



The Global Conservation Program Achievements and lessons learned from 10 years of support for threats-based conservation at a landscape and seascape scale

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World Wildlife Fund Forests of the Lower Mekong

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Acronyms and abbreviations

ADB Asian Development Bank ACP Annamites Conservation Plan

BCI Biodiversity Conservation Corridors Initiative¹

BMP better management practices
CAN Conservation Action Network

CAT Cat Action Treasury

CBEE Community Based Environmental Education
CBNRM Community Based Natural Resource Management

CBNRM-LI Community Based Natural Resource Management Learning

Institute

CBRM Community Based Resource Management

CEP Core Environment Program
CET Community Extension Team

CNRM Community Natural Resource Management

CPF Community Protected Forest CSO Civil Society Organization

CWRP Community Wildlife Ranger Project

DARD Department of Agriculture and Rural Development

DFC Dry Forest Coalition, Cambodia
DFW Department of Forests and Wildlife

DNCP Department of Nature Conservation and Protection, Cambodia

Eastern Plains PA Complex Eastern Plains Protected Area Complex

EE Environmental Education

EIA Environmental Impact Assessment

EO-STEM Earth Observation Support for Traditional Ecological Mapping

and Biodiversity Conservation

EVN European VLBI Network

FA Forestry Administration (MAFF), Cambodia

FFI Fauna and Flora International

FLEG Forest Law Enforcement Governance

FLM Forests of the Lower Mekong FPD Forest Protection Department

FTN Forest Trade Network

GFTN Global Forest Trade Network
GMP WWF Greater Mekong Programme

GMS Greater Mekong Subregion

IWRM Integrated Water Resources Management

MAFF Ministry of Agriculture, Forestry and Fisheries, Cambodia

MIST Management Information System

MoE Ministry of the Environment, Cambodia MOMS Management Oriented Monitoring System

¹ TA 6289–REG: Greater Mekong Subregion – Core Environment Program (CEP) and Biodiversity Conservation Corridors Initiative (BCI) Phase 1 (2006 – 2008) - Cambodia: Eastern Plains Biodiversity Corridor; started in October 2006 and jointly implemented by WWF and WCS

MOSAIC Management of Strategic Areas for Integrated Conservation

MoT Ministry of Transportation, Cambodia

MPF Mondulkiri Protected Forest

NBCA National Biodiversity Conservation Area
NBSAP National Biodiversity Strategy Action Plan

NR Natural Resource

NRM Natural Resource Management
PES Payment for Environmental Services
PPWS Phnom Prich Wildlife Sanctuary
PRA Participatory Rapid Appraisal
PLUP Participatory Land use Planning
PRA Participatory Rural Appraisal

SEA Strategic Environmental Assessment SNV Netherlands Development Organization

STEA Science Technology and Environment Agency

SWA Srepok Wilderness Area
TFF Trust Fund for Forest

VFTN Vietnam Forest and Trade Network

VTV Vietnam Television

WCS Wildlife Conservation Society

Key achievements, impacts and lessons learned attained with GCP funding

The WWF Forests of the Lower Mekong Program received GCP funding during FY00-FY09. A review of the Program's key achievements, impacts, and lessons learned demonstrates how long-term GCP funding enabled the Program to integrate achievements at the community and landscape scales as well as addressing threats at even broader regional scales, adapting strategies and refining objectives according to the changing context and to increased knowledge and experience, thus advancing toward significant and sustainable impacts for conservation of the biodiversity of this ecoregion complex.

Key Outputs and Outcomes

Ecoregion conservation, characterized by the larger scale of effort, greater cooperation and wider stakeholder involvement and strategically delivered interventions was a new concept for biodiversity conservation in the region in 2000. At the beginning of the program, the concept was not fully understood, and there was a high degree of skepticism and suspicion. Through patience, persistence and guidance, the ecoregion program has drawn in an increasing level of support and cooperation. By the end of 2003, techniques such as landscape planning, biological visioning processes, strategy development and strategic partnerships had been demonstrated and were being taken up by a wide number of stakeholders from conservation organizations to international donors. In the Annamites, conservation targets at the ecoregional scale were then widely accepted, and partnerships to tackle specific issues such as the intensive wildlife trade or to manage large scale programs such as in the Central and Northern Annamites were being forged. When the program in the Lower Mekong Dry Forests was suggested in 2000, no conservation action was ongoing in the ecoregion. Within just two years, a full ecoregional scale of intervention had been initiated led by WWF, WCS and Fauna & Flora International in cooperation with Cambodian, Lao and Vietnamese governments with support from a wide variety of donors. Despite the challenges, it was realistic in 2003 to believe that within the next two years, the Annamites and the Lower Mekong Dry Forests ecoregion programs could be established - meeting ecoregion scale targets, implementing integrated programs at the landscape scale, piloting innovative conservation solutions and tackling critical, urgent needs at sites of the highest immediate conservation priority. Over the next several years, national development strategies, the impact of which was increasingly more evident in the significant growth in regional investment in the agriculture, minerals, energy, and infrastructure sectors, continued to be driven by the Greater Mekong Subregion (GMS) regional economic plan, which promoted economic activity and associated investments in infrastructure development to be concentrated along three "economic corridors" that crisscross the subregion. In 2007, WWF responded to the emergence of regional threats by developing strategies for responses at the same regional scale. A two-fold strategy was pursued: site level interventions that address threats specific to the two countries (Vietnam and Cambodia) and interventions that address threats comprehensively at a regional scale aimed to transform the region's most dominant forces threatening biodiversity in the Mekong, towards more sustainable and healthier trends.

Forests of the Lower Mekong Ecoregion Complex

A stakeholder-driven vision for conservation success throughout the Forests of the Lower Mekong was finalized in FY01 and reviewed by stakeholders in Vietnam, Laos, and Cambodia. The published FLM Biodiversity Vision stands as a clear framework for the continuing growth and development of the ecoregion program. The Biodiversity Vision is a record of unprecedented regional cooperation in Indochina on a conservation prioritization - a reflection of the minds of the most experienced conservation biologists in the region. The intensely collaborative process through which this Vision was created resulted in a document that is both meaningful and valued by a wide number of individuals and institutions. The

Biodiversity Vision was used as a framework document for the development of national Biodiversity Action Plans for Vietnam, Cambodia and Laos. In addition the Vision served to raise awareness and support for conservation investment in this unique ecoregion complex. The Vision served as the basis for the biodiversity conservation components of a strategic environmental framework for the Greater Mekong Sub-Region countries developed by the Asian Development Bank and the Stockholm Environment Institute.

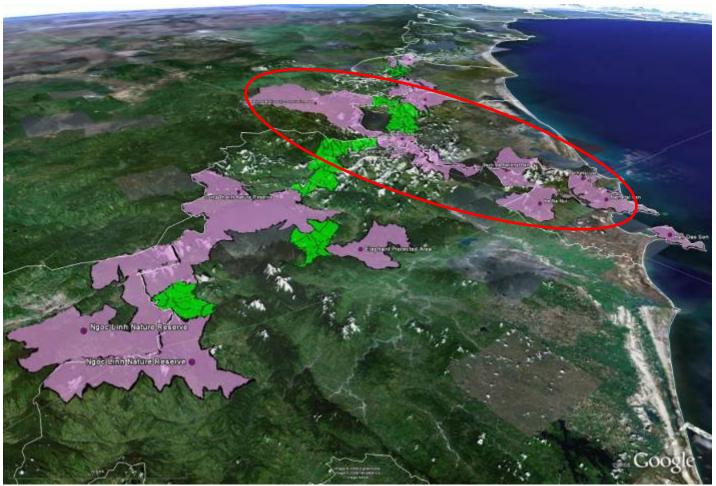
The Central Annamites (Greater Annamites Ecoregion) and Eastern Plains (Dry Forests Ecoregion) priority landscapes (identified in the Biodiversity Vision of the Forests of the Lower Mekong Ecoregion Complex) are the two cornerstones of the WWF program for the ecoregion complex. Through these two initiatives WWF successfully established partnerships across sectors and strategic planning processes across provincial and national boundaries. We piloted an innovative new approach to land use planning and management: Management of Strategic Areas for Integrated Conservation (MOSAIC) in each of these landscapes. Through MOSAIC, we targeted underlying issues such as wildlife trade and government strategies that affected conservation at multiple sites and threatened achievement of long-term conservation goals.

Greater Annamites Ecoregion

- National buy-in was achieved in Vietnam when the government officially committed in January 2001 to the Greater Annamites Ecoregion Program and the Central Annamites Initiative.
- The first large-scale landscape-based integrated conservation and development initiative to be undertaken in Vietnam and Laos was launched in the Central Annamites in FY01. The initiative represented a major advance for conservation in the region as it was the first attempt to develop a comprehensive strategy closely linked to provincial development plans through multi-sectoral and transboundary cooperation and collaboration.
- An inclusive approach to conservation strategy development resulted in the official launch of the Central Annamites Initiative and the establishment of the Central Annamites Steering Committee made up of twelve representatives of the main ministries in Vietnam, government special committees, universities and research institutions.
- Biological advisory teams, established in Laos and Vietnam, worked together to produce in 2002 the biodiversity vision for the Central Annamites, the first landscape-scale biological and socio-economic assessment in Indochina. These studies assessed both threats and opportunities for conservation at larger scales and directly compared conservation priorities with government development plans.
- WWF and its partners worked together in a highly collaborative process to create in 2002, a conservation strategy and action plan for the Central Annamites landscape to address threats from illegal logging and hunting, unsustainable natural resource management, and agricultural and human settlement expansion.
- Based on the Central Annamites model, the European Union proposed in 2002 to expand an existing integrated conservation and development project based on a single protected area, to include the entire Northern Annamites landscape. It looked to increase its investment by 150% to undertake the full landscape initiative.
- By the end of FY02, through start-up funds from WWF, the Song Thanh Nature Reserve, a key protected area in the Central Annamites was made operational. The reserve was outfitted with essential equipment such as motorbikes, telecommunications, and electricity supply for two existing guard stations. In a rare move, Quang Nam province showed their commitment to conservation by providing funding for a reserve headquarters for Song Thanh Nature Reserve. This scale of conservation investment from a provincial budget usually only happens with pressure from the central government.
- Initial work in the Greater Annamites ecoregion focused on building consensus among Vietnamese and Laotian stakeholders for a common vision, followed by strategic planning at the landscape and provincial scales. Over the course of FY03, planning moved to the background while conservation action moved to the

fore. In addition, what began as a WWF initiative in partnership with government and community stakeholders was becoming a coordinated effort to conserve the Annamites by a multi-sector partnership network which included not only other conservation NGOs but also development organizations such as CARE.

- In FY04, WWF saw the Greater Annamites move into a new stage characterized by increased local ownership and integration into national policy contexts. In the Greater Annamites, Vietnam's Ministry of Agriculture and Rural Development and Laos's Science, Technology and Environment Agency led the process to complete a conservation strategy for the Greater Annamites ecoregion, scaling up from the Central Annamites landscape pilot. This process not only clarified the priority goals and objectives for conservation in the ecoregion, but also served to introduce ecoregion conservation to a broader audience of government agencies, donors and nongovernmental organizations operating in Laos and Vietnam. As a result, conservation awareness increased and conservation concerns were better integrated into existing government policies and donor agendas.
- The Annamites conservation planning process marked a turning point in WWF's ability to influence and engage with government policies. The clear articulation in the plans regarding the links between conservation and economic development placed WWF and the conservation community in a stronger position to not only communicate with government officials, but to work toward increased government financial investment in conservation. The Vietnam Conservation Fund's establishment and selection of Song Thanh Nature Reserve as a grantee and the Laos government's use of the Annamites Conservation Plan as an implementation mechanism for their National Biodiversity Strategy and Action Plan are two examples of stronger government interest and support for conservation, not to mention Laos' new membership in CITES. The Annamites Conservation Plan gave WWF a stronger voice.
- A system developed for continued training in enforcement, mapping, forest restoration, and awareness raising techniques for forest rangers in Thua Thien Hue and Quang Nam provinces resulted in a 30% decrease in wildlife trade violations in Thua Thien Hue province in 2007.
- The biggest success in FY07 was the Provincial Governments of Quang Nam and Thua Thien Hue agreeing to two new protected areas (Saola Nature Reserve in Thua Thien Hue Province and Saola Landscape in Quang Nam Province) as well as a 13,500-hectare extension to Bach Ma National Park, all of which contribute directly to the long-term survival of the saola, the flagship species of the Greater Annamites. As a result, a chain of protected areas stretched from the Vietnamese coast in the East to the top of the Annamite mountain range at the border to Laos, covering main habitats of the saola (see figure below). Follow up advances in FY08 included the development of a management plan for the Bach Ma extension and feasibility studies for the new saola reserves.



Map: Chain of Protected Areas (purple color) in Quang Nam and Thua Thien Hue provinces contributing to long term survival of saola (Green color represents biodiversity corridors for restoration)

- The first-ever forest use rights certificate was issued in September 2008 in Vietnam following the Circular 38/2007/TT-BNN by MARD "Guidelines for legal procedures of forest allocation, forest hiring, forest withdrawing to apply to organizations, households, individuals, village communities". Forest use rights increase the ownership of local people over the natural resources and therefore provide a key opportunity for more sustainable management of the ecoregion's natural resources. WWF has been instrumental in this progress by working with Government partners and communities and facilitating the process of establishing the certificates.
- The Chairman of the Quang Nam Provincial Peoples Committee announced that the province will critically review its plans on hydropower development. Based on this announcement and with provincial approval, WWF promoted the "free flowing rivers concept", which included conducting a "minimum flows" assessment together with the provincial Government to advise the authorities on the minimum flows required in the river systems, and consequently whether or not hydropower dams could be built without inversely harming freshwater ecology.
- In FY09, over USD 4 million was secured to initiate a number of projects including a sustainable natural resources management program in Quang Nam, a Hue-based project to effectively combat illegal wildlife trade, a research project to further develop the population monitoring method for saola, and several species monitoring and enforcement projects.

With more than 26,000 citizen signatures in support of saola protection, a program was officially initiated to enhance research on and protection of the saola, achieving a long sought-after goal to protect endemic species of the region.

Lower Mekong Dry Forests Ecoregion

- A biological survey south of Phnom Phrich sanctuary in the Dry Forests landscape, discovered a group of small lakes which were found to support key bird species such as the giant ibis, a remarkable bird previously thought to be restricted to very small populations in sites only in the Northern Plains landscape.
- In the Dry Forests ecoregion, WWF made significant strides in influencing national policy in Cambodia to reflect conservation needs. We continued steadily to fill the wide gaps in knowledge and capacity that characterize Cambodian society. By the end of FY03 we had succeeded in focusing not only our own efforts but those of other international conservation organizations on the areas of highest priority as identified in the FLM Biodiversity Vision—WWF, WCS, and CI each took the lead in the Eastern Plains, Northern Plains, and Cardamoms respectively.
- One of the largest Protected Area Complexes in mainland Southeast Asia was created in FY03 in the Eastern Plains landscape of the Dry Forests of Cambodia. The Prime Minister finalized the designation of three large conservation reserves spread across Cambodia, one of which was the Mondulkiri Protection Forest (MPF). MPF, with its 429,438 hectares, is the largest protected area in Cambodia. It borders on Lomphat, Phnom Prich, and Phnom Nam Lyr Wildlife Sanctuaries, and Yok Don National Park in Vietnam, creating at 1,009,938 hectares the largest contiguous protected area complex on mainland Southeast Asia.
- The official formation and government approval of the Dry Forests Coalition in FY04 signaled a new level of local ownership over the ecoregion program and conservation more generally. The official sanction of this coalition was a major achievement, especially during a difficult year for Cambodia politically when the previous year's elections took a year to result in a new administration. The Dry Forests Coalition gave WWF additional access and leverage to integrate conservation goals into existing government policies and programs. The growing awareness among both government and donors in Cambodia regarding the importance of conservation was evidenced in the shift in funding by the USAID Cambodia Mission which now includes environmental projects in addition to their ongoing work in health and governance.
- In FY05, the Community Based Natural Resource Management Learning Institute (CBNRM-LI) was established in Cambodia with full endorsement of the Cambodian government. This was a significant step to promote the exchange of ideas and skills, offering expertise in developing new policy and building capacity of government and communities to make decisions about the use of biodiversity.
- The legacy of the work USAID has supported in the Eastern Plains landscape is a scientifically rigorous tiger and tiger prey monitoring system designed and under implementation with funding for the next phases, as well as a landscape (provincial) anti-poaching law enforcement unit deployed to reduce incentives for, and incidence of, illegal poaching in Mondulkiri, and with secured funding for operations during the next two years.

Broad Policy Accomplishments

• WWF together with the Government of Vietnam and 18 donor and international organizations, signed a memorandum of Agreement in November 2001, to form a Forest Sector Support Program, to coordinate efforts to implement policies such as the Five-million-hectare Program and the Forest Sector Development Strategy. WWF was chosen to represent seven international NGOs in the Technical Executive Committee.

- The Forestry Law was passed by the National Legislature in Cambodia in FY03. Forestry legislation in Cambodia had been in various stages of development for much of the previous five years. Over the previous two years, WWF played a lead role in raising awareness regarding weaknesses in the draft law and successfully advocating for NGO input in order to ensure the law addressed both social and conservation concerns.
- In April 2004, the Government of Laos acceded to the Convention on International Trade in Endangered Species (CITES). This event opened the way towards better cooperation with neighboring countries especially China and Vietnam in combating the wildlife trade, which is widely acknowledged to be one of the greatest direct threats to biodiversity in Laos. Accession to CITES was in many ways a direct outgrowth of USAID support to WWF's work on wildlife trade in Laos.
- A major achievement by WWF in facilitating the Annamites conservation planning in Laos, was agreement with the Government of Laos to use the plan as the implementation mechanism for the National Biodiversity Strategy and Action Plan (NBSAP). The NBSAP in turn, feeds directly into the National Growth and Poverty Eradication Strategy (NGPES)—the most important development document in Laos. Ecoregion conservation is cited in the NBSAP itself as an important guiding principle for conservation in Laos. Moreover, at the workshop hosted by the Science Technology and Environment Agency (STEA) in July 2004, the Director General of STEA's environment department made clear that Government of Laos, in approving the NBSAP, effectively endorsed the ACP as the NBSAP's operational arm.
- Through the BCI project, which partly aimed to build capacity of government agencies to improve decision making for development planning, significant advances were made through the establishment of the Provincial Conservation Planning Unit to coordinate among government agencies at the provincial level. This allowed for a formal channel to mainstream conservation in the provincial planning process for decision making at the commune development planning level—a unique "first" for any province in Cambodia.

Key Lessons Learned A review of the major lessons learned over the 10 years of the WWF Forests of the Lower Mekong Program demonstrates the process of adaptive management – how monitoring has enabled learning and adjustments to improve the program's own impact as well as to help other initiatives.

Forests of the Lower Mekong Ecoregion Complex

- The Forests of the Lower Mekong has been an ambitious undertaking in a region with limited data and technical capacity that remains one of the poorest in the world. Natural resource exploitation was the main source of revenue for the three countries (and this is largely still the case). As a result, biodiversity conservation received less attention from governments and other stakeholders and was often considered to be a barrier to development. For these reasons, an important element of the ecoregional program was to emphasize the integration of conservation with development needs and the importance of conservation for long-term sustainability. WWF pursued this integration in the development of program interventions as well as through program communications. This strategy has proved successful. In Viet Nam, Cambodia, and Laos, government resource management units at various scales have recognized the important role of biodiversity conservation in the overall development plans for their countries and been highly supportive of the ecoregional programs.
- Launching a comprehensive and ambitious program at the multiple scales required for an ecoregion approach requires an immense amount of basic stakeholder consultation, strategic analysis and program development work. Investments in science-based assessments, program staff, partnership development, and strategic planning are essential.

- A key learning in the initial period of this program was the importance of first cultivating informal relationships with stakeholders to establish an atmosphere of trust, cooperation, and collaboration before moving to formalize long-term partnerships.
- A key lesson learned was the need to develop a program supported by effective communications and that had the ability to be flexible and ready to react to opportunities. As the complexity of the program developed and strengthened, it became increasingly difficult to communicate the variety of approaches, issues, projects, achievements and lessons learned to partners and stakeholders in the region and outside of the region. The development of a communication strategy and action plan (prepared in August 2002) supported by an increase in the capacity of the communications unit supporting the program was therefore very timely. In addition, the development of strategies and action plans involving an increasingly wider set of partners and actors in turn increased the number and scope of opportunities available to tackle issues and develop partners. While the programmatic and partner based approach improved the strategic opportunities to achieve a greater impact, the level of coordination and consultation required placing further restrictions on the program. The ecoregion team together with the government and non-government partners needed to find methodologies for a new level of cooperation, consultation and strategic interventions. This was a new challenge recognised by all partners, but they also recognized that overcoming the challenge would have a very significant benefit for biodiversity conservation in the region.
- WWF's efforts in the Forests of the Lower Mekong resulted in increased government endorsement of conservation objectives and priorities. This increased commitment was reflected in government willingness to participate in and approve key conservation planning activities such as the Central Annamites Landscape Initiative, the Annamites Conservation Plan, and the upcoming Dry Forests Conservation Plan. A key challenge, however, was moving national and provincial government support from endorsements and participation to financial investments. Economic development via traditional methods which rapidly deplete natural resources remains the number one priority for investment in each of the FLM's three countries. True government support for conservation will be achieved when we see these governments mark sufficient funds for conservation activities. In all three countries there are government agencies at both national and provincial levels who are tasked with conservation activities. but who have not been allocated sufficient funds to carry them out effectively. WWF has learned that we have and continue to play a key role in helping these agencies articulate conservation priorities, back up these claims with scientific data, demonstrate through our pilot projects that conservation can contribute to sustainable economic development, and support them in advocating to the leading arms of their governments that greater investment in conservation is the right choice not just for biodiversity but for people.
- The recent example of the termination of the BCI project illustrates the need to secure a diverse funding portfolio to avoid devastating impacts as a result of the loss of a donor. In addition, sustainable financing remains a challenge. Although progress has been made through different venues, for example by tapping into forest carbon sources and working towards ecotourism revenues, WWF and partners will need to plan to invest more in these approaches to yield sufficient income for long term conservation work.

Greater Annamites Ecoregion

■ Information resulting from research on the saola, the ecoregion's flagship species (see picture below), is a powerful force to guide, mobilize, and monitor ecoregion scale efforts to conserve biodiversity. However, methodologies for determining population density of saola cannot be copied from research on other species. This is very exciting, but challenging work, and takes time, perseverance, and – very importantly – a significant amount of resources and funding that is difficult to secure. Success in

obtaining the necessary data requires long-term commitment from WWF and partners, including donors, and especially perseverance from field personnel.



Saola, the flagship species for the Greater Annamites ecoregion. Photo: WWF-

- The long-term investment in tackling illegal wildlife trade finally pays off. Wildlife trade is very difficult to address, but through the long term investment of the GCP-supported program, the relevant enforcement agencies have developed a great deal of understanding and expertise on the issue as well as, the absolutely crucial <u>eagerness</u> to combat these illegal activities. The key lesson is that constant, very close engagement with the partners (Forest Protection Department, Environment Police) creates ownership and investment of these issues and, ultimately, success. It must be emphasized that the success in reducing wildlife violations in Thua Thien Hue and Quang Nam provinces by 30% was only the beginning in addressing illegal wildlife trade. The threat is massive and drivers (e.g. more wealthy Vietnamese to whom it is a status symbol to eat rare wildlife) are gaining force.
- Through a series of discussions and a completed study of best management practices for sugar and cocoa, environmental sustainability issues were advanced and eventually led to official commitments from the government to discourage cocoa planting on any newly cleared land.
- Conducting effective dialogue and establishing partnerships with business or other partners to effectively address large scale threats is time-intensive. Engaging with these companies cannot be done with the required attention if this is just another add on to the terms of reference of staff already responsible for delivery of results from other projects and programs. Effective engagement requires dedicated staff time and technical expertise.

Lower Mekong Dry Forests Ecoregion

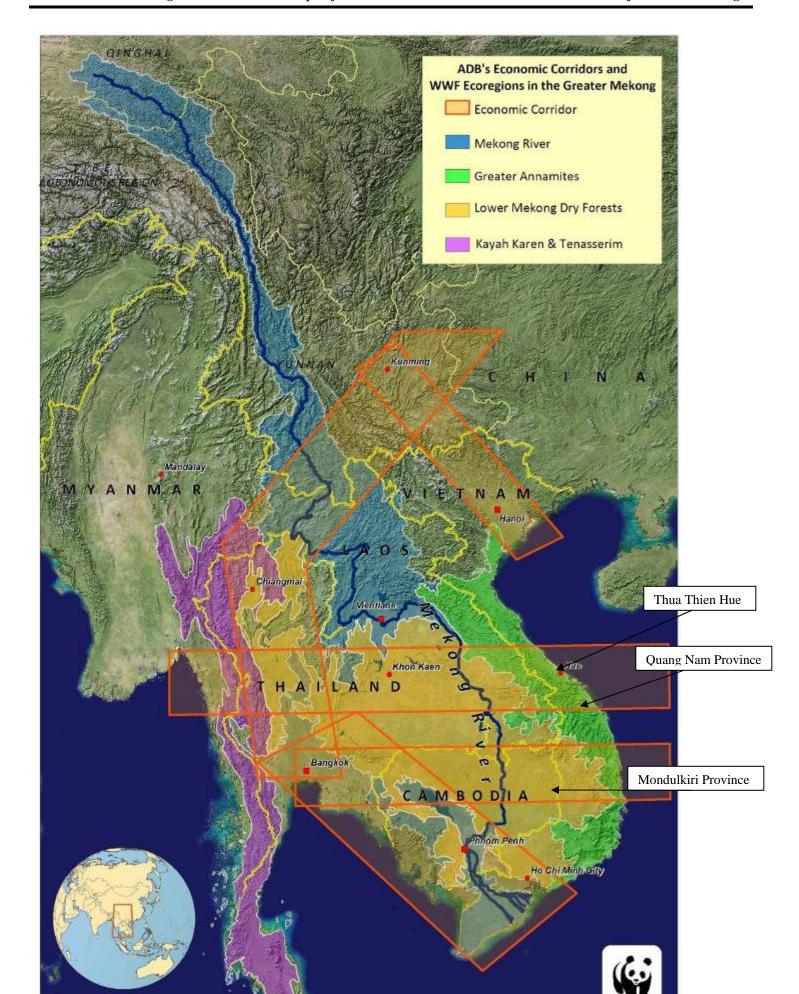
WWF trained 30 Cambodian provincial staff in participatory rural analysis and community resource mapping in FY01. Participants included members of the following departments: environment, agriculture/forestry, rural development, land titling, women's affairs, health education, police, army, military police, and the governor's office. Following this training, participants used their new skills to conduct surveys aimed at identifying: 1) the status and distribution of wildlife, b) the community's resource use, and c) the present capacity manage protected areas in the Dry Forests. A key finding of these surveys was that community resource needs appear related to the skills of the individual household members and the environment directly around them, rather than to the cultural background of the community; i.e. villages of the same ethnic group have entirely different survival strategies. In collaboration with multiple stakeholders, WWF identified critical conservation priorities in the Dry Forests Ecoregion using the results of the aforementioned surveys.

• Building capacity and awareness to increase local understanding of sustainable natural resource use and management was an important component in developing WWF's relationship with government and other stakeholders. Provincial conservation and development messages were regularly contributed to ExCom/PRDC's existing quarterly newsletter (in Khmer), and key reports and findings were translated and disseminated into Khmer to increase awareness among senior provincial government officials of the integral role of the Dry Forests in the conservation of the entire Greater Mekong Subregion.

GCP program background

WWF's overall goal for its Greater Mekong Program is to conserve and sustainably manage biodiversity and natural resources of the Mekong region in order to ensure ecological integrity, to protect the natural assets base for the poor, and as a basis for poverty alleviation. The Forests of the Lower Mekong is an Ecoregion complex consisting of the Greater Annamites (see map below), the Lower Mekong Dry Forests (see map below), the Lower Mekong Floodlands and the Cardamom Mountains Ecoregions, all four of which are Global 200 ecoregions comprising an incredibly high diversity of habitats. WWF began its work for the Forests of the Lower Mekong Ecoregion complex in FY00, but only one activity – promoting the control of illegal trade in wildlife in Laos - was funded that year by USAID, through support from EAP-EI. WWF received broad GCP support from FY01 to FY09 for its focus on two of the Forests of the Lower Mekong Ecoregions - the Greater Annamites and the Lower Mekong Dry Forests.

In the GCP-supported program WWF has pursued a two-fold strategy: 1) interventions in key biodiversity sites that addressed threats specific to two countries - Vietnam and Cambodia (*Note: no USAID funding provided benefit or assistance to the Government of Cambodia*); and 2) strategies addressing threats more comprehensively at a regional scale. From FY01- FY05, WWF managed this program through its Indochina Program Office and Thailand Country Office. To better address emerging regional issues, WWF merged these two offices in FY06 to create the Greater Mekong Program, with headquarters in Hanoi and country offices in each of the lower Mekong countries – Cambodia, Laos, Thailand and Vietnam - and staff based in Yunnan Province, China. Regional Coordinators for the Greater Annamites and Dry Forests ecoregions working together with a coordinator for the Mekong River Ecoregion ensured close coordination to address challenges common to all the priority sites within the two focal ecoregions. The main sites were Quang Nam Province and Thua Thien Hue Province in Central Vietnam (Greater Annamites Ecoregion) and Mondulkiri Province in Northeast Cambodia (Dry Forests Ecoregion).



Location, global importance and key threats to this landscape/seascape

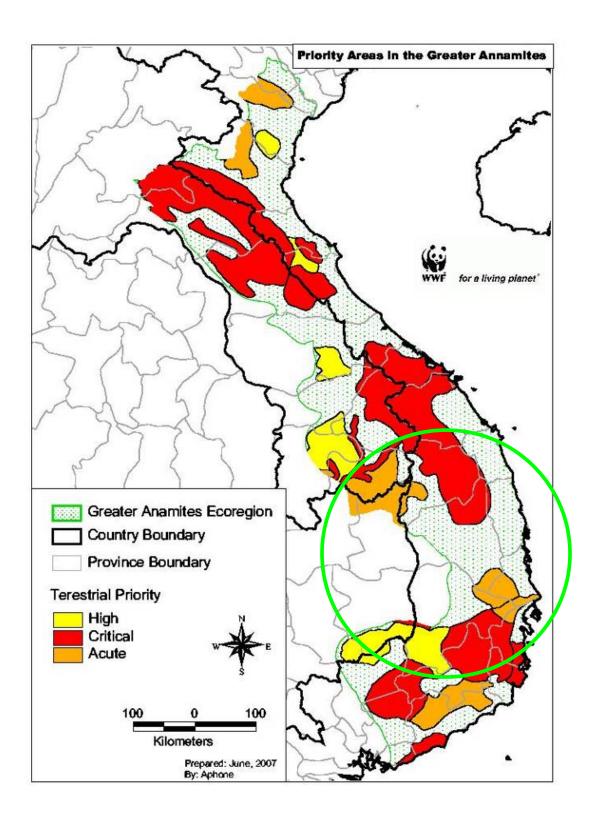
Description of Ecoregions

The Forests of the Lower Mekong are an ecoregion complex consisting of the *Greater Annamites*, the *Lower Mekong Dry Forests*, the Lower Mekong Floodlands and the Cardamom Mountains. All four of these are Global 200 ecoregions comprising an incredibly high diversity of habitats including deciduous dipterocarp forests, moist evergreen forests, karst limestone forests, open grasslands and savannas, upland plateaus, wetlands, and pristine riparian environments, which support diverse, abundant, and rare wildlife. As a remarkable indication of the unique status of these ecoregions, five new mammal species—the saola, large-antlered muntjac, grey-shanked douc, Annamite muntjac, and the Annamite striped rabbit—have been discovered in the Greater Annamites ecoregion alone within the last ten years. The saola, which kicked off this series of discoveries, was identified by a joint expedition of the FPD and WWF.

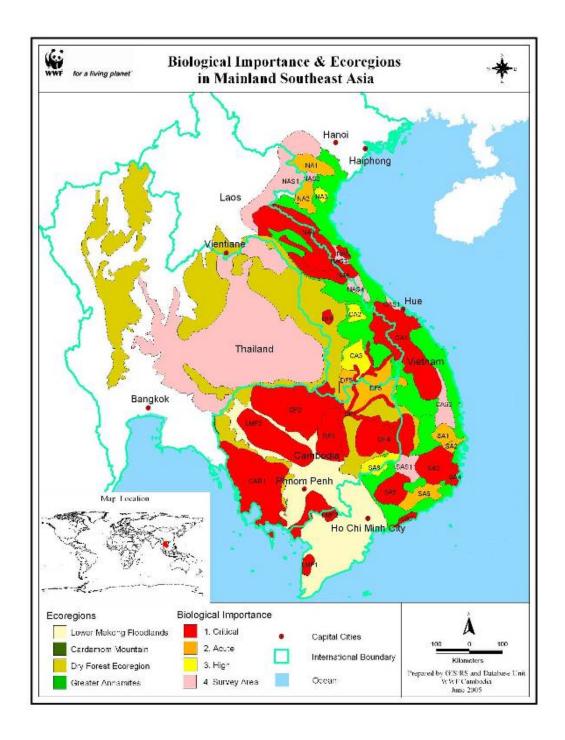
This ecoregion complex is home to other mammal species of global conservation significance. These include the kouprey (on the brink of extinction if not already extinct), Javan rhinoceros, tiger, Asian elephant, and douc and Francois' langurs. The region also contains important bird species, such as Edward's pheasantibis, and ibis, as well as myriad species of reptiles (such as the Siamese crocodile—the rarest crocodile in the world), amphibians, fish, invertebrates, and plants. The aquatic biodiversity of the region is outstanding; with over 1300 species of fish catalogued so far, and recognized as the second most diverse river system in the world. The forests and associated ecosystems also have significant watershed value with westward drainages flowing into the lower Mekong basin, and eastern drainages flowing through Vietnam into the South China Sea.

The Forests of the Lower Mekong are home to hundreds of thousands of upland and lowland human communities who have cultivated the lands, utilized the water resources, and subsisted from the forest products for hundreds of years. In both Cambodia and Vietnam, minority peoples—many of whom practice shifting cultivation—live mainly in the upland areas. The majority of ethnic groups in each country are traditionally lowland wet rice cultivators, though migration into the less densely populated uplands is occurring in some areas, most notably the central highlands of Vietnam.

The *Central Annamites priority landscape* (indicated by the circle in the map below) is located within the *Greater Annamites Ecoregion*, in central Vietnam and in Southern Laos. It covers the central block of the Greater Annamites Global 200 ecoregion. This landscape was identified as a priority because of the high levels of endemism of its flora and fauna. The landscape is dominated by forest habitat that is highly fragmented, but – unlike many other fragmented landscapes – is not intermixed with intensive agricultural land and human settlements, and offered opportunities for habitat restoration as well as integrated land-use planning and community-based resource conservation as part of a strategy for its conservation.



The *Eastern Plains priority landscape* (indicated by DF4 in the map below) is located within the *Dry Forests Ecoregion*, in north eastern Cambodia (and southern Vietnam, although the Vietnam portion of the Dry Forests landscape has not been a part of the GCP). The landscape is dominated by deciduous dipterocarp forest habitat that remains largely intact. The fauna of the landscape is characterized by large mammals and birds that once flourished in large numbers but were decimated between 1950 and 2000.



Threats

- Hunting for local consumption—food, medicine and curio appeal—and poaching for the wildlife trade are having a serious impact on a wide range of species.
- Uncontrolled logging and extraction of non timber forest products (NTFPs) is increasing because of market demand, widening income disparities between rural and urban areas, and inefficient law enforcement.
- Clearing of forest and habitat alteration for a range of purposes is causing habitat loss and fragmentation, leading to the loss of primary and secondary forest cover, thereby increasing the threats to wildlife species and destroying critical biodiversity.

Underlying factors involving trade and market trends that drive these three main threats include:

- Growing demand for wildlife products, driven by increasing domestic and international commercial trade in wildlife products, and by poverty.
- Commercial and unregulated logging, driven by internal and international trade, particularly to China.
- Commercialization of agriculture and a transition away from subsistence farming are decreasing the sustainability of land use practices and may lead to agricultural expansion.
- Infrastructure development—such as proposed hydroelectric schemes and irrigation projects which have the potential to flood habitat, change drainage patterns, and alter fisheries—as well as road construction and infrastructure development, are opening access to natural resources in remote areas.
- Gold mining is responsible for direct destruction of natural habitat, while the associated processing of ore causes water and soil pollution that kill wildlife, degrade or destroy aquatic habitat, and poison local people. Gold mining also encourages in-migration that alters economic and social relationships, usually to the detriment of sustainable customary resource management systems.

The greatest challenges to addressing these threats lie in uncontrolled or poorly planned development schemes, resource demands of industrializing societies, uncoordinated policies and regulations, and more recently, a regional economic development plan, called the Greater Mekong Subregion (GMS), which is expected to have tremendous irreversible impacts on biodiversity and local communities. At the same time, WWF recognizes that these are all venues that can be transformed towards more sustainable and healthier trends.

At the site level, threats are primarily driven by poverty and lack of law enforcement. At the regional level, the threats are primarily driven by unsustainable and environmentally damaging economic development plans or market forces, exacerbated by conflict and lack of coordination among institutions.

WWF historic and current roles in this landscape

WWF initiated its ecoregion program for the Forests of the Lower Mekong in 1999 with the development of a biological assessment/prioritization of the ecoregion complex and a scoping report, in collaboration with IUCN, on key socio-economic issues affecting biodiversity loss. WWF then focused efforts on laying the scientific, institutional, and strategic foundation for an effective ecoregional conservation program, and activities were devoted to refining a comprehensive framework for interventions both at the ecoregional scale and at the scale of priority landscapes, building upon its years of site-specific work in the region. Launching such an ambitious and comprehensive program involved an immense amount of stakeholder consultation, strategic analysis and program development work in partnership with government, academic institutions, NGOs, and donors at various scales. In this process, WWF has focused on influencing partners, both government and non-government, to participate in the development and monitoring of a strategic plan for the ecoregion and to

coordinate actions, integrating implementation of the plan into their individual programs at multiple scales, from community to national, and regional. Once these plans were developed, WWF acted as one of the many stakeholders involved in the implementation of these plans. As mobilizer of this complex process, WWF has taken at multiple scales the roles of convener, consensus builder, capacity builder of institutions and individuals, policy advocate, provider of technical assistance, and communicator. WWF continues these roles today, building the capacity of partner institutions to sustain action to achieve the long-term goals of the Forests of the Lower Mekong Conservation Plans.

WWF approach to threats based conservation at a landscape scale

The WWF Approach to Large-scale Conservation

The World Wildlife Fund's (WWF) approach to large-scale conservation began in the late 1990s with the development of the Global 200, a biodiversity priority setting exercise that used a representative approach to select 238 of the earth's most outstanding terrestrial, freshwater, and marine systems (Olson & Dinerstein, 1998). Subsequently, WWF embarked on ecoregion-based conservation planning in which spatial priorities were identified in many of the Global 200 regions. Ecoregions are defined by WWF to be relatively large units of land containing a distinct assemblage of natural communities and species, with boundaries that approximate the original extent of natural communities prior to major land-use change (Olson et al., 2001). Ecoregions are often larger than landscapes but not always. In essence, WWF realized that only at relatively large scales (generally greater than single protected areas) could conservation planning and implementation adequately understand and preserve habitats and ecological processes. Since the first ecoregion-based conservation planning workshop was held in 1997, for the Chihuahuan Desert, there have been more than 30 ecoregion (or ecoregion complex) analyses. Across all these planning analyses, priority areas for conservation implementation were identified based predominantly on biological characteristics. Priority areas within ecoregions (or ecoregion complexes), while varying greatly in size depending on the specific region and set of local circumstances, form the basis for WWF's landscape-scale conservation planning and implementation. However, in some cases, landscape-scale conservation planning has been performed for entire small ecoregions. The same large-scale planning needs concerns (representation of habitats and species in protected areas, incorporation of ecological processes in spatial plans) are believed to be applicable at both ecoregional and landscape scales. However, only at the small-ecoregion and landscape scales does planning address the spatially explicit decisions required to make a conservation plan practically implementable.

There are two important aspects of WWF's approach to spatial landscape planning. Firstly, strategic planning for conservation action is a critical complement to spatial planning. WWF uses a best practice strategic planning framework called the WWF Program Standards (WWF, 2005), which is similar to The Nature Conservancy's Conservation Action Planning and is derived from the Conservation Measures Partnership's Open Standards for the Practice of Conservation (Conservation Measures Partnership, 2007). Ideally, spatial planning and strategic planning are seamlessly integrated.

Secondly, WWF is a network of semi-independent country organizations (often referred to as the WWF Network), and there are no mandated approaches to conservation planning at the ecoregion or landscape scale. Consequently, there is a wide variety of approaches used in different countries and under different situations that have to do with data availability, conservation targets, and opportunities to coordinate with partners. Furthermore, WWF's approach to ecoregion and landscape-scale conservation planning has continued to

evolve, especially as systematic conservation planning software and other tools have became increasingly available and user-friendly over the past decade.

WWF's landscape level conservation planning approach aims to address the goals of: (1) Representing all distinct natural communities within conservation landscapes and protected area networks. (2) Maintaining ecological and evolutionary processes that create and sustain biodiversity. (3) Maintaining viable populations of species. (4) Conserving blocks of natural habitat that are large enough to be resilient to large-scale stochastic and deterministic disturbances as well as to long-term changes (Dinerstein et al., 2000, modified from Noss, 1992).

Knight et al. (2006a,b) divided conservation planning into conservation assessment and implementation. Conservation assessment methods used in the WWF Network vary considerably, even within a single region. Some are strictly stakeholder-based workshops whereas others involve planning software (with or without stakeholders). The systematic rigor of conservation assessments has varied considerably within WWF, but implementation has always been of paramount interest because of a traditional low tolerance for planning (what Knight calls "assessment"). We define implementation as the extent to which areas identified as priorities have been turned into protected areas, are being managed explicitly in such a way as to preserve critical ecosystem function, or are incorporated into government planning. The level of implementation is generally believed to be a function of a high level of expert, local, and government support, which are in turn interrelated. The support has been achieved through early and prolonged staff engagement of the various stakeholders, including their active participation in the assessment results. Costs (either threat costs or actual monetary costs) have been considered in some cases, and this probably increased the likelihood of implementation because, to the extent possible, priority areas were selected where costs were lower. The extent to which cost considerations will affect eventual implementation is unknown but it is among an array of political and cultural factors that will affect the final outcome. However, the completion of a conservation assessment will not necessarily result in the implementation of the plan. Although the ideal scenario is that WWF hands over a conservation assessment to government organizations to implement, more often WWF maintains ongoing engagement with relevant stakeholders to monitor the process of implementation (e.g. establishing protected areas and improving management). This process often takes years.

WWF's initial efforts at large-scale planning were heavily skewed towards expert-driven workshops involving many experts and stakeholders but less repeatability (Mittermeier et al., 1994). More recently, many of WWF's ecoregion and landscape conservation planning efforts have involved more systematic approaches. These systemic conservation planning efforts have involved varying levels and formats of expert and stakeholder input. This reflects a shift towards greater rigor as systematic conservation planning tools have become more prevalent, user-friendly and documented in the scientific literature.

The advantages of entertaining a variety of approaches are many. Each landscape has its own unique combination of culture, capacity, data, resources and geography. Providing for a variety of methods that can be chosen and mixed depending on the specific situation provides maximum flexibility to a diverse organization. In general, the variety of assessment approaches within WWF reflects differing time and budget constraints, the amount and quality of data available, perceived stakeholder capacity, WWF technical staff capacity, and the technical interest of WWF country programs.

WWF's Strategic Approach for the Forests of the Lower Mekong

The goal for the ecoregion complex is to ensure the conservation and sustainable use of biodiversity and maintain the integrity of biological processes across the Forests of the Lower Mekong.

WWF initiated its ecoregion program for the Forests of the Lower Mekong in 1999 with the development of a biological assessment/prioritization of the ecoregion complex and a scoping report, in collaboration with IUCN, on key socio-economic issues affecting biodiversity loss. In March 2000, WWF organized, with broad participation of experts in biodiversity of the region, a workshop entitled "Ecoregion-based Conservation in the Forests of the Lower Mekong – Biological Assessment Workshop" in Phnom Penh, Cambodia, to develop a Biodiversity Vision for the region. The workshop was the first attempt to undertake a regional assessment of conservation priorities and stands as a major landmark for conservation in the region. Fifteen landscapes were identified as critical to global biodiversity conservation, and areas requiring immediate further survey work were also identified and ranked. The results of the workshop were published as a *Biodiversity Vision for the Forests of the Lower Mekong*. A summary document was published in four languages (English, Khmer, Lao, and Vietnamese) for broader public dissemination. Meetings were held in both Cambodia and Vietnam to present the Biodiversity Vision. A meeting to develop the National Biodiversity Action Plan in Cambodia proposed that the conservation priorities of the Forests of the Lower Mekong Biodiversity Vision stand as the basis for the national Biodiversity Action Plan.

Following the workshop, WWF's activities in FY00 were devoted to refining a comprehensive framework for interventions both at the ecoregion scale and at the scale of priority areas. A core management team was established to facilitate coordination and integration of the program and closer links with key partners. This team developed program activities to achieve **four overarching objectives which served as the objectives for the GCP-supported program from FY01-FY05**:

- 1. *Mobilize conservation on an ecoregional scale* by providing a strong scientific basis for conservation priorities in the region, working with multiple stakeholders to develop consensus goals and undertake integrated programs of action, and communicating the purpose, activities, and results of the program.
- 2. **Protect key sites and wildlife populations** by piloting innovative, large-scale approaches to integrated conservation and development in priority areas defined in the ecoregional Biodiversity Vision, improving the management of protected areas, and developing interventions for the conservation of important wildlife species.
- 3. *Shape regional development to support conservation* by increased understanding of the root causes of biodiversity loss, as well as targeted policy engagement and field projects in sustainable forest management, community-based management of natural resources, and control of illegal wildlife trade.
- 4. *Lay the foundation for lasting conservation* by developing the capacity of local institutions to manage biodiversity conservation, promoting the value of biodiversity through education and awareness, and pursuing sustainable financing of conservation goals.

To achieve these objectives, a primary strategy of the ecoregional program was to promote integrated conservation and development planning at spatial scales large enough to protect biodiversity values and address key threats. Of the fifteen priority landscapes identified through the biodiversity vision, WWF selected two, each representing one of two Global 200 ecoregions in the Forests of the Lower Mekong, to pilot innovative, large-scale approaches to integrated conservation and development. The selected landscapes were the *Central Annamites landscape* (primarily in Vietnam with a small area in Lao PDR, in the *Greater Annamites Ecoregion*) and the *Eastern Plains landscape* (in eastern Cambodia and southern Vietnam, in the *Dry Forests Ecoregion*). To select these landscapes WWF used criteria such as regional importance, gaps in conservation efforts, readiness and applicability of ecoregion conservation, urgency for an ecoregion approach and expressed opinions of the relevant government partners. A major aim of the priority landscape conservation initiatives was to develop science-based consensus land-use plans identifying key conservation areas in relation to other sustainable land uses. The purpose of these plans was to improve the integration of conservation objectives into

decision-making regarding development and land use. The lessons and experience of implementation at the landscape scale would also be "fed back" to inform the ecoregion- and national scale work on policy environments undertaken by WWF and other partners. As a result of extensive consultations in FY00, the governments of Vietnam and Cambodia adopted and supported the initiation of these two landscape programs. With the initiation of GCP support for ecoregion-scale work in FY01, WWF began expanding on its site (protected area)-specific engagement in both landscapes.

Building on the Forests of the Lower Mekong biodiversity vision, a team of Laos and Vietnamese scientists collaborated to develop in September 2001 a landscape-scale biodiversity vision for the *Central Annamites* landscape. The process of creating the vision proved so successful that the Vietnamese government planned to use the same methodology independently to plan conservation activities in other areas. The vision reflected an increased level of detail and accuracy in both the biological and socio-economic data used in its development. The conclusions of the vision were critical for the development of a Central Annamites conservation strategy and supported the integration of conservation objectives into development plans of the two governments.

Efforts to develop a conservation strategy for the Eastern Plains priority landscape reflected the different context in Cambodia. There was a severe lack of available data and understanding of the ecological processes, a considerable lack of capacity, particularly to undertake surveys, and limited access to both remote areas and also large towns during all but a few months each year (due to the wet season). WWF focused its activities during the dry season on gathering the first set of comprehensive data on the Eastern Plains in 40 years. During the wet season, WWF convened teams from the various ministries and partner conservation organizations to discuss the data and design activities to build capacity to manage protected areas.

Building on the Forests of the Lower Mekong biodiversity vision, in FY01 WWF initiated efforts to develop a strategy for the each of the focal ecoregions. A collaborative *Conservation Plan for the Greater Annamites* focal ecoregion was completed in FY04 and a Conservation Plan for the *Lower Mekong Dry Forests* in FY05. The aim of the two conservation plans was to build long-term, strategic, coordinated action among stakeholders to address threats to the FLM's biodiversity from the site level all the way through to the regional macro drivers of biodiversity loss. These plans demonstrate recognition among government, NGO and community stakeholders that protection of the unique values of the Greater Annamites and Dry Forests ecoregions requires better integration of policies and economic instruments that influence the behavior of the public and private sector in natural resource management, to overcome policy contradictions and address root causes of threats to biodiversity.

• Over the course of FY03, planning moved to the background for both the Greater Annamites and Dry forests landscapes while conservation action moved to the fore. In addition, what began as a WWF initiative in partnership with government and community stakeholders was becoming a coordinated effort to conserve the Annamites by a multi-sector partnership network which included not only other conservation NGOs but also development organizations such as CARE. In order to maximize the success of conservation in the FLM, WWF piloted large-scale partnership networks in the Greater Annamites and Dry Forests ecoregions. These partnership networks were made up of national and international stakeholders from a variety of sectors. WWF's goal was for the network partners to jointly develop a common set of objectives for the conservation and development of the each ecoregion and work toward those objectives in coordination with each other. To initiate this process, WWF drafted initial Greater Annamites and Dry Forests Action Plans. The Greater Annamites conservation organizations committed verbally to such a partnership. The Dry forests partnership network remained an informal coalition meeting regularly and working together on common tasks such as the biovision,

environmental education strategies, and wildlife law. In the short term, these Action Plans guided the activities of WWF and its current program and project partners. In the medium to longer-term, these draft Action Plans were to be the starting point for the development of a full Action Plan for each ecoregion negotiated with and endorsed by all stakeholders. The draft Action Plan focused discussions and made it easier to develop a full Action Plan in a complex, multi-country, multi-stakeholder program environment. The plans include a basic system for monitoring and evaluation based on a set of quantifiable targets.

In FY04, WWF saw the two focal ecoregions of the Forests of the Lower Mekong move into a new stage characterized by increased local ownership and integration into national policy contexts. In the Greater Annamites, Vietnam's Ministry of Agriculture and Rural Development and Laos's Science, Technology and Environment Agency led the process to complete a conservation strategy for the ecoregion, scaling up from the Central Annamites landscape pilot. This process not only clarified the priority goals and objectives for conservation in the ecoregion, but also served to introduce ecoregion conservation to a broader audience of government agencies, donors and nongovernmental organizations operating in Laos and Vietnam. As a result, conservation awareness has increased and conservation concerns are better integrated into existing government policies and donor agendas.

In both the Central Annamites and the Eastern Plains landscapes, WWF strengthened the institutional capacity of provinces to ensure better governance of natural resources and exploring, in partnership with local stakeholders, management options for areas of strategic conservation importance. In both landscapes, joint WWF/local teams surveyed areas previously unexplored by biologists, resulting in data essential to planning, survey experience for local management authorities, and a better understanding of current threats. WWF thus strategically put in place the policy, capacity, and knowledge necessary for self-sustaining conservation.

The ecoregional approach to conservation emphasizes the importance of policy-level engagement to support field implementation. The program worked to promote a supportive policy environment for conservation and sustainable development in the Lower Mekong through advocacy and technical assistance at national and regional scales, as well as innovative field projects on policy-relevant issues.

In FY06, the Greater Mekong Subregion, a grouping of six countries (Cambodia, Lao PDR, Myanmar, Thailand, Vietnam, and China's Yunnan and Guangxi Provinces), committed to increasing subregional cooperation to accelerate economic development, as facilitated by the Asian Development Bank (ADB). The GMS is manifested in economic activity and associated investments in infrastructure development, to be concentrated along three "economic corridors" that crisscross the subregion (from Mawlamyine, Myanmar to Danang, Vietnam; from Kunming, China to Bangkok, Thailand; and from Bangkok to Ho Chi Minh City, Vietnam). Recognizing the potential negative impacts of corridor development on biodiversity and natural resources, the GMS has also established a Working Group on Environment (WGE), comprising senior government officials from environment and natural resource ministries, of which WWF was also a participant.

Partly as a response to the emergence of regional threats and opportunities posed by GMS, and partly to address coordination discrepancies within the WWF family, WWF merged its two program offices for Thailand and Indochina into the Greater Mekong Program (GMP).WWF was thus able to develop large-scale responses at the same regional scale, addressing mainly the issues of Infrastructure, Agriculture, Timber Trade, and Wildlife Trade. These four drivers were selected through ecoregional threat assessments and ranking. The overall goal of WWF's Greater Mekong Program (GMP) remained unchanged: to conserve and sustainably manage biodiversity and natural resources of the Mekong region in order to ensure ecological integrity, to protect the natural assets base for the poor, and as a basis for poverty alleviation.

Following the reorganization with the Greater Mekong Program, WWF aligned existing ecoregion logistic frameworks with ongoing work plans, including the USAID GCP Implementation Plans, leading to better overall organization and more robustly defined objectives and indicators. Thus, **objectives and activities for the GCP-supported Forests of the Lower Mekong program were presented differently in FY06 than in preceding years, becoming ecoregion specific and tied to goals within each ecoregion action plan.**

The goal of the GCP-supported program for the Forests of the Lower Mekong ecoregion complex remained the same to the end of the program in FY09: to ensure the conservation and sustainable use of biodiversity and maintain the integrity of biological processes across the Forests of the Lower Mekong.

Greater Annamites Ecoregion Objectives (FY06-FY09):

- 1. Protect, restore, and sustainably manage biodiversity elements of high scientific and economic value in the ecoregion
- 2. Mitigate the most urgent, broad scale pressures on biodiversity in the ecoregion
- 3. Harness local, national, and international support for long-term conservation of the ecoregion

Lower Mekong Dry Forests Ecoregion Objectives (FY06-FY09):

- 1. Conserve species, habitats, and their interactions
- 2. Build capacity of local, national, and international stakeholders for long-term biodiversity conservation in the Dry Forests Ecoregion
- 3. Protect priority landscapes and corridors through sustainable use of forest resources, sustainable agriculture, and forest restoration

Learning Component Objectives:

- 1. Develop an understanding of the impacts of the growing mining sector in the Greater Mekong Subregion (FY08)
- 2. Develop an understanding of impacts of conservation planning on landscapes, communities, and threat mitigation in the Greater Mekong (FY09).

The WWF Forests of the Lower Mekong Program pursued a twofold strategy: site level interventions in key biodiversity sites which addressed threats specific to the two countries (Vietnam and Cambodia) supported by the GCP; and strategies addressing the drivers of threats comprehensively at a regional scale. At the site level, threats are primarily driven by poverty and lack of enforcement. At the regional level, the threats are primarily driven by unsustainable and environmentally damaging economic development plans or market forces, exacerbated by conflict and lack of coordination among various institutions.

The key regional level objective of the broader WWF GMP is to transform the region's most dominant forces that threaten biodiversity in the Mekong towards more sustainable and healthier trends. This was to be achieved through international cooperation on illegal wildlife trade; regional coordination on infrastructure and hydropower planning; regional promotion of payment for environment services; and capacity building for environmental leadership. Initiatives encompassed:

- Economic valuation of environmental services as a tool to influence resource use decision-making to develop appropriate mechanisms for payments for environmental services and standards for best management practice where development is unavoidable;
- Regional agreements and collaboration on international timber trade and wildlife trade to attempt to address the likely increase in trade as a result of the rapidly expanding regional transport network;

- Promoting EIA adherence (coordination in dam planning and execution) to improve the current situation where almost all development projects either have weak impact assessments or none at all;
- Coordination in GMS planning and construction of roads to ensure avoidance of sensitive biodiversity areas across the region through technical analysis and advocacy.

Through the ecoregion coordinators for the Greater Annamites and the Dry Forests, WWF began developing a regional strategy to address the common challenges related to agricultural expansion, mining and infrastructure development. In addition, in FY07 WWF began implementation of three of the six pilot sites in the Greater Mekong Subregion of the ADB-funded Biodiversity Corridor Initiative (BCI) project. This project provided significant opportunities for knowledge exchange, e.g. transfer of best practice approaches to landscape planning in our priority landscapes in the Annamites and Dry Forests. This exchange was done through the Ecoregional Coordinators as well as a dedicated regional BCI project coordinator who facilitated improved sharing of information and lessons learned.

At the country level, WWF's key objective was to ensure conservation of nationally, regionally, and globally important biodiversity and ensure ecological integrity of priority landscapes. To achieve the regional and country level objectives, WWF GMP pursued the following initiatives:

- Community based forest and freshwater resources management improving participation in management and decision making thereby reducing conflicts and helping to avoid a decline in local livelihoods;
- Integrated river basin management building capacity for larger scale planning and inter-government agency coordination to maintain ecological integrity of priority watersheds in the Mekong basin;
- Reforestation in areas of high conservation value;
- Anti-poaching and prevention of wildlife trade in biodiversity core areas and key trade routes;
- Improved enforcement and governance in key conservation sites to enable quicker response to tackle key threats.

The main sites were Quang Nam Province and Thua Thien Hue Province in Central Vietnam (Greater Annamites Ecoregion) and Mondulkiri Province in Northeast Cambodia (Dry Forests Ecoregion).

Implementing conservation at a landscape or regional scale: overcoming challenges, grasping opportunities and managing adaptively

Phase 1(FY01-FY05)

Objective I. Mobilize conservation on an ecoregional scale (FY01-05)

Extending capacity to mobilize and manage large scale conservation across the FLM

- WWF established an ecoregion unit in FY01 in the WWF Indochina Head office in Hanoi, strengthening the institutional and administrative aspects of the ecoregion program within the three countries as well as the WWF Indochina program.
- WWF and our partners in the Vietnam and Laos governments completed a conservation plan for the **Greater Annamites ecoregion** in December 2003. Due to differences in the policy context between the two countries, the strategies to combat threats across the Annamites were developed for the ecoregion as a whole, while the specific actions to carry out the strategies were developed separately for Vietnam and Laos. The Annamites Conservation Plan (ACP)² targets the following overarching threats or challenges: population growth, poverty and natural resource degradation, limited capacity for conservation, land

² In Vietnamese, the Greater Annamites are called Truong Son. In Laotian they are called Saiphou Louang. *Global Conservation Program—World Wildlife Fund*

conversion, enforcement of rules and regulations, over- exploitation of natural resources, trade of wild animal and plant species, socio-economic development, infrastructure development, and institutional arrangements. Identification of the challenges and the strategies to address them was based on a situation analysis and the input of technical working groups in each country. Consensus on the challenges and mitigation strategies was achieved through consultation with donors such as the Dutch Embassy and UNDP, government agencies such as the Ministry of Agriculture and Rural Development, and nongovernmental working in both conservation and development organizations such as Birdlife International and OXFAM.

- The Biodiversity Vision of the **Lower Mekong Dry Forest Ecoregion** was completed July 2004. This report summarizes the findings of national and international technical experts who identified the globally significant conservation priorities in the Lower Mekong Dry Forests, in the context of the key threats to these values. One thousand copies of this report were distributed to key stakeholders in the three countries of the Dry Forests: Cambodia, Laos, and Vietnam. The completion of the conservation plan for the Lower Mekong Dry Forests ecoregion was delayed due to the following reasons:
 - O WWF Cambodia recognized the importance of developing the conservation plan for the Dry Forest ecoregion. Considerable work had been carried out to build the commitment and institutional capacity to support the Dry Forests ecoregion, leading to the formation of the government-led Dry Forests Coalition in November of 2003. The purpose of this coalition (facilitated by WWF) was to guide the development and implementation of the Dry Forests ecoregion program. WWF felt strongly that it was more important to give this Coalition time to coalesce and develop their own timelines and approach with support from WWF in order to ensure the outcomes were truly owned and shared by the key stakeholders who were willing then to act on it and implement it.
 - o In May 2003 the WWF Dry Forest Ecoregion Coordinator was recruited and worked for one year in the program. However, he received an offer in his home country and decided to leave in May 2004. The departure of DF Coordinator resulted in a general slow down in the ecoregion work until a new coordinator began in September 04.
- By the end of FY04, WWF had facilitated greater local ownership of ecoregion conservation in Vietnam, Cambodia and Laos. WWF facilitated completion of an ecoregion-scale partner strategy for the Annamites and the official formation of an ecoregion steering group for the Dry Forests. At the same time, WWF saw a number of internal transitions as long-time staff moved on to new challenges, projects came to a close, and WWF worked to concentrate capacity in key areas to continue driving ecoregion conservation forward.

Engaging broader stakeholder support through advocacy-based communications

- WWF published the Forest of the Lower Mekong Biodiversity Vision in FY01 and also produced a summary document in four languages for wider public distribution.
- In 2003, WWF completed a communication strategy and action plan for the Greater Annamites and Dry Forests ecoregions. The strategy detailed the key communication messages the ecoregion program wanted to send and what mechanisms and approaches would be used to communicate those messages to each program partner and stakeholder. Activities identified in the action plan included a set of updatable brochures and a website for the ecoregion program.
- Communications products produced in 2003 included n interactive CD-Rom entitled "*The Greater Annamites An Interactive Guide*" and an eleven minute film about the Greater Annamites for Vietnamese and Lao PDR television audiences. The CD-Rom was designed to showcase the Greater Annamites Ecoregion, particularly the unique community of species that characterize it. The film was the first to present the importance of the 'Greater Annamites, the threats to its integrity and need for

- action to conserve its value for the people of Vietnam and Lao PDR. It was prepared as part of communications activities to be presented as the Vietnamese contribution to the International Year of the Mountain. The film premiered in Vietnam in November.
- The Dry Forest Ecoregion team in Cambodia seized the opportunity presented by the WSSD Summit in 2003, to produce a set of materials to support a series of presentations and consultations with the Cambodian delegation. The materials built awareness of the role of the biodiversity of the Dry Forests in the future economy and well-being of Cambodia, and successfully contributed to the delegates including the Dry Forests in the portfolio of key conservation interests in their country.
- In October 2003, WWF produced a documentary film "Spirit of the Dry Forest" in English and in Khmer. The Dry Forests of Cambodia were once described as one of the great gamelands of the world. These gamelands have gone into decline; however the Lower Mekong Dry Forests are still home to some of the largest remaining populations of some species and the last refuge for several more. The film mainly shows the importance of the Dry Forest ecosystem for biodiversity, wildlife, and people; the local communities living in the DF landscape of northeastern Cambodia; the threats, and appeals for the central government to crack down on illegal activities.
- An awareness campaign on wildlife trade was initiated in 2004 in Quang Nam province, Central Annamites.
- During FY05 WWF also placed great emphasis on communications efforts to introduce the global importance of the Greater Annamites Ecoregion as well as to call for broader efforts for conservation. A communications package consisting of information leaflets on the species, landscapes, people and conservation efforts of the Annamites was produced and sent to all relevant government institutions, donors, and to a wide range of other stakeholders at national and provincial levels. A key component to the communications work was focused on the two flagship species, the saola and the doucs. Three 15minute television programs on douc conservation were produced in a partnership with Vietnam Television (VTV) and the Endangered Primate Rescue Center and broadcast nationally in late 2005. Aiming to build awareness of the value of wildlife beyond bushmeat and ultimately change consumption patterns, the three episodes introduced the three species of douc, their forest habitat and the threats to the species as well as the conservation work underway. In Laos, WWF translated the proceedings from the February 2004 International Saola Workshop and the April 2004 National Saola Workshop, and printed them in one document distributed widely to the government and NGOs working in the Greater Annamites. The document served as a tool to raise awareness of saola conservation issues among development organizations and to promote protection of the species through implementation of a National Saola Action Plan.
- In FY05 WWF developed and distributed extensively across all countries, a high quality communications package to increase awareness about the Dry Forests Ecoregion. These materials were also translated into Khmer and Laotian and distributed to wider audiences including provincial and community partners and stakeholders. As a result of the package, donors such as JICA, UNDP, World Bank and the USAID Cambodia Mission became aware of the Dry Forests Ecoregion Program. JICA consulted extensively with the Dry Forests Program, in developing its new Cambodia country strategy. In Laos, the materials improved government level understanding of the Dry Forests Ecoregion where previously their understanding was limited to the Greater Annamites Ecoregion Program. The materials were also useful in promoting ecoregion conservation among NGOs working in the Dry Forests Ecoregion.

Engagement of NGOs across the Forests of the Lower Mekong in Laos

With support from USAID, WWF began working strategically in FY05 to improve the collaboration of NGOs on Ecoregion Conservation in Laos, beginning by involving the NGOs in the drafting stages of the

Conservation Plans for both the Greater Annamites and Lower Mekong Dry Forests. During the planning process improved NGO collaboration was identified as a priority area which needed priority support. There were over 50 NGOs working in Laos, many focusing on rural development issues. Despite many overlaps of activities and sites, there was little coordination or consultation between NGOs or projects. This lack of coordination was a barrier to moving from individual site based projects to a larger landscape approach. To address this need WWF hired a staff member to promote ecoregion conservation among NGOS working in Laos, and to facilitate collaborative work at the ecoregion scale. Outputs included:

- Mapping of NGOs operating in ecoregions in Laos, as a tool to increase collaboration and to address threats and opportunities;
- o An agreement and funding to develop a set of practical guidelines for implementing development in ecoregions, specific to Lao PDR;
- o The inclusion of the ecoregion concept, adding environmental significance of sites, in project proposals and strategic plans of the SNV, World Bank and CARE;
- o Integration of environmental education into the programs of NGOs (World Vision and Save the Children Australia/Norway)working in the Education Sector;
- o New partnerships and collaboration with: CARE, SNV, World Vision, Concern World Wide, and Save the Children Australia/Norway;
- o Sustainable financing for the NGO coordination position through the Australian Youth Ambassador Volunteer Program.

This small scale intervention leveraged broad impacts – through the NGOs including environmental considerations in their field applications as well as their improved collaboration in a larger landscape effort.

Consolidating the strategies for the ecoregion program

- Initially consolidating strategies for the ecoregion program referred to the consolidation of WWF"s ongoing protected area-based projects in the region into a coherent ecoregional program. In FY03, this activity assumed a new scope. In order to maximize the success of conservation in the FLM, WWF piloted large-scale partnership networks in the Greater Annamites and Dry Forests ecoregions. These partnership networks were made up of national and international stakeholders from a variety of sectors. WWF's goal was for the network partners to jointly develop a common set of objectives for the conservation and development of the each ecoregion and work toward those objectives in coordination with each other. To initiate this process, WWF drafted initial Greater Annamites and Dry Forests Action Plans. The Greater Annamites conservation organizations committed verbally to such a partnership. The Dry forests partnership network remained an informal coalition meeting regularly and working together on common tasks such as the biovision, environmental education strategies, and wildlife law. In the short term, these Action Plans guided the activities of WWF and its current program and project partners. In the medium to longer-term, this draft Action Plan was to be the starting point for the development of a full Action Plan negotiated with and endorsed by all stakeholders. The draft Action Plan focused discussions and made it easier to develop a full Action Plan in a complex, multi-country, multi-stakeholder program environment. The plans included a basic system for monitoring and evaluation based on a set of quantifiable targets.
- Development of the Lower Mekong Dry Forests conservation plan involved consultation with a range of stakeholders in Cambodia and Laos, as well as preliminary discussions with academia and government stakeholders in Thailand. In addition, ongoing analysis of the socioeconomic factors affecting biodiversity loss in the Dry Forests, updating the first analysis completed in 2001, informed the development of the conservation plan's 5-year targets. The Lower Mekong Dry Forests conservation plan was aligned with several key national documents including National Biodiversity Strategy and Action Plans, National Poverty Reduction Strategies, and National Forestry Strategies. The Dry Forests

- Conservation Plan therefore complemented existing strategies as well as provided specific targets and activities for WWF and partners to implement to achieve biodiversity conservation in the Dry Forests Ecoregion.
- Building on the Forests of the Lower Mekong biodiversity vision and the extensive analysis and consultation phases of the ecoregional planning process, WWF completed the collaborative conservation plan for the Lower Mekong Dry Forests in FY05. The aim of the plan was to build long-term, strategic, coordinated action among stakeholders to address threats to the FLM's biodiversity from the site level all the way through to the regional macro drivers of biodiversity loss. In general, these conservation plans demonstrate recognition among government, NGO, and community stakeholders that protection of the unique values of the Greater Annamites and Dry Forests ecoregions requires better integration of policies and economic instruments that influence the behavior of the public and private sector in natural resource management, to overcome policy contradictions and address root causes of threats to biodiversity.

Objective II. Promote integrated conservation and development in priority landscapes of the Forests of the Lower Mekong (FY01-05)

Central Annamites Landscape (Greater Annamites Ecoregion)

- In FY01 The working group of partners expanded from the national scale to the provinces. Provincial support teams composed of key partner institutions were established throughout the Central Annamites in both Vietnam and Laos, to facilitate surveys and studies in their provinces, while ensuring broad consultation and buy-in as well as building capacity. Using the framework and methodology developed in the Biodiversity Vision for the FLM ecoregion complex, the Central Annamites landscape biodiversity vision was completed in September 2001.
- WWF then initiated development of a comprehensive conservation strategy and action plan for the landscape. Based on the expected data and information requirements, a series of biological and socioeconomic studies involving 30 institutions were identified and carried out. As a result, the ecoregion information system incorporated: basic socio-economic benchmark data, including preliminary stakeholder analyses, from all provinces; land-use and land-use management, including detailed maps; case study on natural resource use management systems in ethnic minority villages; development plans and policies; hunting and wildlife trade case studies in Thua-Thien-Hue and Quang Nam Provinces; studies of issues related to population such as migration, land tenure and resource rights of indigenous people; institutional capacity of major players to undertake conservation actions.
- WWF integrated with and attracted other projects to the Central Annamites in order to provide a greater level of synergy and conservation impact. Several projects were developed to implement immediate conservation action where the needs were most urgent and obvious:
 - O A GEF medium-sized proposed project entitled "The Green Corridor" was developed to restore and manage a forest corridor extending from the Lao border to the Vietnamese coastline. Based on the biodiversity vision for the Central Annamites, the initial focal area of this project was refined to the region of highest priority for conservation action, thus establishing a new protected area to secure vital habitat for globally significant species severely under represented in the protected area system.
 - The newly gazetted Song Thanh Nature Reserve (one of Vietnam's largest protected areas) had no management capacity. WWF worked with the Forest Protection Department of Quang Nam province to identify immediate priority needs and to design an intervention which began in September 2001.

- o WWF identified Song Thanh Nature Reserve and Phong Dien Nature Reserve (Thua Thien Hue province) as key sites for tiger conservation. Staff members of these reserves were trained in tiger conservation activities, such as awareness and enforcement, as part of the tiger conservation work in central Vietnam.
- WWF produced and directed a conservation awareness film on the Greater Annamites ecoregion aimed at Vietnamese and Lao PDR television audiences. The film, completed in August 2002, is 11 minutes long. It was shot and edited by a BBC wildlife cameraman who volunteered his services. It was the first film to present the biodiversity importance of the Greater Annamites, the threats to its integrity, and need for action to conserve its value for the people of Vietnam and Lao PDR. The film was part of a package of communication tools to be presented as the Vietnamese contribution to the International Year of the Mountain in partnership with the UN Food and Agriculture Organization and CEMMA. The film was premiered in Vietnam in late November 2002.
- Over the course of FY03, planning moved to the background while conservation action moved to the fore. In addition, what began as a WWF initiative in partnership with government and community stakeholders was becoming a coordinated effort to conserve the Annamites by a multi-sector partnership network which included not only other conservation NGOs but also development organizations such as CARE. The Central Annamites is threatened by commercialization of agriculture, human encroachment, infrastructure development and illegal collection of timber and non-timber forest products. To combat these threats, WWF worked to influence government decision-making regarding land management and natural resource use. First, we had gathered the necessary biological and socio-economic data on the landscape to determine areas of high priority for conservation and to identify opportunities to have significant impact. We then brought this information to the attention of decision-makers at the local, provincial, and national levels and facilitated creation of a biological vision for conservation success in the Central Annamites, in balance with sustainable development. At the same time we created a multi-stakeholder Steering Committee to guide the initiative and ensure broad ownership of its results. Our next step was to facilitate development of a conservation strategy for the Central Annamites.
 - o WWF completed a draft conservation strategy for the Central Annamites in September 2002 that presented a vision, objectives, and a set of clearly defined conservation targets, an analysis of the threats and constraints that were hampering efforts to meet these targets, and a set of broad themes, approaches and actions required to achieve these targets over the next 30 years. The strategy was based on the need for increased levels of understanding and awareness; the importance of integrating biodiversity conservation within development plans and policies; managing the landscape as a set of connected sites and the mobilization and support for civil and private sector organizations and institutions (such as local communities) to help achieve the conservation targets through sustainable natural resource management and innovative social and economic enterprises.
 - O Provincial consultation was completed in July 2003 led by the WWF Central Annamites Coordinator and overseen by the Central Annamites Steering Committee. Eight provincial workshops were held in Vietnam attended by representatives of each stakeholder group from local communities up to the chairs of the Provincial People's Committees. Each province commented on the results of the preparatory studies, the problem and threat analyses and the provisional landscape scale initiative plans. Each province also proposed broad provincial action plans and identified key projects relevant to their provinces. Based on the results of these consultations, a first draft of the strategy and action plan was completed in August and September 2003.
 - o The document had been informally shared with a number key donor partners who expressed interest in funding some of the key activities and just as importantly were interested in adopting

- the approach for other landscapes in the Annamites. This was a significant success for the initiative as one of the key purposes of the adoption of focal landscapes was to promote replication to other critical landscapes. It was therefore imperative at this stage that the strategy and action plan represent a sound model for landscape scale conservation in Indochina.
- O The process was stalled almost completely in Lao PDR as permission to develop the strategy was not provided despite numerous approaches to the government. The Lao government was apprehensive about supporting activities that did not have any immediate financial support. In reaction to this, a new approach was undertaken. In July 2003, a consultant was hired to prepare a project proposal that would encompass the needs of a strategy and action plan but was aimed at acquiring funds for action more immediately. The proposal was written through consultation at the provincial level, and funding was sought for the project.
- A biodiversity map for the Central Annamites was produced in August 2002. In April, a team from the American Museum of Natural History (AMNH) together with staff from the Vietnamese Institute for Ecological and Biological Resources in collaboration with WWF undertook surveys throughout the Central Annamites to groundtruth satellite data in order to produce the first detailed vegetation model for the landscape. The data were then analyzed in the laboratories in the New York headquarters of the AMNH. The map was fundamental in developing future interventions, research and monitoring.
- Spatial planning is a key activity for provincial conservation action. Mapping and evaluation had been done at the central government level laboriously through old fashioned mapping techniques. In April 2003 during a week long course, the GIS expert from the WWF Indochina Program trained staff from three government departments in Quang Nam province in the use of GIS as a planning and management tool. The province was then able to prepare spatial comparisons between threats, poverty indicators and population parameters such as ethnicity and to produce a detailed habitat map for the province based on the vegetation map produced for the Central Annamites.
- By September 2003, WWF established the necessary infrastructure and co-management capacity in the Song Thanh Nature Reserve for the effective protection of this priority site, as identified in the FLM biovision.
 - The project improved the management of the reserve by providing essential basic equipment such as computers, telephones and motorbikes. It also provided funds to construct two "community outreach posts". These stations represented an innovative approach aimed to link local communities with the reserve management. The concept of having protected area staff stationed in a building dedicated to providing an effective interface between the reserve and communities was new to the region and interest in the concept was expressed by staff of other protected areas in Vietnam and Cambodia. The project also provided critical training to Song Thanh Nature Reserve staff and local communities (not normally included in protected area training initiatives). The training was aimed to increase understanding of conservation principles, ecology of the reserve, techniques for conservation such as environmental education. Reserve staff members were specifically trained in developing participatory management techniques as the first step towards participatory management of the reserve. Activities were focused around the conservation outreach posts.
 - The project was not only been invaluable for Song Thanh, leveraging more funds from the province for conservation, but also has shown how a small investment in a protected area can be used effectively. This was particularly critical at this stage, as the World Bank used Song Thanh activity and progress reports to design a sinking fund based on a small grant scheme for protected areas in Vietnam.
- FY04 saw the Greater Annamites move into a new stage characterized by increased local ownership and integration into national policy contexts. Vietnam's Ministry of Agriculture and Rural Development and

Laos's Science, Technology and Environment Agency led the process to complete a conservation strategy for the ecoregion, scaling up from the Central Annamites landscape pilot. This process not only clarified the priority goals and objectives for conservation in the ecoregion, but also served to introduce ecoregion conservation to a broader audience of government agencies, donors and nongovernmental organizations operating in Laos and Vietnam. As a result, conservation awareness increased and conservation concerns were better integrated into existing government policies and donor agendas.

- A major achievement by WWF in facilitating the Annamites conservation planning in Laos, was agreement with the Government of Laos to use the plan as the implementation mechanism for the National Biodiversity Strategy and Action Plan (NBSAP). The NBSAP in turn, feeds directly into the National Growth and Poverty Eradication Strategy (NGPES)—the most important development document in Laos. Ecoregion conservation is cited in the NBSAP itself as an important guiding principle for conservation in Laos. Moreover, at the workshop hosted by STEA in July 2004, the Director General of STEA's environment department made clear that Government of Laos, in approving the NBSAP, effectively endorsed the Annamites Conservation Plan as the NBSAP's operational arm.
- O The Vietnam Prime Minister approved and issued the first national Strategy for Protected Area System Management to 2010. This achievement was the result of a 3-year joint effort between WWF and the Ministry of Agriculture and Rural Development of Vietnam. WWF was both the main facilitator of the development process for the Strategy and the implementing agency for the project, working with national and local partners and other stakeholders.
- O Central Truong Son Initiative's strategy and action plan was endorsed by the Government of Vietnam and issued by the Ministry of Agriculture and Rural Development in March 2004, and was officially launched for implementation in May 2004. It was a significant opportunity for the Central Annamites Initiative to mobilize the support for conservation of the landscape.
- o The Saola workshop in February 2004 called for national and international attention to the Saola as the flagship species of the Annamites. The most significant result of the workshop was the united call for developing a Saola Action Plan for Vietnam. This call was approved by Ministry of Agriculture and Rural Development in April 2004. This was a significant move to focus attention to a flagship species for Vietnam.
- O The Annamites Program in Vietnam received the International Resource Award from Swiss Re for the A Vuong Watershed Management Project in the Central Annamites Landscape in Vietnam. The project was to reward upland Ka Tu ethnic communities with territory and resource rights, institutional recognition, increased benefits and technical capacity, for sustainable management of the upper A Vuong watershed and the vital economic, ecological and social services it provides to the region; and to in turn provide a model for wider provincial and area replication.
- O A key approach in implementing the Central Annamites Landscape strategy and action plan was WWF's Management of Strategic Areas for Integrated Conservation (MOSAIC) project, aiming to support the provincial governments to design and manage sustainable combinations of land uses to accommodate human and biodiversity needs. In 2004, Song Thanh Nature Reserve in Quang Nam province, one of the showcases of the MOSAIC project, itself completed a Management Plan with technical support from WWF. The plan includes a conservation and threat assessment, a target-driven 5-year action plan (management, enforcement, community cooperation, science and monitoring) and annual budgets, a detailed management structure, detailed reserve staff position descriptions, and a reserve effectiveness monitoring tool. This process generated great interest from the Vietnam Conservation Fund and elevated Song Thanh into the lead example of management planning in Vietnam.

- o Community engagement is the backbone of our conservation work in the Central Annamites. Ultimately it is the communities working with local and provincial government who will lead and sustain conservation in Vietnam and Laos. WWF uses innovative approaches drawn from the development sector such as 3-D modeling in order to promote community awareness and engagement so that they will be ready to step into a strong role in managing their natural resources in the future. For example, WWF worked with Quang Nam provincial officials to build a 3-D model of Song Thanh Nature Reserve and two Communes located in the Reserve's buffer zone. Locals from nine villages in Tabhing, and two from Ka Dy commune were invited to transfer local knowledge onto the model. A total of 75 villagers actively participated in producing the model. Orientation and facilitation was conducted in both Ka Tu and Vietnamese languages. Villagers elected what features they would place on the model. Features included paths, streams, households, traditional meeting houses, different forest classifications, shifting cultivation land, cinnamon plantations, and even wartime helicopter bases. Discussion arose between villages, and several minor conflicts were resolved during the model making, and others clarified for future resolution. Foremost was the STNR staff placing of the boundary of the Nature Reserve. It was instantly clear that it conflicted with local agricultural and forest resource use. The villagers, from both groups, demarcated a preferred boundary, to which the STNR director agreed in principle, and assured that he would follow-up with the provincial authorities to re-adjust the reserve boundary. A representative from each village presented the local land and resources to a panel of local, district and provincial authorities and officers
- The village forest protection teams, known as *TovQuan Ly Bao Ve Rung Thon (QLBVRT)* in Vietnamese, in nine Ka Tu villages of Tabhing commune, became a local and legal force in the fight against forest loss. Each team had four or five members, all with a deep and seasoned knowledge of the local forests. A total of 50 local rangers were now actively patrolling Tabhing's forests, with detailed routes and strategies for monitoring and enforcing local forest law. The Ka Tu of Nam Giang traditionally practiced shifting cultivation, based on a variety of highland crop cycles, centered upon hill rice. The Ka Tu have strong animistic beliefs in the spiritual essence of all things, and have a deeply ingrained knowledge and cultural appreciation of the forest and its offerings. Traditional clothing reflects rank, status and clan identity, with a wide range of natural motifs, colors and designs. However, modern dark green uniforms were selected for the QLBVRT teams, with an arm badge stating their authority as a patrol unit. The reason for this choice of uniform, according to the leader of Zia Ra team, was because 'outsiders need to know we are an official, recognized force'. Traditional norms and laws still govern land use, land ownership and forest management, as well as tree tenure and rules for planting and managing trees in the forest, and are being incorporated into sustainable resource management planning for the area. Village Forest Protection Teams were first established in one commune and replicated in 11 others.
- The People's Committee of Quang Nam officially endorsed the Quang Nam Biodiversity and Nature Resource Conservation Strategy on May 4, 2005. This was the first provincial conservation strategy in Vietnam and represented a landmark in the development of the Central Annamites Biodiversity Conservation Initiative, putting in place the first policy building block of the landscape conservation plan. The Quang Nam Landscape is a province in Vietnam's Central Annamite Mountains, falling within the Greater Annamites Ecoregion. The Quang Nam Landscape/Province was chosen as a unit for the first landscape scale planning effort in Vietnam because in Vietnam provinces are responsible for developing their own socio-economic, development, and forestry plans. The objective was to create a spatial prioritization plan institutionalized within the provincial government. This would allow conservation resources to be directed to the areas of highest priority, and provincial planning processes

to take account of biodiversity priorities when allocating budgets, planning infrastructure development and preparing forest management and harvest plans, and when writing socio-economic development plans. A stakeholder analysis showed that provincial level government and their line departments would have the most power and influence over both planning and implementation. Therefore, provincial level departments formed the core planning ream, led by the Forest Protection Department in consultation with more than 40 provincial government bodies. Communities and companies, both state and private sector, have effects on biodiversity but have little power to actively participate in the planning process in Vietnam; so it was felt that their impacts could be incorporated through their representative regulatory departments. The impact and requirements of communities, predominantly in plan implementation rather than in plan development, were incorporated into the process through the development of pilot community-based natural resource management mechanisms, and lessons from these were fed into the process. Conservation targets were identified by stakeholders, with technical support from WWF, and finalized through discussions with other provincial government departments. The final plan was integrated into the government planning system, resulting in the endorsement of the plan by the provincial government under the Quang Nam Biodiversity and Natural Resource Conservation Strategy 2005-2020, which was endorsed by the Quang Nam's Provincial People's Committee on 4 May 2005. The plan was further bolstered by provincial action plans for strengthening law enforcement and conservation education and a commitment to monitor the plan through the provincial annual monitoring mechanism. On completion, the strategy fundraised for itself, heavily influencing the choice of location for Vietnam's pilot site for the ADB Biological Conservation Corridors Initiative. A significant proposal to DGIS that was based on this strategy, would not only secure the funds to implement the strategy, but also facilitate its replication in Quang Tri Province in Vietnam and Xekong Province in Lao, as well as support a Central Annamites Coordination unit in Vietnam.

Developing a landscape-scale monitoring program for the Central Annamites was a priority for WWF to assess the impact of its work and that of partners in landscape conservation. However, WWF realized that the concepts of monitoring and adaptive management were too little understood within Vietnamese government institutions to effectively implement a monitoring program. WWF embarked in FY05 on a strategy to develop partnerships and a long-term approach to developing monitoring mechanisms at the province level which could then be scaled up to landscape, ecoregion, or country levels. WWF leveraged funding to study the required data collection protocols of each government department and identify interdepartmental adaptive management mechanisms.

Eastern Plains Landscape (Dry Forests Ecoregion)

The Conservation Strategy Workshop for the Dry Forests was held in July 2001 in Phnom Penh. The workshop was a critical opportunity to gather together the results from the first surveys of this area in 40 years and establish the status of the forests and its biodiversity after these years of turmoil in Cambodia. The 50 participants defined long-term conservation goals, identified priority sites for a consultative and systematic conservation process, identified major threats (including gaps in information, capacity, or policy), and finally made recommendations for conservation action. The workshop proceedings are a blueprint for conservation strategies and their links to development plans in the Dry Forests. Numerous maps produced helped to inform the next steps in engagement of provincial partners in integrated conservation and development. The workshop also provided a clear mandate for increased engagement in Mondulkiri Province, as well as suggesting a logical framework for a medium-sized GEF grant for integrated conservation and development in the Eastern Plains landscape. The principal conclusion of the Dry Forests workshop was that the single greatest threat to the biodiversity was from illegal hunting, and all partners agreed to focus on protection over the upcoming field season.

- Based on discussions held during the Dry Forests Workshop, a Resource Rights and Participatory Planning Project was developed. The goal was to strengthen governance of natural resources in the Eastern Plains through securing land and resource tenure rights for upland minority communities and improving information flow between communities and the government.
- Threats from increasing settlement, agricultural expansion and road construction needed to be deflected from priority areas in the Eastern Plains. It was critical that the last refuges of the once great herds of large mammals that characterize the Dry Forests be protected. In response, WWF continued to build the conservation program for the Dry Forests. The program was developing into one of the first truly ecoregion scale programs characterized by strong strategic partnerships, clearly defined priorities and actions and supportive action taken by the Cambodian government³. Site-based actions were balanced with landscape and ecoregion scale planning supported by profound changes to government policies on natural resource management. Significant steps were taken in FY03, in partnership with the Cambodian government and non-government organizations working in the Dry Forests, to gain an understanding of what is required to deliver effective conservation in the Eastern Plains. Based on this understanding, the priority was to prepare a conservation strategy for immediate, effective implementation of an ambitious set of interventions.
 - The first step in the preparations of a conservation strategy for the Central Indochina Dry Forests was the development of a biological vision (biovision) for the ecoregion. In September 2003, a team was compiled in Phnom Penh to develop a biological vision for the Central Indochina Dry Forests using the results of the June 2001 Dry Forests Workshop and subsequently gathered biodiversity data. The team included contracted international biologists, representatives from partner conservation organizations such as Wildlife Conservation Society (WCS) and Fauna & Flora International (FFI) and representatives from the Ministries of Environment (MoE) and Agriculture, Forests and Fisheries (MAFF). The team developed a methodology for the biological assessment to complete the biovision and a mechanism for consulting senior government officials and other stakeholders on the process and results of the assessment while it was being conducted.
 - o An interim biovision was prepared at the immediate conclusion of the assessment. The final biovision would be produced in January 2004. The assessment and biovisioning process presented a set of systemically derived conservation targets for the Central Indochina Dry Forests, indicated the areas of highest conservation importance and proposed specific locations and actions required to achieve particular conservation targets.
 - One of the key recommendations for action resulting from biovision process was the need to provide immediate intensive protection for a representative component of the dry forest fauna in order to restore populations as rapidly as possible retrieving many species from the verge of regional extinction. A key output from the biovision process was the identification of five candidate sites where an intensive wildlife restoration intervention would be suitable. Feasibility assessments were to be conducted in 2003, to identify the candidate site and proceed with the logistics and administration to develop the site. The results of the assessment would be used by the partners working in the Dry Forests to lobby senior level Cambodian government officials, partner NGOs, and donor organizations for support for a major collaborative effort to implement the ambitious plan for the Eastern Plains and the Dry Forest Ecoregion.
- In 2003, the Cambodian Prime Minister finalized the designation of three new conservation reserves across the country to be managed by MAFF/DFW. These new areas are located in the Central Cardamoms, the Northern Plains, and the Eastern Plains priority landscapes. The Mondulkiri Protection

Global Conservation Program—World Wildlife Fund

³ The Central Indochina Dry Forests fall within three countries – Lao PDR, Cambodia and Vietnam. However, the best opportunities for success fall largely within Cambodia and therefore the majority of the focus of activities are in Cambodia.

Forest (MPF), with its 429,438 hectares, is the largest protected area in Cambodia. It borders on Lomphat, Phnom Prich, and Phnom Nam Lyr Wildlife Sanctuaries, and Yok Don National Park in Vietnam, creating the largest protected area complex in mainland Southeast Asia at 1,009,938 hectares. The Department of Forestry and Wildlife originally conceptualized this and other protection forests in 1999. The ecoregional workshops for the Forests of the Lower Mekong ecoregion complex in March 2000 and June 2001 helped build momentum, enthusiasm, and scientific justification for the eventual designation of the MPF.

- WWF continued focus in 2003 on two sites within the Eastern Plains Phnom Prich Wildlife Sanctuary and another in Siem Pang District of Stung Treng Province. Work in Phnom Prich concentrated on building capacity of the 15 rangers to deter poaching and gather information that would be useful in a wider monitoring program to be developed. Similar work was conducted with rangers in the Stung Treng area.
- See Objective III for other activities conducted in the Eastern Plains.
- In the **Dry Forests** ecoregion, WWF made significant strides in influencing national policy in Cambodia to reflect conservation needs. We steadily continued to fill the wide gaps in knowledge and capacity that characterize Cambodian society. By the end of FY03 we had succeeded in focusing not only our own efforts but those of other international conservation organizations on the areas of highest priority as identified in the FLM Biodiversity Vision—WWF, WCS, and CI were each taking the lead in the Eastern Plains, Northern Plains, and Cardamom's respectively.
- In the Lower Mekong Dry Forests, the official formation and government approval of the Dry Forests Coalition in FY04 signaled a new level of local ownership over the ecoregion program and conservation more generally. The official sanction of this coalition was a major achievement, especially during a difficult year for Cambodia politically when the last year's elections took a year to result in a new administration. The Dry Forests Coalition gave WWF additional access and leverage to integrate conservation goals into existing government policies and programs. The growing awareness among both government and donors in Cambodia regarding the importance of conservation was evidenced in the shift in funding by the USAID Cambodia Mission which now includes environmental projects in addition to their ongoing work in health and governance.
 - The Royal Government of Cambodia endorsed the Dry Forest Coalition. The DF Coalition was established to coordinate all conservation and development project activities within the Dry Forests landscapes of Cambodia, ensuring effective biodiversity conservation and sustainable natural resource management. The Coalition was co-chaired by the Forestry Administration, Ministry of Agriculture, Forestry and Fisheries and the Department of Nature Conservation and Protection, Ministry of Environment with participation from relevant government ministries, non-governmental organizations, and private sector.
 - o Forestry Administration, Cat Action Treasury (CAT), and WWF signed a project partnership agreement on collaboration between projects in the Mondulkiri Protected Forest, including the CAT's Community Wildlife Ranger Project and WWF's Srepok Wilderness Area Project. This partnership agreement aimed at ensuring that the management and sustainability principles in Mondulkiri Protected Forest were adhered to for the benefit of both the environment and the people of the region and nation.
 - The strategy for the Eastern Plains landscape was to develop the sustainable use of wildlife. The strategy centered around what had become the umbrella project of not only the landscape but of the Dry Forests ecoregion: the Srepok Wilderness Area project or SWA. The SWA project had the potential to deliver conservation results through effective management of a protected area complex spanning over 400,000 hectares of the Dry Forests and sustainable livelihood results via

ecotourism development. It provided a framework for WWF's existing protected area, species and community engagement work and an exciting vision for Cambodia's future.

The Srepok Wilderness Area (SWA) project, formerly called the Intensive Protection Zone, is located in the Mondulkiri Protected Forests (MPF). The MPF is a short name for "Mondulkiri Protected Forest for Conservation of Genetic Resources of Plant and Wildlife". The area is located in Mondulkiri province with a total size of 429,462 ha. This area was designated as protected forest by Sub-decree signed by the Prime Minister in July 2002. Since this area is one of the highest biodiversity hotspots in the Dry Forest Ecoregion (identified as a WWF Global 200 Ecoregion), , WWF Cambodia sent in early 2003 a biological assessment team to conduct a thorough field reconnaissance aimed at identifying within this protected forest a key priority site for intensive biodiversity conservation. As a result, the team identified an area around 370,000 ha as a priority for biodiversity conservation and sustainable resource use management. In addition, approximately 30,000 ha were identified as a community residential zone. The 370,000 ha is called "Srepok Wilderness Area". This area was divided into four zones: 1. Core Protection Zone (formerly called Intensive Protection Zone); 2. Low Impact Sustainable Use Zone; 3. High Impact Sustainable Use Zone; 4. Corridor Zone. The Srepok Wilderness Area project had strong partner support as the way forward for Cambodia's Dry Forests. On the National level the Project was under the jurisdiction of Ministry of Agriculture, Forestry and Fishing (MAFF), and in more specific terms, Forest Administration, under the auspices of the Wildlife Protection Office (WPO). Response to the project from other nongovernmental organizations was enthusiastic and many fruitful partnerships were established, most notably with Cat Action Treasury (CAT)/Community Wildlife Ranger Project (CWRP) and Fauna & Flora International (FFI). Regular meetings between WWF, CAT and FFI were held to ensure compatibility. The National Forest Administration, CAT and WWF signed a project partnership agreement of collaboration between projects in the Mondulkiri Protected Forests, including the CAT Community Wildlife Ranger Project and the SWA. The Srepok Wilderness Area project was initiated in January 2004, and immediately following, WWF focused on establishing the SWA team. major facilities, and basic levels of monitoring, patrolling, and law enforcement.

Objective III. Promote a supportive policy environment for natural resource management (FY01-05) WWF built on the initial socioeconomic assessment of the Forests of the Lower Mekong Ecoregion Complex to identify the most critical "big picture" issues affecting conservation and to foster cooperation among diverse stakeholders who could collectively address them with targeted interventions.

Sustainable Forest Management

- Significant progress towards attaining sustainable forest management practices, as a step toward certification, was made in Vietnam in FY01. An agreement was signed between WWF, the Government of Vietnam, and a consortium of companies trading in tropical hardwoods, to set aside for biodiversity conservation management 40% of the forests in the Kon Plong Forest Complex the first step toward Forest Stewardship Council Certification. In addition, the first set of Criteria and Indicators for Sustainable Forest Management, was drafted by the National Working Group on Sustainable Forest Management, and tested at two field sites.
- Direct progress toward developing forest certification and improved forest concession management in Cambodia was put on hold in FY01 due to the government going ahead with renegotiation of concession contracts in spite of the logging companies' missing the deadline for completion of concession management plans. WWF focused on participating in the reviews of the management plans and advocating for a complete moratorium on logging activities until satisfactory management plans were

approved. WWF Cambodia had been working with other NGOs and other donors to persuade the World Bank to more strongly use its influence with the Department of Forests and Wildlife (DFW) and the Government to leverage changes in the timber concession system. The World Bank delayed giving an installment of a Structural Adjustment Credit to Cambodia until the timber concession management plans were made available for public review and comments. WWF continued to spend a lot of time and effort in FY03 with other NGOs and donors, contributing to the reform of the Forest Concession system in Cambodia. The timber concessionaires and their corrupt associates with influence over key government officials made working in the forest sector a long, slow, and generally painful experience. A 2003 defeat was an unsuccessful attempt to gain permission to survey high conservation value forests in concessions in a landscape classified as critically important during the FLM biovisioning process.

- In 2003 significant progress was been made to rekindle forest management certification activities. In August WWF designed and co-facilitated a national level workshop on forest certification and sustainable forest management in Lao. The workshop in Vientiane made significant steps towards putting certification back on the agenda and building awareness and support amongst government and private sector individuals. WWF began the process of preparing for the implementation of a project aimed to establish the ecoregion's first certified community owned and managed forest.
- WWF also was a key player in revisions of a much improved draft Forestry Law approved by the council of Ministers and passed by the national Legislature in FY03. Forestry legislation in Cambodia had been in various stages of development for much of the previous five years. Over the previous two years, WWF played a lead role in raising awareness regarding weaknesses in the draft law and successfully advocating for NGO input in order to ensure the law addresses both social and conservation concerns. Although the new law has some weaknesses, it was widely viewed as an achievement that would help the process of reforming the concession system.

Control of illegal wildlife trade

- In FY01, WWF made significant progress in promoting the control of illegal wildlife trade in Laos. WWF developed a briefing and training book for senior government officials, published in Lao, that included information on wildlife trade in Laos, CITES (including guidance for Lao officials on how to accede to the Convention), details of the 1996 Forestry Law in Lao PDR, background on wildlife trade legislation in Cambodia, and the procedures for passing the law in Cambodia. WWF organized a National Workshop in July 2001 to inform 50 participating senior Laos officials from relevant government ministries and all the Provincial Forestry Offices, of the purpose of CITES as well as the implications and obligations of membership. CITES representatives from Vietnam, Cambodia, and Hong Kong participated, providing their respective countries' perspectives. The workshop was instrumental in mobilizing Laos to meet the necessary requirements to accede to the CITES convention by the COP in November 2002. In addition WWF began preparations for a Training of Trainers workshop on wildlife law enforcement.
- In April 2004, the Government of Laos acceded to the Convention on International Trade in Endangered Species (CITES). This event opened the way towards better cooperation with neighboring countries especially China and Vietnam in combating the wildlife trade, which is widely acknowledged to be one of the greatest direct threats to biodiversity in Laos. Accession to CITES was in many ways a direct outgrowth of USAID support to WWF's work on wildlife trade in Laos.

Promoting appropriate land tenure policies, especially related to indigenous people in northeastern Cambodia.

• The results of community resource use assessments in four focal communities in Mondulkiri province were presented to provincial government staff and to local communities. Stakeholders and partners had

the opportunity to comment on the results and discuss the importance of considering the resource needs of communities in future provincial and local conservation planning. The assessments indicated that individual communities actually differed from each other in their resource use while project design had been based on the assumption that community needs were homogenous throughout the landscape. Stakeholders emphasized, therefore, the need for greater consultation with local communities in future planning and implementation in order to ensure that future actions were specifically designed for the individual needs of separate communities. The results of these assessments were also presented at the Dry Forests Conservation Strategy Workshop in June 2001, resulting in greater recognition by provincial and national officials of the rights and resource use of local communities, and helping ensure that community issues and concerns were reflected in the development of conservation activities for the Dry Forests.

- A national review of community based natural resource management projects from a variety of ecosystems throughout Cambodia was initiated in 2001, with a goal of developing better laws and policies relating to CBNRM. The goal was also to create a network of practitioners able to learn from the experiences of these projects.
- The Resource Rights and Participatory Planning Project, which grew out of discussions in the July 2001 Dry Forests Workshop, was initiated later that year to strengthen governance of natural resources in the Eastern Plains landscape through securing land and resource tenure rights for upland minority communities and improving information flow between communities and the government. The project team was comprised of staff members of the Ministries of Environment and Forestry and Fisheries involved with the community resource assessments mentioned above.

Management of Strategic Areas for Integrated Conservation – the MOSAIC methodology.

FY03 saw the launch of an innovative project aimed at conserving an entire landscape by creating a mosaic of complimentary land-uses which ensure multi-benefits for local people and provincial/national economies while meeting biodiversity targets. By combining, biological assessments and economic and social assessments of resource use and land-use planning, the project established integrated plans for conservation in areas of strategic conservation importance. The project was piloted in two provinces, Mondulkiri (Cambodia – Dry Forests Ecoregion) and Quang Nam (Vietnam – Greater Annamites Ecoregion).

- In the Eastern Plains landscape activities focused on the preparation of educational materials and a workshop to train trainers in Ratanakiri province to raise community awareness on resource rights and responsibilities. In August 2003, the WWF MOSAIC team organized a workshop on Shifting Cultivation (swidden agriculture) in Mondulkiri Province for CBNRM team members, provincial counterparts, and protected area rangers. An important goal was to demonstrate the complexity of the issues surrounding swidden agriculture and to provide participants with a framework to organize information about swidden agriculture to inform policy decisions and the design of conservation and development interventions. Discussions of social equity and sustainability and an attempt to link these ideas to the changes facing shifting cultivators were some of the more difficult issues discussed. Unlike in Ratanakiri where field level staff had several years of experience with concepts of traditional rights and have sought to deploy intervention strategies which strengthen traditional tenure systems and thereby encourage those aspects of swidden agriculture complimentary to sustainable natural resource use, staff in Mondulkiri did not make this connection. There seemed to be a good deal of support, for instance, for the conversion of all swidden agriculture to wet rice cultivation which could have serious impacts on biodiversity.
- In the Central Annamites landscape, a new MOSAIC pilot proved to be highly successful, not only for establishing a mosaic of complimentary land uses, but also demonstrating how to leverage conservation activities by working at the provincial scale rather than at individual sites.

- o By April 2003, a full MOSAIC team was recruited and put in place in the new field office established in Quang Nam provincial headquarters. The project was initiated during a series of stakeholder meetings to decide on the problems facing Quang Nam, with a final output of an agreed annual workplan. While the project supported the development of a provincial conservation plan, and pilot activities were begun with 3 communities selected through consultations with provincial and district level officials, villagers, and commune leaders, activities included development of village resource use regulations and allocation of land for community level administration.
- O A team of international and Vietnamese scientists conducted biological surveys in four separate locations defined as strategically important and representing four different landscape units, based on topography, altitude, rainfall patterns, and forest type. Species and habitat priorities were obtained using the lists from the survey, through a weighted ranking exercise in which provincial Forest Protection Department staff participated, providing weightings based on provincial desires and aesthetic values. These priorities and 21 priority communes for more focused work were agreed during the provincial workshop.
- O To obtain baseline data for monitoring project impact and to enable effective project activity design, a PRA was initiated over the 21 priority communes. A PRA toolbox was developed, piloted in one commune (part of Song Thanh Nature Reserve) and published in Vietnamese. Twenty-four people from 10 different provincial departments were trained during the pilot initiative. These people then became team leaders as they returned to their districts and trained district government staff. Over 50 government staff conducted the PRA over 21 communes, in 8 districts and 125 villages, interviewing more than 3,500 people from across 12 ethnic groups of Quang Nam. This activity obtained huge provincial consensus for the process of integrating communities into conservation activities.
- o The PRA in the pilot commune was followed up with a detailed assessment of local community and institutional capacity, land use potentials and forest land ownership and conflicts. The results of this assessment and of the PRA were analyzed and presented in a report that was distributed to all relevant provincial stakeholders. The report sparked provincial interest in WWF assisting in a new provincial program of land allocation. The province then held consultation meetings with all partners including community leaders in an attempt to incorporate the findings of the report in their program. The main changes were: 1) establishing a local community management unit rather than a provincial-wide unit, thus accommodating all situations and ethnicity; 2) establishing community management groups to manage and protect allocated forest land, including training; 3) training of provincial agents in effective and culturally sensitive allocation processes.
- o The first "Village Protection Groups" were agreed upon and funding assured by the district for the pilot site, involving 9 village groups, one for each village in the commune. This pilot site work should lead to the effective management of the buffer zone of Song Thanh Nature Reserve.

Objective IV: Lay the foundation for lasting conservation (FY01-05)

An effective information system for the Forests of the Lower Mekong

• A WWF team prepared a design and implementation plan for an ecoregion information system to support the program. A photo library was installed that provided support to communications activities

beginning in FY2001. All data, particularly spatial data, collected from the ecoregion studies were compiled on the system.

Increasing community benefits from community based natural resource management

Community-based natural resource management has been an integral part of WWF's ecoregion program in the Forests of the Lower Mekong. Before GCP funding, WWF had piloted community forestry and management of natural resources in the Central Annamites and Eastern Plains landscapes – in partnership with local, district, and provincial government, other conservation NGOs, and local communities – with specific sites in Vietnam, Laos, and Cambodia. Using innovative approaches such as 3-dimensional modeling, piloted in Viet Nam, WWF had built basic community capacity to design, negotiate, advocate for, and implement natural resource management in key sites of biodiversity importance. WWF's Cambodia team had led a learning initiative on CBNRM, producing 18 case studies and establishing a Cambodian national CBNRM network – to promote the exchange of ideas and skills.

With GCP support, in FY05 this network was established in Cambodia as a dedicated institution - the CBNRM Learning Institute (CBNRM-LI), with full endorsement of the Cambodian government. The CBNRM-LI offers extensive expertise in developing new policy and building capacity of government and communities to make wise decisions about the use of biodiversity. The CBNRM –LI team produced a book "The Development of Community Based Natural Resource Management in Cambodia" – a compilation of papers on concepts and experiences of best practices for effective decision making processes for equitable distribution of CBNRM benefits. The book also provides examples of the contributions of indigenous knowledge to conservation that can help others to develop CBNRM.

Phase 2 (FY06-09)

I. Greater Annamites Ecoregion

Objective I.1 Protect, restore, and sustainably manage biodiversity elements of high scientific and economic value in the ecoregion (FY06-09)

Conservation of Priority Sites and Specific Species in Quang Nam Province and Thua Thien Hue Province in Central Vietnam

Following the completion of the Quang Nam Province Biodiversity Strategy in May 2005, three priority sites in Quang Nam – Song Thanh Nature Reserve, Que Son lowland forest landscape, and Saola conservation landscape – covering approximately 170,000 hectares of priority Annamite habitat of varying altitudes, came under conservation co-management by communities and the provincial government. Pilot community-based conservation initiatives were replicated across 17 communes by local commune rangers with training and facilitation provided by WWF. Such community–based approaches took the form of community forest management agreements in protected areas and forest land allocation contracts to communities elsewhere. WWF supported Quang Nam Province to develop a community-sensitive forest land allocation method which was accepted by the provincial government, affording all 60 mountainous district communities similar forest co-management options by the end of 2006. Co-management including local governance over natural resources led to significantly improved wildlife protection and sustainable natural resource management. Priority mammals (doucs, gibbons, saola, elephant, tiger prey) came under species-specific management in Quang Nam Province with key populations protected both by provincial law (habitat) and action (patrols and community consensus on conservation). This approach was replicated in Thua-Thien Hue Province. Rangers from each of

the forested districts of Quang Nam Province were intensively trained in species survey, monitoring, and conservation skills resulting in monitoring systems and increased protection of priority areas for primates, elephants, and saola as well as other species. A team of ten primate rangers conducted surveys throughout the province and identified eight priority areas for primate conservation. The top two priority 40-square-kilometer primate areas were delineated with full community consensus and community agreements signed for their management. Monitoring grids that would serve for the rangers to monitor primate, tiger, and tiger prey were set up. Village Protection Teams were established in each of the communes covered by the Intensive Protection Zones, and increased ranger enforcement effort was afforded to these areas. These primate efforts were then replicated in adjacent Thua-Thien Hue Province. After the training, rangers in one district also undertook monthly surveys and developed a database with monthly updating to understand elephant movements throughout the year. This elephant monitoring was complemented by increased enforcement effort, the establishment of community-based conservation actions including Village Protection Teams in all villages, a community-based conservation education campaign, and management planning for the area. This enhanced community control over local resources and established user rights. Surveys identified extant subpopulations of saola in Quang Nam and Thua Thien Hue provinces, and the rangers trained in the survey techniques coordinated saola conservation efforts, including the establishment of Village Protection Teams and snare removal actions. The signing of the Quang Nam Province Conservation Strategy brought significant political support to all species work.

Protection of key species

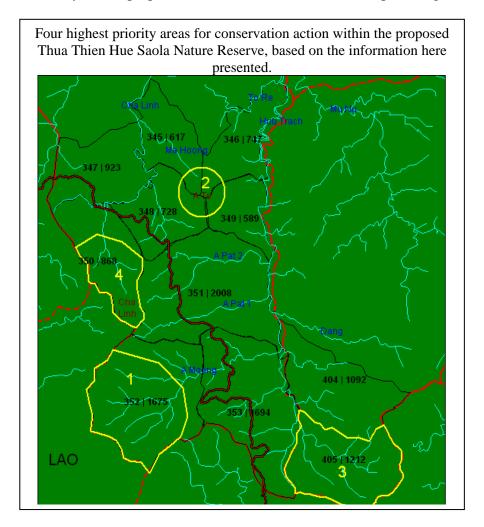
Saola: The saola is the ecoregion's flagship species. Discovered only in 1992, there is little known about this ungulate species, and it was recently upgraded to Critically Endangered status by the newly formed IUCN Saola Working Group. Studies by WWF in Thua Thien Hue and Quang Nam provinces revealed that this unique and enigmatic species is on the edge of extinction. The habitat prioritized for saola preservation is located in Thua Thien Hue province; however, without targeted conservation action the saola is not expected to survive. With projects in the Central Annamites, including the USAID-supported GCP project, the Biodiversity Conservation Initiative, and the Green Corridor project, WWF contributed to saola conservation through:

- A landscape assessment of the distribution, status, and threats to the saola in Hue-Quang Nam province, was completed in 2007 in partnership with the Durrell Institute of Conservation and Ecology, the Center for Biodiversity Conservation of the American Museum of Natural History, the Vietnam National University of Hanoi, and the Institute for Ecology and Biological Resources.
- WWF supported the National Forest Protection Department to complete the Provincial Saola Action Plans for saola conservation in 2007.
- Community forest management in Thua Thien Hue and Quang Nam provinces
 - O A comprehensive commune ranger training needs assessment was completed and a set of training courses developed in 2006 for implementation throughout the Central Annamites landscape. The training covered CBNRM, community consultation, PRA, community forest protection support, and forest monitoring. The first course was given for rangers and commune officers of 17 pilot communes in Quang Nam province. The Forest Protection Department designated a provincial community forestry officer to oversee the 17 pilot communes. The officer has since helped conduct all the initial training and continued monitoring and follow-up training for rangers in these communes. Separately, WWF secured a partnership with SNV to ensure the piloted training was integrated into forestry training delivered across six provinces through BCI and Trust Fund for Forest (TFF) funding.

- o In 2007, WWF supported Village Protection Teams in five communes in Quang Nam, including training of the commune rangers who coordinated the teams.
- o In 2007, WWF piloted four community forestry models on the Hue side of the landscape, facilitating development of community forest management plans and implementation of conservation-oriented income generation schemes, including community-based tourism, rattan and tree nurseries, non-timber forest products, and a traditional Ta Oi weaving project.
- O WWF facilitated provincial government allocation of forest land to communities on the Quang Nam side of the landscape as a continuation of activities ongoing since 2005. By 2007, forest land allocation was completed to one commune with allocations planned for four other communes. However, due to the recent termination of the BCI, this forest land allocation activity is pending for the remaining 4 communities.
- O Under the BCI project, WWF and the Forest Protection Department conducted a rapid assessment in 2008 of existing Village Protection Teams (VPTs) in Quang Nam in order to guide the establishment of new VPTs in 24 other communes and continued support channeled through Community Development Funds.
- o In 2009, in collaboration with WWF, the Forest Protection Department allocated forests and gave forest-use rights certificates to two pilot villages in two communes in Hue province. Facilitated by WWF, these certificates were the first forest use rights certificates issued in Vietnam in September 2008, following the formal issue of Circular 38/2007/TT-BNN by MARD concerning "Guidelines for legal procedures of forest allocating, forest hiring, forest withdrawing to apply to organizations, households, individuals, village communities".
- Strengthening law enforcement to patrol key forest areas and deter wildlife trade
 - O Beginning in 2006, forest rangers in Thua Thien Hue and Quang Nam provinces were trained in enforcement, mapping, forest restoration, and awareness raising techniques contributing to a 30% decrease in wildlife trade violations in Hue in 2007.
 - WWF also assisted government agencies in Quang Nam and Thua Thien Hue provinces to improve their capacities to deter wildlife trade, in addition to completing in 2007 an action plan to address wildlife trade in Thua Thien Hue.
 - o In FY08, ranger patrol training was initiated and patrolling begun in the new protected areas. In addition, discussions with provincial authorities on setting up management boards for the two new saola reserves began.
 - o A new ranger station was built in FY08 in the extension of Bach Ma National Park and equipped with GPS, exhibition facilities, and a meeting room in the traditional community house. This increased ranger presence, helping to reduce hunting pressure.
 - o Immediate law enforcement interventions were conducted in FY08-09 to stabilize the saola population in the newly established protected areas in Quang Nam and Thua Thien Hue provinces and the new extension to Bach Ma National Park. As a result, more than 1500 snares were removed from the four highest priority areas for conservation action within Bach Ma National Park extension and the new saola reserve. This reduced overexploitation, considered to be the greatest threat to the core population of saola in the Hue-Quang Nam landscape.
 - o WWF continued work in FY09 to increase capacity of the Forest Protection Department and National Park staff in Thua Thien Hue province to reduce the illegal wildlife trade more

efficiently over the long term. The effectiveness of this activity was not evaluated in 2009, since the match funding (Green Corridor project) ended.

- Leading a process to develop a method to survey and monitor the saola and its threats. Basic information on saola distribution was urgently needed for guiding management, but the rarity and elusiveness of saola impeded the development of effective monitoring methods.
 - Training programs were conducted in FY08, in collaboration with the American Museum of Natural History and Vinh University (Vietnam), for local people to operate film-based camera traps. Unfortunately, in the highly challenging environment (i.e. high humidity, high heat), these film-based traps failed. Only digital cameras functioned. Thus, in FY09, WWF continued to test the feasibility of camera trapping as a long-term monitoring method. This trial is ongoing and will be continued with new funding coming in from the Darwin Initiative.
 - O To inform immediate management decisions in the absence of sufficient field survey information, an interview method based on participatory mapping was developed in 2008. This method showed promise in uncovering local perceptions of the distribution of and threats to animals, including saola. These interview methods were developed and implemented in villages across the species range in FY09 to assess hunting pressure and other factors associated with ungulate density and to prepare a baseline saola distribution map (see figure below).

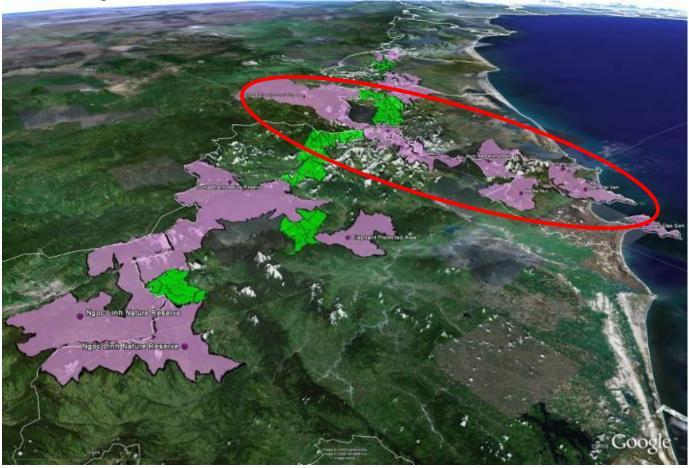


- Raising awareness of communities, district and provincial governments and other stakeholders of the critical status of the saola and building key stakeholder support for and involvement in effective protection measures
 - Community participation in monitoring led to increased community support for effective protection measures. In FY08 in three community workshops where the interviews (see *monitoring method* above) were conducted regarding saola knowledge and hunting in the saola areas, consensus was achieved on the proposed Saola Sanctuary's boundaries and the notrapping and hunting zones in the Saola habitat conservation area. 740 households in 20 villages of the three communes signed commitments regarding the no-trapping and hunting zones.
 - o Based on an action plan elaborated jointly with stakeholders, 'hotspots' of illegal wildlife trading in the province of Thua Thien Hue were investigated regularly in FY08. Meetings took place with owners of restaurants selling wildlife products, to inform them of the relevant laws and convince them to sign anti-wildlife trade commitments. A cooperation network was established between the Forest Protection Department and Environment Police to allow for more efficient monitoring and prosecution of illegal wildlife trade, and a pilot law enforcement data base (including patrol efforts, felled tree encounter rates, hunter encounter rates, etc.) was initiated in Thua Thien Hue province in FY08, and expanded to Quang Nam and Quang Tri provinces in FY09, where analysis of this information served to guide enforcement planning and adaptive management supported by BCI.

As a result of the actions described above as well as the protection efforts for the Saola Landscape described below, wildlife trade violations in Hue province decreased by around 30% in 2007. In 2008, the decrease doubled; however this can easily be due to increased and more effective enforcement efforts. We have not specifically evaluated the decrease in relation to specific enforcement efforts; so it is difficult to draw conclusions.

Protect key sites

Saola Landscape



USAID has been a major benefactor in the Central Annamites over the past eleven years. The Central Annamites Biodiversity Conservation Initiative (BCI), which is now under implementation in Quang Nam and Quang Tri provinces, was supported in its development and implementation by USAID. It provides a model for landscape-scale implementation piloted under the USAID GCP-supported MOSAIC project. The declaration and ongoing implementation of the 'Saola landscape', which covers northern Quang Nam and Southern Thua Thien Hue provinces, is in many ways the culmination of this support.

As activities in Quang Nam were implemented with support from the BCI beginning in 2007, WWF focused USAID GCP2 funding on Thua Thien Hue province to effectively cover the entire 'Saola landscape', as described above, and to assure long-term sustainability. The vision for this 'Saola landscape' is to produce through effective co-management between government agencies and communities an inter-connected protected area matrix where key sites for saola conservation are strictly protected whilst community access to natural resources is not restricted.

Although further capacity building and budget support is required to effectively protect these biodiversity rich areas, WWF's work in Quang Nam and Thua Thien Hue provinces made significant progress toward achieving the vision. In particular, WWF worked with partners to establish two protected areas and an extension to a National Park which were officially recognized in September 2007. This, in effect, covers the most important areas for the saola and creates a resilient corridor of forest that stretches from the South China Sea to the

international border with Lao PDR where it connects with Xe Sap NBCA. This landscape will preserve both a complete east-west climatic transition of the Central Annamites Landscape and protect the habitat of the world's largest population of saola. This east-west corridor was being complemented by a north-south corridor, a critical stretch of habitat for long term conservation in the face of increasing development pressures and the inevitable future impacts of climate change, which was under restoration as part of the BCI project. Unfortunately, the BCI project has been terminated. According to a World Bank report (January 2007) on sea level rise, climate change is a growing threat for the Annamites and Vietnam in general, placing Vietnam as one of the likely worst affected countries in the world. In FY09, WWF through the GCP program, the Green Corridor project in Hue and the BCI in Quang Nam provided further support to help these new areas achieve the following advancements from the level of approved reserves toward more effectively functioning protected areas. Below is a list of specific achievements in this process:

- A provincial level monitoring system was developed in FY06 for Quang Nam province that directly linked to the government decision making processes and was fully integrated into the government monitoring system. A subset of indicators from this process was used to create annual *State of the Landscape* reports.
- A landscape—scale training program for nature law enforcement personnel was initiated in 2006 in partnership with WildAid Foundation Thailand. Over 100 rangers from across the Central Annamites and 8 ranger trainers were trained that year. An important training resource was the identification guide *Primate Conservation in Quang Nam Province*. Training continued through 2009 in two provinces, resulting in an additional 50 rangers being trained.
- A management plan for Western Que Son, one of the most important lowland forest areas in the landscape, was completed in 2006. In addition, a conservation assessment and feasibility study was completed that proved successful in securing Quang Nam provincial agreement to designate the area as a Species/Habitat Conservation Area. At the same time, after seven years of impasse, the province also endorsed the national establishment of the Ngoc Linh Nature Reserve and proposed provincial gazettement of the Tay Giang Saola area as a provincial "landscape conservation area".
- In 2007, WWF completed a conservation evaluation of Thua Thien Hue Province which the provincial government used to develop conservation strategies, including the location of the Bach Ma National Park extension and the new Protected Area for the saola, revising forest types and developing conservation management plans for two Watershed protection Areas.
- The Quang Nam People Party Committee, the highest governing body of the province, agreed in 2007 to the gazettement of Ngoc Linh Nature Reserve and the Elephant and Douc Conservation Area.
- In 2007, provincial governments agreed to two new protected areas Saola Nature Reserve in Thua Thien Hue Province and Saola Landscape in Quang Nam province and a 13,500-hectare extension to Bach Ma National Park, all directly contributing to saola conservation. As part of the process, communities were consulted, and they agreed to the extension of Bach Ma National Park.
- Also in 2007, a team of scientists from WWF and Conservation International discovered in the Saola Landscape, approved by the provincial government for gazettement as a protected area (see above), in Quang Nam province, the world's largest known population of grey-shanked doucs. The grey-shanked douc (*Pygathrix cinerea*) is one of the world's 25 most endangered primates, its presence recorded only in five central Vietnamese provinces. The protection of the Saola Landscape will increase the chances that the endangered monkey and the endangered saola can be saved from extinction.
- Using the same methods already employed in Song Thanh Nature Reserve and the Western Que Son Elephant Conservation Landscape, the National Park Administration and Forest Protection Department with WWF assistance, began in 2007, the development of management plans for Bach Ma National Park including its new 13,500-hectare extension and for Tay Giang District Forest Protection Department in

- Quang Nam Province. A Bach Ma National Park management plan was completed in 2008 and priority activities implemented in 2009. A follow-up plan for 2010 was also developed.
- Feasibility studies were completed in FY08 for the implementation of new saola reserves (Saola Nature Reserve in Thua Thien Hue province and Saola Landscape in Quang Nam province), directly contributing to saola conservation. Key recommendations (including development of management plans and setting up management boards) from feasibility studies were implemented by the provincial Forest Protection Departments in FY09.
- An investment plan developed in FY08 for the Quang Nam portion of the Ngoc Linh Nature Reserve (part of the wider protected area network around the saola landscape) was submitted to the provincial People's Committee and MARD for approval (FY09). This approval allows the official establishment of the Ngoc Linh Nature Reserve and its management board.
- In a joint workshop with WWF in 2008, the provincial Government of Quang Nam agreed to establish biodiversity corridors to connect the protected areas of the Saola sanctuary Song Thanh NR, Ngoc Linh Nature Reserve, elephant and grey douc sanctuary and to link with other protected areas in neighboring Thua Thien Hue province.
- A long-term forest carbon program focusing on a large forest block consisting of Bach Ma National Park extension, two saola nature reserves, and Xe Sap National Protected Area in Laos, was developed in order to establish income over the next 5 years, to make Protected Area management more effective and to develop additional sustainable financing mechanisms. During the next phase, opportunities will be sought to set up the financing mechanism. Voluntary carbon markets are one option for this.

New funding was leveraged for saola protection to assure sustainability of the conservation approach in partnership with the Durrell Institution of Conservation and Ecology (UK). Specifically, a £300,000 grant entitled 'Can hunting and conservation of endemic Annamite ungulates be reconciled?' was awarded and is expected to advance population research on the saola and to implement effective enforcement measures.

Objective I.2 Mitigate the most urgent, broad scale pressures on biodiversity in the ecoregion (FY06-09)

Policy Work

Vietnam's rapid economic growth is causing the landscape of the country to rapidly change and poses new challenges to WWF's work in the Greater Annamites. To accommodate this growth, the country is building new roads to facilitate transport and constructing dams to satisfy growing energy demands. These infrastructural developments are done in the absence of environmental and social assessments, and there are insufficient safeguards in place to limit the impacts on the key areas of the Greater Annamites.

Vietnam is also becoming a growing exporter in a range of commodities and is now positioned as the world's biggest exporter of coffee, cashews and peppers. It also ranks very high for rice, rubber and aquaculture, and has a growing mining industry, both small and large scale. These trends are impacting some of the areas of greatest biodiversity, particularly in the Southern Annamites.

To sufficiently address these issues, WWF began working toward establishing new partnerships and ventures through multi-sectoral discussions with a wide range of public and private sector groups. At the same time, WWF has continued to support the strategies and initiatives of the Vietnamese Government as it strives for sustainable economic development.

In FY06, WWF Vietnam established a "policy unit" with the necessary capacity to address these broad scale pressures on biodiversity. Five key themes - *sustainable agriculture*, *sustainable aquaculture*, *sustainable financing*, *sustainable livelihoods*, *and sustainable development* – were identified as priorities.

Agriculture

- In the area of agriculture, the focus was on *sustainable cocoa production* in the Southern Annamites landscape, near Cat Tien National Park. In FY06, WWF facilitated a workshop that brought together producers, buyers, research institutes, and the government to look at sustainable production of cocoa in Lam Dong province. WWF had the plan to work with these stakeholders toward introducing sustainable cocoa production into the province. Some of the analyses of this work highlighted the growing problem of *cashew expansion* into Cat Thien National Park. The agriculture team also identified sugar as a commodity important for focus.
- WWF's agriculture work developed significantly in 2007, moving from discussions to implementation with the first community cocoa agro-forestry project in Vietnam. The site (Phuoc Loc) was an area critical for the Southern Annamites Landscape, not far from Cat Tien National Park. The government allocated the area to the local communities who had initially planned to burn it to plant cashew and cassava. WWF worked with district agricultural extension offices and ACDI/VOCA a US-based NGO with expertise in cocoa production in Vietnam. Planting began before the rainy season in 2007. The project was well received by local farmers and district government officials and made good progress with a 92% survival rate of cocoa plants after one year. Semi-annual biodiversity monitoring began in April 2007 to determine impacts of the cocoa production. The July 2008 survey revealed that botanical composition within the cocoa plot remained stable. There appeared to be an increase in fauna individuals and species which was not specifically confirmed during 2009 surveys. Surveys conducted in 2009 showed that species composition remains stable, and additional surveys will be conducted in 2010, pending funding availability.
- To scale up agriculture activities in FY07, WWF also completed a study of best management practices for sugar and participated in discussions on a public-private sector partnership with the Ministry of Agriculture and Rural Development in Vietnam, Masterfoods, and the Dutch Government to develop a joint program for cocoa development in Vietnam, signed by both governments in October 2007. WWF played a major role in advancing environmental sustainability issues throughout these discussions, and obtained an official commitment from the government to not encourage cocoa planting on any newly cleared land. In January 2008, Vietnam's Ministry of Agriculture invited WWF to be an official member of the Working Group for cocoa development, formed to implement the action plan signed by the two governments.
- WWF initiated discussions in 2007 with Mars to establish a partnership to support the company to introduce best management practices for its cocoa; however discussions were halted due to the company's restructuring in 2008.
- A new 3-year agro-forestry project began in May 2008, replicating at a landscape scale (the buffer zone of Cat Thien National Park Cat Thien district, Lam Dong province, Southern Annamites) the model for ecologically sound production of high grade cocoa developed at Phuoc Loc. Key project activities included land use planning and introducing best management practices for cashew and cocoa production, with the objective of conserving the biologically most valuable degraded natural forests (corridors, forests adjacent to the national park) and prevent their conversion to agriculture.

■ The new cashew project is now operational and it is expected that draft BMPs for cocoa, cashew, and agro-forestry systems will be ready in 2010 and disseminated amongst farmers and key stakeholders for further consultation.

Mining

- In FY07 WWF completed a study of the impacts of small scale mining within the Greater Annamites and Dry Forest ecoregions. In Vietnam, the study found that small scale, often illegal, mining is most pervasive in the Central Annamites area, impacting on this critical landscape. Based on these findings WWF developed a mining strategy, addressing issues of small scale mining as well as to determine the potential impacts of large-scale mining, such as bauxite. International companies such as BHP Billiton and Alcoa had contacted WWF expressing an interest in working together.
- In 2008 WWF completed an assessment of the mining situation in the entire Mekong region as well as a strategy for future work in the area. (See section III. Learning Component for details).
- A meeting was held between WWF US and Alcoa to explore opportunities for collaboration in Dak Nong Province where Alcoa has an interest in bauxite mining. Several project components were presented to Alcoa, including: 1) build community participation in protecting areas important to livelihoods through Community Natural Resource Management; 2) secure long term health of freshwater resources and watershed ecosystem services through Integrated Water Resources Management (IWRM); 3) establish mechanisms for sharing benefits with communities through Payment for Ecosystem Services; and 4) pilot sustainable mining model in Vietnam through Best Management Practices. Since mining is currently an unregulated industry and a large conservation threat in the Greater Mekong, a partnership with Alcoa could help mitigate these larger impacts and set a benchmark for other companies to follow. Alcoa was unprepared to move forward with this at that time but will eventually be approached again.

Infrastructure

A large number of dams are planned for Quang Nam in the Central Annamites with potential impact on priority sites.

In FY06, there were varying degrees of success and frustration in WWF's work addressing this issue. WWF worked closely with ADB, mainly through the SWEDCO EIA, to minimize the SB IV dam's impact on Song Thanh Nature Reserve. After prolonged discussions, in which WWF requested to be part of the Advisory Group for SB IV, our request was denied. WWF continued to be involved in the SB IV EIA as well as a broader cumulative assessment of the four proposed dams in the area. WWF discussed with ADB consultants the possibility of using the A Vuong Dam to test a transfer payments mechanism, where a small part of the monies earned from electricity generation is used for environmental and social projects. ADB then entered discussions with EVN on the introduction of such a mechanism as part of their power sector reform process. WWF continued to work with ADB and EVN in this basin and in the Southern Annamites landscape. WWF found that direct discussions with EVN were less fruitful and thus concentrated on working to influence EVN through ADB, which provides leverage as a donor or loan provider. Work on Strategic Environmental Assessments (SEAs) of socio-economic plans was to be carried out in FY06 as part of the ADB-BCI project, the Green Corridor Project, as well as a marine project in Con Dao, all of which suffered delays due to problems with permits. USAID support provided WWF with the opportunity to engage in a wider Viet Nam Strategic Environmental Assessment SEA discussion group that includes the Ministry of Natural Resources and

- the Environment and donors including the ADB and World Bank. This group served to exchange experiences and provide training to government staff.
- In FY07 WWF continued discussions with ADB and its consultants, to provide input into the Environmental Impact Assessments and Strategic Environmental Assessments. Some of the results from these studies highlighted several potential problems with the hydropower plans. However, it was not clear how much ADB or the national partners were taking WWF's views into account. Many of the decision makers were not WWF's traditional partners, and WWF needed to rethink its strategy of engagement. WWF carried out a SEA to highlight the issues and also completed a study of alternative energy options in Vietnam.
- WWF facilitated the Chairman of the Quang Nam Provincial Peoples Committee to announce to the media in March 2008, that the province would critically review its plans on hydropower development. The announcement was well covered in the media and triggered the discussion of unplanned development of dams in the country. Based on this announcement, WWF increasingly promoted the "free flowing rivers concept", including conducting a "minimum flows" project together with the provincial Government which will advise the authorities on the minimum flows required in the river systems and consequently whether or not hydropower dams can be built without inversely harming freshwater ecology.

Sustainable Financing

• WWF-Vietnam hired an environmental economist in FY06 to advance work on sustainable financing. Eight different payment for environmental services (PES) schemes were identified as having potential for introduction into Vietnam, including payments to upland communities in Lam Dong Province to protect watersheds and establishing ecotourism sites on Cu Lao Cham Island in Quang Nam Province. WWF secured support for three schemes for which implementation began in FY07: shade grown coffee in Lam Dong Province, sustainable financing in and around Bach Ma National Park, and payment schemes for clean water along the Dong Nai. WWF also hosted a PES workshop in 2006 with more than 20 participants from across Asia. A benefit sharing mechanism between Khe Dien hydropower, local communities and FPD was set up in Quang Nam province. Through this mechanism the communities now receive payments, e.g. for bamboo shoot planting, and have in turn committed to halt any illegal logging.

Objective I.3 Harness local, national, and international support for long-term conservation of the ecoregion (FY06-09)

Mobilizing Vietnamese government approval of the Greater Annamites Conservation Plan by strengthening the Central Annamites Conservation Initiative in Quang Nam Province

Although a draft of the Greater Annamites Conservation Plan was submitted in 2005 to the government of Viet Nam for review and approval, the government questioned the need for approval of a larger conservation plan until results had been realized from the first plan it signed earlier that year for a landscape within the Greater Annamites – the Central Annamite Mountains of Viet Nam, known in Vietnamese as the Central Truong Son Initiative (CTSI). The CTSI Plan, the first landscape approach to conservation in Vietnam, had been completed and received support from the Prime Minister and a range of stakeholders. Based on this government feedback, WWF decided to postpone getting government approval of the Greater Annamites Conservation Plan and instead concentrated on implementing the CTSI. Showing success in implementation of that plan would hopefully develop momentum and donor support to expand work to the Greater Annamites. Clearly, in

Vietnam the largest scale to successfully work is at the landscape level. Only success in a number of landscapes will guarantee government support for a full ecoregional action plan.

- A provincial-level monitoring system was developed in 2006 for Quang Nam province that directly linked to the provincial decision making process and was fully integrated into the government monitoring system. A sub-set of indicators in this monitoring process was to be used to create annual *State of the Landscape* reports.
- In 2007 WWF received funding for the ADB-BCI project which aimed to replicate the MOSAIC activities across two provinces in the broader Central Annamites landscape. This project included funding for a Central Annamites Landscape implementation and coordination mechanism.

Southern Annamites Landscape

- In 2006, with support pending under the ADB-BCI to establish a coordination unit for the Central Annamites landscape, WWF chose as its next priority for the ecoregion, the southern landscape covering the Southern Annamites montane block and the lowland Dong Nai watershed. WWF had experience working in the area, particularly around the Cat Tien National Park project. A large USAID funded project on biodiversity corridors and landscape conservation was being introduced by Winrock International who was conducting an initial biodiversity assessment as well as a socio-economic assessment of the alternatives. WWF saw this as an opportunity to assess existing projects and to plan future projects so that the groups could complement one another and have the greatest impact on achievement of the landscape vision. In FY07 WWF established two field offices in the Southern Annamites.
 - o The Bien Hoa office focused on combating the growing problems of water pollution in Tri An Reservoir and the Lower Dong Nai River. Further deterioration of the water quality will have major implications for the continued rapid economic growth in the area.
 - O The office in Bi Doup Nui Ba National Park focused on working with communities in the buffer zone of the park in a three-year project to develop a comprehensive framework for the allocation of land and natural resource management, to indigenous communities. This was a pivotal step in securing indigenous property rights, recognizing local institutions re-enforcing social, environmental, and economic benefits. The main activities included detailed participatory development of an allocation procedure and an adaptive mosaic of local management regimes to reflect the diversity of local institutions and aspirations. Three pilot sites were established to precede a provincial process to devolve large areas of government land to local community institutions by 2010. This project had the potential to shape provincial capacity and policy, and harmonize with other models of forest land management in Vietnam.
 - O By the end of FY08, both offices were well established and scaling up for landscape work. The new WWF field staff were instrumental in establishing trust and relationships with key stakeholders in the landscape and opening doors to tackle additional issues like tourism and cashew production.
- Instead of developing an overall strategic plan for the Southern Annamites, WWF together with partners, decided to focus the action plan on tourism as an emerging issue. In November 2007, the Vietnamese Government issued a decree allowing so-called ecotourism development in national parks and other protected areas. While tourism can be an opportunity to generate income for protected areas and to provide local communities with livelihood alternatives to poaching in the parks, without clear guidelines and sustainable investment plans "ecotourism" also poses a significant threat. Park

administrations are approached by all kinds of investment companies who want to set up tourism infrastructure even in the core zones with potential severe negative impacts. To tackle this issue WWF conducted two stakeholder workshops in April 2008 in Cat Tien and Bi Dup Nui Ba National Parks (Lam Dong province). Park staff, Government officials, tourism investors, and NGOs discussed the challenges and opportunities of tourism in the protected areas. Based on these discussions and recommendations, a tourism strategy was developed for the Southern Annamites, including a component addressing the issue at a national level. This strategy is now being implemented through a project running until 2011.

- An action plan for protection of priority species in the Southern Annamites will be developed at a later stage after baseline species surveys and monitoring systems (especially for tigers and gibbons), which form the basis for the action plan, are completed.
- In FY09, WWF continued to adapt and introduce the successful lessons and approaches from the MOSAIC project (Central Annamites) in the Southern Annamites. The Southern Annamites landscape is home to Cat Tien National Park, which contains an exceptionally high diversity of species as compared to other parks in Vietnam. It also hosts the protected areas of Bi Doup Nui Ba and Vinh Cuu, where WWF established two field offices which continue to provide a platform to gain further experiences in the region, deepen relationships to key stakeholders, establish linkages to other projects and explore additional opportunities where WWF can add value to the conservation efforts in the Southern Annamites. Through better financial planning and forest carbon finance as a potential funding source, funding is expected to be available for the coming years. It is expected that successfully applying the landscape approach will increase long term provincial Government buy-in for conservation in the Southern Annamites, as it was successfully achieved over the last years in the Central Annamites. In FY09, the following were achieved:
 - o Biodiversity monitoring surveys of cocoa agro-forestry pilot in Madaguri conducted to assess impacts on biodiversity and conservation benefits
 - o Baseline and monitoring system established for tigers and gibbons in the Southern Annamites landscape, providing the basis to develop action plans for the protection of these species
 - o Model for sustainable tourism developed in the Southern Annamites landscape and promoted at the national level
 - o Sustainable financing mechanisms for protected areas developed around forest carbon market opportunities and Reduced Emissions from Deforestation and Degradation (REDD) (FY09)

Engaging broader stakeholder support for the landscape approach.

Long-term sustainability of the combined conservation and development approach requires increased awareness and ownership among key stakeholders. WWF used a strategy of high profile communications to increase awareness and support for the landscape approach by international donors, national and provincial governments, as well as local communities.

- A leaflet of lessons learned from the MOSAIC project *Local to Landscape: Conservation and Community Based Forest Management in Quang Nam* was produced and distributed to a wide range of experts, academics, donors, and WWF staff. (FY06)
- Film series on Douc langurs produced by Viet Nam Television (VTV) and the Endangered Primate Rescue Center was completed and broadcast on national television in Viet Nam (FY06-FY07)
- International press events promoted FY07 media coverage of:

- the work done by Quang Nam and Thua Thien Hue provinces in creating an east-west corridor that will protect the saola landscape, resulting in national and regional coverage, but to a lesser extent international media coverage.
- o the discovery of several new species in Hue in the course of the Green Corridor project. This release let to the production in 2008 of a *National TV broadcast on work in the Green Corridor project in Hue Province*.
- A booklet A Fair Share? Experiences in Benefit Sharing from Community –managed Resources in Asia jointly published by WWF, SNV, and the Regional Community Forestry Training Center for Asia and the Pacific (FY07)
- With WWF support, national media coverage on biodiversity planning workshops in Hue was initiated with a press release and workshops for the production of a CD-Rom toolkit for the Earth Observation Support for Traditional Ecological Mapping and Biodiversity Conservation EO-STEM project (published in 2007)
- With input from WWF:
 - o An article on the saola was published in *Science* in December 2006;
 - o An article on the Ho Chi Minh Highway and its socio-economic and conservation impacts was published in the Wall Street Journal on August 4, 2007.
- A BBC World Service Radio documentary on the Central Annamites was broadcast at the beginning of 2008.
- WWF facilitated the Chairman of the Quang Nam Provincial Peoples Committee's announcement to the media in March 2008, that the province would critically review its plans on hydropower development. The announcement was well covered in the media and triggered discussion of unplanned development of dams in the country.
- A photographic exhibition in Hue and Hanoi (FY08) on communities, landscapes, and forests work under the Green Corridor project in Hue.
- July-August 2008 edition of *Heritage* magazine (Vietnam Airlines publication displayed on all flights) featured in its cover story the Green Corridor project and the interdependence of ethnic minorities and forest ecosystems.
- WWF US (Conservation Action Network) and WWF International (Panda Passport) online actions in 2008 collected more than 26,000 signatures from citizens of more than 150 countries in support of saola protection. The signers applauded the Provincial Governments of Quang Nam and Thua Thien Hue for the establishment of new saola protected areas and call on them to take the next steps to set up the needed management regimes and infrastructure. The signatures were delivered in a national event in fall 2008 to trigger additional efforts of the Vietnamese Government for the protection of saola.
- Global media coverage on first saola camera trap photo (FY09).

Impact of increased awareness:

- Increased coordination and cooperation between government agencies to work at landscape level support from BCI for coordination (FY08)
- New funding secured for projects in the ecoregion, but little progress on support for the landscape approach (FY08)

Increased funding and technical support to the Greater Annamites Program (FY09)

II -Lower Mekong Dry Forests Ecoregion

Please note that no direct funding support has been provided to the Cambodian government.

Objective II.1 Conserve species, habitats, and their interactions (FY06-09)

Development and strengthening of the conservation initiative for the Eastern Plains Landscape, Lower Mekong Dry Forests Ecoregion

In FY05, the key threats to the Eastern Plains were continued high levels of hunting after a 20-year period of negligible control, and the increasing potential for habitat fragmentation due to settlement expansion and agricultural concessions. In response to these threats, and using the completed Dry Forests ecoregion conservation plan as a guide, WWF began consolidating its activities in the protected areas and communities of the Eastern Plains to align with the overarching landscape strategy: promoting sustainable use of biodiversity through wildlife-based ecotourism and other forms of community -based natural resource management (CBNRM). WWF used the Srepok Wilderness Area (SWA) project (located within Mondulkiri Protected Forest, MPF) as the focal point of this strategy, building outward to engage communities and to link priority sites, with the expectation that the resulting mosaic of land uses would promote both conservation and economic development. WWF had begun implementing the Srepok Wilderness Area project in FY04 with financial support from USAID & WWF-Netherlands focusing on an area within the Mondulkiri Protected Forest, one of the largest protected areas in Cambodia - in the heart of the Eastern Plains Dry Forests landscape within Mondulkiri province - as a priority area for demonstrating biodiversity conservation and sustainable resource use. The project had a signed project partnership agreement with Forestry Administration, Cat Action Treasury (CAT), and WWF for collaboration between projects in the Mondulkiri Protected Forest, as well as a recruited, trained, and equipped core team in Srepok Wilderness Area.

The SWA Project developed extensively in FY05, focusing on establishing core infrastructure and operations to address growing threats to such a large protected area (300,000ha). The ranger team's competence was built to a point at which they could undertake regular patrolling activities and record illegal activities and wildlife signs. The project made significant progress in securing government and community support. Senior officials visited the site in 2005, and gave their full long-term support. Both government and conservation organizations saw the project as a flagship with enormous potential for replication elsewhere in the country and region. The success in rapidly developing the basic infrastructure required to run a protected area in Cambodia helped WWF secure significant funding from multiple sources for expansion of the project in FY06.

By the end of FY07 the Srepok Wilderness Area Project (SWAP) was fully recognized as the flagship project for the Lower Mekong Dry Forests Ecoregion, embodying the ambition to conserve and restore the Dry Forests, reflecting the commitment to innovation and a sound scientific approach, and aiming to provide valuable lessons for replication and adaptation in other parts of the Dry Forests in Laos, Thailand, and Vietnam. Two of the three main components of the project – protected area management and community extension – were fully established and relatively well resourced. It seemed unlikely that the Cambodian government would have the financial capacity to maintain a suitable level of professional protected area management in the MPF. WWF began to consider various s mechanisms to secure sustainable financing for the area. It was decided that an ecotourism revenue mechanism should be the first potential area to explore, and a feasibility study for the Srepok Wilderness Area, Mondulkiri Protected Forest, was commissioned and completed by an expert in Cambodian tourism. The study indicated potential for an ecotourism operation within the Mondulkiri Protected Forest. WWF also initiated a community consultation process and discussions concerning the organization of Wildlife Ecotourism Management Boards at the key commune levels around Mondulkiri Protected Forest, as a

step towards establishing an acceptable and transparent mechanism for benefit sharing of revenue from future ecotourism activities. With the aim of further demonstrating the potential benefits from ecotourism and to build capacity in community-based and wildlife ecotourism planning, WWF sponsored an educational trip to Nepal in June 2007 for a selected group, including government officers from the Forestry Department, the Mondulkiri Commissioner of Police, a provincial judge, as well as the Community Extension Team. The study tour provided participants with an opportunity to explore high end ecotourism operations, to interact with and learn from indigenous communities who are active participants or direct beneficiaries of, ecotourism projects in and around protected areas, and to and to learn from Nepal's long history of community-managed protected areas and the country's success in maintaining its well known national parks. As a result of the visit, there was much greater understanding of the potential for tourism to benefit communities, and of the need for in-depth planning that ensures all key stakeholders participate fully.

During FY07 WWF began a 28-month ADB-funded project aiming to maintain the ecological integrity of the Eastern Plains landscape through development of sustainable use corridors that connect existing protected areas. One of the main project goals was to establish a Provincial Conservation Planning Unit (PCPU) to provide technical support to provincial level development planning across all sectors. The PCPU was established and approved by the provincial government in FY07. The next step was to ensure the PCPU was fully integrated into existing local development planning mechanisms. With that integration the project would facilitate the development of a landscape-level, provincial conservation-corridor strategy for approval by the provincial government, much like what was achieved through WWF's work in Quang Nam, Vietnam (Greater Annamites Ecoregion).

Also in FY07, WWF with the Forestry Administration, completed a comprehensive 5-year management and zoning plan for Mondulkiri Protected Forest, which was submitted for approval by the MAFF in August 2007. The management plan includes a 20-year vision for the area and was developed in consultation with all the key MPF stakeholders. The plan also forms the basis for an annual operational plan, providing guidance for the government-WWF partnership on priority management interventions. Developing the management plan built capacity in the Forestry Administration and set new standards in that institution for management plan development. The management plan further strengthened the ability of the government to make informed decisions about development activities that might otherwise undermine conservation efforts. The management plan, together with PCPU coordination among government agencies, was part of WWF's strategy to ensure growing pressures from agriculture, infrastructure, and mining developments, do not have irreversible negative impacts on the landscape integrity.

WWF and Reserve staff established three more transects for biological monitoring in the Srepok Wilderness Area and Phnom Prich in 2007 and readied baseline data for the Monitoring Information System. While no analysis of the data had yet been completed, observations of direct and indirect wildlife sign, through the transect system and ranger patrolling activities, suggested that presence of large mammals was stable. Tiger and water buffalo sign continued to be seen in areas of the MPF and PPWS (tiger) where they were not previously recorded. Photographs of elephant and leopard, both with young, were an encouraging sign for project staff. A 1-day field-based workshop, was held in the Mondulkiri Protected Forest and Phnom Prich Wildlife Sanctuary to develop an integrated regional GMP strategy for monitoring flagship species populations (tiger, Asian elephant, tiger prey, globally significant primate species). Wildlife biologists from WWF Greater Mekong Program, India, Nepal, and Indonesia region attended.

In FY07 the Community Extension Team (CET) continued to work extensively within the three key community clusters around the MPF as a part of its strategic approach to assist local communities in sustainable resource use and management. The CET continued to build relationships with key government agencies and local communities at the site level. These interactions with communities resulted in a decision to establish a permanent presence of CET members in two community clusters, enabling the SWAP to conduct community

extension work and monitoring on a daily basis. The entire SWAP employs almost all its staff from the province, and in many cases from nearby communities, thus also helping to build awareness and support in these communities. In one of the community clusters on the Srepok River, WWF established a new project to secure fishing rights for local communities so that future fish stocks will be safeguarded. The alternative scenario is severe depletion of fishing resources, as has already happened in many rivers in the Lower Mekong region, which could result in increased pressure on forest resources. The land concessions in the southern community cluster (MPF excision) where the participatory land use planning approach was already being implemented, made this planning approach a priority. Some of the threats posed by situations where local communities are suddenly dispossessed of their land can be reduced through improved community understanding of their access rights and of the usefulness of land use planning.

Promotion of Community Management of Natural Resources: the MOSAIC - Eastern Plains Project

The MOSAIC-Eastern Plains project was designed by WWF and government partners to address the planning and livelihood needs of communities living in and around globally significant conservation sites in Mondulkiri Province. Because of constraints in provincial and local technical capacity, the scope of MOSAIC in the Eastern Plains had to concentrate on capacity building and coordination among the village, commune, and provincial levels, so that indigenous customs and livelihoods could be fairly and effectively represented in provincial development planning and national-international conservation planning. By 2004, the project had already completed participatory biodiversity assessments and rapid geographical assessments in 12 communes in and around Phnom Prich Wildlife Sanctuary (another WWF priority protected area in the Eastern Plains Dry Forest landscape), including 3 in SWA, and two priority Commune Extension Teams and village representatives established and trained in biodiversity conservation, CBNRM, community forestry, participatory land use planning, and participatory protected areas management.

In FY05, the MOSAIC project continued to make great strides in raising awareness of biodiversity among governments and communities, and in understanding the resource use issues of some of Cambodia's most disadvantaged communities. The MOSAIC team conducted several activities to raise communities' awareness of land tenure and land conflict resolution. The team also trained key commune members within target communities to conduct participatory land use planning and assisted with community consultation on the draft zoning plan for Phnom Prich Wildlife Sanctuary, thus informing the development of a management plan for that protected area. The MOSAIC Team also produced awareness raising materials, including a documentary "The Forest Is Life", produced in the local ethnic Pnong language to help communities understand traditional natural resource use and current land use conflicts.

By FY08, the Eastern Plains began to experience increasingly rapid changes as a result of better road access and security that precipitated an influx of speculative "investments". These changes will increase in scale over the coming decade. Much of the development is poorly planned with little or no consideration of local communities or environmental impacts. Land grabbing and speculation are rife, and industrial land concessions and plantations are often issued bypassing provincial government. Such large-scale concessions (30+ applications in August 2008: unofficial data source) severely impact most of the Province's population and remaining natural habitats. However, with careful planning based on sound science, consultation, and collaboration, WWF believes that the Eastern Plains can sustain economic development while maintaining itself as one of SE Asia's most important sites for wildlife conservation.

Compilation and review of existing biodiversity information on the Eastern Plains as a foundation for provincial planning

The Eastern Plains Biodiversity Review was completed in FY08. Based on scientific reports and publications of WWF, WCS, and others, the Biodiversity Review identified and delineated zones of importance for biodiversity conservation management and priorities for corridors in Mondulkiri, and serves as a source document for provincial decision-makers. It was published in Khmer and distributed widely in Mondulkiri province.

Identification and analysis of the negative impacts of current and imminent industrial and large scale infrastructure developments affecting key biodiversity areas in the Eastern Plains landscape.

- A Sustainable Agriculture and Land Use Planning Assessment study was completed in FY08 to gain an understanding of agricultural trends and developments in Mondulkiri Province. The study included recommendations for how WWF could best support the provincial government and other key stakeholders in addressing these urgent challenges. A second phase introduced the concept of land suitability assessment and mapping as part of the Mondulkiri Province's land use planning process, comprehensively assessing land suitability at the commune level in 4 communes of a single district most affected by rampant land concessions.
- Also in FY08, we established and maintained an informal dialog between WWF, WCS, and BHP Billiton to exchange information on mining activities planning and conservation priorities in the landscape. A similar dialog was opened with the Southern Gold mining company, an Australian gold prospecting company with leases in the Eastern Plains Dry Forests landscape.
- A detailed situational assessment was completed to understand key issues, threats, and opportunities of plantations, and the report was published in February 2008.

Engage key stakeholders in initial steps to improve coordination on provincial land-use planning decisions

- During FY08, USAID support enabled WWF to integrate project-based, site-, and species-oriented activities into a comprehensive landscape-level approach across sites and government agencies, and to unify its operations into a single Eastern Plains Landscape operation merging several individual projects and funding sources, thus enhancing ecological integrity and landscape-level connectivity.
- In FY08, the Provincial Rural Development Committee (cabinet of the provincial governor) established a permanent Working Group for Provincial Conservation Planning. This was based on the ADB-funded BCI project activity jointly initiated by and implemented WWF and WCS. Soon after establishment, the Governor revoked a 1000-ha rubber concession license in Pu Tang village within the Mondulkiri Protected Forest.

Landscape-scale species conservation in the Eastern Plains Dry Forests Landscape

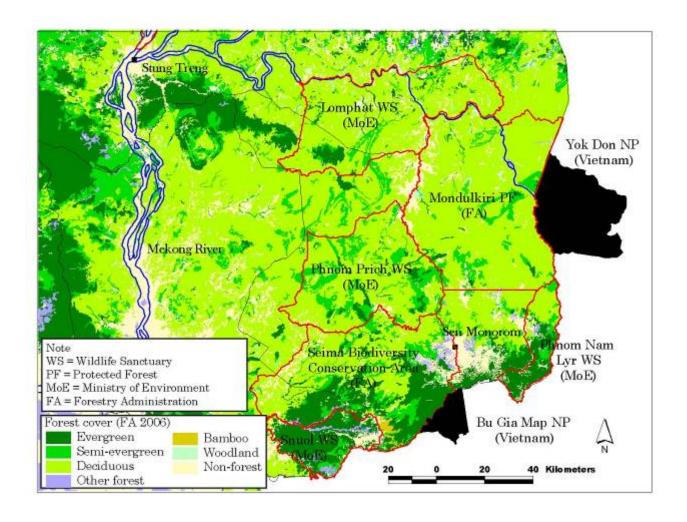
The Eastern Plains landscape forms part of one of the world's top priority Tiger Conservation Landscapes that scientists have prioritized for conservation and restoration of tiger populations. Beginning in FY08, WWF in collaboration with WCS, initiated the development of an ambitious and comprehensive conservation monitoring system for tigers and tiger prey, which aims to double the number of tigers and the prey population by 2020. Based on best knowledge of tiger ecology in Indochina, 17km x 17km habitat blocks were delineated (covering all the landscape) to conduct tiger occupancy surveys approximating maximum tiger home-range to assess the probability of detecting tiger sign. Tiger sign distribution data will be analyzed using rigorous and up to date spatial and temporal statistical methodologies to identify the proportion of the landscape occupied by tiger and to identify priority areas for studies to estimate tiger density using intense camera trapping and mark-recapture analysis. Densities of tiger prey will be assessed using distance sampling along randomly positioned transects in the landscape. Tiger and tiger prey will be monitored to detect changes in the tiger population and to

empirically measure the effects of improved enforcement on the tiger and tiger prey populations in the landscape. This project is funded until FY11.

Poaching and unsustainable hunting remains a pervasive problem and therefore requires more intensive intervention through landscape-wide anti-poaching efforts. Direct protection in individual protected areas only tackles part of the problem; local law enforcement agencies need to be able to respond to illegal incidents at the larger scale, and to have access to data gathered on small scale as well as more organized poaching efforts. In FY08, with additional funds WWF obtained from private sources, WWF hired a dedicated biodiversity research and monitoring technical advisor and established a landscape (Mondulkiri province) biodiversity research and monitoring team made up of local community rangers and government counterparts, to implement the monitoring system for tigers and tiger prey and thus empirically show the effects of improved enforcement. In FY09 this team refined the design of the monitoring system to ensure it could be easily implemented in the variety of landscape habitat types. Thus the legacy of the work USAID has supported in the Eastern Plains is a scientifically rigorous tiger and tiger prey monitoring system designed and under implementation with funding for the next phases, as well as a landscape (provincial) anti-poaching law enforcement unit deployed to reduce incentives for, and incidence of, illegal poaching in Mondulkiri, and with secured funding for operations during the next two years.

Landscape-scale habitat conservation in the Eastern Plains Dry Forests Landscape

The overall conservation approach in the Eastern Plains Dry Forests Landscape is focused on directing support to improve the management of top priority protected areas. In the Eastern Plains, three contiguous protected areas (Lomphat Wildlife Sanctuary, Mondulkiri Protected Forest, Phnom Prich WS – in total approx. 845,000 ha) directly adjoin the Seima Biodiversity Conservation Area (298,000 ha), the Yok Don NP in Vietnam (112,000 ha), and other adjoining protected areas (Snoul WS and Phnom Nam Lyr WS in Cambodia, and Bu Gia Map NP in Vietnam). Together, the areas comprise a total area of more than 11,000km² (2.7 million acres) of largely contiguous dry forest habitat. WWF's vision for the future of the Eastern Plains is a fully integrated network of core areas for conservation, formally acknowledged and respected by all stakeholders.



The Srepok Wilderness Area Project (SWAP) within the Mondulkiri Protected Forest (MPF), and the Phnom Prich Wildlife Sanctuary (PPWS) remain key sites in the Dry Forests Ecoregion and particularly Cambodia's Eastern Plains. In the earlier years of WWF work in the landscape, the tendency was to focus on securing continued existence of individual sites, starting with the Mondulkiri Protected Forest through the SWA Project. There were several reasons for doing this, not least because funding sources were relatively limited and so focusing, rather than stretching, resources was thought to be a more strategic approach. Later, more resources became available allowing for a broader approach. Such a strategy also allows partners and donors to see more easily how cumulative project work contributes to the bigger picture. In FY09, an effort was made to secure funding to bring the third core protected area, Lomphat WS, 'on-line' through EU funding. This did not succeed, but another application is planned in early FY11. Following on from WWF's effort to streamline conservation interventions through a more cohesive landscape approach - rather than focusing on any one protected area in isolation - fundraising, strategy development, and conservation efforts in FY09 continued to concentrate on securing the protected area landscape as a whole, including assessing the need for, and options to apply the MPF/PPWS management model to Lomphat Wildlife Sanctuary (LWS) if resources become available at a later date. The SWA project aims to restore the once abundant populations of large mammal species in the Eastern Plains, and involves a comprehensive three-pronged approach: core support for protected area management operations; community extension; and sustainable financing through ecotourism development. This has been made possible by using ongoing funding, including USAID support to leverage substantial additional funds.

USAID-supported efforts to leverage additional funds for PA management in PPWS are also paying dividends; there is likely to be significant funding made available through the German government's Climate Protection Initiative (confirmed in September 2008) as part of their contribution to the voluntary carbon market, aiming to secure the protection of forest habitats that if not protected, would otherwise represent a substantial contribution to greenhouse gas emissions. Part of these funds will be used to complete the management plan for PPWS and to research and establish mechanisms for directing payments from the forest carbon market to local communities to undertake forest protection activities. There is significant potential for payments from the Forest Carbon market (whether from voluntary payments or REDD mechanisms) to provide long term and sustainable funding for protected areas and adjacent high conservation value forest corridors and larger multiple-use forest landscapes. Therefore, WWF is seeking funds to undertake further assessments, including a more in depth analysis of the feasibility for generating 'carbon offsets' (building on a preliminary report produced for WWF by Winrock in July 2008). This will involve an accurate assessment of potential CO₂ emissions based on different vegetation (forest) types and extent and deforestation rate scenarios, and thus the development of a baseline against which future carbon stocks can be measured.

In addition to more orthodox approaches to protected area management, WWF's ongoing work to provide more opportunities for direct community participation in management and sustainable use of forest biodiversity continued to build on successes in FY07 and FY08. The designation of community protected areas (CPA – within PPWS) and community protected forests (CPF – in MPF) during the last two years paved the way for greater ownership and stewardship by communities of forest resources that must be used sustainably for maintaining livelihoods. See Objective II.3 for more details.

Specific outputs include:

- (FY08) A comprehensive ecological, conservation and social profile, a needs assessment, and an operational Management Plan were completed for Lomphat Wildlife Sanctuary.
- (FY09) Improved management of the Mondulkiri Protected Forest, Phnom Prich Wildlife Sanctuary, and adjacent forest corridors, as part of the strategy to improve the potential for restoring populations of large mammals and securing local community livelihoods.
- (FY09) Official recognition of community protected forests within existing protected area system.
- (FY09) Detailed assessment of forest carbon baselines as part of design of a pilot carbon market payment mechanism to pay for forest protection, management, sustainable use, and economic development in the Eastern Plains.

Objective II.2 Capacity building of local, national, and international stakeholders to plan long-term biodiversity conservation in the Dry Forest Ecoregion (FY06-09)

Lower Mekong Dry Forests Conservation and Action Plans

WWF released the final conservation plan document *BioVision for the Lower Mekong Dry Forests in 2006*, demonstrating to government and NGO partners, and donors, the credibility of the prioritization process and helping to build further awareness about the value of the Dry Forests. The WWF Ecoregion Action Plan for the Dry Forests was completed in March 2006, providing a tool for making strategic interventions based on clear targets and strategies, and to mobilize additional support to deliver targets for the conservation of Dry Forests biodiversity in line with national sustainable development goals. The Action Plan provided guidance for WWF's country programs in Cambodia, Laos, Thailand, and Vietnam to implement country actions addressing national and regional threats to biodiversity.

Following completion of the Lower Mekong Dry Forests Ecoregion Conservation Plan and Action Plan, WWF worked to identify the appropriate means to institutionalize the plans. In a country that still has a rather fragile national legal and policy framework, WWF concluded that the approval process for the Dry Forest plan must fit clearly within the existing system as much as possible. To gain approval for the plan as a stand alone document would be relatively straightforward in Cambodia, but to be implemented, the plan would need strong commitment at senior political levels. Therefore we concluded that we should not seek approval of the plan on its own, but rather wait for an opportunity to embed the goals and targets of the Dry Forests plan within existing or planned national strategies. The MOE-led national workshop at the end of 2007 to review and update the National Biodiversity Strategy Action Plan, an activity required of all signatories to the Convention on Biological Diversity, provided the ideal opportunity to work with the government to integrate the Lower Mekong Dry Forests Ecoregion Plan.

Advocacy to influence government policy and legislation

Beginning in FY05, WWF Cambodia implemented a strategy of engagement and advocacy with the most senior levels of government to catalyze greater impacts at the large scale through improved policies and long term commitments. This strategy included a meeting in June 2005 between Cambodian Prime Minister Hun Sen and Dr. Claude Martin, WWF International's Director General, which resulted immediately in action taken to complete Cambodia's development of an essential piece of legislation that supported the country's ratification of CITES.

Extend capacity to mobilize and manage large-scale conservation across the Dry Forest Ecoregion

Experience showed that the most effective mechanism for coordinating action on certain key issues was through a combination of local partnership building and advocacy, coupled with targeted advocacy at the national level. WWF had several successes in FY06 following this approach and did not need to use a national forum to bring about change. Key achievements in FY06 included the following:

- Influenced the government to push ADB to include the Eastern Plains Landscape as a site for the pilot phase of the Biodiversity Conservation Corridors Initiative project.
- Successfully influenced the government to reject a proposal for a Spanish-based safari hunting company to begin surveys inside the Mondulkiri Protected Forest.
- WWF received several formal requests from the Mondulkiri Provincial Governor to provide technical advice on the following issues:
 - o Problem of continuing immigration along the province's major newly upgraded inter-provincial highway;
 - o Identification of key issues for transboundary cooperation between Cambodia and Vietnam;
 - o Formation of a provincial level ecotourism development committee;
 - o Provincial government agreement for a WWF-WCS supported technical advisor to be placed in an influential position within the province's decision making bodies (funded by ADB);
 - o Provincial level 'agreement' in preparation for full local decree that clearly states government law related to natural resource use inside the Mondulkiri Protected Forest.

WWF efforts in 2007 were focused heavily on ensuring effective site- and landscape-level interventions in the Eastern Plains, requiring increasing effort and resources to keep on top of continuing and emerging large scale threats. Of particular concern was the ongoing conversion of forest for agriculture (rubber and other cash crops), new road development, proposed dams, and mining explorations. The BCI project partly aimed to build capacity of government agencies to improve decision making for development planning, and significant advances were made through the establishment of the Provincial Conservation Planning Unit (with a full-time Conservation Planning Advisor embedded in the Executive Committee of the Mondulkiri Provincial Rural

Development Committee.) to coordinate among government agencies at the provincial level. This for the first time opened a formal channel to mainstream conservation in the provincial development planning process. As a result there is formal recognition of biodiversity conservation within the processes for decision making at the commune development planning level – a unique situation for any province in Cambodia. To raise the profile of the importance of the landscape, WWF made every effort to participate in national level forums discussing pertinent issues, including land concessions, extractive industries, and land use planning in general. In addition, WWF conducted regular meetings with senior level government officials to influence government discussion, raise awareness on key issues threatening the Dry Forests landscape, and offering WWF technical support to facilitate further discussion and action on the ground. WWF contributed to increased capacity of the Forestry Administration and key local government counterparts through training, workshops, and study tours in survey and research design, wildlife management, law enforcement, biodiversity monitoring, and community participation in resource management. WWF's relationship with the government continued to result in opportunities to influence important decision making processes, including a personal call from the MAFF Minister requesting WWF's advice on urgent policy preparations. A visit by the British Ambassador to the SWAP site in Cambodia, the first-ever visit by a high ranking foreign diplomat to this protected area, increased awareness among government agencies of the international importance of the landscape.

In FY08, WWF assisted the Mondulkiri Province Executive Committee's (ExCom) Provincial Rural Development Committee (PRDC) to establish a Permanent Working Group on Conservation and Development to facilitate information sharing and integrated planning of conservation activities at the landscape (provincial level). The working group was envisaged as an entity within government that could provide technical advice to several government planning departments on a range of conservation and development issues. One of the main guiding principles for the working group is that key development issues facing the province need to be addressed at a larger scale, consider wider sustainable economic development issues, and involve greater community participation in decision-making principles. It is also designed to ensure that development planning at the provincial scale is coordinated more effectively between the relevant planning departments of the key government line agencies, thus aiming to prevent conflicting planning decisions that might otherwise result in serious negative environmental impacts and social conflicts. In FY09 WWF used funds leveraged from the ADB and other sources⁴ to continue to support this working group's activities and build on the progress in FY08 including ensuring there is high level political support.

Environmental and social impacts from large-scale economic land concessions (largely for agricultural plantations) in the Eastern Plains pose a challenge to integrating conservation in provincial planning. There is little or no capacity for the entire process of land use planning, that is, in the stages prior to planning (inventorying existing local knowledge, land access and land use, land-suitability, -evaluation, and -mapping). Lacking any such instruments, the provincial government has little or no control over external/large-scale investments (and land grabbing). Land suitability assessment and mapping can direct investments to compatible land and away from incompatible land (e.g. protected areas, indigenous land claims, etc.)

In order to build greater political support for transboundary conservation, WWF initiated in FY08 a process to organize a series of cross-border visits between the Cambodian and Vietnamese authorities. The two governments already met regularly to discuss economic trade between Mondulkiri province in Cambodia and Dak Lak province in Vietnam, but conservation and collaboration on sustainable management of biodiversity had never been discussed formally. Discussions are still ongoing to try to establish this regular dialogue between the two provinces.

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⁴ SIDA, DFID/DANIDA, EC, private donors (Habitat Group, Orvis, Bob King, Distefano, October Hill Foundation, BHP Billiton), German Min. O. Environment, WWF-USA, -Germany, -Sweden, -Netherlands. Global Conservation Program—World Wildlife Fund

At the national level, previous efforts were made to gain government approval for the Dry Forests Ecoregion Plan as a stand-alone strategy. Although WWF highlighted how the strategy is aligned and contributes to national government strategies, it is now considered more strategic to convince government to integrate conservation and sustainable development concepts into existing government plans and policies, including the concepts detailed in the Dry Forests Ecoregion Conservation Plan.

After ten years of stability, Cambodia's natural resources, including minerals, have become prime investment targets, largely by foreign corporate-driven joint ventures, and based on assessments that "In some places, there are undrilled gold deposits literally protruding out of the ground (...)" indicating the presence of sizeable mineral deposits. The Eastern Plains of Cambodia hold mainland SE Asia's largest concentration of mining tenements, exploration licenses, and exploration concessions (gold, bauxite). However, Cambodia does not yet have any transparent allocation or revenue sharing system in place, and allocation of tenements/exploration concessions and exploitation revenues are now obscure and done almost exclusively by the central government without involving local government. There is an urgent need to raise awareness of options for responsible and equitable mining among central government agencies and investment and mining companies. A broad range of NGOs (NGO Forum of Cambodia, PDA, Trocaire, Oxfam, and WWF) and Civil Society Organizations (CSOs) are raising the issue, and momentum for responsible and equitable mining is growing. The dialogues that WWF and WCS have with BHP-Billiton, Southern Gold, and possibly Oxiana, can be a starting point.

Specific outputs include:

- (FY09) Dry Forests conservation and sustainable management concepts are reflected in the revised NBSAP (National Biodiversity Strategy and Action Plan).
- (FY09) Provincial government agency staff actively participate in local community-focused activities (natural resource monitoring programme, land use planning, environmental education, and community-based tourism).
- (FY09) Conservation and NRM goals are made explicit by Mondulkiri province's planning agencies and are included in commune development planning and provincial level development planning strategies.
- (FY09) Increased transboundary communication and cooperation between Cambodian and Vietnamese provincial government authorities (Mondulkiri in Cambodia, and Dak Lak on Vietnam).
- (FY09) Commune-level land suitability assessments and maps for all 4 communes in Pichreda District that clearly show compatible and incompatible land use options.

Building awareness and effective communication on Dry Forests conservation

WWF communications have targeted primarily government agencies, but also donors, development banks, and UN agencies to foster incorporation of ecoregion conservation principles into development activities. They have also targeted local communities.

With the vital support provided by USAID and the additional support this has leveraged, the WWF Communications Department has built trusted relationships with media and journalists, specifically Cambodian nationals, to educate, get more focus on Eastern Plains Dry Forest, and channel conservation messages through print, internet, radio, and TV-based opportunities. The communications materials, meetings, workshops, and other events WWF has organized have had multiple goals, while the overall purpose is to change perceptions, and ultimately bring about positive behavior changes at a number of different levels.

⁵ Southern Gold Press Release, 11 April 2008 (http://www.southerngold.com.au/pdf/announcements/20080411%20Cambodia%20discovery%20imminent.pdf) Global Conservation Program—World Wildlife Fund

For example, at the lowest community level, WWF's daily work brings us into contact with a large number of forest-dependent people whose resource use behavior has a direct impact on the integrity of the forests. The direct impact generally is one of two types: resource use is based on traditional practices, generally low impact, and can be managed sustainably, or it involves significant or irreversible ecological damage through overharvest of a resource. Increasingly, competition from new settlers is forcing ethnic communities to adopt unsustainable resource use practices. WWF's response needed to follow a two-pronged approach: 1) Raise awareness of new settlers about resource use laws and regulations, while also supporting indigenous communities to understand their use rights; and 2) Increase awareness and capacity of government to improve land use planning processes including the allocation of suitable areas for new settlements. Several activities in FY07 followed this approach with considerable success. For example, the elephant migration corridor between PPWS and MPF was under considerable pressure by new settlers clearing land for agriculture. WWF's work to get government commitment to designate development boundaries resulted in no further conversion in the habitat corridor.

At the other end of the spectrum, WWF worked to influence senior government officials, in both Cambodia and other countries, as well as the private sector. Examples include a stakeholder dialog group formed to tackle a potential large mining operation in Mondulkiri province by a major international mining company, regularly meeting with the Forestry Administration to agree on joint strategies to tackle specific threats.

In FY09, WWF developed a new communications strategy that aimed to take conservation and sustainable development messages to a higher political level. For example, the rapid economic development of the Greater Mekong Subregion (GMS) grouping of six countries through regional integration represents a much greater threat to the region's landscapes that are of high biodiversity importance, including the Dry Forests. There is a unique opportunity to get high-level political commitment through the GMS framework from member countries to closely collaborate on the conservation and sustainable development of transboundary landscapes where there is overlap with regional economic development corridors. WWF Cambodia is continuing to play an important role in communicating to senior government officials (at the national and provincial level) the importance of Cambodia's role in ensuring such collaboration to conserve the Dry Forests landscape as well as other transboundary landscapes, increasing awareness of the integral role that Cambodia's Dry Forests play in the conservation of the whole GMS.

Highlights of outputs and outcomes:

- In FY06 (12 December 2005) WWF organized a large public event in Mondulkiri province to highlight the global importance of the Eastern Plains Dry Forests Landscape, and more specifically the protected area complex it contains. The event provided a rare opportunity for the Ministers of Environment, and Agriculture, Forestry and Fisheries, to be seen together in public both making a government commitment to biodiversity conservation and sustainable development in the Dry Forests. It was also a unique event in that local communities had never before been invited to participate in such a high profile event related to NRM and conservation in this part of the country. Significant media attention (both national and international) surrounded the event.
- Other communications opportunities created and communications and awareness materials produced in FY06 include:
 - O Updated WWF Cambodia fact sheets, produced in English and Khmer, highlighting the importance of WWF project sites, project backgrounds, and project objectives. The fact sheets form part of the WWF Lower Mekong Dry Forests Communication Package, widely circulated to hundreds of participants during the 12 December event (see above).

- o Press releases: on Cambodian Eastern Plains Protected Area Management Event in December 2005 and in June 2005 related to the SWA project study visit to Namibia.
- o WWF Dry Forests project staff profiled on Cambodian national TV and radio programs.
- Key outputs and achievements in FY07 include:
 - o Completed and distributed a 23-minute film *Mondulkiri Protected Forest –the making of a protected area*, documenting what WWF and the Forestry Administration achieved by applying the successful southern African approach to protected area management. The film was launched during Cambodia's first Environmental Film Festival co-organized by WWF in June 2007.
 - o 33 individual appearances in the mass media. Of note was the BBC news coverage of the leopard photograph story.
 - o Summary document of *Biovision for the Lower Mekong Dry Forests*, summarizing the 200-page report.
 - O A meeting with the First Political Councilor of the Embassy of People's Republic of China, to discuss areas of common interest in the management and development of Cambodia's natural resources a first step to try to establish a good relationship with the Chinese Embassy and its state-run enterprises in Cambodia.

II.3: Protect priority landscapes and corridors through sustainable use of forest resources, sustainable agriculture, and forest restoration

Increasing community benefits from community-based natural resource management (CBNRM), contributing to the learning exchange on payment for ecological services

With CBNRM a key focus of the project, work began in earnest in FY06 to engage with local communities that inhabit three main areas around Mondulkiri Protected Forest (MPF). Three community clusters were identified and socio-economic surveys begun to increase understanding of community resource use needs, as well as to identify key community representatives for capacity building to empower their participation in land use planning and decision making, as well as involvement in future tourism development planning. As a first step towards increasing direct community involvement in natural resource management, additional funds were found to enable Cambodian government and community staff members of the Srepok Wilderness Area project to participate in a three-week study visit to successful CBNRM project sites in Namibia (WWF had implemented the project in Namibia for many years with USAID support). A large part of the visit was spent observing community wildlife guards undertake a half-year review of their monitoring activities and in discussions with communities and local WWF staff on how to adapt the Namibian approach to the Cambodian context. The visit catalyzed the required next steps to develop capacity in Cambodia to begin piloting a similar community-based monitoring methodology for the Srepok Wilderness Area project by January 2007. CBNRM activities in the landscape in FY06 focused on training community representatives in conducting participatory land use planning in their own communities. Work also continued on supporting the establishment of NRM committees in target villages. These committees fit within the already established local governance framework and are in line with the government's 'deconcentration and decentralization' policy. The aim is for local NRM committees to have the capacity to represent their communities in decision making processes about natural resource use and land allocation issues in their traditional areas.

Of particular significance for FY07 was the initial implementation of the Namibian–inspired Management Oriented Monitoring System (MOMS) seen in operation by community and government project staff during the visit to Namibia in FY06. WWF began piloting this approach first with the community rangers working on the Global Conservation Program—World Wildlife Fund

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project. The aim was to begin slowly, as it can take several years to develop the system to the stage where it is simple to implement and delivers information that is of use both for the communities themselves and for the government to improve protected area management. Materials were developed and distributed to all ranger stations in the province. Specific achievements include:

- Provided follow-up training on Participatory Rapid Appraisal, Livelihoods Assessment tools, and Participatory Land Use Planning in all three community clusters around PPWS and SWA and completed three 3-D community resource maps.
- Facilitated development of community conservation agreements among communities, government agencies, and NGOs in all three community clusters.
- Established and evaluated pilot MOMS involving SWA project community rangers (results indicate simplification is needed). Coordinated and facilitated approval of local management structure and local regulations of two Community Protected Areas. Allocated and demarcated 4,730 ha of two Community Protected Areas.
- Established and built capacity of NRM committees in two of four villages in Pu Chrey to integrate resource management into the Commune Development Plan.

In FY08, WWF's work with local communities in and around the key protected areas in Mondulkiri was expanded. This was based on much of the survey and groundwork undertaken in FY07 by WWF's Community Extension Team, (including the completion of four 3-Dimensional model maps in the three focus community clusters between MPF and Phnom Prich Wildlife Sanctuary, and an initial inventory of community livelihood options in three villages (honey, resin harvesting). Also in FY08, the Community Extension Team continued to build relationships within the three target community clusters around the key protected areas, completed the large scale socio-economic survey that began in FY07, and made significant progress towards making some tangible improvements to the livelihoods of local communities. Of particular note is the establishment of two honey associations and two resin associations in two communes in Mondulkiri. These associations will provide communities with the support structure for marketing sustainably harvested honey and resin from the protected forests. Already in mid-2008, 400 litres of honey had been produced through these associations, and there was interest from buyers in Phnom Penh to provide a market for selling the product. There was also potential for organic certification. These developments represent significant opportunities for adding value to local products, so long as the production is sustainable. Thus in FY09 WWF expanded the number of marketing associations and followed through on the opportunities for harvesting and certification of forest products.

Two Community Protected Forests (CPF) areas were designated within MPF in FY08, the boundaries delineated, and indicated in the field. CPF committees were established and relevant regulations developed. In FY09 WWF facilitated the official approval of these CPFs⁶ as well as the preparation of management plans for the previously established Community Protected Areas (CPAs) within PPWS.

Tourism remains another sector where there is potential for community-based income generation. In FY08, WWF facilitated the establishment of a provincial Wildlife Ecotourism Management Board (WEMB) that will function to provide technical guidance to the provincial government on establishing and managing sustainable ecotourism projects. Within this context, WWF initiated a pilot homestay project in one village in MPF, and in FY09 established another pilot in one other village. Community tourism initiatives, as other activities geared towards supporting local community livelihoods, have clear conservation goals that relate specifically to a strategy that aims to provide alternative and additional sources of income for communities that have historically

⁶ Official approval of all CPFs (and all Protected Forests Management Plans) was put on hold pending the outcome of a nation-wide mineral deposit inventory. However, FA recently sent out invitations to (re)submit request for CPF approvals.

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harvested natural resources to meet their basic needs. With increased external stresses such as infrastructure development, in-migration, and agricultural expansion adding to the competition over space and resources, tourism provides the opportunity to demonstrate how income can be generated from conservation of the resource on which tourism demand is based, i.e. the aesthetic values of the Dry Forests in the Eastern Plains. In time, if the strategy is successful, this will generate vital support from communities benefiting from tourism who in turn will champion the conservation cause in order to safeguard the resource that attracts tourism.

The recent developments related to Forest Carbon markets also represent a major opportunity for sustainable financing of forest conservation and sustainable protection as well as for direct income generation for forest-based communities. In FY08, with support from ADB, WWF produced a feasibility study of the potential for generating carbon offsets based on payments from the voluntary and REDD markets. WWF is seeking funding to develop a much more comprehensive assessment of the potential as well as the initiation of a pilot project for a payment mechanism in one community. Such a mechanism may function through direct payments to a community development fund in return for delivery of specific forest protection activities that result in avoided deforestation, and therefore reduced CO² emissions.

Selected outputs:

- (FY09) In addition to the Bunong facilitators trained in EE, six officers from different community associations (CPAs and CPFs) were also trained on facilitating community environmental awareness inside MPF
- (FY09) The first community-run guesthouse was constructed and the first tourists to use it are expected by the end of the wet season.
- (November 2009) Training for local community members in guiding and other areas of hospitality was provided and conducted by the hospitality school of the Royal University of Phnom Penh (RUPP).
- (FY09) Two more honey and resin associations established, business plans developed for pilot honey and resin associations, and study completed on potential for sustainable collection of sleng seeds;

Objective III. Learning

III.1 Develop an understanding of the impacts of the growing mining sector in the Greater Mekong Subregion. (FY08)

Assessment of Mining Sector.

As a result of increased demand, high commodity prices, and the global geo-political context, previously unattractive mineral deposits in key WWF priority ecoregions have come under increasing scrutiny by the mining industry. Nowhere is this trend clearer than in the Asia-Pacific region, where the lack of regulatory frameworks, lax enforcement, and the proximity to China combine to make the region especially attractive to potential investors. Recognizing the important threat that mining could pose for the Greater Mekong, WWF undertook in 2008 an analysis of the mining situation in the region and developed a strategy for future work in the area. The assessment covered all of Thailand, Cambodia, Vietnam, Myanmar (Burma), Laos, and Yunan province in China, and included all major base and precious metals and industrial minerals (gypsum, limestone, gravel, and sand). The assessment did not include fossil fuel minerals, as data were not acquired and/or available. The assessment attempted to answer the following questions:

- O Where are the primary mineral development areas in the Greater Mekong and how do these overlap with the priority landscapes of the Greater Annamites and Lower Mekong Dry Forests ecoregions?
- o Which US and Canadian companies have interests in the region and pose the best opportunities for engaging on Corporate Social Responsibility?

- o What is the role of governments and the public sector and how should they be engaged?
- o Is small scale mining a threat?

The study revealed that the majority of the potential and actual mining sites occur within the WWF priority ecoregions and that a majority of "advanced" exploration sites (sites with known deposits and known operators in a feasibility stage of exploration) are found in the Dry Forest and Kayah-Karen and Tenasserim ecoregions.

The majority of mining companies reported to hold interest in the Mekong region are headquartered in China or are Canadian and Australian exploration companies. Many of these companies have already developed corporate sustainability policies and have taken steps to engage with stakeholders on the ground and in the global arena. However, it was recommended that the Greater Mekong Program focus its engagement with the mining industry on four main corporate targets: BHP-Billiton, Rio Tinto Alcan, Alcoa, and Oxiana. It was also suggested that as the largest globally diversified mining company, BHP-Billiton represents the most significant opportunity for developing a new sustainable practices policy in the mining sector.

Most governments in the Mekong have not fully developed policies or regulatory frameworks for mining, due in part to the lack of demand and interest from major investors. With the exception of Thailand and Vietnam, the remaining Greater Mekong Subregion countries have not developed detailed laws regulating the mining sector. Provisions for community consultation and consent, related to proposed mining projects, are mostly non-existent throughout the region. In addition to the lack of proper regulatory framework for mining, some countries lack adequate environmental and social safeguards, including laws ensuring revenue transparency, equitable benefit distribution, EIAs, and pollution prevention.

Until recently most mining occurring in the Mekong Region was undertaken by small-scale artisanal miners using rudimentary techniques with few health or environmental safeguards. With the exception of local communities engaged in artisanal mining or the limited number of farmers who supplement their income from subsistence agriculture by working for wealthier mine operators, local communities benefit only marginally from employment in the mining sector. Since governments do not allocate permits for artisanal mining, small scale miners operate illegally and without government oversight or regulation. The study found that the World Bank had recommended to the Laos government to allow miners to apply for and receive permits for operating in an environmentally and socially responsible manner. However, such regulations would also need to be accompanied by capacity building and technical training for miners. The mining assessment indicated that without profound policy interventions aimed at equitable distribution of mining revenues, the economic benefits of artisanal mining to traditional agricultural communities are likely to decline.

A Preliminary Strategy. In FY08, based on the mining assessment, three key strategic strategies were identified:

- 1. International Markets: promote responsible investment in mining through engagement with private banks to develop mining investment strategies
- 2. Policy Advocacy Pilot Approaches:
 - o facilitate and/or mobilize civil society group dialog to bring concerns to the central government
 - o develop model institutional frameworks for laws, institutional structures, and capacity building
 - o awareness raising and/or advocacy at central or provincial government level, including the media
- 3. Pilot Field Project develop model for best practices at site level.

Steps to engage with business and government. Following the development of the detailed strategy in FY08, steps were also taken to engage with business and government, but no major progress was made, this, due in part to the fact that WWF had very limited technical capacity in relation to mining standards. Through WWF-Canada, Alcoa – a large Canadian aluminum company – selected a province in the Southern Annamites in Vietnam as a site for piloting a tool for identifying appropriate mining site that ensure minimal or no negative impacts to areas of high biodiversity value. Although the province selected was outside WWF's priorities in Southern Vietnam, there is potential to use this opportunity to inform other mining developments in the country and region.

III.2 Develop an understanding of impacts of conservation planning on landscapes, communities, and threat mitigation in the Greater Mekong (FY09)

In FY09, activities were re-designed slightly to reflect a concerted new WWF GMP regional policy advocacy strategy that has gained crucial momentum during FY09, although the capacity building activities have been undertaken, focusing on mitigating impacts of deforestation through REDD, and assessing climate change vulnerability.

WWF worked internally to identify a means of getting commitment for the conservation of the key areas of biodiversity in the region at the highest possible level. Climate change was identified as a key factor that could unify the countries of the region in a joint agreement to combat the impacts.

Climate change will amplify development pressures and its interaction with other global change drivers to make this region one of the most vulnerable in the world. Governments face the challenge to devise climate-smart development strategies that also conserve the region's globally important biodiversity, and especially those landscapes identified by WWF and others as being particularly important; including the Central Annamites and the Eastern Plains Dry Forests. This challenge can be met if the threats are addressed in an integrated and coordinated way within a harmonized regional legal framework. Asia's first regional climate adaptation agreement would provide that framework by forging innovative cooperation, incorporating sustainable solutions, and linking these solutions across all social, economic, and environmental sectors.

In FY09, in addition to the already planned threat mitigation capacity building activities, USAID funds have been used to support the two following activities:

Climate Change Vulnerability Assessment Expert Consultation Workshop

The workshop's proceedings and discussions synthesized the following:

- 1. A summary of future change factors that will influence each priority biodiversity conservation area with emphasis on the combined effects of climate change and socio-economic factors.
- 2. A qualitative assessment of the vulnerability of the priority areas that highlights the combined effects of climate and non-climate pressures on ecosystem attributes and services.
- 3. A summary of technical and policy-relevant adaptation options that will help enhance the resilience and maintain the integrity and functions of ecosystems in the priority areas.
- 4. An area-specific summary of (a) gaps that need to be filled for successful adaptation planning and implementation; (b) opportunities for resilience-enhancing actions based on existing knowledge; and (c) the functions and benefits that the priority biodiversity areas provide at the national and regional scale in terms of resilience and future adaptation capacity.

Capacity-building for large-scale threat mitigation

In addition to ongoing capacity building for WWF staff across the region and for our important partners in both priority landscapes, in FY09 we have focused more on climate change impact mitigation and adaptation and Forest Carbon issues (i.e. REDD) as they relate to providing arguments for safeguarding important forest areas.

In FY09, WWF conducted a regional workshop, including training on Climate Change and identification of REDD opportunities in priority landscapes and trained staff at the Asia-Pacific REDD workshop on technical aspects of carbon accounting, project design, and networking. In addition, a regional technical workshop was conducted to identify climate change adaptation strategies and solution.

Sustainability

In both the Central Annamites and the Eastern Plains landscapes, WWF strengthened the institutional capacity of provinces to ensure better governance of natural resources and exploring, in partnership with local stakeholders, management options for areas of strategic conservation importance. In both landscapes, joint WWF/local teams surveyed areas previously unexplored by biologists, resulting in data essential to planning, survey experience for local management authorities, and a better understanding of current threats. WWF thus strategically put in place the policy, capacity, and knowledge necessary for self-sustaining conservation.

Just one example of the legacy of the work USAID has supported in the Eastern Plains is a scientifically rigorous tiger and tiger prey monitoring system designed and under implementation with funding for the next phases, as well as a landscape (provincial) anti-poaching law enforcement unit deployed to reduce incentives for, and incidence of, illegal poaching in Mondulkiri, and with secured funding for operations during the next two years.

Measures of success

- 1). The establishment of the Provincial Conservation Planning Unit (with a full-time Conservation Planning Advisor embedded in the Executive Committee of the Mondulkiri Provincial Rural Development Committee) was designed to coordinate among government agencies at the provincial level. This for the first time opened a formal channel to mainstream conservation in the provincial development planning process. As a result there is formal recognition of biodiversity conservation within the processes for decision making at the commune development planning level a unique situation for any province in Cambodia
- 2). In FY08, WWF facilitated the establishment of a provincial Wildlife Ecotourism Management Board (WEMB) that will function to provide technical guidance to the provincial government on establishing and managing sustainable ecotourism projects.
- 3). WWF's work to get government commitment to designate development boundaries resulted in no further conversion in the elephant migration corridor between PPWS and MPF, that had previously come under considerable pressure by new settlers clearing land for agriculture.

Lessons Learned (what worked, what didn't work and why)

• One of the most painful lessons has been the need to build in greater flexibility if funding for big projects does not come online when expected. Although the ADB-BCI project officially began in 2006, funding did not become available until 2007, leaving WWF in a difficult situation, since we did not have alternative sources of funding.

- WWF Vietnam had little success in getting the Vietnamese government to adopt the plan completed in FY05 for the Greater Annamites. The government awaited results the already adopted the Central Truong Son strategy, before scaling up to a much larger area. Clearly in Vietnam the largest scale to successfully work is at the landscape level. Only success in a number of landscapes will guarantee government support for a full ecoregional action plan.
- The WWF team had to work hard to develop strategies to tackle the growing threats to the Dry Forests Ecoregion. Three notable strategies of engagement were developed, each involving a different tack and all requiring persistence and patience. The first involved writing to senior government to express concern about mining concessions. This did not meet with the intended result; therefore other approaches were needed to ensure our key message was heard and acknowledged at the top political level. Attempting to meet the Chinese Embassy was an obvious strategy, but as far as we are aware WWF was the first NGO in Cambodia to be granted a meeting to discuss natural resource management issues. Engaging with a global mining company required an altogether different approach than with government. Initial awkwardness as both parties hesitated to share information for fear of misrepresentation in the media or the development community, led to fruitful discussions once the objectives of the dialog were made clear by both sides.
- Establishing dialogue and partnerships with businesses requires much more time than we originally
 expected. More staff time must be allocated and more perseverance is needed for successful
 engagement.
- The land concessions in the southern community cluster (MPF excision) where the participatory land use planning approach was already being implemented, made this planning approach a priority. Some of the threats posed by situations where local communities are suddenly dispossessed of their land can be reduced through improved community understanding of their access rights and of the usefulness of land use planning
- Developing large scale conservation plans is a worthwhile activity, though it is made more sustainable if
 these plans fit into existing government strategies and policies, otherwise there can be a lack of incentive
 for their implementation
- Experience showed that the most effective mechanism for coordinating action on certain key issues was through a combination of local partnership building and advocacy, coupled with targeted advocacy at the national level

Value of the GCP program

With the support from USAID GCP1 & 2, fully fledged landscape programs were designed for and established in the Central Annamites and Dry Forests ecoregions. The long-term funding provided through GCPI and II was crucial for the establishment and the successful management of these landscapes. WWF has been successful in establishing ownership and understanding for conservation among the provincial governments, government agencies, involved communities, protected area managers, and other stakeholders, thereby setting up long term sustainability of conservation efforts in the Central Annamites and the Dry Forests. In keeping with its commitments, WWF will continue to strengthen the ownership building process and community empowerment exercises to further instill community based conservation values and change the general attitudes in favor of conservation.

Sustainable Financing is a critical component to build long term change. GCP funding has helped WWF to leverage funding from the ADB-BCI project that will continue to build on these investments and further invest in biological corridors within the Forests of the Lower Mekong. In the future, as governments become stronger managers of natural resources, WWF will take on more of an advisory role where appropriate.

The value of the long-term support that GCP provided cannot be understated. It is very unusual to receive funding support for more than 3 years, but GCP commitment has been essential to achieve impact on biodiversity targets at the landscape scale. This long-term core support has helped the program to maintain focus on the long-term landscape scale goals, while implementing actions at all scales and adapting as knowledge and experience increased. The GCP support was instrumental in leveraging support from other donors.

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