MRC as an enhanced actor in regional environmental governance. Like the other institutions of the region, the MRCS has to accommodate the different administrative and management practices of its member countries while respecting national interests and sovereignty.

Based on Dore, 2001b, REPSI, 2001, and discussions throughout the Mekong Regional Environmental Governance Research and Dialogue Process (2000-2001).

NGOs, among others (Danube Program Task Force, 1995; Helsinki Commission, 1992). In fact, the Danube Program has developed a Transnational Monitoring Network that seeks to improve the exchange of information at the regional level. More recently, the Aarhus Convention on Access to Information, Participation, and Justice in Environmental Matters, which entered into force on October 30, 2001 and was signed by 40 countries in Europe and the Near East, provides a legal basis for requiring its signatories to supply the public with basic information concerning the environment. In MSEA, the quantity and quality of information have begun to improve; further such efforts will improve environmental decisionmaking.

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Box 5 PUBLIC INVOLVEMENT AND NGOS

The legal basis for non-governmental organizations and interest groups varies greatly by country, making it difficult to imagine how a truly regional NGO might operate. Because civil society is so broadly defined, engagement with civil society presents challenges to governments and regional institutions (REPSI, 2001). In the MSEA region, there is confusion that public involvement equals NGO involvement (Jamaree, 2001). NGOs can play a valuable part in giving voice to marginalized concerns and aspirations, but they can also be subject to the same accountability problems described for regional institutions. Mechanisms to ensure that NGOs truly represent a certain interest group are rare. And given the varied status of NGOs, civil society narrowly defined in terms of NGO representation is clearly not realistic or desirable in the MSEA region.

The experience of other regions, such as Eastern Africa, suggests that participation should be considered in broad, multi-layered terms that include mechanisms for direct involvement of citizens in decisions. In Africa, increased roles for sub-regional governments and national legislatures in transboundary environmental management may hold potential for enhancing the degree of public involvement in decision-making (Dwasi, 2002; Lissu, 2000). With the uncertain role of NGOs, this type of direct involvement is of interest and relevance to MSEA.

INVOLVEMENT OF THE PUBLIC

Access to information alone is hardly sufficient to ensure good environmental and social outcomes. Public participation—or public involvement, as it is often referred to in the MSEA region—is a fundamental aspect of good environmental governance. Public involvement can take many forms and must occur on many levels in order to meet the specific needs and conditions of a country (ERI, 2001; Chou, 2000). There is, however, disagreement concerning the precise definition of public involvement. At its most basic, the idea of public involvement envisions citizens as passively absorbing information handed down to them about an upcoming project. More meaningful public involvement provides roles for local communities, local governments, academics, and interest groups in the policy formulation and project planning stages (REPSI, 2001). The question of public involvement is compounded by the differing status of NGOs in the countries of the region. (*See Box 5.*)

The inter-governmental nature of decision-making in many regional institutions has a direct influence on their ability to engage the public. (See Box 6.) In the MSEA region, it is difficult to establish reliable methods of increasing public involvement in regional institutions.²⁵ Public involvement in the MRC is constrained by structural and capacity factors in the Secretariat; further, the Commission's organizational structure stipulates that consultations with local communities be left to the National Mekong Committees. As discussed above, the NMCs have neither the capacity nor the status to perform these difficult tasks. The MRC Secretariat, however, recently signed several memoranda of understanding with international NGOs to integrate conservation goals with human needs, and to help facilitate interaction with the public (MRC, 2000). The WWF Living Mekong Initiative is an example.²⁶ The advent of this type of partnership indicates that the Secretariat is receiving more political space from member governments to engage with civil society.

In 1995, the ADB adopted an official governance policy that committed the Bank to the principles of accountability, participation, predictability, and transparency (ADB, 1998). Public participation is often cited as an important part of the ADB project cycle, and the ADB has issued specific policies to capture the nuances of successful participation, such as the Bank directive that the role of and effects on women be considered at every stage in the project cycle. However, an analysis of the Bank's experience with a technical assistance initiative designed to build capacity in water management found that women had been "largely excluded in practically all levels of consultation and participation" (Panadda et al., 2001). In this case, the project merely extended central government power to local communities, without acknowledging the fact that local water management institutions are dominated by male interests (Panadda et al., 2001), thereby failing to achieve the stated objectives of participation. This experience suggests that meaningful public involvement must combine a sophisticated understanding of local political and

social conditions with a firm grasp of the environmental issues at stake.

Participation in policy formulation is another equally important challenge. In 2001, the ADB tried to open parts of its policy formulation to public comment and input. The Bank solicited public input into its new environmental policy as well as its NGO engagement policy, but because the ADB website was the chief resource for facilitating public input, the consultation reached only the subset of the public with Internet access. Some MRC programs, such as the Water Utilization Program and the Working Group on Transboundary Issues, have made cautious efforts to consult with civil society (REPSI, 2001). Although its awareness of the need for engagement, the MRC has not yet brought MSEA civil society groups into its activities in a meaningful way. Furthermore, external contributions to MRC activities still tend to be from specialists, often individuals from outside the region.

In other regions of the world, parallel processes are managed by NGOs to facilitate broader representation of diverse and often marginalized voices within official decision-making structures (REC, 1999). In Europe, the Black Sea NGO coalition engaged with public and private sector actors and facilitated stakeholder input to inter-governmental decisionmaking structures for the rehabilitation and protection of the Black Sea. It has been suggested that a parallel forum attached to the MRC could offer the space for exchange of views on transboundary and regional water management issues by a broad sampling of civil society actors (TEI, 2000). Gaining official recognition will not be easy, but a parallel NGO dialogue could potentially demonstrate its usefulness to the MRC. More recently, the World Commission on Dams explicitly adopted good governance principles in its review of the development effectiveness of large dams and recommended multi-stakeholder processes-bringing together representatives from a broad range of backgrounds, interests, and perspectives to establish common ground on contentious issues of environment and development.

Even in a region where diplomatic relations are strained by political differences, opportunities for cross-border NGO activity on environmental issues can exist. In Northeast Asia, where North and South Korea are still officially at war,

Box 6 ENVIRONMENTAL GOVERNANCE NORMS IN ASIA: LESSONS FROM APEC

Institutions for managing transboundary resources at the ecosystem level are more effective when they focus on the promotion of principles rather than enforcement (Brunnee and Toope, 1997). In the 1990s, the Asia Pacific Economic Cooperation (APEC), which promotes economic integration in the Asia-Pacific region, experimented with non-binding norms of environmental governance in an attempt to enhance environmental outcomes. Analysis of this experience suggests four main tasks for regional institutions in improving the interface between the environment and economic development—developing a shared vision of norms and goals, building capacity at the regional level to monitor implementation and raise performance, policy coordination, and developing effective institutions to implement policy (Zarsky, 2000).

Because of the difficulty in mobilizing political will to develop norms, APEC's environmental activities in this period tended to focus on information and capacity building. Although NGO input into the process varied, the general consensus was that it was largely ineffective. This weakness was caused partly by the limited space in the national contexts and partly by NGOs' limited direct experience in engaging with formal APEC processes. In the end, the NGOs themselves failed to produce substantive demands or make constructive suggestions for acceptable environmental governance norms (Zarsky, 2000).

Some have argued that introducing global norms to Southeast Asia has not been successful because they have been applied without recognition of existing behavioral norms among regional institutions and national governments. Global norms might be more relevant if they are modified and adapted to the region's specific needs (Tay et al., 2000). Any approach to regional norms should be accompanied by a process of confidence and consensus building, with the objective of producing not only an acceptable framework but also mechanisms for implementation. Although the MSEA region demonstrates some of the same diversity that challenged APEC's efforts, the strength of the MSEA identity is reaching the point where such a political initiative could make new inroads.

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regional civil society actors are engaged in alleviating transboundary air pollution problems in North and South Korea, China, and Mongolia. The Northeast Asia Forest Forum began with South Korean NGOs that wanted to assist in reforestation to reduce the amount of sand blown from Mongolia and China, and its activities now include treeplanting to protect North Korean watersheds that drain into South Korea. This network has gradually expanded, with additional chapters forming in Mongolia, Japan, and China.²⁷

Regardless of what aspects of enhanced involvement are under consideration, it should be noted that regional institutions are not likely to achieve meaningful public participation without the close cooperation of national governments. However, the MRC, the ADB, and other regional institutions could help facilitate transboundary participation where bilateral intergovernmental efforts might prove unworkable.

ACCOUNTABILITY TO AFFECTED STAKEHOLDERS

The existence and nature of accountability mechanisms determine the degree to which institutional performance is subject to public review. These mechanisms—critical in ensuring that institutions are responsive to public interests can take many forms: political accountability through representative electoral systems, financial accountability through transparency in budgeting and expenditure, operational accountability through inspection panels, and local accountability through public hearings and participation.²⁸

As governance systems develop, there is a certain degree of substitutability among accountability mechanisms. For example, accountability through participatory processes associated with development projects can make up for gaps in direct representation in larger planning arenas. Similarly, financial transparency in the absence of direct public representation in budgeting processes can be a tool in ensuring that the public interest is reflected in the way resources are used. Nevertheless, such surrogate accountability relations should give way to a dense structure of overlapping mechanisms that ensure political, financial, operational, and legal accountability.

In theory, institutions comprising representatives from national governments, for example, should be accountable to those governments, which, in turn, are accountable to the general public. But governance in the MSEA region does not ensure that accountability mechanisms function effectively. The inclusion of a more diverse range of voices in decisionmaking processes—community leaders, academics, NGOs, and local governments, for example—may be a first step toward outcomes that reflect the range of society's interests. Within the MSEA regional institutions, the central position of national governments has been a recurring theme throughout this analysis, as it is here.

As discussed above, the MRC is an inter-governmental body in which national government representatives make the key decisions. It is the national governments that have the ultimate authority over which programs are developed, who has access to information, and what voices are heard in decision-making processes. In a river basin management body such as the MRC, a central role for the national governments may be appropriate in light of the fact that national water resources development projects have the highest potential for altering the basin's conditions (Le Quy An et al., 2001) and the fact that in this situation the main accountability should be within the nations themselves. This type of arrangement also means national development planning and implementation omissions and errors are transferred to regional institutions. In this sense, the degree to which national governments represent the full range of public interests affects how well they are reflected in the MRC and other regional institutions' priorities and plans.

The MRC relies upon national governments to provide the necessary channels of information down to and up from the community level. This exchange is often blocked because, for the most part, the National Mekong Committees are marginalized from the relevant national decision-making processes. Indeed, local communities have virtually no way of influencing the MRC, so that downward accountability is negligible. The MRC accountability situation is made more complex by bilateral donors (such as the European governments that provide funding to the MRC) that represent external stakeholders with significant financial clout.²⁹

Without the formal membership of China and Myanmar, there is no inclusive institutional framework for accountability among the nations of the basin. Recently, however, the MRC has shown increasing confidence through its public expression of concern regarding planned development activities in China. The CEO himself has called for a cooperative approach to managing the whole basin that protects downstream ecological and economic interests (Kristensen, 2002).

As a bank, the ADB is accountable to its board of directors and shareholders. As a multilateral development bank, the board of directors comprises representatives from national governments. The ADB's board reflects the Bank's broad membership, which includes countries external to the region. Some of these countries-the United States, Japan, and Australia---wield considerable political and financial power, creating a situation in which the ADB is subject to a set of strong external accountability relations.³⁰ Moreover, the developing country member governments are in a vulnerable position vis-à-vis the Bank because they depend on development assistance. This vulnerability was evident when the ADB, as part of a bloc of donor institutions, made its assistance to the Cambodian government contingent upon its pursuing forest sector reform. At the time, the Cambodian government depended on the donor community for approximately onehalf of its national budget (Seymour and Dubash, 2000). This lack of debtor control indicates the absence of the Bank's downward accountability to the region's people.

Since 1995, the ADB has given increasing attention to improved governance through its policy commitments to the principles of participation, transparency, predictability, and accountability. As part of its 1995 governance statements, the ADB approved an Inspection Function Policy, which provides a mechanism for affected parties to request a review of an ADB project in the event of environmental concerns or an observed failure to comply with the ADB's own policies or with national laws (ADB, 2000a). This instrument could ensure accountability of the Bank's management to the communities it is assisting. But, in general, the first experience with the Inspection Panel in Thailand was not well received by stakeholders, who perceived a basic lack of genuine Bank commitment to making it work. Specifically, concerns in the Inspection Panel's first case regard the selection of the panel members and the Thai government's level of cooperation.³¹ In short, therefore, despite the existence of mechanisms such as

review and inspection panels, downward accountability has not been effectively institutionalized.

At the regional level, many factors determine the scope of possibilities for enhancing accountability relations among regional institutions, national governments, local governments, and the public. The Aarhus Convention, when fully implemented, will formalize the channels for transboundary accountability among signatory members in Europe (Petkova and Veit, 2000). This agreement is a good example of how an arrangement to pool or share sovereignty does not necessarily represent a threat to national interests (Stålgren, 2000). Through inclusion within such a procedural environmental regime, governments can be more confident that their interests and the interests of their citizens can be articulated to other countries. Focusing solely on the perception of lost sovereignty misses the opportunity both to enhance the security of national and sub-national interests in a more open and inclusive environment of dialogue and to increase the shared benefits of resources, markets, technologies, information, and trust (He et al., 2001). That said, the prospects for a similar agreement in the MSEA region are unlikely, because of ASEAN's traditional non-interference policy. In this context, the Aarhus Convention may be an interesting learning point that could contribute to the development of alternative accountability mechanisms that provide for shared sovereignty within regional governance of environmental issues. (See Box 7.) Inevitably, regional institutions have to devise and test mechanisms for accountability across boundaries and to affected communities because of the growing interaction among stakeholders at all levels.

A common thread running through the preceding discussion is the difficulty in reorienting, and in some cases creating, opportunities for more effective interactions between government and the general public in managing transboundary natural resources. The gaps identified—insufficient transparency and provision of information, low levels of meaningful public involvement, and virtually non-existent mechanisms for downward and downstream accountability—point toward the need for innovative thinking and experimentation to realize meaningful roles for civil society within regional governance processes.

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Box 7 ESCAP AND ENVIRONMENTAL GOVERNANCE IN MSEA

The Economic and Social Commission for Asia and the Pacific (ESCAP), is a branch of the United Nations. It is also the current incarnation of the Economic Commission for Asia and the Far East, which was prominent in the founding of the GMS Program and the MRC. ESCAP promotes dialogue between regional actors and advocates sustainable development in the context of realizing the goals set forth in the Rio Declaration (Dore, 2001b). In 2000, ESCAP declared the Decade of GMS Development, but by most accounts, the Commission is struggling to establish a niche in the regional institutional landscape (Dore, 2001b). Its most effective role seems to be in providing support for economic and social development initiatives through the production and dissemination of information. It also works to build national capacity and supports multi-stakeholder dialogue on the region's development challenges.

The UN Economic Commission for Europe, which is similar to ESCAP in its mandate and organizational structures, has been a central proponent of environmental governance in Europe, as seen in its active promotion and facilitation of the processes that made the Aarhus Convention possible. Similarly, ESCAP may be well placed to contribute to the development of greater awareness of the need for improved environmental governance and to provide a forum for the elaboration of priorities that are both relevant and appropriate for the region.

In light of the modest results following 10 years of promoting the Rio principles, ESCAP has suggested that "new forms of participation are needed to allow individuals, groups and organizations to be informed and participate in decisions which potentially affect their communities." The ESCAP-coordinated regional report to the WSSD clearly acknowledges the gap between policy and governance practice, and states that without the political will to implement new governance principles, welldesigned policies are likely to fail (ESCAP, 2001).

VI. ENHANCING TRANSBOUNDARY ENVIRONMENTAL GOVERNANCE

Two sets of gaps have emerged from this analysis of the MSEA transboundary environmental challenges and the regional institutional response. Both are key to the creation of an enhanced regime of regional environmental governance that can meet transboundary environmental challenges. The first set of gaps is directed to the inadequacy of the structural arrangements that characterize the institutions. Responding to these gaps requires close cooperation between the regional institutions and the relevant national governments. The second highlights the opportunities to overcome the short-comings of governance practice, which require shifts in the ways in which national governments and regional institutions interact with the general public.

ENHANCING THE INSTITUTIONAL STRUCTURES FOR COOPERATION

Define the environment in broad terms

A broadly construed regional environmental governance agenda will increase the likelihood that common areas of interest and cooperation among the national governments will emerge. This point is especially relevant to concerns for the poverty, vulnerability, and livelihood security of rural people. Exclusive focus on water issues misses the urgency of an ecosystem approach for maintaining the productive integrity of the region's environment, and colors other issues with the tension between upper and lower basin countries-it also fails to capture the range of environmental challenges that the countries of the region face, particularly regarding forests and biodiversity. No doubt, effective mechanisms to manage the Mekong River among both the lower and upper basin countries are critical to the environmental stability of the region, but a broadly defined environmental agenda can encourage the shift from a narrow focus on sectoral environmental management to more encompassing process-oriented environmental governance.

Locate decision-making at the lowest appropriate level

Environmental decision-making takes place at multiple levels, and the subsidiarity principle calls for authority to be located at the lowest appropriate level. The need for interaction across the regional, national, and sub-national levels in transboundary environmental issues is particularly acute. Governance reform is already underway at the national level, and governments in the region should continue gradually to increase the roles of supra-national and sub-national actors in environmental decision-making as required by the many scales of environmental challenges. Particularly important is the potential role of sub-national governments in preventing and managing conflict in transboundary situations, but their authority to do so is still limited. Regional institutions, especially the MRC and the ADB, will have to play more flexible and reflexive parts that are compatible with the demands for environmental governance as they evolve over the short, medium, and long-terms. If considered in the context of evolving governance structures, discussion of allocating roles and responsibilities may avoid some of the perceived threat to national sovereignty.

Link environmental governance to regionalization trends

If environmental issues can be linked to a broader range of political and economic cooperation trends, it is possible that the benefits gained from environmental cooperation can be increased (Wolf, 2001). Although institutions are not yet up to the region's environmental challenges, increased political and economic cooperation has created a number of opportunities for bridging environmental governance gaps between the ASEAN countries and China. Specifically, ASEAN should use its dialogue with China to establish an agreed-upon set of basic environmental norms of cooperation that would provide a basis for dialogue and exchange. The ADB should use the momentum of GMS cooperation to encourage the region's countries to discuss mutually beneficial approaches to improved environmental management, and to more actively promote broad-based dialogue that fosters political commitment for enhanced national and sub-national environmental governance practices.

Integrate transboundary environmental concerns

Regional institutions, in close collaboration with national governments, should help develop a vision for and an approach to institutionalizing transboundary issues within environmental assessments, particularly environmental impact assessments. The ADB and the MRC, for example, could mobilize financial resources and facilitate access to information, and ASEAN could lead efforts to increase political support from national governments. If effectively developed and harmonized with national EIA laws, the proposed MRC regional environmental impact assessment process could be an important first step toward institutionalizing transboundary EIAs. All three institutions should engage with the research community to devise methodologies for developing transboundary EIAs and, at the outset, local governments should be involved in transboundary environmental assessment activities. As the space for participation within the national setting grows, local communities and interest groups could be more thoroughly integrated. Further, both national governments and regional institutions should expand their frameworks for environmental assessment and reporting to include measures of environmental performance and governance. Tools that assess governance practice could provide valuable analytical support to the more common measures of environmental conditions, trends, and prospects.

ENHANCING GOVERNANCE PRACTICES

Increase transparency with better information flows

The flow of information is an important part of governance practice. Regional institutions should continue to increase public availability of information regarding the policies and procedures of their operations. The Internet has become an important tool and the regional institutions should further public access to digital information. The MRC has a central role in providing baseline information on conditions and trends in the Mekong Basin, and it could concentrate on heightening understanding by governments and the public concerning transboundary impacts. The MRC has also suggested that joint studies should be the first step in moving toward a more substantive engagement with China. The ADB

Box 8 SUMMARY OF OPPORTUNITIES FOR ENHANCING ENVIRONMENTAL GOVERNANCE

Approaches to enhancing environmental governance should be based upon a regionally acceptable framework of norms that are implemented on an incremental basis, with attention to the practices of both regional institutions and national governments. Environmental performance and governance practices should be included within national and regional assessments and reporting frameworks.

Enhancing Institutional Structures for Cooperation

Regional institutions and national governments should:

- define the environment in broad terms, thereby allowing for cooperation and dialogue on the full range of transboundary environmental challenges. The dominance of water issues reflects the reality of water's importance but misses the opportunities of broader-based environmental cooperation.
- cooperate to identify which transboundary environmental problems are best handled at which levels of governance and commit to a plan of implementation that recognizes the dynamics of change and the need for periodic adjustment of roles and responsibilities.
- take advantage of the regionalism trends that provide opportunities to broaden the linkages among economic, political, and environmental cooperative efforts.
- promote the institutionalization of transboundary environmental impact assessments on an incremental basis that gradually increases the roles of local governments and communities.

Enhancing Governance Practices

Regional institutions and national governments should:

- continue to increase transparency through the provision of information concerning operating policies and procedures, programs, and projects to the general public. Information should be exchanged to stimulate debate, deepen understanding, and nurture new perspectives on transboundary environmental challenges.
- increase efforts to involve the public through multistakeholder dialogues that contribute to the recognition of multiple stakeholders and their perspectives.
- deepen downward accountability mechanisms to increase the environmental sustainability and social equity of development projects.

and the MRC should improve their efforts to provide the public with timely information on project plans while concurrently widening the channels for upward information flows regarding environmental and social outcomes from the grassroots level. At the same time, donors and civil society should increase their efforts to promote the exchange of existing information, catalyze discussion with policymakers, and encourage the broader representation of society in the creation and use of that information. Augmented information flows can lead to the proliferation of new understanding among policymakers and new perspectives on the diverse range of interests. Drawing government and regional institutions into research activities can enhance the credibility and legitimacy of alternative sources of information and analysis within official decision-making processes.

Provide voice through multi-stakeholder processes

National governments and regional institutions should expand their consideration of options for increasing public involvement in decision-making beyond existing structures and processes. Greater regional integration and cooperation provide an increasingly conducive atmosphere for experimenting with creative approaches to bringing together stakeholders to achieve consensus on transboundary environmental issues. Regional institutions should take an active role in convening stakeholders around these issues. The global experience provides useful insights on the difficulties of facilitating public participation in transboundary environmental issues. However, the World Commission on Dams's use of the multistakeholder process to establish a common base of information and foster the development of common ground for further negotiation should be repeated at the national and regional levels to advance the dialogue on transboundary issues. A MSEA commission on dams, perhaps with MRC support, could yield important results, including the fundamental recognition of multiple stakeholder interests in medium- and large-scale water resources development projects. Similar approaches could be taken on the slightly less contentious issues of non-timber forest products (NTFP) trade, road development, and air pollution. Regional institutions-particularly the ADB and ASEAN-would be essential in providing the platform and resources to affect these activities.

Deepen downward accountability to an engaged civil society

Accountability of the MSEA institutions to their ultimate constituents, the public, is thin. The ADB and other regional institutions should increase efforts to work with national governments to establish mechanisms for improving accountability to the public with regard to the environmental and social outcomes of regional development efforts. The MRC, for example, should provide a channel for communicating the environmental and social impacts of water resources management on the Mekong River among national governments and other actors. National governments should strengthen and empower the NMCs to participate more fully in facilitating the flow of information to and from the grassroots to ensure that local concerns are reflected in national and regional water management planning. Civil society, including both NGOs and other local citizen groups—with support from such institutions as ESCAP—should become more active in monitoring the performance of regional institutions. Analysis of experience from other parts of the world suggests that, in the long term, a vibrant network of researchers—who share a common set of norms and work together to generate information and analysis—is critical to the implementation of governance principles (Brunnee and Toope, 1997; Haas, 1992).

In conclusion, the MSEA region faces significant challenges in transboundary environmental management. Several forms of regionalism have provided the backdrop for institutional responses to these environmental challenges, in which regional actors are playing an increasingly large part. However, the structures of these regional institutions are often insufficient in terms of mandate and capacities, location of authority at appropriate levels of decision-making, representation of national governments, and the integration of environmental concerns into operations. At the same time, enhancement of the regional institutions' governance practice, encompassing transparency and the provision of information, public involvement, and implementation of accountability mechanisms, is essential to the environmental sustainability of the MSEA region. Experience from around the globe provides valuable perspectives on how institutional structures and governance practice can be improved. Institutional innovation and improved governance practices are clearly high priorities for addressing the transboundary environmental challenges of the region and should be a central component of regional strategies for ecological sustainability and social equity.

ENDNOTES

- 1. In fact, many forms of shifting cultivation are practiced throughout the region. In some cases of low population density and long fallow rotations, shifting cultivation systems can be ecologically sustainable and make important contributions to food security. Nonetheless, population pressures and restrictive forest conservation policies have led to unsustainable shifting cultivation with an array of problems that includes reduced soil fertility, erosion, altered runoff regimes, and susceptibility to pests. Because of these problems, national policy tends to portray shifting cultivation as something that must be eradicated.
- See ADB website, www.adb.org/Documents/News/1999/ nr1999135.asp (February 20, 2002).
- 3. See ADB website, http://www.adb.org/GMS/Projects/reta-5920 (February 20, 2002). It is interesting to note that plans for hydropower development are proceeding on several parallel tracks—the MRC hydropower strategy, the ADB-GMS power grid, and Yunnan provincial planning. Recent years have witnessed a partial convergence of the first two, but the situation is by no means coordinated effectively.
- 4. For example, an environmental component of the hydropower development schemes is the increased logging in the proposed areas of flooding that follows closely in the footsteps of dam construction feasibility studies.
- 5. One notable voice coming from the region is the Towards Ecological Recovery and Regional Alliance (TERRA) and its publication *Watershed*, which challenges the mainstream economic development paradigm promoted by the ADB, the World Bank, and many bilateral donors. TERRA supports networking among NGOs and peoples' organizations in Burma (Myanmar), Cambodia, Laos, Thailand, and Vietnam, promoting exchange and alliance building. Focus on the Global South, which has provided important analysis of the ADB poverty reduction policies and hydropower development, and the Asia-Pacific Forum for Women, Law and Development, which has a task force on women and environment, are two other regionally focused NGOs that are voicing concerns for social and environ-

mental outcomes of development decision-making (Dore, 2001a).

- 6. See ADB website, www.adb.org/GMS/gmsprog40.asp (February 20, 2002).
- 7. The upper Mekong Basin, the portion of the river system that lies within China, is often referred to as the Lancang Jiang. The use of different names has contributed to the perception that the upper and lower Mekong basins are separate systems. Recently, the use of "Mekong-Lancang" to refer to the entire basin has led to a growing sense of the river as shared among upper and lower basin countries.
- 8. See www.thewaterpage.com/mekong.htm (February 20, 2002) for the full text of the Mekong Agreement.
- 9. The MRC has received US\$70 million in pledges and funding (*Mekong News*, October-December 2001).
- 10. In broader regional environmental terms, countries with an interest in a shared environmental concern, even without direct transboundary linkages, may be important to the effectiveness of a regional institution. The Czech Republic and Slovakia, which are non-riparian but are located within the Baltic Sea watershed, are parties to the Helsinki Commission in recognition of the impacts that actions within their borders might have on other countries sharing an interest in the environmental quality of the Baltic Sea (Momose et al., 1995).
- 11. China and Myanmar have also been involved in dialogue to some extent through ADB-MRC interaction to devise more effective strategies for handling the environmental impacts of water resources development projects (ADB, 2000d).
- 12. Although the ADB has decided that it will not finance dams on the Lancang section of the Mekong because of environmental impacts, it will support private sector investment in the dam scheme in the interest of developing a regional power grid.
- See ASEAN website, www.aseansec.org/ menu_asean+3.htm (February 20, 2002).

- See CCAD website, http://ccad.sgsica.org (February 20, 2002).
- 15. The SEF project will provide a framework of technical, policy, and institutional recommendations and guidelines designed to ensure the environmental and social sustainability of economic development; a set of maps and GIS databases on baseline bio-physical and socio-economic conditions in the region, key ADB-GMS and national projects, and key environment-development "hotspots" in the region; and a GIS-based GMS Development and Environment Information and Early Warning System. See SEF website, www.eapap.unep.org/sef-gms/ index.htm (February 20, 2002).
- See, for instance, www.undp.org.vn/mlist/envirovlc/ 102000/post78.htm (February 20, 2002).
- After the Yali Falls incident, the ADB proposed a broader environmental assessment that would include transboundary impacts. The Vietnamese government did not accept the proposal, illustrating how the ADB can be constrained by national decision-making prerogatives. (Personal communication with staff from a development organization, February 2002).
- See also Bank Information Center website, www.bicusa.org/asia/samut.htm (February 20, 2002).
- 19. The Commonwealth of Australia is a federation of states, each of which has its own parliament.
- 20. Global experience has demonstrated the difficulty of arriving at and implementing shared governance principles, not to mention the relatively low degree of application. See Wolf (2001) for a discussion of legal principles and agreements governing transboundary water management.
- 21. The MRC will issue a State of the Basin Report in 2002.
- 22. See ICARD website, www.agroviet.gov.vn/en/html/ gioithieu.asp (February 20, 2002).
- See Mekong News, October-December 2001, at www.mrcmekong.org/info_resources/infores002b002.htm (February 20, 2002).

- 24. See ISP website, www.ispnet.org/ (February 20, 2002).
- 25. Stating that public participation and assistance are of paramount importance to economic development and governance outcomes, ASEAN sponsored the ASEAN People's Assembly in November 2000. This forum was created to provide a platform for horizontal dialogue and the integration of civil society networks at the ASEAN level (ASEAN People's Assembly, 2000). Despite encouraging statements, the forum was not designed to contribute directly to ASEAN deliberations, and assembly recommendations did not make it into official processes.
- 26. The initiative has recently been expanded through a memorandum of understanding with the World Conservation Union (IUCN) to form the Conservation of the Mekong River Basin Freshwater Ecosystems project, and now includes cooperation among WWF, IUCN, the MRC, the four MRC national governments, and several local academic institutions and training centers (WWF Indochina Newsletter, volume 19, issue 1.02, January 2002).
- 27. Personal communication with Professor Youn Yeo-chang, who serves on the board of directors of the Northeast Asia Forest Forum (www.neaff.or.kr).
- 28. Presentation by Robert O. Keohane at the World Resources Institute, January 23, 2002.
- 29. This point is illustrated by the fact that the current MRC CEO is not a citizen from a MRC country, and neither was his predecessor. The position of the CEO is a telling one, sandwiched between demands of both the member and donor governments.
- 30. As a formal political grouping, ASEAN's accountabilities are clearly to its member nations, including the non-MSEA governments.
- 31. See Bank Information Center website, www.bicusa.org/ asia/samut.htm (February 20, 2002).

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THE MEKONG REGIONAL ENVIRONMENTAL GOVERNANCE PROJECT

The MREG project is a part of the Resources Policy Support Initiative, which is a World Resources Institute-coordinated collaboration among local, regional, and international organizations based and working in the Mekong region. REPSI works toward increasing the capacity and legitimacy of policy-oriented research concerning environmental and natural resource management issues, primarily in the upland areas. In order to accommodate the systems perspective inherent in ecosystem management and to recognize the importance of transboundary and regional drivers of environmental change, the MREG project adopted a broad scope that includes lowland society.

The REPSI-MREG process was undertaken to advance the discussion of regional environmental governance by convening researchers and practitioners from a wide range of backgrounds and activities. The MREG group included academics, activists, NGO researchers, and officials from international organizations. The first meeting of the MREG group was held in Chiang Mai in July 2000, directly following the Second International Symposium on Montane Mainland Southeast Asia, and was the start of a 12-month program of research and dialogue. The group was subsequently hosted in Phnom Penh by the Cambodian Institute for Peace and Cooperation in November 2000, and in Vientiane by the Science, Technology and Environment Agency's Environment Research Institute in April 2001.

MREG provided an open space for discussion of the broad issues of environmental governance. Through this forum, participants were exposed to a range of perspectives on regional environmental issues, the current state of governance, the roles of institutions and organizations, and options for enhancement of environmental governance at the regional level. For the participants, MREG was a learning process in which they were encouraged to explore the issues in their own context and exchange perspectives on the range of interests and concerns that were voiced. The MREG group produced a compilation of research and dialogue outputs entitled Mekong Regional Environmental Governance: Perspectives on Opportunities and Challenges. This volume can be obtained by contacting the REPSI project office in Chiang Mai, Thailand, at repsi@loxinfo.co.th and is available for download from www.reg-msea.org.

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Map 1: Regional Institutional Coverage

Legend

Asian Development Bank



Association of Southeast Asian Nations

Mekong River Commission

Notes: ASEAN also includes Malaysia, Indonesia, Singapore, Brunei, and the Philippines.

> The actual domain of the Mekong River Commission (purple) is the intersection of the Mekong River Basin (blue) and the member nations (fuschia). It is interesting to note that the National Mekong Committees of Vietnam and Thailand are not located within the Basin itself.

1:26,000,000



Map 2: Major Watersheds of Mainland Southeast Asia



1:16,000,000



Source: USGS Hydro1k Elevation Derivative Database, 1997.

Map 3: Forested Areas of Mainland Southeast Asia





Source: Global Landcover Characteristics Database (GLCCD), IGBP Classification, v. 2.0, 2001.



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