

ENVIRONMENTAL GOVERNANCE IN VIETNAM IN A REGIONAL CONTEXT

Le Thac Can
Do Hong Phan
Le Quy An¹

Background

The Mekong Regional Environmental Governance (MREG) Project is being undertaken in the framework of the Resources Policy Support Initiative, which is a collaboration among the World Resources Institute, national, regional, and international partners. This team of Vietnamese researchers has been invited by the project coordinators to join this study. The present paper reflects this Vietnamese team's opinions on some aspects of environmental governance in Vietnam in the context of the Mekong Region, which is understood as being composed of the five countries of Cambodia, Laos, Myanmar, Thailand, and Vietnam, and Yunnan Province in China.

1. Natural Resources and Development

1.1 Natural Resources

Vietnam is situated along the southeast margin of the Indochina peninsula. It has a land area of 329,600 km², a coastline of 3,200 km, and 3,700 km of land borders. Three-quarters of the territory consists of mountains and hills. Vietnam has a tropical and sub-tropical humid climate with a strong influence of monsoons. The average rainfall amounts to 1,976 mm, unevenly distributed among areas that receive 4,000 mm and others that receive 700mm. More than 80 percent of this precipitation falls in the rainy season.

According to the national 1999 census, the population was 76.3 million, the 1990s growth rate was 1.76 percent, and the urban population rate was 23.5 percent. The ethnic Kinh majority group accounts for 85 percent of the population, leaving the rest to 53 minority groups. The average population density is 230 people/km², with 1,020 people/km² in the Red River Delta.

Vietnam is endowed with diverse natural resources, including land, forest, water, mineral, energy, and biological resources. There are 8.4 million hectares of agricultural land and 12 million hectares of forestland; the latter figure reflects a serious deforestation of about 40 percent during the last half-century.

A dense network of rivers and creeks covers Vietnam. The total annual runoff is estimated at 835 billion km³, out of which 63 percent is generated by international rivers outside of the country. Groundwater potential is estimated at roughly 58 km³. The hydropower potential is 17,400 MW, of which 17 percent is developed, contributing to half of the country's electricity production. The development of water resources so far has made an enormous contribution to Vietnam's economic growth. In addition to natural constraints such as devastating floods and severe drought, even a lack of drinking water in several areas, water pollution was recently discovered everywhere. Water quality is deteriorating.

With its tropical rainforest and monsoon savanna, marine and wetland life, and mountainous sub-alpine scrubland, Vietnam is home to one tenth of the world's bird, fish, and mammal species. Forty percent of the current inventoried plant species in Vietnam are endemic (IDRC, 1995). From 1992 to 1997 three new species of mammals were discovered along the Vietnam-Laos border: *Pseudorys nghetinhensis*, *Megamuntiacus vuquangensis*, and *Muntiac truongsongensis*. They are three among the eight species of mammal discovered throughout the world in the 20th century.

¹ Le Thac Can is the director of the Vietnam Environment and Sustainable Development Center (VNESDC). Do Hong Phan is the director of the Centre for Resource Development and Environment, Vietnam Union of Science and Technology Associations. Le Quy An is the president of the Vietnamese Association for the Conservation of Nature and Environment.

1.2 Dependence of the Economy on Natural Resources

Vietnam's natural resources are of special importance to the living conditions of its people and to the country's socio-economic development. Although Vietnam is starting its industrialization efforts, about three-quarters of the population are still engaged in primary agriculture, forestry and fishery.

According to 1999 Gross Domestic Product (GDP) figures, the share of agriculture was 28 percent. When all natural resource exploitation and use are aggregated, that share rises to 49 percent. Manufacturing and services in Vietnam are also indirectly related to the use of natural resources. Furthermore, 59 percent of export revenue comes from extraction and use of natural resources, such as crude oil, fish, rice, and coffee.

A comparison with several neighboring countries shows Vietnam's relatively high dependence on natural resources.

	GDP (percent of total)			Labor (percent of total)		
	Agriculture	Industry	Service	Agriculture	Industry	Service
Vietnam	28	30	42	71	14	15
Thailand	11	40	49	64	14	22
Indonesia	17	42	41	55	14	31
Malaysia	13	43	44	27	23	50
Philippines	22	32	46	46	15	39
Singapore	0	36	64	0	36	64

Source: World Resources Report, 1998-1999

1.3 Dependence on Natural Resources at Sub-national Level

On the basis of geography and socio-economic development, the country is divided into eight zones: (1) Northern Mountainous, (2) Northwest, (3) Red River Delta, (4) Northern Central, (5) Coastal Central, (6) Central Highland, (7) Eastern South and (8) Mekong Delta. Zone 8, Zone 6, and small areas of other zones belong to the Mekong Basin. The following information and data show the high dependence of socio-economic development on natural resources in these regions.

1.3.1 Central Highland Zone

The Central Highland Zone (CHZ), also known as Zone 6, consists of four provinces with an area of 56,200 km², out of which 23,800 km² is composed of the Upper Sesan and Srepok river basins. With a population of 3.2 million, its population density is around the quarter of the country's average. The CHZ's population is characterized by ethnic diversity, and the major ethnic groups are Gia Rai, E De, and Ba Na. The Kinh became the predominant ethnicity (66 percent) after a recent in-migration.

CHZ natural resources consist of land (7 percent of the country's total), forest (32.5 percent of the country's total), water, biological, and mineral resources. CHZ is famous for its basalt soil, which is suitable for coffee and other cash crops. Exports have pushed coffee growing to the extreme in terms of groundwater withdrawal, resulting in serious aquifer depletion. Illegal timber exploitation, together with continuing shifting cultivation that is still largely practiced among ethnic groups, is dramatically destroying the CHZ's forests.

The Upper Sesan and Srepok rivers in the CHZ both flow down through the Sesan—a tributary of the Mekong River. Upper Sesan hydropower potential is ranked third countrywide. The 720 MW Yali hydropower plant began the operation of its first turbine in early 2000.

In terms of biological resources, the CHZ is among the most diverse areas of the country. Thirty-two species in the CHZ are internationally recognized as rare and endangered.

CHZ economic development is highly dependant on natural resources. In 1995, 64 percent of economic development in the region was related to natural resources, and of this 49 percent was related agriculture and forestry and 15 percent to processing industries (MARD, 1997).

1.3.2 Mekong Delta Zone

The Mekong Delta Zone (MDZ), designated Zone 8, covers 39,000 km² and is the lowest part of the Mekong Delta, consisting of 12 provinces and home to some 17 million people.

The diverse natural resources of the MDZ are of great importance to the country's agricultural production and economy. The MDZ currently accounts for some 50 percent of the Vietnam's total agricultural production, including 55 percent of the country's rice production. Rice and fish products in the zone contribute significantly to export revenues and account for about 27 percent of the national GDP.

In the MDZ, land, water, fish, and forest resources are closely linked to each other in several diverse ecosystems. The fertility of the alluvial plain is due to seasonal flooding, although some major constraints have been limiting the full development of agriculture. These include: deep and prolonged inundation, salinity intrusion, the spread of acid sulfate water, and scarcity of fresh water. Since the 80s, wise water/flood management—an output of joint studies between farmers and water resources planners—has led to a radical change in rice cultivation, shifting from one low-yield floating rice to two high-yield crops. This practice avoids water abstraction in April—a critical time of low flows, and is applicable to other periods of the dry season, thus limiting saline intrusion.

The management of coastal and flooding wetlands plays an important role in fish and forest production as well as in biodiversity protection. However, export markets have placed strong emphasis on shrimp cultivation, leading to serious degradation of these coastal ecosystems. Efforts are being extended for safeguarding what still remains, with a view to sustainable resources management.

1.4 Transboundary Aspects

Vietnam shares not only borders with neighboring countries, but also resources and environmental impacts. These may include watershed deforestation, pollution of water bodies, declining fish and wildlife population in the hinterlands, dislocation of border populations, and illegal transboundary trade.

1.4.1 Water resources sharing

As mentioned above, out of the dense watercourse network in Vietnam, there are seven international rivers that are largest in terms of catchment and runoff. In most of cases, water flows into Vietnam. In the Mekong Delta, only 5 percent of the annual runoff is generated locally. The Hong - Thai Binh system (Red River) receives 42 percent of its runoff from China, while the Ca and Ma rivers receive 15 percent of their water from Laos. In a few cases, Vietnam takes the position of the upstream country—the Upper Sesan and Srepok join the Mekong River in Cambodia and the Ky Cung and Bang Giang join the Pearl River in China.

The above figures reflect the geopolitical positions of both downstream and upstream riparian countries, as well as the potentially strong impacts of transboundary water and general natural resources development and management in Vietnam.

As a downstream country, Vietnam is conscious of both quantity and quality of the water flowing into its rivers, as well as of the possible reforestation of bare land upstream. In the Mekong case, Vietnam is determined to effectively implement the Mekong Agreement for the sustainable use of Mekong water resources and prevent any negative impacts from unsustainable water use in the upper parts of the basin. Vietnam has also expressed its willingness to cooperate with China and Laos for the sustainable use and protection of the Hong, Ca, and Ma rivers.

At the same time, Vietnam is attempting to restrain its use of water resources to avoid putting pressure on the upper basin countries. Vietnam is prudent in dyking its Mekong tributaries, which it used to do to controlling seasonal floods, so as to avoid an increase in water flood elevation in the upper delta in Cambodia. Instead, Vietnam has adopted a "co-existence" flood policy. Vietnam is also keen to develop and facilitate international navigation along the Mekong channels. The case of My Thuan Bridge could illustrate this policy. Instead of having a 25 m vertical clearance bridge as justified by future needs, Vietnam adopted the Mekong option of a 37.5 m vertical clearance for fairer accommodation to

Cambodian requirements. By doing so, Vietnam has had to bear a larger investment. The two countries later entered into a bilateral agreement on Mekong navigation and consolidated cooperation in the field.

As an upstream country, Vietnam has an obligation towards its downstream neighbors—the same that it requires from other upstream countries. One of its major upstream rivers is the Upper Sesan. As mentioned above, Upper Sesan hydropower potential ranks third countrywide and Yali, a major hydropower plant of the Upper Sesan, ranks second countrywide. The Yali project was identified in the 1960s by the Mekong Committee as one of the two most interesting projects (together with Nam Theun II in Laos) of the lower Mekong Basin. A pre-feasibility study was undertaken in 1991-92 along with an environmental impact assessment (EIA) report financed by Switzerland through the Mekong Programme. The political context in Cambodia at the time had prevented inclusion of Sesan downstream sites in Cambodian to the EIA study. The report thus covered the Vietnamese part only. The Vietnam National Mekong Committee was aware of its obligation to inform downstream areas on the impact of large upstream projects, and had thus notified the Cambodian National Mekong Committee at least twice about Yali project development. However, the two sides have both regretfully missed the opportunity of undertaking an EIA study for Cambodia once renewed political stability would have allowed them to do so.

As a hydropower plant, Yali will have a positive impact downstream. The negative impacts regretfully occurred during the construction period. The operational test of the Yali hydraulic works did not take into account the impacts that it would have downstream and regretfully caused some harm to local people. Neglect by the hydropower developer was even more destructive. Fortunately, the matter has been brought to the attention of the Mekong River Commission (MRC) in time, which is the appropriate body in such an event. The Vietnamese Government and its Ministry of Industry had given timely instructions to Electricity of Viet Nam and Gia Lai Province for necessary mitigation and most importantly, for future upstream/downstream collaboration mechanisms. The two sides have had constructive discussions resulting in a mutual understanding.

It is important to recognize that, among the Vietnamese, the concept of Vietnam's own upstream obligations is still vague. There is therefore a need to raise awareness and educate the populace, from local communities and authorities to central agencies.

1.4.2 Other transboundary aspects

Along its 3,700 km of borders, Vietnam neighbors upon China, Laos, and Cambodia. Mountains, narrow valleys, and forests dominate border areas, where neighboring countries share rich biodiversity and common cultures and values.

The Truong Son range along the Vietnam-Laos and Vietnam-Cambodia borders has a diverse relief, which explains the rich biodiversity in the region. A number of national parks and national reserves have been set up there, such as in Vu Quang, Pu Mat, and Yok Don. The region lying at the Indo-China junction between Vietnam, Laos, and Cambodia is also another biodiversity-rich area. A national park was established in Chu Mom Ray. Some forms of cooperation among Vietnamese scientists and their Lao and Cambodian counterparts have been observed, with occasional meetings. However these meetings need to be enhanced.

Under the imperatives of economic growth and market-oriented policies, Vietnam shares concerns with its neighbors about the unsustainable and uncontrolled use and trade of nature-based goods and wildlife. These are social evils that all countries are determined to extirpate.

2. Environmental Governance

2.1 Policy Framework

Vietnam's policy on the environment was set out quite comprehensively in the 1991 National Plan for Environment and Sustainable Development, which was included in the Vietnam Country Report to the 1992 UN Conference on Environment and Development, Rio de Janeiro. These policies aimed to:

- Satisfy the basic material, spiritual, and cultural needs of current and future generations of Vietnamese people by wisely managing the country's natural resources; and
- Establish and enforce policies, action plans, and institutional frameworks to ensure the sustainable use of natural resources, which are closely connected to all aspects of socio-economic development in Vietnam.

The objectives of the 1991 National Plan included:

- Preserving key ecological processes and ecosystems that influence the well-being of the population;
- Conserving the abundance and genetic diversity of domestic and wild animals and plants for current and future generations;
- Ensuring the long-term and sustainable use of natural resources by controlling their efficient use and keeping tabs on the way they are used;
- Maintaining the basic environmental quality that humans need to exist; and
- Attaining a population growth level and distribution that corresponds to the country's stable natural productive capacity and ensuring the living standards of the Vietnamese people.

In 1995, the government approved the National Biodiversity Action Plan, of which the immediate objectives were to:

- Protect the country's endemic ecosystems, vulnerable ecosystems that are now facing the danger of reduction or destruction caused by human economic activities;
- Protect those biodiversity components that are now subject to be over-exploited or ignored; and
- Promote and identify the utilization value of all biodiversity components on the basis of sustainable development of natural resources in order to serve the country's economic targets.

Not included in the legislative framework, but also having considerable influence is the Directive No. 36 issued in 1998 by the Political Bureau, Communist Party of Vietnam, on strengthening environmental protection during national industrialization and modernization. The directive calls upon the whole country to participate actively in environmental protection.

All above-mentioned policies reflect Vietnam's attempts to overcome what are currently serious constraints and adapt itself to sustainability concepts. Results from testing the application of sustainable development principles vary from sector to sector and depend on locale. One of the major constraints seems to be a lack of incorporation of environmental issues into socio-economic development plans, making it difficult to have sound implementation.

2.2 Legislative Framework

In the 1990s, Vietnam adopted a number of laws related to natural resources and environmental protection:

- Law on Protection and Development of Forest, enforced in August 1991;
- Law on Land and Territory, enforced in October 1993;
- Law on Environmental Protection, enforced in January 1994;
- Law on Minerals, enforced in September 1996; and
- Law on Water Resources, enforced in January 1999.

Under these laws, natural resources belong to all people, and the State exercises unified management/governance of natural resources and environmental protection throughout the country. The Law on Environmental Protection specifies its aims as preserving a healthy, clean, and beautiful environment, improving the environment, ensuring ecological balance, preventing and overcoming adverse impacts of humans and nature on the environment, and making a rational and economical exploitation and utilization of natural resources.

The Water Law states that organizations and individuals have the right to exploit and use water resources for life and production. At the same time, they have a responsibility to protect water resources by preventing and mitigating negative impacts caused to water. The principles of “user pays” and “polluter pays” are included.

It can be said that, through the above-mentioned laws, Vietnam has introduced a large number of globally accepted principles on natural resources and sustainable environmental management into its legislative system. However there is long way to go in coming up with effective enforcement of these laws, since regulations are still missing and/or overlapping and institutions are either new or weak.

2.3 Institutional Framework

2.3.1 The administrative hierarchy

The administrative hierarchy is composed of four levels: central, province, district/quarter and commune/precinct (in rural/urban areas).

At the central level, the National Assembly is elected through a countrywide general vote. It is the highest legislative body. The National Assembly elects a Prime Minister who submits his Cabinet membership to the National Assembly for approval. The government is the highest executive body of the State.

At the local level, People Councils are elected through general vote at the corresponding level (province, district, commune). People Committees are the executive bodies responsible to both the electors and the higher administrative authorities. The government, chaired by Prime Minister, supervises provincial activities and adopts or rejects their decisions. The provincial governments represent an important power and play a major role in formulating local development strategies, including environmental ones.

At the lowest level, a commune consists of several villages, which are a kind of household community. Commune People Committees assign village heads who manage grassroots administration. In the minority ethnic groups, village administration is carried out by a dual system—the village head and the village elder, or in some cases, a Village Elder Council. According to local traditions, the village elder is chosen by the community.

2.3.2 Line ministries

There are more than ten line ministries and central agencies dealing with natural resources and environment:

- Ministry of Science Technology and Environment—environmental monitoring, quality standards;
- Ministry of Agriculture and Rural Development—land use, forest, water resources, irrigation, flood control, rural water supply;
- Ministry of Fisheries;
- Ministry of Industry—minerals, geology, electricity;
- Ministry of Construction—urban and industrial water supply;
- Ministry of Health—drinking water standards, hygienic sanitation;
- Ministry of Transport—navigation;
- Ministry of Education and Training;
- Service of Hydrology and Meteorology;
- Service of Land and Cadastre;
- Service of Oil and Gas; and
- Service of Tourism.

Other ministries have general governance functions, such as the Ministry of Planning and Investment and the Ministry of Finance.

Line ministries have their staff at the provincial level (and at the district level as well, in most cases) in the form of provincial services/departments. Provincial services have dual responsibilities—they are accountable to line ministries for technical work, and to the provinces for plan implementation and administrative matters.

2.3.3 Professional agencies

Research institutes, universities, and colleges are affiliated with ministries, and are commissioned by the government to carry out surveys and research on natural resources and environment issues.

Numerous non-governmental organizations (NGOs) are active in the fields of natural resources and environment. They are self-financing, non-profit, professional organizations. NGOs cooperate with ministries, provincial authorities, and local communities in policy implementation and building models for the rational use and conservation of natural resources and environmental protection.

2.4 Environmental Information and Public Access to the System

2.4.1 At the national level

At the national level, the Ministry of Science, Technology and Environment (MOSTE) or, more specifically, the National Environment Agency of MOSTE, is directly responsible for the collection, analysis, and dissemination of environmental information.

Through its sectoral and provincial departments responsible for science, technology, and environment, MOSTE collaborates with line ministries and all provinces in environmental information activities. Line ministries and provinces also set up their own databases and provide MOSTE with information as required.

2.4.2 Provision of and access to environmental information

Principles for the provision of environmental information and the facilitation of public access to this information are defined in the Law on Environmental Protection, which states that governmental authorities have the responsibility of periodically reporting national environmental conditions to the National Assembly and informing the public. MOSTE submits a State of Environment Report (SOER) to the National Assembly every year. Some of the main contents of the report are published and disseminated to the public through mass media.

Legally, all citizens have access to environmental information available at environment offices. Deputies and individual citizens can request detailed environmental information for specific projects and programmes. Line agencies have the responsibility to respond to these requests. The Science Technology and Environment Committee of the National Assembly assists deputies in accessing relevant governmental agencies. However, because of unclear regulations and mechanisms for implementation, this apparently sound system design is not workable yet.

The same procedures for providing and accessing environmental information are applied at lower levels. The Provincial Department of Science, Technology and Environment reports periodically to the Provincial People Council. Again, enforcement is as weak as at the central level, if not worse.

In practice, the lack of reliable information and the absence of well-organized services for information delivery create many difficulties for accessing environmental information. Access to information concerning specific development projects, including environmental information, is still limited to offices and organizations that are directly involved. To improve public access to environmental information, it is necessary to elaborate and issue legislative and administrative regulations, to better organize information services at various administration levels, and to build up the capacity of local NGOs and mass media groups.

Mass media groups, including national and local newspapers, radio, and television, have, in recent times, been active in raising public awareness, environmental protection, and defending grassroots rights. Mass

media groups are the first to report on issues such as illegal timber cutting, water and solid waste pollution, etc., and enjoy strong popular support. Better coordination between media groups and environmental professionals is needed for improved technical analysis and support. Environmental information also needs to be combined with education, knowledge dissemination, and the promotion of public environmental awareness.

Among minority ethnic groups, as mentioned above, there exists a dual system of administration—village heads and village elders. Village elders often play an important role in the local management of land, forest, and water resources and in environmental protection.

2.5 Decision-making Process and Opportunities for Public Input

2.5.1 The overall process

The overall process is run in such a way that provincial planning proposals are formulated in close consultation with line ministries before they are submitted to the central government through the Ministry of Planning and Investment for approval. Major development projects are studied by central agencies with the participation of local authorities.

MOSTE takes the lead in the preparation of action plans, programmes, and projects for the prevention and mitigation of environmental pollution and disasters, and, after consulting with all related ministerial and provincial agencies, as well as National Assembly offices, submits these to the Prime Minister for approval.

2.5.2 At the in-country regional level

As mentioned above, the planning schema divides the country into eight zones on the basis of geography and socio-economic development. A zone is not an administrative level. Any zone-scale decision is made by the central government, in consultation with related provinces/cities within that zone. The planning process is guided by the Ministry of Planning and Investment and ultimately appraised by an ad-hoc central council. Responsibility for the supervision and monitoring of zone development plans falls directly to the government, primarily through its line ministries.

An exception may be noted when inter-provincial river basin organizations are established under the interpretation of some articles of the Law on Water Resources. In this case, the law stipulates that integrated river basin planning must ensure the unified management of water resources in accordance with the administrative system. There might be some practical difficulties in implementation, however, since the administrative system generally has authority over sub-basin areas lying under their jurisdiction, while the law considers integrated river basin planning to be the responsibility of the Ministry of Agriculture and Rural Development.

2.5.3 At the provincial level

At the provincial level, there has been a decentralization of functions and powers in the decision-making process. Provincial authorities are empowered to make decisions about numerous issues related to the use and management of local natural resources. For example, in land use and management, the province has the power to formulate land and territory use planning, and to hand over land to organizations. The district has the power to hand over land to households and individuals.

2.5.4 At the grassroots level

At the grassroots level, the policy of community participation and socialization of socio-economic development and environmental protection is practiced. Mass organizations (Union of Women, Youth, Farmer, Revolution Veteran, etc.) play an active role at the grassroots level. The Regulation on Democratization at the Commune level was issued in 1998, stipulating that people should be consulted on commune development planning, including economic and employment affairs, land use, water supply, and environmental sanitation before plans are finalized by the Commune People Committees.

However, enforcement is still weak since, because of traditional behavior, the concept is often understood as the participation of communities in the implementation process, rather than in the decision-making

process. In Vietnam, communities are represented by mass organizations and local authorities. Apart from the hierarchic administration system, mass organizations are quite active. They are mandated to represent people's rights and aspirations. In certain localities and certain movements, through their grassroots activities mass organizations have contributed significantly to the implementation of social policies and have influenced local authorities in the decision-making process.

With the newly introduced participatory approach, communities have been promoted to organize themselves for specific purposes, such as water use and environmental sanitation. New developments can be observed in field irrigation. Under the Programme on Irrigation Management (PIM), assisted by several donors, water users of on-farm irrigation schemes have been organizing within their own water user associations and water cooperatives, even though they may belong to different administrative communes. This form of water management was not initially supported by local administrative authorities, who finally supported the new management system only after considerable progress was made in securing a reliable water supply and the full collection of water fees. PIM, however, has been developed slowly and needs to be formally introduced nationwide.

2.5.5 Environmental impact assessments

EIAs were adopted in 1994 for application to both enterprises and new projects as a key tool in the decision-making process. Because of this adoption, municipalities were able to move some serious polluters out of the city areas. EIAs are applied broadly in infrastructure development projects, such as hydropower, irrigation, transport, and industry. Projects financed from Official Development Assistance (ODA) sources always have an EIA done properly in the early stage of pre-investment. Unfortunately, local interests used to try to avoid EIA regulations. Monitoring systems need to be improved.

EIA reports are always appraised by an EIA Commission before being approved by MOSTE. The EIA Commission-- as stipulated in governmental decree-- consists of scientists and managers and may also include representatives of social organizations and representatives of the population. Community participation is thus mentioned, however as optional only and therefore not quite enforceable. The public hearing mechanism didn't exist as of yet. Professional associations, such as the Vietnam Association for Conservation of Nature and Environment, are often invited to participate in EIA activities. It is however necessary to mention that the technical capacity of EIA local professionals are still very limited, especially in the overall and strategic assessment of macro and long-term plans. Capacity improvement is also needed in environmental monitoring and forecasting.

2.5.6 Transparency in environmental decision-making

The environmental information and decision-making procedures in Vietnam are, in principle, transparent. Public participation is defined by "four musts": "People must know about; people must participate in; people must discuss on; people must have control over," which governs development activities at all levels, from village community to national-level. Every citizen can request environmental information from the central and local governments, either directly or through their representatives.

The transparency is however still limited for the following reasons:

- Fragmented management of natural resources and environment sectors and restricted exchange of information.
- Limited availability of environmental information. A proper national environmental information database is still in the process of being established. Lack of environmental information is serious in many provinces, where information databases do not exist, and an annual SOER has not been produced yet.
- Inadequate monitoring of ambient environment and inadequate survey of natural resources depletion. The national environmental monitoring network is still limited. Natural resources data are collected and analyzed by various agencies without coordination with MOSTE. Most industrial enterprises do not monitor the pollution they create.
- Limitation in human resources for the provision and dissemination of environmental information and for adequate public participation environmental decision-making. The staff of the National

Environment Agency is still limited, with some provincial environment offices having only four or five staff members.

- People's knowledge and awareness is still low, which prevents the democratic process from being fully practiced.

2.5.7 Influence of the entire system on decision-making

The entire system, including official administration, public access to environmental information, public input in decision making, and transparency in environmental decision-making, could be seen in general terms as available, but is still far from effective.

It is hoped that future EIAs will be done comprehensively and in the early phases of project conception and design. EIAs of many important projects were, in fact, carried out long after their pre-feasibility or even feasibility studies had passed. The EIA and resettlement plan for the Yali hydropower plant were limited to the power plant and reservoir surroundings only. The National West Highway project began to incorporate substantial public participation in environmental issues months after the project already begun. Because of these experiences, the Son La hydropower project feasibility study is being better implemented (e.g., more prudently studied), by a large group of national institutions, NGOs and local people.

Reasons for inefficiencies in the system are many. Some include: successful law enforcement, but a lack of by-laws and technical regulations; unclear definition of public participation; no provision of necessary conditions for public participation; fragmented information systems; mechanisms for legislation enforcement are still to be set-up; and the weak awareness of governance practices. In such conditions, the responsible authorities are relatively free to interpret based on their knowledge and capacities. Even when willing to do their best, they have difficulty with proper implementation. Capacity building is desperately needed. Good results have been found in externally funded/cooperated projects and these could be seen as pilot models.

3. Regional Institutions

3.1 Classification of Regional Institutions

A number of regional institutions, regardless of whether they have the word "Mekong" in their title, are participating actively in the region. They could be classified into three categories according to their institutional statutes:

- Intergovernmental regional organizations, such as the MRC, the Association of Southeast Asian Nations (ASEAN), and the United Nations Economic and Social Council for Asia and the Pacific (ESCAP). Only the MRC is specifically attached to the Mekong region.
- Financial support agencies, including bilateral donors active in regional activities, such as Denmark, Sweden, Netherlands, France, Canada, and Switzerland, and international and regional agencies such as the Asian Development Bank (ADB), the World Bank (WB), the Global Environment Facility (GEF), and the United Nations Development Program (UNDP).
- Other international groups and institutions, such as the World Conservation Union (IUCN), and other NGOs, regional projects and programmes, such as the Resources Policy Support Initiative's (REPSI) Mekong Regional Environmental Governance (MREG) project.

In the Mekong region, the MRC and the ADB are the two agencies handling the largest operational programmes. Although the ADB has been showing interest in regional infrastructure development studies and is executing some pre-investment technical assistance projects, the MRC is considered to be the technical regional agency in water resources and environmental management. ASEAN has expressed support to assist in Mekong Region development, but their resources and activities are still limited.

3.2 Regional Institutions and Transboundary Resources Management

3.2.1 Prioritization of regional studies

No one regional organization can deal with all aspects and all levels of a regional development plan or a river basin development plan. In international river basin planning, tributaries, sub-basins, and local conditions used to be handled by the national/local agencies concerned. In general, regional agencies should focus their study efforts on basin-wide and regional issues, such as:

- Data collection, dissemination, and exchange, including natural resources, environmental, and social data.
- Taking action in the management and protection of resources and the environment: flood management (control, forecasting), watershed management, and wildlife protection in border areas, management of international river fish capture and river fisheries resources, protection of large ecosystems (forest, floodplain, wetland, coastal), studies on social and economic aspects of the immigration movement at region/basin levels.
- Formulation of social, economic and environmental development and management plans at region or basin-wide levels in view of poverty alleviation, gender promotion and catalyzing in secure funds for these plans.
- Development of regional infrastructures: land routes and railways, navigation channels, electricity network.
- Promotion of regional integration: trade, especially the trade of natural resources based products, tourism, culture exchange etc.
- Capacity building, including human resources and environmental governance improvement.
- Solutions for transboundary environmental issues and conflicts.

3.2.2 Coordination of regional activities

Coordination of regional activities should be based on the strengths and weaknesses of regional institutions. Among regional institutions cited above, the MRC's relative strengths are management of the water and resources database, the permanent hydrology measurements, and the water quality monitoring network, and the day-to-day communication and hydrology forecasting system among the MRC Secretariat, the four National Mekong Committees, and National Hydro-Meteorology Services.

Other regional institutions are stronger in, among other things, the collection of social and environmental data through their activities in remote areas. However, these data were available mainly at the project level. An exchange of information among regional organizations is thus necessary so as to complement each other's activities.

In any case, an active participation of nationals, whether governmental or non-governmental, is a prerequisite. They are the ones who translate regional findings into country strategies and programmes and implement them.

3.3 Regional Institutions and Regional Development Trends

Regional institutions such as the MRC play an important role in regional development. The MRC, in its interim status between 1978 and 1995, was a unique organization in the region, and made an important contribution to the region's political stability. Since its reestablishment under its current statute, the MRC continues to play a role in sustainable water resources management in one of the largest river basins in the world.

Cooperation among all six riparian countries is welcome by the four lower riparian countries, and stipulated in Article 39 of the Mekong Agreement. Pending the participation of the two upper riparian countries, the MRC has continued its cooperation programme, while maintaining close contact with these countries. Recently, the Fifth Dialogue Meeting was organized by the MRC with the participation of all six Mekong countries.

The role that ADB is playing through its Greater Mekong Sub-Region (GMS) programme has promoted the trend of cooperation among the six Mekong countries. Through its support of some of the first

physical development projects, such as roads, trade and other regional cooperation activities will be accelerated.

The Mekong water management and regional development are being seen as attractive subjects in a number of regional programmes and projects. The trends and objectives have much in common: the sustainable management of natural resources and the well-being of local people. For greater efficiency, a close coordination among these programmes should be promoted. Each organization should set up its own programme based on its mandate and strengths, so as to avoid duplication and unnecessary competition.

3.4 Regional Institutions, Resource Use, and Environmental Protection

Natural resources and the environment are both regional in nature. While regional water resources issues are characterized and limited by specific watersheds, environmental issues are not. A larger framework of relevant regional institutions is needed if environmental protection is to be achieved.

Governments generally adopt the principles of sustainable use of resources and protection of the environment. However, discrepancies remain in developing mechanisms for promoting them and translating them into practice. Regional institutions should be the first to adopt these principles and should be among the most active stakeholders in their promotion. Their role should start with awareness raising, focusing on general public awareness and including both decision-makers and grassroots communities.

The MRC, during its more than forty years of existence, has shifted from dealing mainly with water resources development to dealing with water resources management, taking into account the environmental impacts of development options. The Mekong Secretariat set up its Environment Unit at the beginning of the 1970s. The Mekong Environment Programme has developed quickly since then, and is, at present, one of the three core programmes of the Commission. For greater efficiency, the Mekong Environment Programme should extend beyond the Mekong Watershed and influence the Mekong Region in general.

3.5 Regional Institutions and their Influence on Local Livelihoods, Needs, and Rights

Regional institutions have a choice: they can be active in large undertakings for the benefit of a large portion of the population that includes majority and minority ethnic groups, or they can be active only in local areas for the well-being and livelihoods of smaller groups. This “choice” depends on the nature, function, policies, and capacity of each regional institution.

In the classification of regional institutions mentioned above, the first group of intergovernmental institutions, such as the MRC and ASEAN, work towards the sustainable management of natural resources and the environment in areas covered by their membership. They are able to facilitate dialogue forums that may influence the entire region, promoting the exchange of ideas and information, mutual understanding, human resource development, and multilateral and bilateral agreements. All of these, either directly or indirectly, may have a positive influence on local livelihoods.

The MRC and ASEAN have defined their visions and strategic action plans. If these are well-implemented, the needs and rights of people in member countries will be served, especially in cases of dispute over controversial interests.

Many agencies of the second group of regional institutions, especially NGOs, may be of more specific interest to local people. Such an approach is typically justified by the group’s abilities and competence. The needs and rights of communities can be served directly through the implementation of regional projects at local levels. These kinds of projects, generally small in size, consist of the transfer of appropriate technologies, the establishment of pilot models, training, etc.

The role of financial support agencies and international professional institutions in Vietnam began long ago and is extensively developed. Their contribution has been remarkable in promoting regional cooperation and integration for stable and sustainable development.

In Vietnam, foreign donors also give priority to natural resources and environment sectors. Through technical assistance and research, they have contributed substantially to the introduction of modern concepts, such as sustainability, efficient and effective governance, good practice, capacity-building, etc. In sum, foreign donors have brought a change in thinking and behavior with an emphasis on broader vision, integrated action, and stronger ownership. Recently, national stakeholders expressed their desire to see more effective coordination among donors in conjunction with their support to national governance reform.

4. Challenges for Change at the Regional Level

The improvement of national-level environmental governance arrangements and processes should be promoted and implemented as a basic condition for the improvement of environmental governance arrangements and processes at the regional level. It is important to recognize that regional trends will likely influence national ones.

4.1 National Environmental Governance Concerns

Overriding national environmental governance concerns and issues may be summarized into the following elements:

- Enabling environment, including the general framework of national policies, legislation, regulations, and financing for sustainable management of natural resources and environmental protection;
- Institutional framework, both within the general administrative structure, and within the river basin in the case of water management;
- Incorporation of environmental issues into national socio-economic plans; and
- Decision support systems in planning and prioritization, provision of required information, and tools to guide rational allocation and management decisions in a combination of regulatory and economic instruments.

Among the above issues, fragmentation and shared responsibilities among ministries are realities likely to prevail. The key is to concentrate on adequate cross-sectoral coordination mechanisms and not necessarily on full institutional integration. A solution must recognize that all economic, physical and social systems are interconnected, and governments should develop mechanisms to cope with such interconnections that fit the economic and political circumstances of their countries.

4.2 Environmental Governance at the Regional Level

Environmental governance arrangements and processes at the regional level, while supporting national efforts, could also focus on transboundary issues. Elements for improvement may consist of:

- Promotion of regional cooperation and agreements, which are legal frameworks for effective cooperation.
- Improved cooperation in environmental governance, which should be oriented to strategic and cross-sectoral matters, such as awareness raising, information exchange, EIA information dissemination, capacity-building, coordination of criteria and guidelines, etc.
- Cooperation on water resources management, which should have a basin approach and should be institutionalized under river basin organization. The MRC should be further supported and strengthened. Cooperation on other shared river basins should be promoted and institutionalized under appropriated forms.
- Exchange of experiences among environmentalists and managers on the formulation and enforcement of regulatory and economic instruments.

- Closer cooperation among national and regional governmental organizations and international and local NGOs in the promotion of public participation, especially the participation of minority ethnic groups and affected people.

5. Conclusions and Recommendations

5.1 *Concerning Environmental Governance in Vietnam*

Environmental concerns have received increasing recognition since the 1980s. Policies, strategies, plans, programmes, and projects have been implemented by scientists, experts, and managers dedicated to sustainable development. Several laws on natural resources and environment were issued during the last decade, establishing a basic legal framework for resource and environmental management. However, technical regulations are still seriously lacking and the enforcement of laws and regulations requires improvement. Integration of the environment into socio-economic development plans needs to be put in practice.

The national environmental management system has been established with MOSTE at the central level and provincial offices at local level together with related sectoral agencies. Strengthening of this system would make environmental management more effective. For example, having environment offices at district and commune levels would facilitate popular participation in environmental affairs. Improvement should focus on database development and information and monitoring capacity. Public access to information should be more open.

International and regional cooperation should be promoted with a view to greater efficiency. In addition to regional cooperation, bilateral dialogue and agreements are of vital importance.

5.2 *Concerning Environmental Governance in the Region*

The concept of a “Mekong Region” rather than a “Mekong Basin,” with five countries and one Chinese province, is still questionable in terms of how study outputs within such a framework would be delivered to relevant governments for consideration.

Regional efforts could and should help in policy dialogue, human resources development, mutual understanding among regional people, conflict resolution, etc. The idea is not to mobilize countries to compete successfully, but to cooperate in reconciling competing needs.

The MREG project should develop close relations with environmental governance institutions. In the case of Vietnam, these institutions include among others: MOSTE and its National Environment Agency, the Ministry of Agriculture and Rural Development, the National Mekong Committee, and the Ministry of Planning and Investment.