Evidence-based Conservation

Lessons from the Lower Mekong

Edited by

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18 A review of conservation area governance in Cambodia, Laos and Vietnam

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The countries of the Lower Mekong region, particularly Cambodia, Laos and Vietnam, have experienced severe social, economic, and political disruption for over half a century (Wescott, 2001). These began during conflicts with colonial authorities while asserting their independence, followed by Vietnam's war for independence and national unity, a conflict that also affected Laos and Cambodia. Cambodia went through significant civil conflict during the Khmer Rouge regime (1975–1979) that has had long-lasting impacts on its economic and social development. This was followed by twenty years of civil war, until 1999, when a functional policy, law and regulatory conservation framework began to be built.

As human populations are increasing in all three countries, the dependence of many of these people on agriculture, the extraction of forest products and development of infrastructure are intensifying pressures on the natural environment and resources (Fox *et al.*, 2009). Furthermore, the international demand for natural resources, combined with often uncertain tenure, has influenced local people to become more involved in the illegal sale of wildlife and wood for immediate financial gain. One of the most prominent examples of this is in Laos. While protecting their own forests, Vietnam, Thailand and even China have turned to exploiting Laotian forests by importing large amounts of wood logged illegally from primary forests (EIA and Telapak, 2008). The use of effective conservation-related policy and legal frameworks, including appropriate laws and regulations that are implemented effectively, is one avenue to addressing these issues.

The citizens represent important components in any governance system. Although information on the peoples within and around protected areas is scattered, some rough generalizations are possible. First, as many environmentalists have complained, protected areas tend to be in remote areas deemed economically marginal by governments, exactly the places where marginalized ethnic groups are likely to live. The collection by Duncan (2004) nicely summarizes the dismissive governmental attitudes in South-East Asia towards such peoples, with examples from each country, all indicating both historical

and contemporary patterns of neglect and disrespect, as well as a lack of comparative political power for such groups (see also McCaskill and Kampe, 1997). In Cambodia, there are small numbers of such ethnic groups, comprising 70,000–100,000 in total, divided among a number of small groups (Ovesen and Trankell, 2004). In Laos, the Hmong constitute a significant group (315,000), and one whose powers have been diminished, partly because of their perceived support for the US during the "American War" (Ovesen, 2004) and partly related to Marxist/Stalinist ideology (Fox *et al.*, 2009). In Vietnam, paternalistic attitudes toward "hill tribes" have also been linked to revolutionary ideology (McElwee, 2004; Cramb *et al.*, 2009). Second, in and around the kinds of tropical forested protected areas discussed here, local people are likely to practise swidden agriculture, a common basis for forest people's livelihoods in the three study countries. Such practices have been traditionally unpopular with most governments and serve to diminish the political power of swiddeners.

Awareness of the importance of the environment and natural resources to the development of the sub-region has grown recently, especially in the post-conflict period of the mid-1990s. A framework for conservation-related legislation has thus been developed throughout the Lower Mekong region, albeit with each country having highly variable systems of government and governance mechanisms. The government sections mandated to control environmental pressures are inhibited by poor governance and the lack of technical capacity and resources (To and Sikor, 2008; Fox *et al.*, 2009). The recently developed laws and regulations to control forest resource exploitation are often not adequate to the task. However, as government officials gain in experience and governance mechanisms evolve, some knowledgeable observers anticipate that these laws and regulations will be amended again or re-written.

The aim of this chapter is to explore the governance systems of Cambodia, Laos and Vietnam in relation to biodiversity conservation, and highlight the opportunities and constraints for improving conservation implementation and effectiveness. In particular, we explore how each country is able to implement conservation-related legislation and the governance systems in place that regulate illegal activities such as the trade in wildlife and wood.

Our focus here is on issues particularly relevant to the management of natural forest resources in areas protected by the government. In many instances, these protected areas are classified under the International Union for Conservation of Nature (IUCN) Protected Area categories (Miller and Shields, 2004) and managed by the national bodies in charge of environmental resources. There are others, however, that are under some form of protection but not classified under the IUCN categories, including biodiversity corridors, biodiversity conservation areas, and community forests – see the World Database on Protected Areas (UNEP *et al.*, 2009).

The United Nations Economic and Social Commission for Asia and the Pacific defines governance as the process by which decisions are made and implemented (UNESCAP, 2008). Within this framework, governance involves a diversity of societal groups, ranging from formal organizations and institutions

such as central government, non-governmental organizations (NGOs) and other civil associations to informal actors such as powerful families, local elites and criminal gangs (UNESCAP, 2008). We also consider ordinary people to be part of any governance system. The respective influences of these groups and individuals vary depending on circumstances in different countries or systems. The structure of government determines the relationship between central government ministries and other levels of government, particularly the distribution of authority over natural and financial resources (ICEM, 2003a). Using the concepts above, we look first at the organizations involved in the conservation sectors of Cambodia, Laos and Vietnam and compare their functions. We then analyse three governance mechanisms: education, incentives and formal regulations. We follow with a broader discussion of the opportunities and constraints for implementing these governance mechanisms.

This chapter relies primarily on secondary information from the published literature. This is supplemented by interviews with government staff, international conservation organization staff, forest guards and local people working or living in protected forest areas in Cambodia, Laos and Vietnam. We also use the quantitative results of a comparative study of fifteen conservation areas (five in each country – see Table 18.1) to support the discussions presented. These data were collected from secondary information, key informant interviews and field observations between September 2007 and May 2008. A sample of forty-three organizations was included in the analysis. Fifteen of these (one at each site) manage the conservation areas. Nineteen of the remaining organizations (predominantly NGOs focused on development) operate in Cambodian sites, four in Laos sites and five in Vietnam sites.

Structure of the conservation sectors

Conservation in Cambodia, Laos and Vietnam involves multiple societal groups, including the state (the central government, line ministries and local authorities), civil society (including NGOs and donors), the private sector (business and industry) and local communities. In this section we explore the structure of the state and civil society working in the forest conservation areas of the Lower Mekong.

Cambodia

Cambodia has approximately 13.4 million people. Its agriculture is largely reliant on the Mekong river, especially the Tonle Sap Lake in the centre of the country, and upland crops in the mountains. Forests, covering approximately 59 per cent of the country (FAO, 2005), also provide a significant part of rural people's livelihoods. The protected forest reserve system covers approximately 4.6 million hectares, or 25 per cent of Cambodia. Twenty-three protected areas were established by Royal Decree in 1993 and at least seven more protected forests have been established in the years since 1996 (Miller and Shields, 2004).

Table 18.1 Fifteen study sites in the Lower Mekong

Site name	Management body	Technical assistance
Vietnam		
Cat Tien National Park	CTNP Management Board	WWF and others
Song Thanh Nature Reserve	STNR Management Board	WWF Quang Nam
Bach Ma National Park	BMNP Management Board	N/A
Tam Dao National Park	TDNP Management Board	GTZ
Van Ban Nature Reserve	VBNR Management Board	Fauna & Flora International
Cambodia		
Seima Biodiversity Conservation Area	Department of Forestry and Wildlife	Wildlife Conservation Society
Central Cardamom Protected Forest	Department of Forestry and Wildlife	Conservation International
Mondulkiri Protected Forest	Department of Forestry and Wildlife	WWF Cambodia
Phnom Samkos Wildlife Sanctuary	Ministry of Environment and PSWS Management Board	Fauna & Flora International
Virachey National Park	Biodiversity and Protected Areas Management Project	N/A
Laos		
Dong Hoa Sao-Xe Pian Biodiversity Corridor	WWF through the Asian Development Bank's Biodiversity Corridors Initiative	N/A
Nakai-Nam Theun National Protected Area	Nam Theun 2 Watershed Management and Protection Authority	N/A
Nam Kading National Protected Area	Department of Forestry	Wildlife Conservation Society
Nam Et-Phou Louey National Protected Area	Department of Forestry	Wildlife Conservation Society
Bokeo Nature Reserve	Gibbon Experience	N/A

Government

In Cambodia, the Ministry of Environment (MoE) and the Ministry of Agriculture, Forestry and Fisheries (MAFF) are the two main governmental sections that formally constitute the policy and institutional agencies for the forestry sector (Luttrell, 2007). The MoE has the responsibility of protecting Cambodia's natural resources and preventing environmental degradation. The MoE also advises other ministries on the conservation and management of natural

resources. With the MoE, the Department of Nature Conservation and Protection (DNCP) is responsible for the management of protected areas and wildlife sanctuaries. Part of this operational responsibility falls on NGOs, with DNCP staff seconded to work on the projects (Hobley, 2004b).

The Ministry of Agriculture, Forestry and Fisheries has responsibility for the major productive resources in the rural economy (Hobley, 2004b). This ministry has a mandate to develop community forestry and implement forestry policy, particularly the system of permanent forest reserves. These areas include Protected Forests and Biodiversity Conservation Areas, which are managed by the Forestry Administration under MAFF and often operate in partnership with NGOs. These areas may also be temporary "protection forests" awaiting rehabilitation as production forest (Miller and Shields, 2004).

In 2003, the Forestry Administration was renamed the Department of Forestry and Wildlife, and a process of vertical integration was initiated, designed to remove horizontal interference from other actors, such as the military and police, and to allow more rational resource management across administrative boundaries. While some of the related administrative experiments have improved governance, significant problems remain with the capture of illicit rents and competition for potentially profitable posts. In addition to this department, police, local government, gendarmes and the military also police illegal logging and obtain revenue from these sources (Netra and Craig, 2009).

There are three other ministries that affect conservation-related activities: the Ministry of Land Management, Urban Planning and Construction; the Department of Mineral Resources within the Ministry of Industry, Mines and Energy (MIME) (Shields *et al.*, 2004); and the Ministry of Water Resources and Meteorology, which leads hydropower development in the country (R. Oberndorf, personal communication, November 2009).

Policy and legislation

In 1925, Cambodia was the first country in South-East Asia to identify a protected area: 10,800 hectares of forest around the Angkor Temple; and, in 1969, six national parks were established, covering approximately 2.2 million hectares (12 per cent of the country's total area).

In November 1993, His Majesty King Norodom Sihanouk designated twenty-three areas forming the National Protected Area System (NPAS; national parks, wildlife sanctuaries, protected landscapes, multiple-use areas) through the Royal Decree on the Creation and Designation of Protected Areas. The total area covers 3,327,200 hectares (18.23 per cent of the country's land area), classified according to IUCN classifications.

The Law on Environmental Protection and Natural Resources Management was adopted in 1996. It prevailed over other laws or legal instruments related to the protection, conservation and management of natural environments.

The Forestry Law, issued in 2002, is one of the most important legal documents relating to conservation. It outlines the provisions of traditional

use and rights of access to forest resources, and grants authority over forest resources to MAFF and the Forestry Administration. This law promotes community forestry activities by allowing these activities to occur in production forest areas. Following the passage of this law, and subsidiary to it, the Community Forestry Sub-Decree was approved in 2003. It summarizes the general rules and guides the development of procedures for the establishment and management of community forestry (Oberndorf, 2005). More recently, the Forestry Administration, with the NGOs Terra Global Capital and Community Forestry International, signed agreements with nine community forestry groups in Oddar Meanchey province to develop and market carbon credits for a Reduced Emissions from Degradation and Deforestation (REDD) project (Terra Global Capital, 2009).

The Protected Area Law is the latest law, signed on 4 January 2008 by the President of the National Assembly. This law defines the framework of management, conservation of biodiversity and sustainable development of protected areas. Based on several previous core laws, the new law takes precedence over them (National Assembly, 2008), but most of the subsidiary sub-decrees and *Prakas* (Ministerial Decrees) necessary for implementation have not yet been drafted (R. Oberndorf, personal communication, November 2009).

The following national laws and legal documents also relate to conservation in Cambodia:

- Royal Government of Cambodia (RGC) national forest policy (2002);
- Land Law 2002:
- Law for Protection of Cultural Heritage adopted by the National Assembly in December 1995 and promulgated by the King on 25 January 1996. This law focuses on Angkor and its surrounding areas. Natural conservation and biological conservation may be the consequence of cultural protection;
- Law on Administration and Management of the Commune (2001), which
 delegated responsibility to local authorities to protect the environment and
 natural resources within commune boundaries but gave no management
 decision- making power without specific authority from RGC (Oberndorf,
 2005);
- Sub-Decree on State Land Management (2005).

At the international level, RGC has signed significant documents to declare its contribution to global issues, including:

- Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention, accepted on 28 November 1991);
- Convention on Wetlands of International Importance, especially as Waterfowl Habitat (Ramsar Convention, contracting party since 23 October 1999);
- Convention on Biological Diversity (party since 9 February 1995).

Civil society and donors

Cambodia has over 1,000 registered NGOs (Hobley, 2004c), and they have accounted for some 30 to 50 per cent of the technical assistance expenditure in Cambodia (Wescott, 2001). These organizations advise the government in drafting laws and speaking up for the poor. International conservation organizations, such as the Wildlife Conservation Society, Conservation International, Worldwide Fund for Nature (WWF) and Fauna & Flora International (FFI), are also instrumental in providing technical assistance for the management and protection of forest areas. Much of the funding for forest protection comes from donor assistance through these organizations and others, such as the Mekong River Commission, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) and the Danish International Development Agency.

Laos

Laos is a land-locked country, with the Mekong River flowing down its west side and forming the border with Thailand to the south-west. Many of the 6.8 million people in Laos rely on forest resources, estimated to be worth more than USD 350 million per year to the national economy (Emerton, 2005). Approximately 13 per cent of Laos's land area has been protected through the twenty-one National Protected Areas. Eighteen of these were established following the 1992 Rio Earth Summit, by the promulgation of Prime Minister's Decree 164 in 1993 (Bugna, 2002). Two more were established in 1996, and yet another in 2008 (see also Badenoch, 1999). In addition to these areas, there are approximately sixty-four provincial protected areas and over 100 district protected areas (K. Marion Siuseeva, personal communication, November 2009).

Government

In recent years, the structure and legislation in Lao PDR have been in flux. Manivong and Sophathilath (2007b) describe forest and land management responsibilities as lying with the Ministry of Agriculture and Forestry (MAF). They note the involvement of several other government agencies at the national level: National Agriculture and Forestry Extension Service (NAFES), the Department of Forestry (DoF), and the National Agriculture and Forestry Research Institute (NAFRI). DoF focuses on policy development and legislation, as well as monitoring and macro-level assessments; NAFRI and NAFES address the implementation of government policies at the local level, working with Provincial Agriculture and Forestry Offices (PAFOs) and District Agriculture and Forestry Extension Offices (DAFEOs).

Looking at matters from a more bottom-up perspective, Fitriana *et al.* (2009) identified the following government actors, in descending order of importance, according to Viengkham District stakeholders: DAFO, Land Management Office, Finance Office, District Cabinet Office, Trade Office and Transportation Office. Boungnakeo (2008) introduced the new Department of Forest Inspection, which monitors and investigates illegal logging, including having the authority to make arrests, while collaborating with the private sector and civil society in efforts to improve law enforcement.

Policy and legislation

The Laos government held its first national forestry conference in 1989 (Bugna, 2002). Morris *et al.* (2004) briefly summarize the subsequent National Tropical Forestry Action Plan (1991), followed by the National Environmental Action Plan (1994). During the past twenty years, Laos has established its constitution (1991), established the national protected area system (1993), passed the Forestry Law (1996, revised in 2007), the Land Law (1997), the Environmental Protection Law (1999) and the Wildlife Law (2007). In the past ten years, regulations and policies were developed or updated to manage the environment and resources.

The same authors also identify a series of relevant Government Decrees related to the Forestry Law, including:

- No. 67 (1991), aimed at "illegal and incorrect" logging and strengthening the government's control over logging operations by banning it in natural forests;
- No. 99 (1992), designed to "stabilize" shifting cultivation;
- No. 164 (1993), establishing the National Biodiversity Conservation Areas (NBCAs).

Decrees under the Land Law, which is also the legal basis for the influential Land-Forest Allocation Program, include:

- No. 198 (1999), which provides the regulating design for implementing the Forestry Law (including protected areas);
- No. 11 (1999), which strengthens the government's central role designed to minimize forest destruction.

Tong (2009) describes the Ministry of Agriculture and Forestry's five-year Agriculture and Forestry Development Plan (2006–2010), which includes measures designed to increase forest cover, classify forests to strengthen management by scientific principles, and establish systematic management plans for the 3.4 million hectares of NBCAs, among other provisions.

The 2007 Forestry Law governs forest resource management and use, and categorizes forests into conservation, production and other resources. This law is complemented by a 2007 Wildlife Law, claiming all wildlife as property of the state, and the 2003 MAF Regulation No. 0360 on management of NBCAs and Aquatic and Wild Animals.

Other important legislation of relevance for conservation includes the National Environment Action Plan 2001–2005 and the National Biodiversity Strategy to 2020 (endorsed in 2004).

Lao PDR has ratified four international conventions concerned with biodiversity conservation:

- Convention Concerning the Protection of World Cultural and Natural Heritage (1995) (Morris et al., 2004).
- Convention on Biodiversity in 1996 (CBD, 2009a).
- Framework Convention on Climate Change (Morris et al., 2004).
- CITES in 2004, including a Management Authority in the DoF and a National Scientific and Technical Authority, which advises the Management Authority (Boungnakeo, 2008).

Civil society and donors

Manivong and Sophathilath (2007a), in their analysis of community forestry in Laos, acknowledge the importance of donors, international organizations and international NGOs in this setting where civil society is weak. The process outlined for participatory NBCA management, described in their study, holds the potential, if properly implemented, for strengthening civil society. However, the ubiquity of the disempowering processes outlined a decade ago for Laos by Arnst (1997) continues to cause concern (see also Fujita and Phengsopha, 2008 and Oberndorf, 2009, both of whom examine processes designed to be participatory that did not always function that way).

Over the previous decade, many international organizations have funded projects and programmes with technical and financial support for the development of models on forest management. They have also tested and developed a legal framework, and contributed to human resource development in the country (e.g. Oberndorf (2009) on village forests). The Swedish International Development Agency (SIDA) is assisting the Laotian Government in institutional development for environmental management through two major projects (Rafiqui, 2007). Manivong and Sophathilath (2007b) also list support from the World Bank, Finland, Asian Development Bank, JICA, IUCN, SNV, FAO and IDRC as contributing to community-based management of forests in Laos – all potentially providing experience and training that may be of use in conservation efforts. An internet listing of NGOs in Lao PDR revealed sixty-three organizations and 228 projects, fifteen of which were concerned with natural resources and ecology, many coordinating multiple projects (iNGO Network, 2009). The latter ranged from huge international organizations such as WWF, WCS, SNV and Care International to tiny NGOs such as the Global Association for People and the Environment (GAPE) with long-term staff and in-depth local experience.

Vietnam

Vietnam has a population of over 86 million. The Mekong river delta is west of Ho Chi Minh City in the south of the country. Vietnam has 126 protected areas, including two Ramsar sites and four biosphere reserves, covering a total of 7.6 per cent of the land area (CBD, 2009b).

Government

The Ministry of Agriculture and Rural Development (MARD) has overall responsibility for managing the system of national parks, nature reserves and cultural historic environmental sites (ICEM, 2003d), called the Special Use Forest system in Vietnam (see also FAO, 2009). The Ministry also reviews budget allocations for Special Use Forest management boards and oversees implementation of the Five Million Hectares Reforestation Programme (5MHRP or Programme 661), which supports Special Use Forest management through protection contracts and reforestation activities. It carries out surveys, plans and develops investment projects for establishing Special Use Forests (ICEM, 2003d). In the past national parks were under the direct management of MARD. At present, all except eight national parks are under this agency's direct management, with the eight remaining parks and national nature reserves managed by local governments (FAO, 2009).

The Ministry of Natural Resources and Environment (MONRE) is responsible for the Ramsar Convention, the Convention on Biological Diversity and coordinating the implementation of Vietnam's Biodiversity Action Plan (ICEM, 2003d). Apart from its role in designating protected areas, it has no mandate to manage protected areas (T. Sikor, personal communication, November 2009).

Under these two ministries, there are many other departments in charge of different aspects of conservation. The Forest Protection Department is responsible for forest protection nationwide, and the Fisheries Department is in charge of marine protected areas.

Other ministries are also involved in conservation. These are the Ministry of Planning and Investment (MPI), Ministry of Culture and Information (MCI) and the Governmental Office. MPI, through the annual budgeting process, is responsible for setting funding levels and negotiating budget allocations, including the budget for protected areas, with sectoral ministries and the provinces. The Ministry of Culture and Information, together with MARD, has the responsibility for managing "cultural-historic-environmental sites", one of Vietnam's categories of Special Use Forests (ICEM, 2003d). Furthermore, the provincial governments play a large role in protected area management, especially in the Nature Reserves.

Policy and legislation

Many regulations and laws have been implemented for biodiversity conservation in Vietnam. Between 1990 and 2007, 155 different legislative papers directly and indirectly related to forestry and conservation were issued. Of the three countries, Vietnam has the most comprehensive and complicated policy and legislation related to conservation.

In 1985, with technical assistance from IUCN, the government prepared a National Conservation Strategy within the frame of its National Resources and Environmental Research Programme. This strategy proposed: (1) the maintenance of ecological processes and life support systems in Vietnam, namely the maintenance of forests, midlands, croplands, freshwater, and estuarine, coastal and deep sea ecosystems; (2) the preservation of genetic diversity by development of protected areas, identification of protected species, establishment of hunting regulations, control of the wildlife trade and *ex situ* conservation; (3) the sustained use of renewable resources, the maintenance of environmental quality for human life; and (4) the implementation of conservation in partnership with international organizations (Tannetje Lien Bryant, 1999).

In 1991, during the Doi Moi period, the first National Forest Policy introduced a new framework for forest management in Vietnam. According to this, private households were allocated land to strengthen their role in overseeing the forest (Ari, 1999). In 1998, the government introduced a new programme, the 5MHRP or Programme 661, among Vietnam's biggest initiatives, aiming to increase the country's forest cover to 43 per cent. This was supported by Prime Ministerial Decision 661, 1998, on Establishing 5 Million Hectares of New Forest.

On 12 August 1991, Session 9 of National Assembly VIII ratified the Forest Protection and Development Law. The most recent version of this law was revised and ratified by the National Assembly in 2004 (Nguyen, 2008). Much improved over the original version, it provides a stronger emphasis on forest protection and combating illegal wildlife trade, including monitoring and support for Programme 661 (Infoterra, 2007).

The 1993 Law on Environmental Protection raised the effectiveness of state management and administrative responsibilities for environmental issues at all levels (AustLII, 2008). This law was followed by Government Decree No. 26-CP 26 April 1996: Environmental Protection – Decree on Sanctions for Administrative Violations, which stipulated offences as well as punishments.

Decision 192, The Management Strategy for a Protected Area System, was implemented in 2003 (Infoterra, 2007). Its long-term objective is to protect the rich and unique biodiversity resources within Vietnam's sustainable development framework. Seven areas are covered by this strategy: policies and legal issues, establishment and management of protected areas, awareness building, capacity building and staff training, scientific research, socio-economic issues and international cooperation (UNEP, 2008).

The Vietnamese government signed the Convention on Biological Diversity in 1993, the Convention on the International Trade in Endangered Species in 1994 and the International Tropical Timber Agreement in 1994. The Prime Minister approved Vietnam's Biodiversity Action Plan in 1995.

Civil society and donors

Vietnam has received considerable support from international organizations and NGOs, particularly in the implementation of the Five Million Hectares Reforestation Programme (1998–2010, 5MHRP). Over twenty donors have committed themselves with MARD to support this programme. Loans from the World Bank, the Asian Development Bank and the Japanese Bank for International Development Cooperation are being assigned to projects under 5MHRP (Do Dinh Sam *et al.*, 2003). International conservation organizations and development NGOs also play key roles in forest protection, with many working in partnership with government departments to manage national parks and Special Use Forests – for example, GTZ in Tam Dao National Park, WWF in Song Thanh Nature Reserve and Cat Tien National Park, and FFI in Van Ban-Hoang Lien Nature Reserve. IUCN has worked in Vietnam for the past three decades and has assisted in the development of conservation legislation.

Functions of conservation sectors

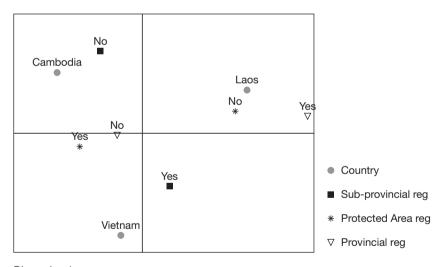
In the Lower Mekong countries, ministries have overall responsibility for managing conservation areas (ICEM, 2003d). Responsibility is channelled through relevant departments and through provinces to districts (ICEM, 2003d). Ministerial responsibility for conservation is, however, different in the three countries. The conservation-related bureaucracy is more complex in Vietnam and Cambodia than in Laos, requiring the coordination of more actors – always a difficult juggling act. Effective collaboration is rare in all the countries. In Cambodia, the MoE and the FA often have conflicts over responsibilities in their respective areas and compete with each other for government resources (Miller and Shields, 2004); see also Netra and Craig (2009) for discussion of the roles of donors and NGOs in complicating governmental coordination generally. In Laos, laws are drafted by the relevant agencies and then discussed by the national assembly (Stuart-Fox, 2006), with the interests of the party firmly in mind. Likewise, in Vietnam the majority of laws regarding the environment and conservation are drafted by MARD and MONRE and are then discussed and ratified by the National Assembly. Nevertheless, information exchange among ministries is also weak (T. Sikor, personal communication, November 2009). Wescott (2001) claims this weakness is due to the top-down regime, which often means staff are unwilling to make decisions or reflect their thoughts back to their leaders. Netra and Craig (2009) provide a table comparing the staffing authority at different levels in six countries (Laos is not included). Vietnam has decentralized more functions than Cambodia; both are far behind China and the

Departments at provincial, district and commune level are responsible for implementing centrally promulgated policies and are expected to report to their respective ministries. Local government has, however, increasingly been involved in conservation and environmental management since the early 1990s, and has played a more active role in biodiversity conservation at the local level.

Conservation regulations in the three countries are established at different levels. Figure 18.1 provides an analysis of conservation regulations at the provincial, sub-district and conservation area levels within each country, with the level at which regulation occurs varying by country. Vietnam has subprovincial regulations (mainly in the communes and villages), Cambodia has no lower-level regulations but some conservation areas have set up regulations, and Laos has district and village level regulations in many areas. Laos's new village clusters (*kumban*) are likely to develop their own regulations. Decentralization of regulations is most prominent in Vietnam; for example, seven national parks have been devolved for direct management by the provinces (ICEM, 2003d), and participatory processes are in place to enable villages and communes to establish their own regulations on forest resource management.

Similarly in Cambodia, due to the government's decentralization policy, locally managed protected areas have been established, with many provinces expressing interest in managing these areas (ICEM, 2003a). From interviews conducted in the conservation areas in Cambodia, one of the biggest problems has been the status and certification of land tenure; without clear boundaries, establishing regulations for the control of resources has been challenging, and local people's rights remain unclear.

Decentralization began in Laos in the mid-1990s, but some recentralization occurred in the late 1990s. The national government has the responsibility of creating policies and laws, the provincial governments disseminate information



Dimension 1

Figure 18.1 Correspondence analysis based on presence/absence of conservation regulations in fifteen conservation areas of Laos, Cambodia and Vietnam

Notes: Sub-provincial includes district, village or commune regulations. Data points close to the centre of the graph are less explanatory than those further along the axes. Eigenvalues: x-axis = 59%; y-axis = 40%.

and implement, and the district and village levels also have implementation responsibilities (Manivong and Sophathilath, 2007b). While the central government has overarching authority, many of the provinces tend to act as semi-autonomous entities (R. Oberndorf, personal communication, November 2009), a view supported by Stuart-Fox (2006). There are few protected area management regulations at the national level; however, many regulations are also developed at the provincial level, and some areas have started to implement village and district regulations related to specific protected areas, as is the case at Nam Et-Phou Louey NPA in Laos. A recent governance innovation of potential significance is the development of the village cluster, or *kumban*. The main actors in the *kumban* are the district, the DAFO and the Land Management Authority, all attempting to reduce poverty and manage natural resources sustainably (Watts, 2009).

Other groups involved in conservation include international conservation organizations and local NGOs. Conservation areas are managed by an array of different organizations, many in partnerships to improve the protection of biodiversity while maintaining or improving livelihoods of local residents (see Box 18.1). While government sections have overarching control of protected areas, international conservation organizations play important roles in decision-making through technical advice, finances and human resources. One of their main roles is to assist governments in improving institutions, by developing and implementing management plans, advising on the development of regulations and laws, providing technical training to government staff, conducting biological and socio-economic research and improving the efficiency of law enforcement; see Jonsson (1997) for a less positive, ethnographic assessment of their roles in the region.

Our findings suggest that international organizations and local NGOs that concern themselves with biodiversity conservation and local livelihood development have contributed greatly to conservation efforts in these countries (Do Dinh Sam *et al.*, 2003; Miller and Shields, 2004). Fujita and Phengsopha (2008), for instance, compare the functioning of Laos's Land and Forest Allocation programme in government- and donor-supported projects, with the latter performing far better; see also (Morris *et al.*, 2004)). With support from the IUCN and other international conservation organizations, all three countries have recently developed or improved wildlife, protected area or biodiversity laws, which are positive moves toward fulfilling the biodiversity conservation commitments of these countries.

The involvement of international organizations and NGOs is different in each country due to the country's policies towards international aid. Data from our survey in fifteen protected areas in Cambodia, Laos and Vietnam indicate that the number of NGOs working on conservation in protected landscapes in Cambodia is the greatest, with an estimated forty-six organizations working in the five selected sites, while Vietnam has fewer (eighteen) and Laos the fewest (sixteen). This might be explained by the level of openness each country has towards international organizations. Cambodia is more open to international

Box 18.1 Organizations' relationships in managing protected areas, Seima Biodiversity Conservation Area, Cambodia

The protection of Seima Biodiversity Conservation Area in eastern Cambodia was established through a *prakas* (a ministry-approved regulation) from the Ministry of Agriculture, Forestry and Fisheries (MAFF) in 2002, following the closure of the Samling logging concession. The management of this area is the responsibility of the Forestry Administration (under MAFF), but is supported by the Wildlife Conservation Society (WCS). The management of this area includes biodiversity protection through patrolling, biodiversity research and community engagement. Much of the community engagement and livelihoods support is provided by the Cambodian Rural Development Team, in partnership with WCS. There are also multiple organizations operating in the villages within the Seima area to conduct health care, infrastructure support and schooling.

Sources: interviews with organizations, 2007–2008.

interventions and hence there are greater numbers of external agencies active there than in Laos and Vietnam. Vietnam has exhibited its commitment to the environment by raising the profile of conservation in its national and international dialogue (World Bank, 2008b). The Laotian government remains, however, somewhat sceptical of the value of external aid (Rafiqui, 2007); see also Arnst (1997), who uses Laotian examples – examples that are recognizable internationally today – to document how international development donors and other actors have functioned to disempower communities and governments. Although there is some evidence that this may have obstructed Laos from receiving aid from international communities, especially in conservation, there still remains a significant number of international actors working to improve conservation in the country.

Policy framework

Cambodia, Laos and Vietnam have put in place many national laws, policies and programmes that focus on conservation during the last decade. Three instruments are employed to implement these laws, policies and programmes in forest areas: education; incentives; and law enforcement.

Education

Education about the environment and awareness of conservation are widely considered important aspects of implementing biodiversity conservation

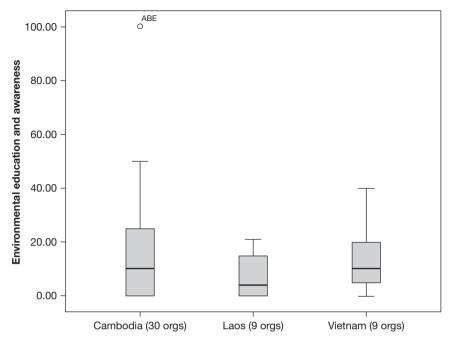


Figure 18.2 Boxplot: percentage of resources spent on education and awareness activities by conservation and development interventions operating in protected areas 2003–2007

throughout the Lower Mekong. But government officials themselves are often not fully informed about the benefits of conservation and environmental services. Furthermore, schools and universities have few environmental or conservation programmes in their curricula. Nevertheless, at each of the fifteen sites studied, education and awareness programmes are conducted by at least one organization. On average, approximately 10 per cent of conservation and development project resources are spent on environmental education and awareness activities in villages in the conservation areas (Figure 18.2), and one organization (the Association of Buddhists for the Environment) focuses solely on these subjects. Implementation of these programmes has a main function to build capacity at all levels of society, from local villagers to conservation staff to government officials. These programmes teach the values and benefits of the environment to local people (see Box 18.2) as well as improving the understanding of conservation laws and regulations that permit or forbid activities in forest areas. While education and awareness of formal conservation are relatively new endeavours in each of the countries, progress is being made. The improved understanding of conservation is beginning to aid the implementing of conservation policies and programmes, and improve the awareness of conservation to the wider society outside protected forest areas.

Box 18.2 Environmental education and conservation awareness raising: ENV, Vietnam and ABE, Cambodia

Environmental education and conservation awareness raising form a significant part of conservation efforts in the Lower Mekong. Two organizations, Education for Nature Vietnam (ENV) and the Association of Buddhists for the Environment (ABE) in Cambodia, have been working alongside international conservation organizations to improve local people's understanding and attitude towards the environment and conservation.

Education for Nature Vietnam has a primary task of training people at all levels of society, from local villagers in Tam Dao National Park, forest guards in national parks around Vietnam, the Wildlife Conservation Society in Laos and Cambodia, and government officials in Hanoi. Their approach is to teach the value of conservation for environmental services, natural resources, aesthetic beauty and future benefits to the participants of their programmes. They also emphasize four pillars needed to implement conservation: law enforcement, awareness, alternative incomes and biodiversity monitoring and evaluation. While it took a number of years for ENV to develop its conservation education programmes, it has now had a significant effect on the policies of government, especially the operations of national parks.

The Association of Buddhists for the Environment involves monks from all twenty-three provinces in Cambodia to strengthen the community of Buddhist monks and nuns to protect the environment. ABE does this by building monks' capacity to spread environmental awareness in their communities around their pagodas. The association works in collaboration with Conservation International in four of the Central Cardamom Protected Forest villages. Most of the rural people are Buddhists, so environmental education can apply moral pressure on those abusing the environment in order to change their behaviours. Initially the organizations did not communicate well with local people, but within a one-year period, they have improved, and people have started to consider conservation part of their lives.

Source: Personal communication with the Venerable Hiek Sopheap, ABE, Phnom Penh, 2008, and Dang Minh Ha, ENV, Hanoi, 2009.

Incentives

Decentralization may improve conservation governance by allowing local people and local authorities to control an area, but the effectiveness of this process is still debated (Tacconi, 2007); see also the collection by Colfer et al. (2008) for a broader coverage of these issues in the Asia Pacific region. Nevertheless, since 2000 Laos has started to devolve the management of national protected areas to district offices (ICEM, 2003c), and as of September 2009, NPA offices have been set up in seven provinces (K. Marion Suiseeya, personal communication from Savanh Chanthakoummane, Deputy Director, DFRC, 9 September 2009). In Cambodia, decentralization began with the CARERE/SEILA programme (CARERE: Cambodia Area Rehabilitation and Regeneration Project; SEILA: Social Economic Improvement Local Agency), including governmental agenda setting in 1999 (Oberndorf, 2004). Even though Cambodia's official decentralization process began recently – in 2001 (Oberndorf, 2004) – the government has begun strengthening management and providing local authorities with more responsibilities; see Netra and Craig (2009) for a thorough analysis of the problems with this process. In Vietnam, the government has implemented 5MHRP, or Programme 661, which allocates forest land for locals to manage and enables local people to be paid for forest protection; see Hong (2005) for a description of a successful effort in a Man and Biosphere Reserve and Nguyen (2008) for a mixed evaluation on Vietnamese decentralization of forest management.

Local governments and communities are also becoming actively involved in protected area and buffer zone management. Participation by local interest groups is important because it helps to improve understanding of their different perspectives, thus improving effectiveness of conservation interventions (Stoll-Kleemann and O'Riordan, 2002), as well as often strengthening people's abilities to manage and to monitor the activities of others. Some previous studies noted that the willingness of international conservation organizations to involve local people or collaborate with other stakeholders was limited (Barrett et al., 2001; West and Brockington, 2006; or Arnst, 1997, on Laos in an earlier era). Yet, as highlighted by Figure 18.3, the conservation interventions in Cambodia, Laos and Vietnam report frequently involving local people in their activities and/or collaborating with other organizations working in the conservation areas. On a 1-5 scale, where 1 represents poor collaboration and 5 represents excellent collaboration, the minimum reported among all organizations is 3, the average is often 4, and collaboration with organizations in Laos is 5. Turning to look at participation, its absence in the Laos sites is interesting in light of the very participatory NBCA guidelines presented in Manivong and Sophathilath, 2007b. However, overall these results emphasize the perceived importance of participation and collaboration to conservation management, and suggest that many actors in the Lower Mekong are attempting to implement conservation in a socially acceptable way.

The promulgation of laws and regulations on land tenure, focusing on the rights of local people, is another kind of incentive. The Land Law of 2001 in

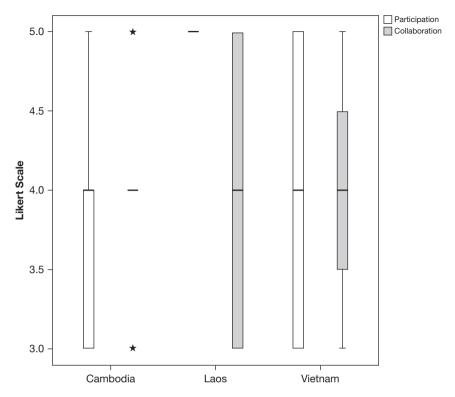


Figure 18.3 Boxplot: participation of local people and collaboration between organizations by conservation interventions of Laos, Cambodia and Vietnam

Notes: The variables here are measures on a Likert scale of 1-5: participation (1 = local people do not participate in the activities of the conservation intervention; 5 = local people are an integral part of the organization's activities) and collaboration (1 = the conservation intervention works alone; 5 = the government and organizations involved in the conservation management body have strong cooperation and many other organizations work with the primary conservation management body for similar goals). Note: Van Ban Nature Reserve in Vietnam was removed from the boxplot of collaboration because there are no other organizations operating in the area.

Cambodia brings a new approach to land classification and ownership, particularly with regard to indigenous collective land titles, which give legal rights to indigenous communities to practise swidden agriculture (Shields *et al.*, 2004). This version did not directly address conservation but promoted the opportunity for participatory land use planning and provided a platform for conflict resolution related to land ownership during the implementation of conservation activities (Oberndorf, 2005); see also McAndrew and Il (2004), who document community establishment of protected areas in Cambodia. In Vietnam, the Land Law of 2003 details land use rights and other rights connected to land use, with maximum land lease rights being fifty years. In Laos, following the Forestry Law of 1996, the government launched the Land and Forest Allocation

Programme, in which each household was to be assigned a maximum of three plots to be used for swidden agriculture on a permanent basis (Hyakumura and Inoue, 2006). Fujita and Phengsopha (2008) describe some of the problems with this approach on a national scale; and Fitriana (2008) discusses related difficulties in Viengkham District. Oberndorf (personal communication, November 2009) reports that this policy was replaced by a 2009 participatory land use planning and allocation policy, which strengthens provisions for village conservation and protection forest areas.

Another approach has been the development of new schemes providing direct incentives to local people by payment for the environmental services they provide and local livelihood development. In 2008, the Vietnamese government set up a national framework for a payments for environmental services (PES) scheme, a new move in giving people direct incentives to protect the environment (MARD et al., 2009). Laos is also in the initial stages of setting up policies for PES through a steering committee (R. Oberndorf, personal communication, November 2009). Yet the level of payments for conservation is a small fraction of the budgets allocated to manage protected areas, averaging 1.1 per cent (standard error = 0.4) of resources of the forty-three projects analysed. Other incentives are more commonly provided to local people, including support for infrastructure (such as roads and wells for drinking water), health support (establishing clinics and providing health services), improving the local economy (by developing alternative sources of incomes such as agriculture and non-timber forest product nurseries) and formal education. These activities make up a significant fraction of resources (averaging over 20 per cent across all study sites) of conservation and development interventions (Figure 18.4). Development assistance in Cambodia is particularly evident, as there are many non-government organizations operating to improve health care and infrastructure development in the conservation areas.

Law enforcement

Responding to calls from national and international conventions, Cambodia, Laos and Vietnam have been establishing legislative frameworks for conservation since the early 1990s. Key laws contributing to biodiversity conservation include laws on forestry, land use, tenure, water resources, fisheries and protected areas. In accordance with this, governments are using instruments such as protected areas and zoning, licences, permits, quotas and agreements to control illegal logging and the wildlife trade (Traffic, 2008). Each country has set up a system of protected areas, and many of these followed from the 1992 Rio Earth Summit. These countries have shown their commitment to conservation by signing various international conventions on conservation, as described above. Each country also implemented or updated laws and regulations to support protected areas in 2007 and 2008.

In trying to enforce laws and regulations more effectively, individual countries have set up various licences, permits and quotas on logging and

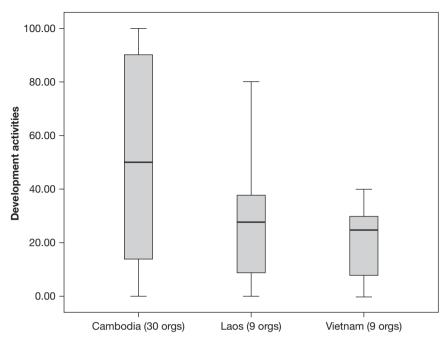


Figure 18.4 Boxplot: percentage of resources spent on development activities (including school education, training, income generation, health support and infrastructure) by conservation and development interventions operating in protected areas 2003–2007

wildlife trading. A series of forestry regulations defining licences, permits and quotas has been established in the region. The Government of Vietnam began imposing controls on the logging industry in 1992, including an 80 per cent reduction in the logging quota and a log export ban (EIA and Telapak, 2008). The decree published in 1992 listed fines applicable to extraction and transportation of different kinds of woods without required permits (To and Sikor, 2008). From 1999 to 2007, the Laotian government ordered several bans and a reduction on the logging industry in the country. In 2007, the Laotian government cut off the wood quota from local sources, which gave central government all rights for timber and wood export (EIA and Telapak, 2008). In Cambodia in the 1990s, privately owned companies were awarded thirty-two logging concessions, which were subsequently poorly managed. To counter this, the World Bank set up a project in 2000 to improve the management and control of these concessions. This, however, had limited effectiveness, and multiple issues arose during the implementation of this project (World Bank, 2006; Luttrell, 2007). Nonetheless, while there are still concessions in Cambodia, many have been halted and the Forestry Administration has protected some, such as the Seima Biodiversity Conservation Area, under the permanent forest reserve system.

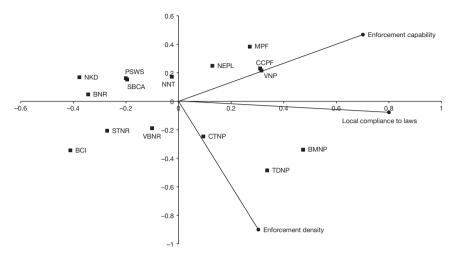


Figure 18.5 Principal components analysis (PCA) of three variables representing enforcement of fifteen conservation areas

Notes: PCA is used to identify inter-group relations of variables and cases. The x-axis represents the main axis of variation in the data; the y-axis represents the next axis of variation. The strength of the PCA is indicated by the cumulative "percentage of variation explained" by the x-axis (50 per cent) and y-axis (35 per cent). The variable "enforcement capability" measures the effectiveness of the forest guards at dealing with the level of threats, based on secondary information, interviews and evaluation reports (where available), on a 1–5 scale where 1 indicates that enforcement is disorganized and agents are not capable of dealing with many violations over the entire area and 5 indicates that enforcement is highly organized and the agents are capable of controlling nearly all the threats over the entire area, with a notable decrease in the number of violations over recent years. The variable "local compliance to laws" is similarly measured on a 1–5 scale based on secondary information and interviews, where 1 indicates that there are many problems – local people are not complying to laws – and 5 indicates that local people mostly comply with laws and there are few issues of non-compliance. The variable "enforcement density" is the number of employed enforcement agents (mostly government staff) divided by the area of the core zone.

Enforcement of laws makes up the largest component of conservation area management in the fifteen sites analysed, with an average of 30 per cent (standard deviation = 16) of resources spent on this function. A survey of the effectiveness of enforcement programmes in the fifteen sites studied also suggests some success at dealing with violations, but only rarely have such programmes worked exceptionally well. A principal components analysis of enforcement capability (how well the enforcement teams are dealing with the current level of threats), local compliance with legislation and density of enforcement agents are shown in Figure 18.5 (see Table 18.1 for acronyms used). Some sites are implementing enforcement programmes relatively well (such as those on the right-hand side of the graph), whereas others are not (left-hand side). There is also a slight significant difference between the x-axis values of sites in Laos and sites in Cambodia and Vietnam (t-test probability = 0.052), suggesting that many sites in Laos are not as effectively controlling threats to the conservation areas as the other two countries.

Constraints to governance

Though several efforts have been made to improve the legal system regarding conservation, enforcement and implementation of policies and laws are challenging: illegal logging and wildlife trade are still widespread. Traffic (2008) reports that instruments implemented to control wildlife trade have been partially effective, yet there is a wide variety of perceptions on this effectiveness, and the wildlife trade chains are highly complex (Traffic, 2008). Illegal logging and timber smuggling are widespread in Laos, with an estimated 600,000 cubic metres cut illegally in 2006 (EIA and Telapak, 2008). Global Witness produced a report in 2007 that exposed Cambodia's largest illegal logging syndicate and its links to senior government officials (Cambodia Information Center, 2007). While laws and regulations have been implemented in the Lower Mekong countries, there remain significant gaps and unclear guidelines on implementation, leading to serious conservation problems.

Stuart-Fox (2006), who takes a historical and cultural view, has differentiated Vietnam from Cambodia and Laos, emphasizing Vietnam's political cultural links to China and Confucianism, as opposed to Cambodia's and Laos's links to Theravada Buddhism. His analysis describes a complex web of interactions among hierarchy, karma (rebirth), and patronage in Theravada Buddhism that resonates well with the findings of this study; see also Netra and Craig's more conventional description of the Cambodian bureaucracy in general (Netra and Craig, 2009). Similarly, the contrasting Chinese/Confucian influence in Vietnam, with its greater emphasis on achievement and social order, fits with that country's more complex and somewhat more effective conservation bureaucracy. At lower levels, Stuart-Fox contrasts the Vietnamese tradition of self-governing villages with strong communal identities to the individualism inherent in the Buddhist notion of karma and examines the governance implications of this difference.

Communication within governments and with citizens

The structure of the government in the three countries has largely been centralized and top-down (Wescott, 2001), but recent changes, including decentralization programmes, have in some cases resulted in more local community involvement in governance of forest areas (see, for example: Manivong and Sophathilath, 2007b, for the theory for Laos; Nguyen, 2008, for the reality in Vietnam). Nevertheless, there are some gaps and unclear mandates, as well as a lack of effective dissemination about laws and regulations by the national level governments (R. Oberndorf, personal communication, September 2009). This creates confusion over the implementation of laws and delegation of responsibility, leading to a lack of synchronized action regarding the protection of national resources. For example, in Cambodia a large proportion of the forest land has no clear legal claim, or formal management. There are also some areas of high biodiversity importance that are excluded, including limestone forest,

swamp forest, some mangrove areas, open pine forests, sub-montane shrub-lands, grasslands and wetlands; on the other hand, degraded forest or forests of limited ecological significance are sometimes included in the protected area system (Shields *et al.*, 2004). In Laos, lands allocated to households are sometimes re-zoned to facilitate other land uses, resulting in undesirable insecurity of tenure. Tenure issues are notably problematic for swidden cultivators, common in and near tropical protected areas, since swidden tends to be unpopular with governments. Tenure rights across the region are particularly likely not to be recognized in or near protected areas (Fox *et al.*, 2009).

The lack of an empowered citizenry represents another important hindrance to good governance. Without such a citizenry, real democratic functioning becomes chimeric, as there are inadequate constraints on the power of officials, whether elected or not.

Ill-prepared and inappropriate laws

In some instances, there is a lack of necessary research before legislation is promulgated, with some laws being too general, others too specific; superior and subordinate regulations are not prepared together, which complicates their implementation (Wescott, 2001). For example, in Cambodia, the National Assembly reviews and enacts bills drafted by the government, often without sufficient consideration and lacking necessary expertise (Wescott, 2001). These shortcomings lead to loopholes in the legal system. Currently, in Cambodia, the legal system makes extensive use of formal fees and licence systems, in a context where there is: (a) little notion of officials as public servants; and (b) a judicial system that is not effectively enforcing the laws in court (problems not limited to Cambodia). Various fees are being charged by commune chiefs, whose action is not provided under the law, but is accepted informally (Shields et al., 2004). It is also not clear whether these fees are for "personal capture" or for "party capture" since there is no formal monitoring or regulating mechanism in place to ensure that the fees are subject to democratic community control (Shields et al., 2004).

Unclear laws also lead to unclear instructions on how to actually implement them. For example, in Vietnam, Directive 12/2003/CT-TTg requires law enforcement bodies to cooperate in order to uphold the forest law, but there is no instruction on how such cooperation should operate (Infoterra, 2007). In Cambodia, as stated in the Law on the Administration and Management of the Commune, there is little clarification of conflict resolution mechanisms, thus exacerbating the inherent difficulties in administering conservation (Oberndorf, 2004). Luttrell (2007) documents the purposeful lack of governmental clarity in efforts to emasculate two "independent forest monitoring teams".

Ill-prepared laws also result in a lack of harmonization of national and local interests, reflected in the creation and designation of protected areas. While the designation of protected areas is necessary, the question remains: how are they managed and monitored in harmonization with local people's interests? Forests

are the safety net and an integral part of the livelihoods of hundreds of thousands of people living in and around them, so an overly strict law that limits access and fines "illegal" activities can push them further into poverty – not to mention the potential function of complex laws in providing excuses for corruption (e.g. Dudley, 2000). Local people, who feel that their home areas *belong* to them despite national views to the contrary, are often unhappy with the conditions governments may force upon them. Displacement from areas such as Vietnam's Cat Tien National Park or the buffer zone of Laos's Nam et-Phou Louey National Protected Area relocates people to places they find more challenging without the safety net of the forests. Furthermore, as there are many ethnic groups (McElwee (2004) lists fifty-four groups in Vietnam overall) living in and around the conservation areas, many local traditions and customs are not incorporated into formal law. This leads to a lack of understanding between conservation area managers and local people about the use of resources.

Some laws have adversely affected conservation. According to the World Bank, from the late 1960s to early 1990s, along with the "Doi Moi" programme, the Vietnamese government resettled about 5 million people from the lowland provinces to the uplands, See McElwee (2004) for a thorough discussion of the scope, rationale and effects of such resettlement in Vietnam; also Salemink, 1997. See also Fox *et al.* (2009) who look at resettlement across mainland South-East Asia. Vietnam's resettlement programmes were ostensibly designed to increase cultivation, exploit the available natural resources and provide groups of ethnic minorities with permanent settlements. But the programmes, besides increasing human misery, also caused conflict with the land law, the law on forest protection and the development and environment law (Ari, 1999). In Laos, the Land and Forest Allocation Programme includes resettlement (Morris *et al.*, 2004), a process that continues in 2009 (Watts *et al.*, in production) and has had adverse effects in many contexts (e.g. Baird and Shoemaker, 2005).

Limited finance

Limited finance for conservation-related activities hinders the operation of the relevant implementing institutions. Budgets for managing conservation areas in Cambodia, Laos and Vietnam are low, with an average of less than USD 1,000 per square kilometre (termed "budget density" in Figure 18.6). Vietnam, however, appears to spend considerably more money than Laos and Cambodia, and on a smaller percentage of its land area. The majority of the budget allocated to the fifteen conserved areas we analysed came primarily from international organizations and NGOs. However, even with such support, conservation financing remains a constraint often reported by protected area managers. These costs are unlikely to be sustained in the long term, which may leave the conservation areas with little effective management. For example, in the case of Laos, budgets allocated by the government to manage the national protected areas were approximately USD 5,000 in 2005 and 2006, and increased

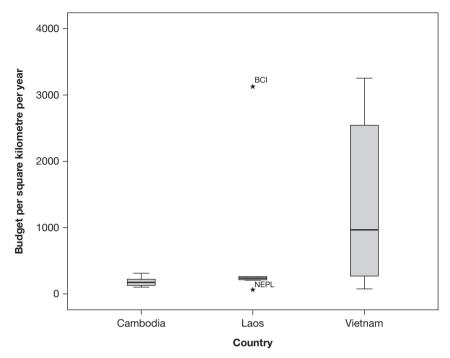


Figure 18.6 Boxplot: budget density of the core zone of fifteen protected areas, by country

to USD 15,000 in 2007 (personal communication with K. Marion Siuseeya, November 2009; field notes) – still a pittance. Our discussions with conservation practitioners in the three countries revealed that salaries for government staff were low (discussed further below), translating into poor motivation and incentives to work effectively, and ultimately a disincentive to work in the conservation sector. Limited finance also leads to lack of sufficient equipment to operate effectively, which further reduces rangers' willingness to work; some become complacent, making illegal logging and wildlife trade increasingly difficult to control.

Lack of transparency

Lack of transparency is a critical issue in the region, leading to institutional weaknesses. According to the Transparency International Corruption Index, Cambodia, Laos and Vietnam rank low on the global scale (Transparency International, 2007). This is caused by a multitude of issues, including "complicated administrative procedures, excessive regulations, opaque nature of decision-making, lack of public information, bureaucratic discretion on the part of officials, and long delays" (Wescott, 2001: 59). A contributing factor is low public-sector wages. The laws and policies cannot achieve their purpose if the

system remains weakened by a lack of transparency; nor can the citizenry be justly governed. For example, forest guards or even military forces in Laos, Cambodia or Vietnam occasionally accept money to turn a blind eye to forest violations (EIA and Telapak, 2008), negatively affecting both conservation enforcement and citizens' confidence in their own systems. Furthermore, the trade in illegal products, such as logs, is often under the control of government officials and lawmakers (Global Witness, 2004; To and Sikor, 2008).

Limited capacity to govern

Capacity constraints exist throughout the civil service (Netra and Craig, 2009), inadequacy exacerbated by a low level of education among bureaucrats. Although the educational level of officers in Vietnam is slightly higher than in Laos or Cambodia (Human Development Report, 2008), lack of technical expertise remains an obstacle to on-site effectiveness (also noted in the CBD's 2007 Programme of Work on Protected Areas Action Plan for Laos). Even people at the management level lack clear job descriptions and clarification of their responsibilities (see Netra and Craig, 2009, for Cambodian details).

Conclusions

In this concluding section, we identify opportunities and constraints relating to conservation in the three countries. We draw on the literature and on our own study in this discussion.

Opportunities

Of the three countries, Vietnam currently has a more stable governance system for conservation-related activities, and it manages a significantly smaller proportion of its area as protected area (7.6 per cent). Its historic and cultural links to China and Confucianism serve it well in the matter of governance. Confucian ideals share many features with the current international view of "good governance"; insofar as Vietnam's officials share this cultural tradition, it is likely to contribute to a well-functioning bureaucracy. Our own findings on law enforcement reinforce this conclusion; Vietnam has been the most successful of the three countries in this realm (Figure 18.5). It also has more successfully integrated participation and collaboration in its management of conservation areas, vis-à-vis our other research sites (Figure 18.3).

Vietnam is further along in the decentralization process. Besides having decentralized forest management implementation to provincial, district and commune levels, it has provided some real assets and benefits to its people, via transfers of rights to households and the private sector as required by recent policies, laws and programmes. The country has allocated significant financial and human resources to managing conservation areas (though its position in our study sites is intermediate in terms of education, awareness and development expenditures in conservation areas).

With strong control over international organizations and NGOs, Vietnam has received considerable assistance, which helps to enhance its governance and the meeting of its conservation targets. The signing of a number of international conventions is another sign of Vietnam's commitment to conservation, a commitment that is moderated by its efforts to enhance economic development (Ovesen and Trankell, 2004). The growing interest in conservation of Cambodia's government is reflected in the increase in area and number of protected areas and nature reserves, providing an opening for developing more effective biodiversity conservation (Miller and Shields, 2004). The inclusion of development activities within the country's conservation interventions is also encouraging (Figure 18.4). Its recent passage of the 2008 Protected Area Law is further evidence of the government's conservation interest, as are its expenditures on conservation awareness and education (Figure 18.2).

The 2006 prakas (ministerial decrees) empowering governors as official government representatives and as the main coordinators and promoters of provincial development represented a formal beginning to a decentralization process that is nascent (Netra and Craig, 2009). Among the three countries, Cambodia is by far the most ethnically homogeneous (90 per cent are Khmer (Ovesen and Trankell, 2004), which reduces some of the marginalization problems that serve to disempower many forest dwelling citizens in the other two countries. The democratic regime and the open nature of government policy have led to external assistance from many actors, which in turn has enhanced governmental capacities. A final encouraging sign is Cambodia's commitments to international conventions related to conservation.

Although there have been a number of new national programmes and legislation on conservation in Laos, the major policy focus remains on poverty reduction. Such policies contribute indirectly by reducing pressure on the natural resources on which the poor often depend (ICEM, 2003b). Laos has recently enacted legislation designed to rationalize resource management, with the goal of moving towards managing its abundant natural resources in sustainable ways (World Bank, 2008a) that can capture more benefits for the people and the nation. As with its neighbours, it is a signatory to a number of international conventions of relevance for conservation.

Constraints

Conservation governance in the Lower Mekong has made significant progress, but perhaps more daunting obstacles remain to fully implementing policies and laws. Despite the recent establishment of multiple and potentially useful conservation and environmental laws, the weaknesses within governments and the comparative powerlessness of local citizenry have so far limited the laws' effectiveness.

Cambodia has faced political disorder and conflict for a long period of its recent history (Wescott, 2001; Ovesen and Trankell, 2004). The loss of large

numbers of their educated citizenry through out-migration or death has created serious human resource capacity problems (Stuart-Fox, 2006).

Governance is still presenting a number of challenges characteristic of a post-conflict country (Hobley, 2004a), including weakened land tenure systems and poor management of resources – both of which have serious conservation implications. Our research indicated an intermediate position for Cambodia on the question of citizens' participation in conservation (Figure 18.3). The country's fledgling efforts to decentralize have barely got off the ground; indeed as of 2009, many aspects are still in the planning stage (Netra and Craig, 2009).

The same authors' analysis of the roles of donors and NGOs in Cambodia suggests that there may be as many problems as benefits from their involvement. The problems include issues of accountability, competition for scarce qualified personnel, and lack of coordination of effort (Netra and Craig, 2009). These authors provide a table (Netra and Craig, 2009: 83) comparing typical government salaries with those provided by NGOs in Cambodia. A low-level official's salary averages USD 15; working for a local NGO, that person would get USD 84. A high-level official who gets USD 100 per month from the government would average USD 390 from a local NGO. Such divergences have complicating implications for officials' accountability. These authors go on to attribute partial blame to NGOs for many government problems: "Lack of NGO coordination, the desertion of government offices, uneven motivation caused by salary supplements and their complex relation to rent seeking can all be argued to have weakened the state's capacity to perform its tasks" (Netra and Craig, 2009: 91–92).

Figure 18.3, which deals with participation and collaboration in our study areas, shows a certain amount of participation in the Cambodian site but no collaboration.

Among the three countries, education quality in Laos is lowest, and corruption and poverty are ranked highest (Human Development Report, 2008). Like Cambodia, Laos suffered serious losses of human capital during the recent wars; such problems were less severe in Vietnam, because the united country could draw on expertise from the north (Fox *et al.*, 2009). In our field study, Laos did noticeably worse on law enforcement issues than did the other two countries (Figure 18.5).

The national Land-Forest Allocation programme, with its emphasis on stabilizing shifting cultivation and resettlement of peoples, serves neither people nor the environment well; the effects of the recent modifications in this programme may, of course, yield better future results. There is abundant evidence of the top-down orientation of the government, with the usual disempowering and other adverse impacts on local people – often people already marginalized by their ethnicity. Such adverse livelihoods conditions may have exacerbated the pressures from Chinese investors, including serious temptations to convert vast areas to rubber plantations in the north (see Shi, 2008, for a discussion of rubber-related incursions into Nam Ha Protected Area). Our own research provides dramatic evidence of the Lao government's attitude toward participation: Figure 18.3 shows *none* reported.

The large numbers of donors and NGOs operating in Laos suggest there may be similar problems to those amply described for Cambodia, though the Laotian government appears to take a less conciliatory approach to donors than the other two countries. Certainly Figure 18.3 indicates significant amounts of collaboration between the managers of the protected areas studied and other actors.

Looking at the three countries together, we find some important commonalities. Each country has developed a legislative framework to address issues related to biodiversity conservation. In Laos and Cambodia, particularly, many of these laws and policies are fairly new, yet in all three countries important forests and conservation areas are clearly in danger or degraded. The laws themselves often consist of contradictions and weaknesses that result in difficulties in implementation and enforcement. There is a clear weakness within all the public administration systems (more pronounced in Laos and Cambodia), which are characterized by low management and operational capacity, and highlighted by a lack of transparency. The effects of such governance weaknesses gain in importance when neither the citizenry nor the bureaucracy has the power to monitor or effectively resist in cases of malfeasance (cf. Luttrell's account (Luttrell, 2007) of the unsuccessful efforts to verify compliance with logging regulations in Cambodia).

Stuart-Fox (2006) has examined governance in the same three countries and summarizes his findings relating to corruption (Stuart-Fox, 2006: 12); we quote his conclusions below:

Corruption varies from the plunder of natural resources (mainly timber and wild life in both Laos and Cambodia), to the granting of concessions (land for plantations, mining leases) and contracts in return for private payments, to diversion or reduction for a consideration of sources of government revenue (in the form of reduction of taxes, customs duties, etc.), to payments demanded for services, whether legal (registration of a business) or illegal (provision of forged documents, such as land titles). All of these impact on development because they divert resources that could otherwise be spent on measures to build the economy (infrastructure, communications, etc.), and on services designed to create a critical mass of educated and informed citizens, who could contribute more fully to developing a modern economy.

Beyond addressing corruption, a central need in the process of enhancing conservation successes, while maintaining the livelihoods and cultural systems of local people, is improved coordination. Improved governance of conservation areas will first require greater coordination among governmental agencies and between different levels of governance. Similarly, better coordination in efforts to harmonize the concerns of government agencies, civil society groups and local people are in order. Any such efforts will require the empowerment of people in the areas, so they can play their role in a constructive balance of power.

The development of monitoring and evaluation of programmes and policies among a variety of stakeholders is also needed. Governments need to monitor their own functionaries in the implementation and enforcement of laws and regulations. But complementing such direct governmental action, efforts to mobilize local communities to monitor governmental programmes in their areas can go far to improving management; see Larson *et al.*, 2010, who provide evidence from twelve countries about the largely positive effects of devolution of rights and assets to local communities. Existing efforts to grant ownership and/or long-term use rights to local communities represent excellent beginnings, and should be strengthened, in parallel with bureaucratic reforms, as part of a general empowerment effort.

To build on existing opportunities for conservation in the countries of the Lower Mekong, while taking into account the constraints, will require a multipronged, mutually reinforcing approach: (1) raising governmental interest in conservation, perhaps through continued international pressure and contributions, (2) coordinating governmental collaboration with NGOs and international organizations; (3) strengthening bureaucracies through capacity building and reducing corruption and patronage; (4) improving law enforcement through both governmental and community monitoring and other mechanisms; and (5) increasing local people's conservation awareness while recognizing and supporting their ability to act together constructively. The region has been active in formulating its legislative framework as well as signing international conventions to prove its support for conservation activities; these are important early steps. There have also been serious advances in the involvement of the citizenry more meaningfully in resource management. These are encouraging signs; more remains to be done.

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