

5. Protected areas and development: lessons from Vietnam

5.1 Introduction

This chapter is a contribution to the Vietnam review of protected areas as part of a regional initiative – ‘The Review of Protected Areas and their Role in Socio-economic Development in the Four Countries of the Lower Mekong River Region’ (PAD Review). It assesses recent experience in protected areas policy and management and how it relates to development in Vietnam. The chapter draws on a number of sources, including PAD Review background papers (Tran Quoc Bao 2001; Hughes 2001) and presentations made at PAD Review national round table meetings.²⁶

The chapter outlines some of the basic features of the protected areas system, profiles institutional and policy changes over recent years and then examines some of the underlying issues that shape the way in which protected areas are perceived, established and managed in Vietnam. It reflects on recent achievements in protected areas thinking and planning, and examines what might be learned from these achievements. Also, the chapter highlights some key challenges that must be addressed if protected areas are to contribute to national well-being in its broadest sense - for example, through conserving biodiversity, protecting watersheds and coastal areas, providing resources for education as well as delivering economic benefits to those living in and around protected areas and to the major development sectors.

Vietnam is one of the most densely populated agricultural countries in the world²⁷, with a population that will double every 40 years at current growth rate.²⁸ One of the consequences of this growth has been increasing pressure for internal migration and a general decline in the abundance and quality of environmental resources. Significant numbers of people continue to move from the densely populated northern

²⁶ See for example, www.mekong-protected-areas.org/vietnam/round1.htm.

²⁷ According to UNDP, *World Development Indicators (2001)*, Vietnam is the fifth most densely populated ‘agricultural country’ (measured as countries that derive more than 30 percent of GDP from agriculture), after India, Bangladesh, Rwanda and Burundi.

²⁸ Although recent demographic analysis suggests that fertility rates are now falling towards replacement levels.



provinces to resource-rich areas further south (MPI/UNDP 2001). Many of the areas selected for resettlement are within or adjacent to the boundaries of protected areas.

Over recent years, the Vietnamese government and the international community have invested considerable resources in establishing and managing protected areas. There has been much progress in expanding the protected area network (Map 4), building the institutional infrastructure required for its management and supporting some basic management activities. There have been important regulatory, institutional and political reforms. Despite these achievements, most protected areas remain 'paper parks', with little conservation management taking place on the ground.

The challenges facing protected areas managers go deeper than inadequate funds – often there has been no improvement in habitats and species conservation even where resources have been allocated to specific nature reserves and national parks. Protected areas, even those supported by costly donor-funded projects, continue to suffer from high levels of consumptive uses of biodiversity, particularly through hunting of wildlife for local consumption and trade, NTFP collection and timber extraction. The implications of these trends for biodiversity, and for people and cultures who have long depended on these resources are of growing concern.

Levels of conflicts between people and protected areas are poorly documented and understood in Vietnam. Recently revised regulations for Special-use Forests (SUF) restrict all extractive and most non-extractive uses of protected areas (GoV 2001). Low levels of enforcement have left few incentives for forest users to comply with official regulations. As enforcement capacity increases and populations increase around PAs, it is likely that the number of conflicts will rise in the absence of alternatives to forest resource use.

5.2 The protected areas system

5.2.1 *Categories of protected areas*

Vietnam's protected areas are designated in a variety of different ways. Figure 1 outlines the national protected areas system and Annex 1 provides a brief chronology of the development of the protected areas system.

5.2.2 *Special-use forests*

The term 'protected area' is commonly perceived and translated as 'Special-use Forest' - one of the three principal forest management categories (the others being protection and production forests). The SUFs category of protected areas is the only one supported by national law. Article 31 of the Forest Protection and Development Law defines SUFs as:

'... forests mainly planned for forest development aiming at conservation of natural, standard specimens of the national forest ecosystem, forest botanical and animal gene resources, scientific research, protection of historical/cultural relics and landscapes, and tourism [sic].'

Agreement has yet to be reached formally on the composition and extent of the SUF system. The total area of SUF is officially 2,123,354 hectares (ha).

However, the Ministry of Agriculture and Rural Development has proposed to increase the number of SUFs to 109, which will expand the total area to 2,629,188 ha.²⁹

SUFs, which include national parks, nature conservation areas (nature reserves and species/habitat conservation areas) and landscape conservation areas have specific management regulations. Since

²⁹ It is not possible to give a definitive figure for the total area of Special-use Forests in Vietnam because boundaries have yet to be demarcated for most areas.

Map 4. Vietnam's protected area system

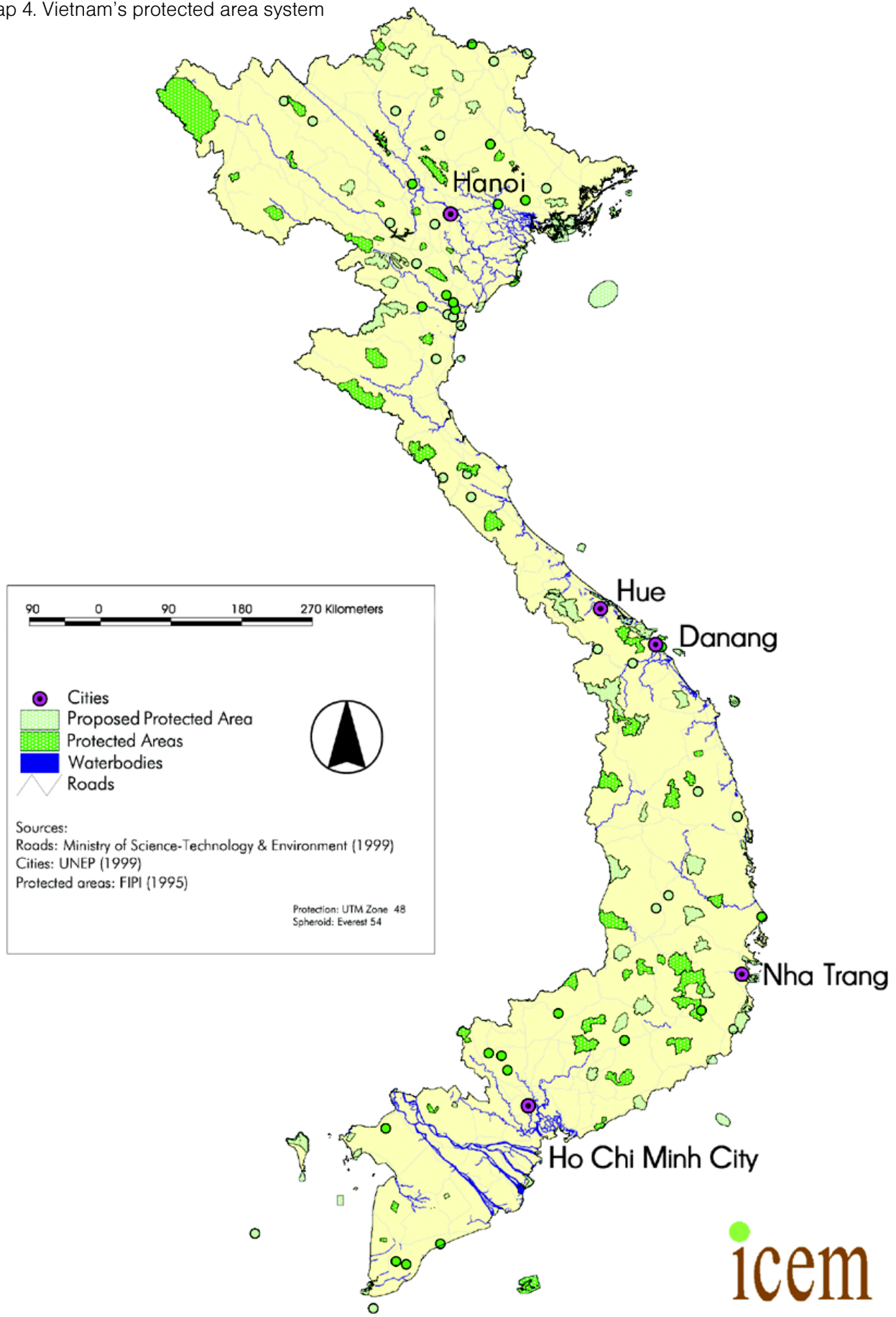
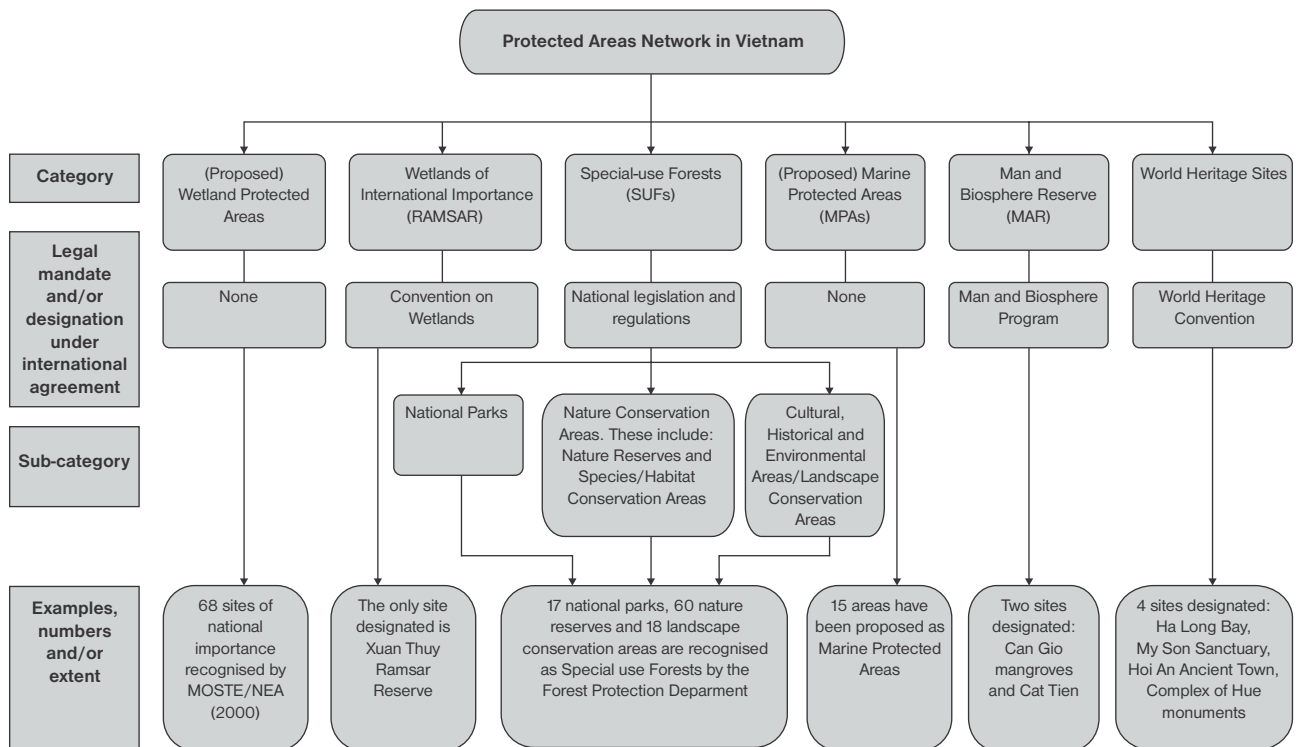


Figure 1. The protected areas system in Vietnam



'Special-use' is simply a forest management category, administrative responsibilities with respect to socio-economic management remain with various government departments at commune, district and provincial level. It does not imply that planning and decision-making activities are necessarily coordinated, as they would be under the protected areas management authorities that exist in many other countries.

SUF sub-categories approximate to IUCN PA management categories as follows.

SUF Category	Equivalent IUCN PA category
National Park	II
Nature Reserve	I
Species/Habitat Conservation Area	IV
Landscape Conservation Areas	III & IV

IUCN categories V - Protected Landscapes/Seascapes, and VI - Managed Resource Use Areas, which emphasise the role of local communities and the sustainable use of resources, have not been included in the SUF System. Broadening the range of protected areas categories would enable PA managers in Vietnam to encourage a gradient of human intervention and use over the protected area system as a whole.

Because SUFs cover the only categories of protected areas recognised under law discussions on the PA system tend to omit wetlands, together with the institutions responsible for their conservation. Institutional responsibilities and regulations for SUF extend only to the terrestrial forestry component of marine areas (for example, to the forests on island sites or to coastal mangroves). This limitation constrains efforts to build broad-based institutional consensus on planning and management of the national protected areas system as a whole.

5.2.3 *Other protected areas categories*

Rather slow progress has been made in establishing other protected areas. Marine and wetland protected areas have yet to be given status under statute. Labels such as Ramsar reserves, World Heritage sites and Man and Biosphere Reserves are viewed as international designations and not management categories. They are recognised in policy and Vietnam values the potential development and conservation benefits international recognition can bring to listed sites. Vietnam was the first country in South East Asia to become a contracting party to the Convention on Wetlands (Ramsar), and designated Xuan Thuy Nature Reserve as the first Ramsar site. This remains the only designated Ramsar site in Vietnam, although several others have been proposed.

Vietnam is a party to the World Heritage Convention. Currently, there are four World Heritage Sites including Ha Long Bay. The others are Hoi An Ancient Town, My Son Sanctuary and the complex of Hue monuments. Currently, there are two biosphere reserves, Can Gio in Ho Chi Minh City was designated as Vietnam's first Biosphere Reserve in 2000, and Cat Tien Biosphere reserve was designated in 2001.

During 2001-2, the former Ministry of Science, Technology and Environment (MOSTE), now Ministry of Natural Resources and Environment (MONRE), in collaboration with relevant government agencies, prepared a list of 15 marine and 68 wetland protected areas for government approval. All marine protected areas are considered 'proposed' and a debate is ongoing as to how to confer protected area status to a representative sample of nationally and internationally important wetlands (although some wetlands and marine areas are already categorised as SUFs).

5.2.4 *Existing and proposed protected areas*

Some protected areas have been decreed by government and have been "*established*" through the creation of a management board. Provincial and/or national government then provides financial support to the management board for their staffing and conservation activities. In some cases, management boards have been established through decree of provincial people's committees. In others cases, PAs have been decreed, but management boards have yet to be established. Also, there are some PAs that have been proposed by a national or provincial government agency, but progress has been slow in evaluating their conservation importance, proposing boundaries, preparing investment plans (official documents that formally request financial support from MPI) and/or ensuring that they are included in an official decree.

More accurate maps of the PA network are now beginning to appear. A revised list of SUFs has now been compiled and submitted for approval to government, and a recent initiative has just completed synthesising information on all 189 existing and proposed protected areas in Vietnam (BirdLife International and FIPI 2001). This information provides a solid foundation for future network planning.

5.2.5 *Representation of species and habitats*

The current system of decreed SUFs has a number of gaps in coverage (BirdLife and FIPI 1999). Evergreen forest, which accounts for 64 percent of the remaining natural forest is seriously under-represented particularly at elevations between 300 and 1,200 m. Semi-deciduous forest is also under-represented, particularly at elevations above 300 m where less than 2 percent of the remaining forest is included within the current system.

Perhaps the most significant gap is in wetland habitats. The few wetland protected areas in the Mekong and Red River Deltas, such as Xuan Thuy Nature Reserve and Tram Chim National Park, are insufficient to represent the full range of wetland biodiversity and biological processes. Currently, the wetlands of central Vietnam are completely unrepresented.

A number of species and/or sub-species found only in Vietnam (endemic species) are not represented within the current system or are represented only in one protected area.³⁰ The designation of new PAs is now beginning to redress these imbalances, but considerable progress is needed to ensure the system becomes representative of all ecoregions, habitats and species.

5.3 Trends: policy, decentralisation and institutional responsibilities

5.3.1 *From production to sustainable use: policy changes*

For many years, the emphasis of national forest policy has focused on increasing the production output of the forest sector. Plantations have been established, pulp and wood processing mills have been constructed, and export of timber and non-timber forest products has been encouraged. Yet, the forest sector's role in the formal economy remains modest and continues to decline. Whilst overall forest cover is now gradually increasing as a result of efforts to establish plantations and tree crops, natural forest cover is declining in extent and quality. The performance of the forest sector, increasing recognition of the needs of poor, forest-dependent people and a decline in natural forest cover and quality have prompted a re-think of the role of forestry in national development. The emphasis of the sector is now beginning to shift from production to protection – a shift that will offer greater opportunities to respond to the multiple functions of forests – including the management of forests for conservation, livelihoods and economic development.

Since 1998, a dialogue has developed between different actors in Vietnam's forestry sector, under a partnership process called the Forest Sector Support Program (FSSP). For the first time there is an opportunity for national and international partners to discuss the implications of natural forest loss and degradation for biodiversity conservation and for other services that have important economic implications. The FSSP offers a window-of-opportunity to enhance awareness of senior government officials of the contribution of protected areas to development, for example through valuation studies of their contribution to catchment protection, water supply, the generation of tourism revenues, fisheries support and their contribution to local livelihoods. More important, the partnership process provides the opportunity to maintain and enhance those values in a co-ordinated and coherent manner.

5.3.2 *Decentralisation*

While there are clearly important developments underway at the macro-level with an emphasis on decentralisation, much needs to be done to streamline policies, regulations and guidelines that constrain effective forest and PA management on the ground. Centralised control over financial flows has meant that central policies and programs tend to dominate over provincial level approaches, which may be more sensitive to the conservation and development needs of particular protected areas.

Generally, the policy environment for PAs is in need of an overhaul. A recent government – donor review of forest sector found that “a number of legal documents, policies and guidelines at central and local level are not up-to date, constitute an obstacle for the effective implementation of forestry activities, conflict with each other and overlap” (MARD/ICD/5 MHRP Secretariat 2001). These difficulties apply to SUFs. Many government institutions operate within protected areas according to different administrative mandates in place at commune, district, provincial and national level.

The ongoing process of policy and administrative reform in the forest sector has great potential to contribute to more effective management of the PA system by addressing those constraints.

³⁰ Examples include Western Black Gibbon *Nomascus concolor concolor*, Tonkin snub-nosed monkey *Rhinopithecus avunculus*, and Ha Tinh Langur *Trachypithecus laotum hatinhensis*.

5.3.3 *Institutional responsibilities*

Responsibility for the decentralisation of SUFs management lies with MARD.³¹ The general principles governing the process are outlined below, but institutional arrangements can vary considerably between provinces and protected areas.

Provincial authorities manage all nature conservation areas (nature reserves and species/habitat conservation areas) and landscape conservation areas and a growing number of national parks. Of the 17 National Parks, 9 are the responsibility of management boards established at provincial level with the others managed by boards set up by MARD. Article 8 of Decision 08 stipulates that MARD should directly manage National Parks where they have a 'nationally-important' role or are located in more than one province (such as Cat Tien and Cuc Phuong National Parks). Decision 08 authorises the Ministry of Culture and Information to collaborate with MARD in the establishment and management of landscape conservation areas.

Management boards, either those for national parks or nature reserves, do not generally include representatives of stakeholder groups relevant to protected areas management, such as village and commune leaders in the buffer zones.

In 2000, the Ministry of Fisheries (MOFI) was assigned the responsibility for establishing and managing a system of marine protected areas, although this mandate has yet to be supported by a government decree (Azimi et al. 2000; Nguyen Chu Hoi 2000). MONRE's list of wetlands of national importance may form the basis for a national system of wetland protected areas. MONRE is responsible for nominating Ramsar Sites and Biosphere Reserves. The Ministry of Culture and Information is responsible for nominating World Heritage Sites.

5.4 Issues, achievements and challenges

This section discusses key issues concerning the contribution of protected areas to development and reviews some of the achievements and challenges.

5.4.1 *Integrating protected areas and economic planning*

Many of the factors that shape the relationship between protected areas and those who live in and around them are rooted in policies and planning that lie well beyond the spatial and administrative boundaries of the PA system (Box 9). Road development, new economic zones and hydropower development provide topical examples of development planning decisions that have important implications for the existing and proposed system of protected areas.

The Biodiversity Action Plan (GoV 1994) was a first effort to widen institutional and sectoral involvement in biodiversity conservation (including protected areas). The BAP succeeded in identifying strategies for action, which have endured to this day. Yet, it was less successful in encouraging the commitment of government line departments and other stakeholder groups. Recent policy documents, such as the National Strategy for Environmental Protection 2001-2010 (MOSTE/NEA 2001), continue to focus on the expansion of the protected areas network, rather than effective management and integration with other sectors.

By shaping land uses, macro-economic policies influence the way in which people interact with protected areas. For example, policies that have been successful in encouraging rice production have accelerated the reclamation of important wetlands (Buckton et al. 1999). Promotion of industrial and cash crops, such as sugar cane and coffee have also increased pressure on protected areas (Le Trong Trai et al. 2000).

³¹ Article 9 of Prime Minister's Decision 08/2001/QĐ-TTg, 11 January 2001

Box 9. Examples of issues related to macro-planning that impact protected areas

Road development threatens the integrity of many protected areas, and increases market access for illegally harvested timber, wildlife and NTFPs;

Migration and the establishment of New Economic Zones have complex and widespread impacts on protected areas, beyond simply the clearing of trees to make way for agricultural development. These effects include unsustainable cultivation practices by in-migrants and displacement of indigenous farmers into upland (and often) SUFs. This issue requires greater attention in national economic and environmental planning (MPI/UNDP 1999).

Resettlement due to dam construction, often to forest areas many thousands of miles from the dam site has had significant impacts on protected areas. Tran Quang Ngoc et al. (2001) noted that forest clearance by ethnic Hmong resettled by the Hoa Binh dam in northern Vietnam posed a considerable threat to the forests of a proposed nature reserve over 1000 km further south in Gai Lai province. The Song Gam scheme approved in 2002 will have significant negative social and natural environmental impacts within Na Hang Nature Reserve including resettlement of communities from low lying areas to upland watershed areas within the reserve.

Other impacts of hydropower schemes. Other impacts of Song Gam include:

- Around 28 percent of the reservoir will be located in the Na Hang Reserve covering some 1000 ha at peak water levels
- Substantial reduction in snub nosed monkey habitat – a critically endangered species (only 200 individuals remain in the wild);
- Construction and the activities of the anticipated 10,000 workers over the construction period will dramatically increase pressure and use of the nature reserve.
- The Na Hang to Ba Be road will be flooded requiring the construction of another road through the reserve
- Population increasing in Na Hang district will have more needs for timber, fuel wood and other forest products.
- Industrial and urban development associated with access to power and increased populations.

Achievements:

In recent years, the policy and planning framework for protected areas has gradually improved. At the strategic level, the FSSP framework seeks to better integrate and support PA planning within the forest sector and to engage a wider range of sectoral agencies in PA management issues. In terms of broadening stakeholder engagement at the site level, guidelines for the identification and establishment of PAs have been revised and these encourage stakeholder involvement (FIPI and BirdLife International 1999). The system of PA management boards provide the foundation for multi-stakeholder involvement in protected areas planning and management.

Recognition of the need for broader institutional involvement in protected areas planning and management. There is increasing recognition that a broader range of institutions should be involved in PA planning and management. The need to identify and involve institutions such as MONRE, Ministry of Culture and Information, Ministry of Fisheries, Ministry of Planning and Investment, the General Department of Tourism and Provincial People's Committees has been recognised.

Challenge:

Better integration of sectors in PA management. Progress is needed at different levels. The FSSP remains a sectoral initiative, and progress will need to be made at the national level to promote greater integration of PAs into sectoral planning, for example, of transport, agriculture and industry. Recent use of EIA to address potential impacts of infrastructure on protected areas is encouraging, but sector participation in the process needs to increase. EIA has a project focus and systems for integrated regional planning which involve all sectors are poorly developed. With the exception of the management board for Can Gio Biosphere Reserve, an area which is not a SUF but was established by decision of the Ho Chi Minh City Provincial People's Committee, there are still no 'multi-sectoral' management boards.

5.4.2 *Stakeholder participation in protected areas management*

Management regulations (as laid out in Decision 08) for SUFs prohibit the exploitation of all biological resources from the strictly protected and ecological rehabilitation zones, the exception being the collection of dry wood from Landscape Conservation Areas (formerly known as Cultural and Historical Sites). Regulations provide no incentives for local stakeholders to engage in PA management. In many cases, local stakeholders have high levels of dependency on forest resources within protected areas, and therefore have few alternatives to entering forests in search of wildlife, NTFPs or timber. There is no motivation for sustainable forest use while those activities are considered 'illegal'. In these circumstances, PA management becomes reliant on expensive enforcement activities, for which resources are not usually available.

Achievement:

Piloting of new approaches. Regulations for MPAs have yet to be developed, but it seems likely that they will include greater flexibility to explore collaborative management and sustainable use approaches. One objective of the recently commenced Hon Mun MPA project is to pilot co-management with the local community. Such approaches are now commonly used elsewhere in the region and worldwide but Vietnam has little experience of them. The FSSP framework includes proposals for piloting of collaborative management for terrestrial protected areas.

Challenge:

Engaging stakeholders in protected areas planning and management. Protected areas play a crucial role in sustaining the livelihoods of rural and coastal populations. Fishing and tourism are vital economic activities for those that live in and around Hon Mun MPA, for example. Forests, including SUFs, play a key role in sustaining many rural communities, particularly in remote mountainous areas. Indeed, many PAs have inhabitants with long traditional claims to the area. Balancing local needs with those of conservation can only occur with a supportive policy and legal framework, which has yet to be developed. It will involve reorienting PA managers from 'preservation' to 'conservation through sustainable use'. One option might be to introduce a SUF category equivalent to IUCN PA Management Category 6, which would support sustainable management of protected areas, rather than prohibition of all exploitation.

Currently, the management boards for SUFs do not allow local stakeholders to raise their concerns or contribute in other ways to PA management, for example through sharing of skills and knowledge and in monitoring and enforcement. While management boards must play a key role, the piloting of complementary institutions and management approaches may engender local stakeholder support for the PA system.

5.4.3 *Adopting appropriate models for protected area management*

Vietnam has progressed in establishing a protected areas system for the nation's forests and there are recent advances for wetland and marine areas. However, progress has been slower in implementing effective management of these areas. Most ODA support for PA management has been allocated through Integrated Conservation and Development Projects (ICDPs). These approaches have been applied widely with the support and encouragement of international conservation organisations and donors. Yet, the performance of ICDPs in Vietnam has been poor, often because the approach has proved ill-suited to tackling the range of threats facing protected areas and because one-off projects tend to have little sustained impact (Box 10; Sage and Nguyen Cu 2001).

Box 10. Lessons from ICDP experience in Vietnam

Provincial, national and international PA and development planners came together at a workshop held in Hanoi in July 2000 to assess the experience with ICDP implementation. They found that ICDP performance has been disappointing in Vietnam. The reasons included:

- Saturation of provincial and district authorities with ODA funds for short (3-5 year) project cycles when the need is low level and long term;
- Conflicts between international consultant teams and their counterparts in provincial government;
- Poor initial institutional and problem analysis;
- Over-ambitious project design;
- An unsupportive regulatory and institutional environment;
- Poorly defined and/or overlapping institutional and administrative responsibilities, particularly in the buffer zones of SUFs.

Protected areas in Vietnam tend to be small and isolated. Large tracts of deforested or agricultural land separate most protected areas from each other. Small areas of habitat tend to lose species faster than large areas. Indeed, many protected areas have lost those species which are vulnerable to human disturbance and hunting, or which require large range sizes for survival (e.g. tiger). The small size of most PAs, and the fragmented nature of the PA system as a whole makes conservation more difficult and costly. In recent years, the size of some protected areas has been increased through boundary adjustments, or by the establishment of new PAs in contiguous areas of forest. Improved integration of conservation objectives into mainstream land-use planning and forest policy will be needed if ecological links between forested protected areas are to be improved.

Administrative boundaries (international, provincial, district and commune) pose significant constraints to conservation management. Many PAs retaining important biodiversity are located along the Truong Son mountain range dividing Vietnam from Lao PDR and Cambodia. For security reasons, many of those forests are 'off limits' to conservation organisations, and the prospects for developing alternative livelihood activities- such as tourism, are limited. Also, protection of areas straddling provincial boundaries is complicated by disincentives within the centralised planning and budgetary systems discouraging local government collaboration (Gilmour and Van San 1999). Even within single provinces, administrative boundaries between districts and between communes can introduce management problems.

Achievements:

A legal, institutional and scientific basis for forested protected areas is now in place. The basis of a protected areas system for Vietnam forests is now in place. Institutional responsibilities for SUFs have been defined and these are supported by a number of laws and regulations. Investment plans have been prepared for 17 national parks and 35 nature conservation areas³² and management boards have been established for a number of these areas. In some cases, local people have been recruited to work as forest rangers to build support for protected area management. In others, communes, villages and households have agreed to sign commitments to conserve forest resources, often in return for improved land tenure security or government investment in rural infrastructure (examples include the buffer zones of Cat Tien and Chu Mom Ray Nature Reserves). According to official figures, SUFs cover around 7 percent of the national land area. The scientific basis on which conservation management decisions are made continues to improve as surveys are undertaken and critical knowledge gaps are addressed. On the basis of these surveys, new species to science have been discovered and new areas worthy of protection have been identified.

A rich experience in implementing conservation and development projects. Vietnam now has considerable experience of ICDP approaches to guide future project and program design. At the policy level, the FSSP process offers an opportunity to learn from this experience in piloting innovative approaches and then in scaling-up successful models.

There has been good dialogue between Vietnam and neighbouring countries on transboundary conservation issues, such as wildlife trade, illegal logging and trans-boundary protected areas. Also, efforts have been made to improve linkages between existing PAs through the protection of wildlife corridors. Tourism facilities and visitation is increasing, with tens of thousands of tourists (both Vietnamese and international) visiting national parks such as Cuc Phuong, Bach Ma, Ba Vi, Tam Dao, Ba Be, Cat Ba and Cat Tien, and greater than 20 percent increases each year to key locations such as Ha Long Bay World Heritage Area.

Improved awareness of protected area values. In recent years, there have been considerable improvements in the awareness of both the public and government officials of the values of the protected areas system. Protected areas are also playing a growing role in hosting and promoting educational activities.

Challenges:

Improving the management and ecological viability of existing protected areas. Many existing PAs remain too small to sustain the biodiversity within them (FIPI and BirdLife International 1999). In some cases, substantial extensions to existing areas will be needed. In others, there may be opportunities to establish, manage and protect wildlife corridors. Extending the PA system will not be easy with growing human populations and competing demands over land and forest resources. Administrative and political boundaries dividing many protected areas further complicate coherent planning and conservation action across shared ecosystems. This is the case with Vu Quang Nature Reserve, for example, which is contiguous with Nakai-Nam Theun National Biodiversity conservation area in Lao PDR, and Cat Tien National Park, lying within the administrative jurisdiction of three provinces. The contiguous lowland forest of Phong Dien and Dakrong also straddles a provincial boundary –two separate nature reserves have been established to protect this area.

³² English terms given to these categories vary according to different translations. The official translation of Decision 08/2001/QĐ-TTg of January 11, 2001 refers to national parks as 'national gardens', nature conservation areas as 'nature conservation zones' and historical and cultural sites as 'Cultural, historical and environmental forests (scenic place-protecting forests).'

Diversifying approaches to supporting protected areas management. Few PA conservation projects pay sufficient attention to innovation, in part because of rigid project implementation regulations and structures, but often because project duration is too short to learn from implementation experience. Government and donor agencies need to invest more in project design to ensure that the underlying threats to PAs are addressed and Also, innovative pilot approaches need support at a smaller scale than is currently possible with conventional funding arrangements. A flexible Conservation Fund for innovation in PA management might attract support from GEF and bilateral donors and put management boards, forest agencies and local forest users back in the driving seat of conservation.

Learning from regional and international experience. The ICDP model might be appropriate in some circumstances, but other approaches are needed to address the range of problems facing protected areas. Much can be learned from regional experience of establishing co-management agreements with local stakeholders, and exploring different tenure responsibilities and benefit sharing arrangements.

5.4.4 *Filling key knowledge gaps*

A crucial ingredient for effective management of any PA system is access to reliable information to inform planning and policy making.

Achievement:

Improved information on protected areas. Until recently, information on the biodiversity of Vietnam's protected areas system was not easily accessible. The situation has improved dramatically over the past 10 years. There is now a growing culture of information sharing, and new research and publications are beginning to fill many of the gaps, which have inhibited good planning and policy making. The FSSP is giving this trend new impetus and has begun to formulate a demand-led agenda for research and survey.

Challenge:

Improve the information base, particularly on protected areas and economic values. Research needs to fill a number of important gaps, especially relating to the development values of protected areas. Protected areas must be integrated in national and local economic planning and development. The challenge is to ensure that the development planning process is shaped by appropriate economic information on the benefits and costs of protected area services and products. This will require new skills, survey methods and monitoring and assessment procedures.

5.4.5 *Funding mechanisms for the protected areas system*

Chronic under-funding of the PA system, particularly at provincial level, and budget uncertainties from one year to the next constrain effective PA management. Mechanisms are needed to effectively manage and develop revenue streams from sources other than central and provincial budgets. Also, more effective use could be made of available funds, which tend to go to infrastructure and recurrent costs and not conservation programs.

Achievements:

Development of national investment programs in forestry. Forest policy is shifting from an emphasis on production to one that recognises the multiple functions of forests. In 1997, the National Assembly issued a resolution that became central to the national forestry debate. The Five Million Hectares Reforestation Program (5MHRP) was outlined in National Assembly Resolution 08 (5 December 1997), and followed by Prime Ministerial Decision 661 (29 July 1998) to adopt the 5MHRP as a National Target Programs involving major central government budgetary commitment. This investment program is designed to achieve economic as well as environmental and social objectives.

Funds secured from national forest programs, such as the ongoing 661 program and its predecessor, the 327 program, can be used to contribute to the costs of establishing forest cover within buffer zones or areas zoned for regeneration within the boundary of SUFs. These funds may go to establishing plantations within SUFs or to forest protection under a system of Forest Protection Contracts (FPCs). The contracts create an opportunity to engage local stakeholders in the management of SUFs.

Development of investment plans and institutional structures for protected areas management.

Investment plans for important SUFs, including 17 national parks and 35 nature conservation areas have been completed. Around 50 percent of SUFs now have management boards established to implement activities defined in the investment plans.

Raising of funds from Overseas Development Assistance (ODA). Over past decade international donors have funded a series of projects in SUFs. Some 12 protected areas have medium and large-scale (i.e. over US\$500,000 for 3 years) projects supporting conservation management. These projects have carried out infrastructure construction, protection and development of buffer zones and scientific research.

Challenges:

Raising additional funds for recurrent and capital expenditure from government budgets. Around 50 percent of decreed SUFs have approved investment plans³³ and investment budgets (mainly for infrastructure development and essential equipment). Those without management boards do not receive funds from national or provincial budgets. However, on average only 25-40 percent of the costs requested in the investment plans are actually provided to SUF management boards (Carew-Reid et al. 2002; IUCN 2002). Management boards established and funded directly by MARD (including 9 National Parks) tend to secure much higher level of funding than provincially managed SUFs (mostly nature conservation areas comprising nature reserves and species/habitat conservation areas). Also, PAs located in 'richer' provinces tend to receive more funds than those in poorer provinces.

Improving the efficiency of domestic funding mechanisms. The efficiency of using funds for conservation purposes is greatly compromised by the nature and complexity of domestic mechanisms for allocating financial resources. Even where investment plans have been formulated, domestic funding mechanisms for PA management are complex. They vary according to PA category, from central to provincial level, from province to province and from area to area. The challenge will be to develop an efficient and effective national system of financing that is sensitive and responsive to the provincial or local context.

Ensuring the effective use of capital expenditure funds. Generally, management boards have access to a budget assigned for capital expenditure to establish the basic infrastructure required for PA management (for example, a park headquarters building, guard stations and roads). In some cases, spending from capital budget lines has encouraged the development of infrastructure within the boundaries of SUFs eroding conservation value. For example, in Ba Be National Park capital expenditure has been used to build a large hotel, tourism infrastructure and road construction through sensitive areas. More effective PA planning is required to provide the framework of conservation priorities and controls so that scarce capital funds address the most important management needs.

Improving efficiency of donor disbursements. Discretionary ODA is particularly important in the context of chronic scarcity of domestic funds and cumbersome disbursement mechanisms. Yet, ODA support for protected areas has been characterised by:

- donors tending to favour projects at high profile protected areas;
- strategic support for the overall policy and institutional arrangements for the national system receiving less attention than specific protected areas;

³³ The MARD Forest Protected Department lists investment plans for 16 national park and 50 nature reserve management boards.

- support often exceeding the capacity of provincial and district authorities to spend funds effectively; and,
- allocation of funds to PAs which are not necessarily the most important in terms of conservation.

Donors must work with government in developing a more strategic approach to protected areas financing so that the most important fields of policy and geographic areas receive priority attention in a collaborative and coordinated manner. The emerging FSSP provides a framework for such a strategic program approach to be formulated, agreed and implemented.

Diversify funding options for protected areas. Viable strategies are needed that diversify the potential sources of revenue available for protected areas – for example from tourism, downstream water use charges, carbon offset payments and concession-payments for sustainable forest management. The creation of a supportive policy and institutional ‘enabling environment’ for such innovation is a key challenge.

Employing the national forest program funds more effectively to support conservation. National forest program funds have great potential to support the protected areas system. However, these funds need to be employed more effectively. For example, the existing system of forest protection contracts, the most common use of such funds, offers an opportunity to engage local stakeholders in SUF management through direct payments. They are also open to abuse by those who can wield undue influence, and may risk establishing a culture of dependency on FPC payments (MRDP 1998). More effective ways of employing national forest program funds are needed which create incentives for sustainable forest management and which address priority conservation concerns.

5.5 Conclusion

Vietnam has established the basic elements of a national protected areas system. The system continues to expand and is moving to incorporate non-forest ecosystems and habitats, particularly wetlands and marine systems. As PA coverage expands, greater attention will need to be paid to developing effective management strategies. Planners and policy-makers must focus more attention on the integration of PAs into socio-economic planning, and on the development benefits that they can contribute to local, national, regional and even international economies and stakeholders. Indeed, the Communist Party of Vietnam has provided a mandate for such integration in the ten year development strategy (approved by the 9th National Congress in April 2001). This strategy requires government to:

“...proactively incorporate[s] environmental improvement into every socio-economic development scheme, plan, program and project, regarding environment-related requirements as a major criterion for evaluating development solutions.”

At the local level, PAs maintain subsistence livelihoods and help alleviate poverty. Yet, since PA management regulations prohibit most forms of forest use, local support for PAs is limited. Worldwide, prohibitions in the face of growing populations and natural resource demands has not led to effective conservation management (see for example, White and Kaimowitz 2002). There has been little piloting of inclusive, incentive-based approaches in Vietnam. However, lessons might be learned from the pilot approaches now being developed for MPAs, for example, from the Hon Mum pilot project. Indeed, the absence of a constraining policy, legal and regulatory framework in the development of the MPA system provides planners with a major opportunity to try innovative approaches which might influence the course of the national PA system overall.

The unique characteristics of Vietnam’s PA system – for example, high levels of fragmentation, heavy extractive pressures, low levels of enforcement capacity, and yet considerable existing and potential economic values - require the adoption of tailored management models. In some cases, the approach will require a ‘re-fashioning’ of conventional PA management tools to protect and sustain PA development and

conservation values. An example might be the introduction of more effective enforcement regimes to prevent unsustainable and illegal logging, which contributes little to local and national economies while seriously eroding PAs development contribution. In other cases, new and more innovative approaches to PA management will be required – for example, the testing of water use charges or conservation levies on users to pay for the watershed protection values afforded by upstream protected areas. There is a need here for carefully targeted research to inform cross-sectoral planning and dialogue. Improving and upgrading the information and knowledge base available to PA managers is critical, and no more so on the theme of the economics of protected areas.

Finally, efforts to improve existing systems of PA financing and to introduce new approaches are badly needed. PA managers require a longer term budgetary horizon and security to take a strategic orientation in their planning decisions. Mechanisms for improving the conservation effectiveness of existing allocations are a good place to begin. Yet, for the foreseeable future, government allocations will not be sufficient to meet the needs. Supplementary financing approaches that build on PA services and products and the “user pays” principle should be explored.

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Annex 1: A brief chronology of the protected areas system

<i>Date</i>	<i>Landmark Event</i>
1960	President Ho Chi Minh announced Ordinance No. 18/LCT: 'Law on Organisation of the Government Council of the Democratic Republic of Vietnam'. This ordinance included a proposal to establish the General Department of Forestry.
1962	Cuc Phuong Protected Forest established (now Cuc Phuong National Park), the first protected area in Vietnam
1977	The establishment of 10 protected forests, with a combined area of 44,310 ha, was decreed by Decision No. 41/TTg of the Prime Minister.
1986	Decision No. 194/CT decreed the establishment of a further 73 Special-use Forests nationwide, with a combined area of 769,512 ha. These Special-use Forests comprised two national parks, 46 nature reserves, and 25 cultural and historical sites
1986	Cat Ba National Park decreed in Decision No. 79/CT. This becomes the first National Park to include a marine component (5,400 ha).
1986 -1994	New Special-use Forests continue to be established by decree
1989	Vietnam joins Convention on Wetlands (Ramsar) and designates Xuan Thuy Nature Reserve as a Ramsar site.
1994	Biodiversity Action Plan for Vietnam recommends the strengthening of the protected areas system
1995	The Nha Trang Institute of Oceanography compiles the first list of proposed marine protected areas (MPAs).
1998	FPD prepares '2010' list of 12 national parks, 64 nature reserves and 18 protected landscapes. The government announces a goal of 15 MPAs to be established by 2010.
1998	Con Dao National Park extended its borders to include 14,000 ha of sea and a 20,500 ha marine buffer zone, in addition to the 6,000 ha terrestrial area based on Decision No. 1165/QD-UB.
2000	Vietnam's first Biosphere Reserve established at Can Gio. Ministry of Fisheries requested to prepare a plan for the management of MPAs.
2001	Cat Tien designated as a biosphere reserve. Hon Mun Marine Park GEF project is approved and is funded by ADB, Danida and IUCN. Ministry of Fisheries is the Vietnamese counterpart and IUCN is the implementing agency. Hon Mun is a pilot project for MPA establishment in Vietnam.

Annex 2: Laws, regulations, decrees and official government decisions regarding the management of Special-use Forests

<i>Date</i>	<i>Legal Document</i>
30 December 1986	Management regulations for production forests, protection forests and Special-use Forests: attached to Decision No. 1171/QD of the Minister of Forestry
19 August 1991	Law on forest protection and development
17 January 1992	Decree No. 18/HDBT on endangered species and management and conservation mechanisms
15 September 1992	Decision No. 327/CT on use of open land, bare hills, forest, coastal alluviums and water bodies
5 December 1992	Decree No. 14/CT on penalties/fines in forest protection and management
27 March 1993	Directive No. 130/TTg on protection and management of endangered plant and animal species
29 November 1996	Decree No. 77/CP on penalties/fines in forest protection and forest resources management
29 May 1996	Directive No. 359/TTg on urgent measures to protect and develop wild animal species
24 July 1996	Official Letter No. 2472/NN-KL-CV on strengthening wildlife protection and development
16 November 1999	Decree 163/ND-CP on allocation and lease of forest land to organisations, house holds and individuals for long-term forestry purposes
11 January 2001	Decision No. 08/QD-TTg on the management of Special-Use Forest, protection forest and production forest

6 Abbreviations and acronyms

5MHRP	Five Million Hectares Reforestation Program
ADB	Asian Development Bank
ALRO	Agricultural Land Reform Office
ARCBC	ASEAN Regional Centre for Biodiversity Conservation
BAP	Biodiversity Action Plan
CBD	Convention on Biological Diversity
CDC	Cambodian Development Committee
CDRI	Cambodia Development Resource Institute
CFB	Community Forestry Bill
DANIDA	Danish International Development Assistance
DFW	Department of Forestry and Wildlife
DNCP	Department of Nature Conservation and Protection
DOA	Department of Agriculture
DOF	Department of Forestry
DOLA	Department of Local Administration
EGAT	Electricity Generating Authority of Thailand
EIA	Environmental Impact Assessment
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FDI	Foreign Direct Investment
FIPI	Forest Inventory and Planning Institute
FORMACOP	Lao PDR Forest Management and Conservation Project,
FPC	Forest Protection Contract
FPD	Forest Protection Department
FSSP	Forest Sector Support Program
GAP	Governance Action Plan
GDP	Gross Domestic Product
GEF	Global Environment Facility
GoL	Government of Lao PDR
GoV	Government of Vietnam
ICDP	Integrated Conservation and Development Project
ICLARM	International Center for Living Aquatic Resources Management
IDA	International Development Assistance
IMF	International Monetary Fund
IPRSP	Interim Poverty Reduction Strategy Paper
ICEM	International Centre for Environmental Management
IUCN	The World Conservation Union
JICA	Japan International Cooperation Agency
Lao PDR	Lao People's Democratic Republic
LGDAD	Local Government Development Affairs Division
MAB	UNESCO Man and the Biosphere Program
MAF	Ministry of Agriculture and Forestry
MAFF	Ministry of Agriculture, Forestry and Fisheries
MARD	Ministry of Agriculture and Rural Development
MEF	Ministry of Economy and Finance
MFN	Most Favoured Nation
MIME	Ministry of Industry, Mines and Energy
MOAC	Ministry of Agriculture and Cooperatives
MOC	Ministry of Commerce
MOE	Ministry of Environment

MOFI	Ministry of Fisheries
MOI	Ministry of Interior
MONRE	Ministry of Natural Resources and Environment
MOSTE	Ministry of Science, Technology and Environment
MOT	Ministry of Tourism
MOWRAM	Ministry of Water Resources and Meteorology
MPA	Marine protected area
MPI	Ministry of Planning and Investment
MRC	Mekong River Commission
MRD	Ministry of Rural Development
NAREBI	National Resources and Biodiversity Institute
NBCA	National Biodiversity Conservation Area (in Lao PDR now National Protected Area)
NBSAP	National Biodiversity Strategy and Action Plan
NCCBD	National Committee on Conservation of Biodiversity
NEA	National Environment Agency
NEAP	National Environment Action Plan
NEB	National Environment Board
NEPO	National Energy Policy Office
NESDB	National Economic and Social Development Board
NESDP	National Economic and Social Development Plan
NGO	Non-governmental organisation
NPA	National Protected Area
NRCB	Natural Resources Conservation Bureau
NRDP	National Rural Development Program
NTFP	Non-timber forest product
ODA	Official Development Assistance
OEPP	Office of Environmental Policy and Planning
PA	Protected area
PAD Review	Review of protected areas and development in the four countries of the lower Mekong River region
PDR	People's Democratic Republic
PPP	Phnom Penh Post
PRSP	Poverty Reduction Strategy Paper
RECOFTC	Regional Community Forestry Training Center
RFD	Royal Forest Department
RGC	Royal Government of Cambodia
RTG	Royal Thai Government
SEDP	Socio-Economic Development Plan
SEILA	Social Economic Improvement Agency Program
SUF	Special-use Forest
t	Tons
TA	Technical Assistance
TAO	Tambon Administrative Organisation
TDRI	Thailand Development Research Institute
UN	United Nations
UNDP	United Nations Development Program
UNESCO	United Nations Education, Science and Culture Organisation
UNICEF	United Nations Children's Fund
UNTAC	United Nations Transitional Authority
VAT	Value Added Tax
WTO	World Trade Organisation
WWF	Worldwide Fund for Nature