



Final Assessment of CEPF Investment in the Indo-Burma Hotspot 2008-2013

A Special Report
May 2014

OVERVIEW

The Critical Ecosystem Partnership Fund (CEPF) is a joint initiative of l'Agence Française de Développement (AFD), Conservation International (CI), the European Union, the Global Environment Facility (GEF), the Government of Japan, the John D. and Catherine T. MacArthur Foundation and the World Bank. CEPF provides strategic assistance to nongovernmental organizations (NGOs), community groups and other civil society partners to help safeguard Earth's biodiversity hotspots: the biologically richest yet most threatened ecosystems. A fundamental goal of CEPF is to ensure that civil society is engaged in biodiversity conservation.

CEPF commenced its investment in the Indo-Burma Biodiversity Hotspot on July 1, 2008, following the approval of an ecosystem profile¹ developed with stakeholders' input and a spending authority of \$9.5 million to be awarded over five years. Thanks to additional support from the MacArthur Foundation, the spending authority was increased to \$9.9 million in 2012, and the investment period was extended to five-and-a-half years.

Figure 1. The Indo-Burma Hotspot



¹ The ecosystem profile for the Indo-Burma biodiversity hotspot is available on the Web, in English at http://www.cepf.net/where_we_work/regions/asia_pacific/indo_burma/ecosystem_profile/Pages/default.aspx and in Vietnamese at http://www.birdlifeindochina.org/sites/default/files/CEPFIndoChina_EP%26info_VN_6Nov08.pdf

Indo-Burma is the largest biodiversity hotspot, in terms of land area. It spans mainland Southeast Asia, including all or most of Myanmar (Burma), Thailand, Cambodia, Lao PDR and Vietnam, parts of southern China, and small areas of eastern Bangladesh and northeastern India (Figure 1). During 2008-2013, CEPF investment focused only on Cambodia, Lao PDR, Thailand and Vietnam. In July 2013, CEPF launched a second five-year investment phase in Indo-Burma, including these four countries plus China and Myanmar. This report is concerned entirely with the results of the first phase.

The report aims to assess attainment of the goals set in the ecosystem profile, summarize lessons learned arising from the grant portfolio that can inform the work of conservation organizations, and improve the delivery of the next phase of CEPF investment in the Indo-Burma Hotspot. It draws on experience, lessons learned and project reports² generated by civil society groups implementing CEPF grants. In addition, it incorporates the findings of a final workshop held in Phnom Penh, Cambodia, on March 25-27, 2013, attended by over 110 representatives of civil society organizations, government departments, donor partners and news media. All but three of the CEPF grantees in the hotspot participated at the workshop.

THE INDO-BURMA HOTSPOT

Encompassing over 2 million square kilometers of tropical Asia, Indo-Burma is one of the most geographically diverse of Earth's 34 biodiversity hotspots. The hotspot encompasses a number of major mountain ranges, including the Annamite Mountains and eastward extensions of the Himalayas, as well as extensive areas of limestone karst and five of Asia's largest rivers: the Ayeyarwady, Salween, Mekong, Red and Pearl (Zhujiang). Its sweeping expanse of level lowlands embraces several fertile floodplains and deltas and includes Tonle Sap Lake, Southeast Asia's largest and most productive freshwater lake.

As a result of a high diversity of landforms and climatic zones, Indo-Burma supports a wide variety of habitats and, thus, high overall biodiversity. This diversity has been further increased by the development of areas of endemism as a result of the hotspot's geological and evolutionary history. Centers of plant and animal endemism include the Annamite Mountains and the highlands of southern China and northern Vietnam. The Indo-Burma Hotspot ranks in the top 10 hotspots for irreplaceability and in the top five for threat, with only 5 percent of its natural habitat remaining.

Indo-Burma is home to over 300 million people, more than any other hotspot, the vast majority of who depend, for their livelihoods, on the services provided by the hotspot's natural ecosystem. Of particular importance, in a region where paddy rice and fish provide the staple diet of most people, are hydrological services and provisioning of fish and other freshwater products. The issues of poverty alleviation and biodiversity conservation are inextricably linked.

In common with many of the world's biodiversity hotspots, a combination of economic development and human population growth is placing unprecedented pressures on the Indo-Burma Hotspot's natural capital. These pressures are compounded by a lack of effective planning and management systems to control them, as well as the impacts of climate change. The two greatest immediate threats facing the region's natural ecosystems are habitat loss and overexploitation of plant and animal species. Over the last decade, infrastructure development has emerged as a key factor underlying these threats, with major schemes to increase regional economic integration now underway, and a rapid acceleration in hydropower development. These

² All available final project reports can be downloaded from the CEPF Web site, www.cepf.net

trends have been counteracted, although by no means offset, by a gradual amelioration of the operating climate for local civil society, including a 2009 decision by the government of Lao PDR to allow local NGOs to register and operate as independent entities.

CEPF NICHE

The ecosystem profile and five-year investment strategy for the Indo-Burma Hotspot were developed in 2003, through a process of consultation and desk study coordinated by BirdLife International, in collaboration with the Bird Conservation Society of Thailand, Kadoorie Farm & Botanic Garden and the WWF-Cambodia Program, and with technical support from the Center for Applied Biodiversity Science at CI. More than 170 stakeholders from civil society, government, and donor institutions were consulted during the preparation of the ecosystem profile.

The ecosystem profile presented an overview of the hotspot in terms of its biodiversity conservation importance, major threats to and root causes of biodiversity loss, socioeconomic context, and patterns of conservation investment. It provided a suite of measurable conservation outcomes, identified funding gaps, and opportunities for investment, and thus identified the niche where CEPF investment could provide the greatest incremental value.

Given the very significant investments already being made in biodiversity conservation by international donors and national governments, the CEPF niche was defined to target support to civil society initiatives that aimed to complement and better target these existing investments. In particular, resources were targeted to conservation efforts for freshwater biodiversity and trade-threatened species, two long-standing investment gaps, as well as for civil society efforts to mainstream biodiversity into development policy and planning.

In line with this niche, the ecosystem profile defined four strategic directions for CEPF investment:

1. Safeguard priority globally threatened species by mitigating major threats.
2. Develop innovative, locally led approaches to site-based conservation at 28 Key Biodiversity Areas.
3. Engage key actors in reconciling biodiversity conservation and development objectives, with a particular emphasis on the Northern Highlands Limestone and Mekong River and its major tributaries.
4. Provide strategic leadership and effective coordination of CEPF investment through a Regional Implementation Team.

To maximize impact and enable synergies among individual projects, CEPF investment focused on 67 priority animal species and 28 priority sites in two conservation corridors. During the mid-term assessment in 2010, these priorities were updated slightly, to incorporate new information and reflect changes in state, and a revised list of 83 priority species and 28 priority sites was adopted, still within two priority corridors.

The two conservation corridors were prioritized for investment on the basis of their high biological importance, the level of threat to their biodiversity values, and the opportunities they presented for engaging civil society in biodiversity conservation. The Northern Highlands Limestone corridor, in northern Vietnam and southwestern China, is particularly important for the conservation of primates, supporting the entire global population of two Critically Endangered species: cao vit crested gibbon (*Nomascus nasutus*) and Tonkin snub-nosed monkey

(Rhinopithecus avunculus)). The corridor is also extremely important for plant conservation, supporting very high levels of endemism in groups such as orchids and conifers. The Mekong River and Major Tributaries corridor contains some of the best remaining examples of riverine ecosystems in the hotspot, which are severely under-represented within protected areas. These ecosystems are known to be vital for many globally threatened fish species, including some of the largest freshwater fish in the world. As well as their intrinsic values, the riverine ecosystems of the Mekong basin support the world's largest inland fishery, with approximately 2.6 million metric tons harvested annually from the Lower Mekong Basin.

The CEPF ecosystem profile for the Indo-Burma Hotspot was approved by the CEPF Donor Council on April 26, 2007, with a total budget allocation of \$9.5 million. Of this amount, \$3.95 million was allocated to Strategic Direction 1, \$2.15 million to Strategic Direction 2, \$2.5 million to Strategic Direction 3 and \$900,000 to Strategic Direction 4. The Council subsequently approved the appointment of BirdLife International as the Regional Implementation Team (RIT) for the region in November 2007. The RIT grant began implementation on July 1, 2008, thus launching the five-year investment program.

COORDINATING CEPF INVESTMENT ON THE GROUND

BirdLife International performed the role of the RIT for the first investment phase, working closely with the CEPF Secretariat to coordinate and manage CEPF grant making in the Indo-Burma Hotspot. BirdLife assembled an experienced, motivated team, established robust systems for soliciting, reviewing, managing and monitoring grants, and put in place structures that promoted transparency and ensured synergies between CEPF investments and those of government and other donors in each country. BirdLife also provided support to civil society organizations, especially local groups, assisting them to design and implement grants, and helping them comply with CEPF's environmental and social safeguard policies.

In its role as the RIT, BirdLife provided oversight and strategic guidance to the development of the CEPF grant portfolio, in close cooperation with the CEPF Secretariat, and performed the following key functions:

- Act as an extension service to assist civil society groups in designing, implementing, and replicating successful conservation activities.
- Review all grant applications and manage external reviews with technical experts and advisory committees.
- Award grants up to \$20,000 and decide jointly with the CEPF Secretariat on all other applications.
- Lead the monitoring and evaluation of individual projects using standard tools, site visits, and meetings with grantees, and assist the CEPF Secretariat in portfolio-level monitoring and evaluation.
- Widely communicate CEPF objectives, opportunities to apply for grants, lessons learned, and results.
- Involve the existing regional program of the RIT, CEPF donors, GEF implementing agencies and other government departments within the hotspot in implementation.
- Ensure effective coordination with the CEPF Secretariat on all aspects of implementation.

BirdLife's professionalism, local knowledge and leadership contributed substantially to the delivery of an influential grant portfolio, which delivered important conservation results on the ground and set a standard for effective use of donor funding in the region. BirdLife responded

well to the difficult task of working in a region with a challenging operating environment for civil society. The RIT was proactive in making CEPF funding accessible to local civil society organizations, including by searching for local groups working in or around CEPF priority sites, organizing introductory meetings for potential grantees in targeted provinces, providing hands-on support to local groups with project design and management, and forging alliances between local groups and international NGOs working in the same geographic areas. In this way, the RIT created a context in which local civil society organizations could grow in capability and credibility, forge partnerships with other groups nationally and regionally, and be exposed to global best practice through relationships with international groups.

BirdLife performed particular well in adopting a systematic approach to grant making, by establishing robust systems for tracking proposals, reviews, reports, payments, etc. BirdLife also developed a wide group of expert peer reviewers which, together with BirdLife's own in-house expertise, added significant value to the technical design of large and small grants, and informed strategic grant making.

To support the work of the RIT, Technical Reviewer Groups were established in each country, comprising more than 140 representatives of NGOs, government agencies, scientific institutions and donor organizations. Technical Review Group members are responsible for review and evaluation of funding applications. BirdLife also established National Advisory Groups in Cambodia, Lao PDR and Vietnam, comprising selected representatives of government and civil society plus regional staff of CEPF's donor partners. These groups were responsible for overseeing the strategic evolution of the CEPF portfolio in their respective countries.

IMPACT SUMMARY

CEPF investment in the Indo-Burma Hotspot began in July 2008. Achievements during the first phase of CEPF investment are detailed in Annex 2 and can be summarized as follows:

- Coherent and balanced grants portfolio developed, comprising 126 grants with a total value of \$9.7 million.
- Nine civil society networks to coordinate conservation efforts established or strengthened.
- Global threat assessments completed for 3,122 species, as a basis for more effective and better targeted conservation planning and action, and resulting in an almost 50 percent increase in the number of species in the hotspot officially assessed as globally threatened.
- Core populations of 32 globally threatened species secured from overexploitation and illegal trade.
- New information generated on six species identified as being in great need of improved knowledge about their status and distribution.
- Demonstrated improvements to the protection and management of 15 CEPF priority sites.
- Innovative, local stakeholder-based conservation initiatives with potential for wider replication in the hotspot demonstrated in all four countries, including nest protection schemes, conservation incentives and community fisheries co-management.
- Tangible socioeconomic benefits conferred to 186 communities at project sites.
- Strengthened protection and management of 79 percent of targeted protected areas, as evidenced by increased SP1 Management Effectiveness Tracking Tool (METT) scores.
- Formal protection extended to more than 150,000 hectares through the creation and expansion of protected areas.

- Biodiversity conservation strengthened in nearly 1.6 million hectares within protected areas and more than 360,000 hectares in production landscapes outside of protected areas.
- Seven development plans and policies analyzed for their impacts on biodiversity and ecosystem services, and alternative development scenarios proposed, particularly ones related to hydropower development in the Mekong Basin.
- Targeted outreach, training or awareness raising provided for more than 900 decision makers, journalists and lawyers.
- Sixty-six civil society organizations engaged directly as CEPF grantees or indirectly as sub-grantees; including 36 local organizations (55 percent).
- Strengthened capacity of 92 percent of local civil society organizations receiving CEPF grants, as evidenced by increased Civil Society Organizational Capacity Tracking Tool scores.
- Increased credibility of local civil society organizations in the eyes of government, donor and private sector partners, as evidenced by increased ability to influence development decision making.

Taken together, the achievements of the CEPF grant portfolio in Indo-Burma contribute to 12 of the 20 Aichi Biodiversity Targets of the Convention on Biological Diversity's Strategic Plan for Biodiversity 2011-2020 (Annex 5).

IMPLEMENTING THE STRATEGY

The first phase of CEPF investment in the Indo-Burma Hotspot ran for five-and-a-half years, from July 1, 2008, to December 31, 2013. All project activities ceased on December 31, 2013, although some grants were still active during the first part of 2014, to allow time for reports to be compiled and submitted. The last grant was formally closed on May 16, 2014.

At the time of the final assessment workshop in March 2013, 75 of the 126 grants had already ended, and most of the remainder had reached a point where the key results and lessons learned were known. The main exceptions were the 28 small grants awarded under the extension period, some of which were in the early stages of implementation or, in a few cases, had yet to begin. Consequently, the preparation of the final assessment report was postponed until May 2014, to ensure that all results from the investment phase could be included, and enable a comprehensive evaluation of lessons learned.

Calls for Proposals

CEPF grant making in Indo-Burma began in 2008 with the award of the RIT grant, which was awarded through a competitive process. A request for proposals was issued on July 11, 2007, with a final decision being made by the CEPF Donor Council on November 20 of that year. This was followed by the award of implementation grants, of which two types were made: small grants of up to \$20,000 and large grants above that amount. Small grants were contracted by BirdLife, following a single-stage process, whereas large grants were contracted directly by CEPF, following a two-stage process consisting of a Letter of Inquiry (LoI) followed by a full proposal from shortlisted applicants.

There were four rounds of grant making: the first three comprised small and large grants, while the fourth comprised small grants only. Due to delays in securing endorsement of the ecosystem profile, the first call for proposal covered Cambodia and Vietnam only, while subsequent calls covered all four countries. The first call, issued on August 22, 2008, was an open call, covering all investment priorities in the CEPF investment strategy (other than the RIT function). The

second and third calls, issued on June 11, 2009, and August 16, 2010, were restricted calls, targeting geographic, taxonomic and thematic gaps, to ensure a balanced portfolio across the investment strategy. The fourth and final call, issued on July 1, 2012, was made possible by the provision of additional funds by the MacArthur Foundation. Because there were relatively few gaps in the investment strategy by that point, emphasis was placed on providing continuous support for activities bridging the first and second investment phases, and giving opportunities to local civil society organizations that had not previously received CEPF support to demonstrate their suitability as potential partners for the second phase. In addition to the four calls for proposals, the RIT was empowered to award small grants on an invitation basis, to respond to urgent threats or opportunities arising between calls, subject to prior approval by the CEPF Secretariat. In the event, very few such grants were awarded, with each undergoing the same review and due diligence process as other small grants.

All proposals received were circulated for review by Technical Review Group members familiar with the project context or topic. In parallel, all proposals were reviewed by the RIT members and (in the case of large grants only) the CEPF Grant Director. Based upon these reviews, applications were shortlisted. Final decisions about which small grants to award were made by the RIT, then presented to the respective National Advisory Group. For large grants, the RIT and the CEPF Grant Director made a joint decision about which applicants should be invited to submit full proposals (on the strength of their LoIs), and final decisions on grant awards were made by the CEPF Executive Director.

Under the first funding round, 39 small grant applications were received, of which 13 (33 percent) were awarded. In addition, 45 large grant applications were received, of which 16 (36 percent) were awarded. The success rates for applications under the second funding round were similar, with 27 out of 59 small grant applications (46 percent) and 15 out of 38 large grant applications (39 percent) being awarded. Under the third round, 15 out of 39 small grant applications (38 percent) and 11 out of 26 large grant applications (42 percent) were successful. Under the fourth round, small grant awards were made to 28 out of 55 applications (51 percent). The success rate across the four calls for proposals was remarkably consistent, particularly as the amount of available funding to make new grant awards diminished from one round to the next. This increased competition for funds appears to have been offset by the RIT's efforts at managing the expectations of applicants about the type of project that was likely to be successful and the level of resources that were available.

Overall, 43 percent of small grant applications and 39 percent of large grant applications were successful, which approximates to a success rate of two-in-five (Annex 1, Chart 3). This is a high success rate compared with many other grant programs available to conservation-focused civil society organizations in Indo-Burma, and reflects the considerable investment of time and energy made by the RIT in providing guidance to applicants to ensure high technical quality and a close fit to the CEPF investment strategy.

Collaboration with CEPF Donors

Throughout the CEPF investment program in the Indo-Burma Hotspot, BirdLife and the CEPF Secretariat made efforts to inform and engage regional and headquarters staff of CEPF's donors. Regional staff of AFD, CI, the Government of Japan and the World Bank participated in National Advisory Group meetings, while the GEF was represented by the Operational Focal Points and/or the Small Grant Program Coordinators. CEPF Task Team Leaders from the World Bank visited CEPF grants in Vietnam in September 2009 and June 2011, a member of staff from the MacArthur Foundation visited CEPF grants in Cambodia in January 2011, and a member of staff from the Ministry of Environment, Japan visited CEPF grants in Cambodia in March 2013. These

interactions all resulted in useful guidance for the implementation of individual projects as well as for the development of the overall portfolio. In addition, RIT and CEPF Secretariat staff made periodic visits to World Bank country offices to seek advice, particularly on the implementation of social and environmental safeguard policies.

The CEPF Secretariat also collaborated closely with three private foundations supporting biodiversity conservation in the Indo-Burma Hotspot through grants to civil society organizations, namely the MacArthur Foundation, the Margaret A. Cargill Foundation and the McKnight Foundation, to ensure alignment of their complementary portfolios. In 2011, the four funders worked together to enable the update of the ecosystem profile for the hotspot through a collaborative process that engaged more than 470 stakeholders. This process was instrumental in establishing a framework for reinvestment in the hotspot by CEPF, and complementary investments by the other funders.

Portfolio Status

A total of 126 grants were awarded during the first phase of CEPF investment in Indo-Burma, with a total value of nearly \$9.7 million, equivalent to 98 percent of the funding allocation for the hotspot (Table 1). The small residual balance was due to unspent funds being returned by grantees at the end of their grant terms. As anticipated, international civil society organizations received the majority of grants and grant funds awarded, reflecting the small number of local civil society organizations with missions related to biodiversity conservation, the limited capacity of many groups to absorb large amounts of funding, and the restrictive operating environment for local civil society in most countries. Nevertheless, several high capacity local organizations were engaged in biodiversity conservation from the outset of the CEPF investment phase, and other groups emerged and grew in confidence and capacity over the five-and-a-half years. Consequently, it was possible to award 46 grants (37 percent of the total) to 25 different local organizations, with a total value of \$1.8 million (19 percent of the total).

Table 1: CEPF grant portfolio in the Indo-Burma Hotspot at end of first investment phase

Strategic Direction	Allocation	Grant awards	Balance
1: Species-focused conservation	\$4,050,000	\$4,363,904	-\$313,904
2: Site-based conservation	\$2,228,000	\$1,913,765	\$314,235
3: Biodiversity mainstreaming	\$2,600,000	\$2,425,360	\$174,640
4: Regional Implementation Team	\$1,000,000	\$947,369	\$52,631
Total	\$9,878,000	\$9,650,398	\$227,602

The 126 grants awarded leveraged \$15.8 million in co-financing, including counterpart funding and in-kind contributions, of which \$1.4 million was for small grants and \$14.4 million was for large grants. This brought the effective size of the grants portfolio to \$25.5 million.

The greatest demand for funding was under Strategic Direction 1 (species conservation), reflecting the facts that Indo-Burma is on the front lines of the species extinction crisis and that very few other significant funding sources are available for species-focused conservation efforts, following a general shift in donor focus towards ecosystem-wide approaches and climate change adaptation and mitigation projects. In response to this demand, 78 grants (20 large and 58 small), totaling \$4.4 million, were awarded under Strategic Direction 1.

In contrast to the typical species-focused conservation project, site-based conservation tends to be more resource-intensive. Hence, the typical project had a larger grant size, as well as more co-financing. Thus, while only 14 grants (seven large and seven small) were awarded under Strategic Direction 2 (site-based conservation), they totaled \$1.9 million in investment.

Mainstreaming biodiversity conservation into development plans, policies and programs is an area where civil society organizations can add significant value, by demonstrating innovation, conducting action research and bridging divisions among different sectors. Consequently, 33 grants (15 large and 18 small) were awarded under Strategic Direction 3 (biodiversity mainstreaming), totaling \$2.4 million. It is notable that this was the strategic direction where local civil society played the largest role in implementation, receiving 58 percent of grants awarded.

Finally, a single grant of almost \$950,000 was awarded under Strategic Direction 4 for the RIT function (Annex 1, Chart 1).

The 83 small grants ranged in size from \$1,820 to \$20,000, with a mean of \$17,367. Excluding the RIT grant, the 42 large grants ranged in size from \$30,702 to \$699,125, with a mean of \$172,894. Only six grants larger than \$250,000 were awarded, comprising; a grant to Fauna & Flora International (FFI) to strengthen the management of selected priority sites within the Northern Highlands Limestone corridor; a grant to World Wide Fund for Nature (WWF-Cambodia) to establish a protected area along the mainstream and conserve freshwater biodiversity and critical wetland resources for local communities along the Mekong River in Cambodia; a grant to the University of Canterbury to model the potential impacts of large scale disruptions to the hydrological cycles in the Mekong River and Major Tributaries corridor; a grant to Wildlife Conservation Society (WCS) to demonstrate incentive mechanisms for conserving a suite of highly threatened bird species in Cambodia; and grants to the International Union for Conservation of Nature (IUCN) and Missouri Botanical Garden to undertake Red List assessments of selected freshwater and vascular plant taxa, respectively. These were considered 'cornerstone' grants, which were built upon by other projects in these corridors or thematic areas. Annex 3 provides a full listing of all grants awarded during the first phase.

As can be seen from Chart 2 in Annex 1, grants under Strategic Directions 2 and 3 were concentrated in the two priority corridors, albeit with a number of cross-cutting grants under Strategic Direction 3, which addressed issues not restricted to a single corridor. The Mekong River and Major Tributaries corridor was the focus of approximately twice as many grants as the Northern Highlands Limestone corridor, reflecting the fact that this corridor spans three countries, including Cambodia, where the greatest concentration of conservation-focused civil society organizations in the hotspot can be found. Regarding Strategic Direction 1, the vast majority of grants were not restricted to a priority corridor, reflecting the distribution of the targeted species and the fact that many addressed cross-cutting issues, such as wildlife trade.

Overall, the portfolio achieved a good thematic and geographic balance, consistent with the priorities set out in the ecosystem profile. The portfolio was also adaptive to new information, opportunities and threats, which were collated during the mid-term assessment in 2010 and the update of the ecosystem profile in 2011, and used to inform the scope of the third and fourth calls for proposals respectively. Nevertheless, a few gaps remained, particularly with regard to coverage of priority sites. While improvements to the protection and management of 15 priority sites were demonstrated, the other 13 priority sites were not addressed by CEPF grants (these included three sites in China that were not eligible for support under the first investment phase). This was not so much a result of limited funds as a lack of suitable proposals. The ecosystem profile made an assumption that proposals would be forthcoming for all priority sites but this

turned out not to be the case, in part because civil society groups made a (valid) decision not to apply for funding to work at sites where they did not have existing programs of work. One lesson that can be drawn from this is that presence of civil society organizations with capacity and interest to engage in conservation should be considered as a selection criterion for priority sites in future.

Portfolio Overview: Strategic Direction 1

CEPF investment under this strategic direction aimed to safeguard priority globally threatened species by mitigating major threats. This strategic direction was intended to fill a major gap in investment in species-focused conservation, while responding to the pernicious threat of overexploitation, driven in many cases by demand from the illegal wildlife trade. The ecosystem profile selected 67 globally threatened species as priorities for CEPF investment. For the vast majority of these, control of overexploitation was identified as the priority species-focused conservation action required. The strategy adopted by CEPF was to identify and secure core populations of priority species from overexploitation and illegal trade (Investment Priority 1.1), thereby securing the short-term survival of viable populations that could form the basis for recovery efforts in the longer term, after wildlife trade, habitat loss and other threats have abated. These measures were complemented by public awareness campaigns to reinforce existing wildlife trade policies and contribute to the reduction of consumer demand for priority species and their products (Investment Priority 1.2). These investments were inevitably a contribution to a longer-term process of societal change, aimed at reducing the social acceptability of wildlife consumption and building political support for enforcement efforts.

These two investment priorities, which attracted the majority of grants awarded under Strategic Direction 1, addressed a relatively narrow suite of species for which sufficient information (including, crucially, globally threat assessments) was available to target conservation investments with confidence. The remaining investment priorities under Strategic Direction 1 focused on filling knowledge gaps with regard to other taxa, and making the information available to key actors. Recognizing that the vast body of information on endemic and at risk plant species in the hotspot had not been systematically synthesized to establish conservation priorities, CEPF supported a major exercise to investigate the status and distribution of globally threatened plant species, and apply the results to planning, management and outreach (Investment Priority 1.3). A similar initiative was undertaken for selected freshwater taxa, with the results being integrated into conservation planning and assessments of the impacts of hydropower and other developments affecting aquatic ecosystems, particularly the Mekong River and its major tributaries (Investment Priority 1.4). A small number of targeted investments were made to fill information gaps on 12 globally threatened species for which there was a need for greatly improved information on their status and distribution before effective conservation action for them could be taken (Investment Priority 1.5). Finally, in order to disseminate results to local and grassroots stakeholders, CEPF supported the publication of local-language reference materials on globally threatened species (Investment Priority 1.6).

Investment Priority 1.1 received more funding than any other, with 56 grants totaling \$2,860,703 (equivalent to 30 percent of awarded funds). These grants provided vital support to conservation efforts for some of the most highly threatened species in the hotspot, and in some cases were instrumental in reducing or even reversing declines in core populations. In addition to contributing to avoiding extinctions, the most irreversible manifestation of biodiversity loss, these grants also demonstrated a range of conservation approaches with potential for wider replication in the hotspot.

One approach widely piloted under Investment Priority 1.1 was nest protection, which involves making cash or in-kind payments to local people for protecting nests of waterbirds, freshwater turtles or other species from accidental disturbance, opportunistic collection of eggs and young, and other threats. Examples include an initiative led by the CI Cambodia Program to protect a core population of Asian giant softshell turtle (*Pelochelys cantorii*), an initiative led by People Resources and Conservation Foundation (PRCF) to secure a population of white-eared night-heron (*Gorsachius magnificus*) in the Ba Be-Na Hang forest complex, and efforts by the Sam Veasna Center for Wildlife Conservation to improve nesting success of white-shouldered ibis (*Pseudibis davisoni*), giant ibis (*Thaumatibis gigantea*) and sarus crane (*Grus antigone*) in the northern plains of Cambodia.

Another approach widely demonstrated by grantees was to engage grassroots stakeholders in local conservation teams, to support and complement patrolling and community outreach activities of the designated management bodies. This approach was adopted by Chamroen Chiet Khmer (CCK) and the Wildfowl & Wetlands Trust (WWT), who established 'Local Conservation Groups' to protect two important wetland protected areas in the Mekong Delta region of Cambodia. A variant of this model was adopted by WWF, who successfully piloted 'forest guards' (local conservation staff directly managed by an NGO but working in support of the government management authority) at two protected areas in central Vietnam. As well as delivering significant measurable results in terms of snare removal, this grant demonstrated a model with significant potential for replication in a country where weak enforcement is a pervasive problem at protected areas.

A third approach was conservation agreements: negotiated agreements with local stakeholders, under which they commit to verifiable conservation actions in return for agreed benefits. This approach was piloted by PRCF for a core population of François's langur (*Trachypithecus francoisi*) in northern Vietnam, as well as by POH KAO des Tigres et des Hommes for an important forest for multiple priority species in north-eastern Cambodia.

Also under Investment Priority 1.1, a number of grants were awarded to address specific conservation needs of particular priority species. For instance, ElefantAsia implemented a large grant to secure Lao PDR's elephant populations from illegal trade by micro-chipping and registering all domesticated animals. In Cambodia, FFI implemented a small grant to manage human-elephant conflict in the eastern plains, while WCS and Pannasastra University implemented a series of small grants to provide a supplementary source of food to vultures, through a network of 'vulture restaurants'.

Investment Priority 1.2 received a moderate amount of funding, with five grants totaling \$426,391 (4 percent of awarded funds). These grants adopted a range of approaches aimed at responding to the illegal wildlife trade. The approach adopted by Education for Nature-Vietnam (ENV), in the largest grant awarded under this investment priority, was to engage members of the public, particularly university students, as the eyes and ears of the enforcement agencies, helping to monitor establishments that had previously been implicated in the illegal sale of wildlife, and report infringements via a public hotline. A different approach was adopted by FFI, which gathered data on the dynamics of the wildlife trade between Lao PDR and two Vietnamese provinces, and used it to better inform a coordinated response by enforcement agencies. In Cambodia, Wildlife Alliance also sought to facilitate improved coordination among different agencies involved in efforts to combat the wildlife trade, through support to the national Coordination Unit for the Association of South East Asian Nations (ASEAN) Wildlife Enforcement Network (WEN). Finally, ENV and WCS addressed the demand side of the wildlife trade, by promoting reduced consumer demand for rhino horn through targeted campaigns.

Two grants were awarded under Investment Priority 1.3, totaling \$505,884 (5 percent of awarded funds). Both were to Missouri Botanical Garden for an assessment of the global threat status and distribution of selected vascular plant families, capacity building for local botanists, and establishment of a Plant Red List Authority for the Indochina Region. This was a highly collaborative initiative, involving the leading botanical research institutions in the hotspot, as well as expert taxonomists from institutions in Europe and North America.

Only a single grant, of \$299,504 (3 percent of awarded funds) was awarded to IUCN under Investment Priority 1.4, for a project to assess the global threat status and distribution of five major freshwater taxa: fishes; mollusks; odonates; crabs; and selected families of aquatic plants. Again, this was a collaborative effort, engaging researchers and conservationists from across the hotspot and worldwide.

Investment Priority 1.5 received a modest amount of funding: \$223,212 (2 percent of awarded funds) spread across 11 grants. These grants sought to fill gaps in knowledge with regard to nine priority species, for which there was an over-riding need for additional information before effective conservation action could be taken. In most cases, this meant identifying extant populations that could be the focus of conservation and recovery efforts. For instance, the Centre for Natural Resources and Environmental Studies sought to locate populations of several little-known turtle species, while Global Wildlife Conservation and WCS both sought new information on the enigmatic kouprey (*Bos sauveli*). In one case, museum studies were required to reassess the taxonomic status of an enigmatic mammal.

Finally, Investment Priority 1.6 only received \$48,210 (less than 1 percent of awarded funds) split among three grants. These included a grant to WCS to translate wildlife identification guides for frontline law enforcement officials into Khmer, Lao and Thai. The level of demand for this investment priority was much less than anticipated when the ecosystem profile was drafted in 2003. This may be a reflection of the fact that significant funding for local language reference materials was available to civil society organizations in the hotspot during the period between the completion of the ecosystem profile and the start of the CEPF investment phase, most notably from the World Bank's local language field guides project.

Portfolio Overview: Strategic Direction 2

CEPF investment under this strategic direction aimed to develop innovative, locally led approaches to site-based conservation at 28 Key Biodiversity Areas (KBAs). This strategic direction was intended to demonstrate alternative models to conventional protected area management, which was considered to have been generally ineffective in addressing threats to biodiversity within the hotspot's most important natural areas. While investments under this strategic direction aimed to strengthen the protection and management of KBAs within the two priority corridors, they were also intended to demonstrate approaches with potential for wider replication elsewhere in the hotspot. To this end, CEPF supported the establishment of innovative local-stakeholder-based conservation management and caretaking initiatives at priority sites (Investment Priority 2.1). CEPF also sought to support the development of regional standards and programs that address overexploitation of biodiversity and pilot them at selected sites (Investment Priority 2.2), although the level of response from applicants was much lower than expected.

Consequently, the lion's share of investment under Strategic Priority 2 was for Investment Priority 2.1, which received \$1,833,803 (19 percent of awarded funds), spread across 13 grants. These grants adopted various innovative approaches to site-based conservation. In the Northern Highlands Limestone corridor, these approaches were mainly variants of the co-management model, where mechanisms were established to enable local and indigenous communities to

participate in the management of government-owned protected areas. This was the approach adopted by FFI for its large grant focusing on the conservation of priority sites for primate and tree conservation. Given the legal context for protected area management in the hotspot countries, which creates obstacles for full local participation in governance, co-management was often manifested as participation of local people in patrolling and monitoring activities, with a limited voice in decision making, for instance regarding management objectives or management regimes. Some grants did promote local participation in protected area governance, for example a PRCF initiative to develop multiple-use zonation for Nam Xuan Lac Species and Habitat Conservation Area in Vietnam, but these efforts were not always successful.

In the Mekong and Major Tributaries corridor, where the ecosystems represented within KBAs were predominantly riverine, there were more opportunities for community-led alternatives to formal protected areas, especially community fisheries and, to some extent, community forests. For example, the International Center for Living Aquatic Resources Management (WorldFish Center) facilitated the establishment of three community-managed fish conservation zones within Cambodia's Stung Treng Ramsar Site, in coordination with Cambodian Rural Development Team (CRDT) and other local NGOs active in the Ramsar site. Similarly, IUCN assisted local communities in Lao PDR to establish four fish conservation zones along the section of the Mekong River between Vientiane and Luang Prabang.

Only a single grant, of \$79,962 (1 percent of awarded funds), was awarded under Investment Priority 2.2. This was to TRAFFIC's Greater Mekong Programme, through TRAFFIC International, for development of a model for the sustainable wild collection of medicinal plants at Ban Thi-Xuan Lac KBA in the Northern Highlands Limestone corridor, using the FairWild standard. It is not entirely clear why no other high quality applications were forthcoming for development and piloting of regional standards and programs to address overexploitation of biodiversity. One possible explanation is that the groups leading the development of such standards and programs, such as the ASEAN Competence Standards for Protected Area Jobs or the Spatial Monitoring and Reporting Tool (SMART), had access to sufficient funding from other sources, so did not require additional support from CEPF.

Portfolio Overview: Strategic Direction 3

CEPF investment under Strategic Direction 3 aimed to engage key actors in reconciling biodiversity conservation and development objectives. Particular emphasis was placed on the two priority corridors but investments were not restricted to them, in order to take advantage of opportunities for biodiversity mainstreaming elsewhere in the hotspot. This was a relatively new field for civil society to be engaged in, and many of the initiatives explored new approaches and pushed the boundaries of civil society's role in development decision making. CEPF's strategy was to target the bulk of the available resources in support of civil society efforts to analyze development policies, plans and programs, evaluate their impact on biodiversity and ecosystem services, and propose alternative development scenarios and appropriate mitigating measures (Investment Priority 3.1). This was complemented by targeted outreach and awareness raising for decision-makers, journalists, and lawyers, to build support for biodiversity conservation objectives (Investment Priority 3.3). CEPF also intended to take advantage of the very significant resources being invested in development projects and programs by governments, donor agencies and the private sector (which outstrip investments in biodiversity conservation by several orders of magnitude), to leverage support for biodiversity conservation (Investment Priority 3.2). However, there was very little demand for grants under this investment priority, and such leveraging as did occur took place opportunistically, outside the context of targeted grants.

Investment Priority 3.1 received \$2,126,390 (22 percent of awarded funds), spread across 25 grants. These grants supported a range of initiatives to mainstream biodiversity into development policies, plans and programs at regional, national and local scales. At the regional scale, the greatest concentration of grants focused on hydropower development in the Mekong Basin, which emerged as one of the most pressing conservation issues during the investment phase. Some grantees, such as the University of Canterbury, focused on evaluating the potential impacts of these plans on biodiversity and ecosystem services. Other grantees, such as Green Innovation and Development Centre (Green ID) and the Henry L. Stimson Center, applied the results of these assessments to influence policymakers to adopt precautionary positions regarding hydropower development. These approaches were complemented by other grantees, such as International Rivers, who catalyzed campaigns against destructive dam developments on the Mekong mainstream.

At the national scale, one of the key investments was a grant to the Center for People and Nature Reconciliation (PanNature), which conducted independent research relevant to four aspects of national policy in Vietnam: the potential impacts of REDD+ on protected areas; the implications of safeguard policies in international development finance; environmental charges in the mining sector; and Vietnamese investment in hydropower development in the Mekong basin. The findings were disseminated via local-language reports, policy briefs and media articles, as well as by briefings for members of the National Assembly. This was ground-breaking work for a Vietnamese NGO, and expanded the influence of local civil society in the policy arena.

At the local scale, CEPF grantees worked to integrate biodiversity conservation into plans and policies in natural resources sectors. For instance, WWF piloted integrated spatial development planning as a tool for reconciling conservation and development objectives for forests in Lao PDR. The approach here was to integrate core areas for Eld's deer (*Rucervus eldii*) into local development plans, to mitigate the risk of site-level conservation being undermined by wholesale conversion of the specific dry forest sub-type in this area to agro-industrial plantations. In Cambodia, Action for Development integrated conservation measures for Bengal florican (*Houbaropsis bengalensis*) into community forestry management plans, to ensure that forestry activities were consistent with the conservation needs of this Critically Endangered species. Elsewhere, local fisheries plans were the focus of CEPF grants. For example, WWF promoted the adoption of conservation measures for Mekong giant catfish (*Pangasianodon gigas*), the flagship aquatic species of the hotspot, into fisheries management policies and plans in the upper Mekong River of Lao PDR and Thailand, strengthening the capacity of provincial fisheries officers and successfully calling for a moratorium on catch for scientific purposes on the Thai side.

Investment Priority 3.2 was explicitly prioritized under all four calls for proposals but, as mentioned above, very few applications were received and only a single grant, of \$19,947 (less than 1 percent of awarded funds) was awarded. This was to WCS for leveraging support from the Vietnamese corporate sector, and the main emphasis was on changing employees' attitudes towards illegal consumption of protected species as opposed to mobilizing resources. The reasons for this low response to Investment Priority 3.2 remain unclear. While it is undoubtedly true that many civil society organizations active in Indo-Burma remain heavily dependent upon grant funding, an increasing number are diversifying their funding sources by leveraging support from development projects and programs. It may be that opportunities for such leverage arise opportunistically, and cannot easily be pursued in a systematic fashion within a structured project.

Seven grants were awarded under Investment Priority 3.3, totaling \$279,023 (3 percent of awarded funds). The bulk of this investment comprised large grants to PanNature, which exposed journalists to development issues affecting biodiversity, and WCS, which developed a network of

journalists to disseminate news about transnational wildlife crime. Both projects contributed substantively to elevating biodiversity conservation as a political priority in Vietnam, and catalyzing action by senior levels of government. This investment priority also included small grants to the Center for Water Conservation and Development (WARECOD), the International Centre for Environmental Management (ICEM) and the 3S Rivers Protection Network to raise awareness of the potential impacts of hydropower developments in the hotspot among decision-makers and journalists. These investments complemented and drew on the results of some of the grants awarded under Investment Priority 3.1.

Portfolio Overview: Strategic Direction 4

CEPF investment under this strategic direction was limited to supporting the operations of the RIT. To this end, a single grant of \$947,369 was made to BirdLife to build a broad constituency of civil society groups working across institutional and political boundaries toward achieving the shared conservation goals described in the ecosystem profile (Investment Priority 1.4).

BIODIVERSITY RESULTS

Globally Threatened Species

Conservation Status Assessments

CEPF investments under Investment Priorities 1.3 and 1.4 enabled conservation status assessments to be taken for several major taxonomic groups that had hitherto been severely under-represented on the IUCN Red List. One of these groups was vascular plants, of which the Indo-Burma Hotspot supports an estimated 15,000 to 25,000 species, of which only around 1 percent had been assessed prior to the CEPF investment phase. A large grant to Missouri Botanical Garden enabled systematic conservation status assessments to be undertaken for selected vascular plant families, thereby filling a gap in conservation priority setting efforts that had been a major barrier to targeting conservation efforts for plants at the species and site scales. Under the project, the global threat status of 607 plant species was assessed (in 519 cases, for the first time), of which 289 species were found to be globally threatened (91 Critically Endangered (CR), 114 Endangered (EN) and 84 Vulnerable (VU)). The results were placed in the public domain through the IUCN Red List website (www.iucnredlist.org), and are expected to inform and inspire increased conservation action for threatened plant species.

One of the most impressive achievements of this project was the way in which it was able to bring together botanists from across and outside of the Indo-Burma Hotspot, to contribute to a shared endeavor. In particular, the establishment of an Indochina Plant Red List Authority was as an important result, which will enable the conservation status assessments carried out under the project to be periodically updated, as well as first time assessments for other plant families that could not be addressed under the project, due to limitations of time and expertise

A parallel large grant to IUCN enabled conservation status assessments to be undertaken of all freshwater fishes, mollusks, odonates and crabs and selected families of aquatic plants in Cambodia, Lao PDR, Thailand and Vietnam, as well as the Thanlwin (Salween) and Sittaung Basins within Myanmar. Prior to the project, only 18 species of freshwater fish in this region of analysis had been assessed as globally threatened, and none in the other taxonomic groups. Under the project, 1,178 fish species were evaluated, of which 112 were found to be globally threatened (21 CR, 39 EN and 52 VU). For the other groups, 430 species of mollusk, 473 species of odonate, 182 species of crab and 252 species of aquatic plant were evaluated, with 48 (8 CR, 12 EN and 28 VU), 14 (2 CR, 2 EN and 10 VU), 27 (9 EN and 18 VU) and five (1 CR, 2 EN and 2 VU) being assessed as globally threatened, respectively. The results were posted on the IUCN Red List

website (www.iucnredlist.org) as a freely available dataset on the conservation status, distribution and ecological characteristics of each species. These assessments filled a major gap in knowledge on the status of aquatic biodiversity, and created a valuable information base that can be drawn upon to evaluate the biodiversity implications of hydropower dams and other developments affecting aquatic systems.

The most chastening result of these conservation status assessments (notwithstanding the fact that 124 species were assessed as Critically Endangered) was that one fish species, Siamese flat-barbelled catfish (*Platytrapius siamensis*), was assessed as Extinct. This species, which was only known from two drainages in central Thailand and has not been recorded since 1977, is believed to have been extirpated by a combination of pollution, conversion of wetlands to agriculture, and damming and canalization of rivers. Four other species of fish and four species of mollusk are considered possibly extinct, as a result of hydropower dam development and other factors, although this requires confirmation through surveys. This may be just the tip of the iceberg in terms of species extinctions if current development trends, especially hydropower development, continue unabated.

Identification and Conservation of Core Populations

The ecosystem profile included a list of 67 priority species for CEPF investment, which was expanded to 83 species during the mid-term assessment, to account for new information and taxonomic changes. As mentioned above, there was a strong funding demand for species-focused conservation, and Investment Priority 1.1 received 30 percent of the available funds. As this was by no means sufficient to meet the latent demand, a number of high quality proposals had to be rejected due to limited funds. Furthermore, rather than spread the available funds evenly across all priority species, CEPF and the RIT targeted them strategically at those species that presented the best opportunities for civil society to make successful interventions, and in amounts that reflected the varying conservation needs of different species. In spite of these limitations, CEPF grants identified and/or secured core populations of 44 of the 83 priority species (53 percent of the total), comprising 15 mammals, 13 birds, 15 reptiles and one fish (Tables 2 and 3). Other priority species are believed to have benefited from cross-cutting actions taken under the CEPF grants portfolio, such as control of wildlife trade, although a direct causal relationship cannot necessarily be established between the action and the status of particular species. It should also be noted that three priority species (Hainan gibbon (*Nomascus hainanus*), red-necked pond turtle (*Chinemys nigricans*) and Beale's eyed turtle (*Sacalia bealei*)) are restricted to China, which was not covered by the investment program during the first phase.

With support from CEPF grants, 48 core populations of 32 species were secured from overexploitation and illegal trade. This was a tremendous achievement, particularly considering that Indo-Burma is at the forefront of the extinction crisis facing Asia's non-marine species. The species benefiting from these interventions comprised 14 Critically Endangered, 10 Endangered and eight Vulnerable species (Table 2), including nine species endemic to the hotspot. In every case, CEPF grants only secured selected populations (between one and four in each case), meaning that part (in most cases, the majority) of the global population was not covered by the intervention. Also, in no case were threats to the core population fully abated, meaning that sustained investment will be required, in order to consolidate the results achieved under the investment phase. Nevertheless, these investments have established a foundation for long-term conservation initiatives for these species, some of which, such as saola (*Pseudoryx nghetinhensis*) had no populations under effective conservation management prior to the investment phase.

Table 2: Priority species with core populations secured by CEPF grants

Species	Taxonomic group	Red List status
Sun bear (<i>Helarctos malayanus</i>)	Mammals	VU
Hairy-nosed otter (<i>Lutra sumatrana</i>)	Mammals	EN
Smooth-coated otter (<i>Lutrogale perspicillata</i>)	Mammals	VU
Black crested gibbon (<i>Nomascus concolor</i>)	Mammals	CR
Cao vit crested gibbon (<i>Nomascus nasutus</i>)	Mammals	CR
Irrawaddy dolphin (<i>Orcaella brevirostris</i>)	Mammals	VU
Saola (<i>Pseudoryx nghetinhensis</i>)	Mammals	CR
Red-shanked douc (<i>Pygathrix nemaeus</i>)	Mammals	EN
Tonkin snub-nosed monkey (<i>Rhinopithecus avunculus</i>)	Mammals	CR
Eld's deer (<i>Rucervus eldii</i>)	Mammals	EN
Francois's leaf monkey (<i>Trachypithecus francoisi</i>)	Mammals	EN
White-headed leaf monkey (<i>Trachypithecus poliocephalus</i>)	Mammals	CR
Asian black bear (<i>Ursus thibetanus</i>)	Mammals	VU
White-winged duck (<i>Cairina scutulata</i>)	Birds	EN
White-eared night-heron (<i>Gorsachius magnificus</i>)	Birds	EN
Sarus crane (<i>Grus antigone</i>)	Birds	VU
White-rumped vulture (<i>Gyps bengalensis</i>)	Birds	CR
Slender-billed vulture (<i>Gyps tenuirostris</i>)	Birds	CR
Bengal florican (<i>Houbaropsis bengalensis</i>)	Birds	CR
Greater adjutant (<i>Leptoptilos dubius</i>)	Birds	EN
Lesser adjutant (<i>Leptoptilos javanicus</i>)	Birds	VU
Green peafowl (<i>Pavo muticus</i>)	Birds	EN
White-shouldered ibis (<i>Pseudibis davisoni</i>)	Birds	CR
Red-headed vulture (<i>Sarcogyps calvus</i>)	Birds	CR
Giant ibis (<i>Thaumatibis gigantea</i>)	Birds	CR
Asiatic softshell turtle (<i>Amyda cartilaginea</i>)	Reptiles	VU
Mangrove terrapin (<i>Batagur affinis</i>)	Reptiles	CR
Siamese crocodile (<i>Crocodylus siamensis</i>)	Reptiles	CR
Yellow-headed temple turtle (<i>Heosemys annandalii</i>)	Reptiles	EN
Impressed tortoise (<i>Manouria impressa</i>)	Reptiles	VU
Asian giant softshell turtle (<i>Pelochelys cantorii</i>)	Reptiles	EN
East Asian giant softshell turtle (<i>Rafetus swinhoei</i>)	Reptiles	CR

Seven of the priority species with core populations secured by CEPF grants were reptiles, mainly freshwater turtles. Many of these species are in high demand in the illegal wildlife trade, and are consequently exposed to over-exploitation. One response to this, adopted by CI in Cambodia, was to support community patrolling and snare removal, to reduce pressure on populations of Asiatic softshell turtle (*Amyda cartilaginea*), impressed tortoise (*Manouria impressa*) and yellow-headed temple turtle (*Heosemys annandalii*). Other species, which nest on sandbars in large rivers, are threatened by opportunistic egg collection and egg predation by dogs and wild animals. One response, adopted by WCS for mangrove terrapin (*Batagur affinis*) and by CI for Asian giant softshell turtle (*Pelochelys cantorii*), was to operate nest protection schemes. In the case of the Asian giant softshell turtle population along the central section of the Mekong River in Cambodia, nest protection was supplemented by 'head-starting', whereby a proportion of hatchlings are raised *ex situ* and only released into the wild when they have reached a size when mortality rates (due to predation) have significantly reduced. Due to the short-length of these interventions in relation to the generation length of the species in question, it was not possible to

observe population trends, although there were reported increases in the numbers of nests and eggs covered by the nest protection programs.

Twelve of the priority species with core populations secured by CEPF grants were birds. Eight of these were covered by a single grant, to WCS, which focused on core populations around Tonle Sap Lake and in the Northern Plains of Cambodia. This project successfully piloted and scaled up various approaches to incentivizing local people to conserve breeding populations of threatened birds, including nest protection, community-based ecotourism, and eco-labeling of agricultural products. These approaches had demonstrable success in reducing threats, and, in all but one case, the targeted bird populations increased or were presumed to be stable over the course of the project. The exception was Bengal florican, where populations at two sites appeared to fluctuate but remain generally stable, while populations at two other sites appeared to decline. This result can be attributed to the particular challenges of conserving a species with specific habitat requirements that breeds in a landscape undergoing rapid land-cover change (i.e., the Tonle Sap inundation zone), and underscores the need for intensification of conservation efforts for the most important remaining population of this Critically Endangered species in the world.

Among the species benefiting from the WCS-led project was sarus crane, which occurs as a dispersed breeder in the Northern Plains and spends the non-breeding season at Ang Tropeang Thmor. Other non-breeding birds migrate to Anlung Pring (within Kampong Trach KBA) and Boeung Prek Lapouv: two important wetland sites in the Mekong Delta region of Cambodia. These sites were the focus of conservation efforts by an alliance of civil society organizations, including the Cambodian Institute for Research and Rural Development (CIRD), CCK, Mlup Baitong and WWT, which leveraged their complementary capacities to strengthen management of these sites. This integrated suite of grants successfully secured the formal designation of Anlung Pring as a management and conservation area for sarus crane (although it should be recognized that the groundwork for this designation had been put in place prior to the project, by BirdLife and the Forestry Administration), and developed management plans for both sites. These activities helped establish the regulatory framework for conservation management, which was translated this into management action on the ground by local conservation groups, to which the project provided training, study tours and operational support. The grants also piloted savings groups, community-based ecotourism, wildlife-friendly agriculture and community fisheries, which helped build support for conservation objectives among local communities and pointed the way towards possible long-term funding mechanisms.

Also in Cambodia, Pannasastra University and WCS implemented a series of small grants to promote the conservation of three Critically Endangered vulture species. The approaches adopted by these grants included: nest protection, to reduce incidental persecution of nesting birds; control of poisoning, to prevent accidental poisoning by pesticides or veterinary drugs used to treat livestock; and supplementary feeding, to provide an uncontaminated food source and allow monitoring of vulture numbers. Monitoring results indicate that populations of the three species remained stable or increased over the investment phase.

The remaining priority 13 species with core populations secured by CEPF grants were mammals. Among these were six primates with populations in northern and central Vietnam, including the world's rarest ape (cao vit crested gibbon (*Nomascus nasutus*)) and one of the world's rarest monkeys (Cat Ba langur – a subspecies of white-headed leaf monkey (*Trachypithecus poliocephalus*)). The most significant investment in primate conservation within the CEPF portfolio was a large grant to FFI, which enabled it to develop a more systematic approach to conservation efforts for highly threatened primate and tree species. This project made an important contribution to consolidating on-the-ground conservation actions at five sites, through

supporting ‘community conservation teams’ and improving the knowledge base for conservation planning through targeted surveys. The project also generated valuable experience of the Species Conservation Action Planning methodology, which was demonstrated at multiple sites, forming the basis for wider application of the approach.

Hairy-nosed otter (*Lutra sumatrana*) and smooth-coated otter (*Lutrogale perspicillata*) were among several Cambodian mammals threatened by wildlife trade to benefit from a grant to CI. One of the key results of this project was the establishment of three community conservation areas in the Kampong Prak area of Tonle Sap Lake, supported by community rangers, awareness raising and government-led protection. In parallel, the project established savings groups to break the cycle of indebtedness, which was driving environmentally destructive activities, such as hunting otters. The combination of these activities appeared to have positive impacts on otter conservation, with a steep decrease in the use of otter leg traps, fewer records of captures and confiscations, a higher release rate of incidental otter by-catches, and an increase in positive attitudes towards otters among local communities.

The greatest concentration of CEPF resources for a single species was for saola, the flagship terrestrial species of the Indo-Burma Hotspot, which was the focus of nine grants, totaling \$602,099 (6 percent of awarded funds). These investments were instrumental in reinvigorating conservation efforts for the species, which had languished after an initial burst of interest following the species’s discovery in 1992. When CEPF began supporting saola conservation efforts in 2009, only one other institutional donor was supporting conservation of one of the most threatened large mammals in the world. By 2013, the number of institutional donors had increased to 30, with a wider circle of individual scientists, conservationists and supporters providing support, while on-the-ground conservation action for the species was being taken by an increasing number of actors.

The key initiatives for saola conservation supported by CEPF included a large grant to WCS, to put in place a strong foundation of knowledge, capacity and community support for Phou Sithone Endangered Species Conservation Area in Lao PDR. Through a combination of outreach, awareness raising and enforcement, the project was able to demonstrate a marked reduction in activities incompatible with saola conservation within the protected area, especially hunting with snares. Across the border in Vietnam, three other sites assumed to support saola populations were supported through a large grant to WWF, which, using the forest guard model (described earlier), successfully destroyed more than 350 illegal hunting and logging camps and removed more than 19,500 wire snares. The importance of these efforts was underscored in September 2013, when a camera trap confirmed the presence of saola: the first photo of the species in the wild for more than a decade. The on-the-ground actions supported by CEPF and the growing body of institutional funders were coordinated by and drew on technical support from the Saola Working Group of the IUCN/SSC Bovid Specialist Group, which was supported through a series of small grants. This working group model, which was instrumental in diversifying the funder base for saola conservation, was viewed as good practice, and has already been replicated for a number of other globally threatened species in the hotspot, including hog deer (*Axis porcinus*).

The second aspect of Investment Priority 1.1 was an emphasis on identification of new core populations that could provide a focus for future conservation efforts. This was achieved for several of the species in Table 2, most notably hairy-nosed otter, whose presence was confirmed in the coastal zone of Cambodia’s Koh Kong province. In addition, core populations were identified of the 12 priority species listed in Table 3. Identification of these populations did not translate into conservation action during the lifetime of the CEPF investment phase, due to limitations of time and resources, although the new information generated can be used to guide

conservation in coming years. Indeed, several are the focus of funding applications submitted to CEPF under the second phase. The most important project in relation to identification of core populations was a large grant to Cleveland Zoological Society, which significantly increased the knowledge base on the status and distribution of globally threatened tortoise and freshwater turtle species in central Vietnam. As part of this work, a number of innovative survey methodologies were tested in the Vietnamese context, including scent-seeking dogs and radio telemetry.

Table 3: Priority species with core populations identified by CEPF grants

Species	Taxonomic group	Red List status
Hog deer (<i>Axis porcinus</i>)	Mammals	EN
Indochinese silvered langur (<i>Trachypithecus germaini</i>)	Mammals	EN
Spoon-billed sandpiper (<i>Eurynorhynchus pygmeus</i>)	Birds	CR
Indochinese box turtle (<i>Cuora galbinifrons</i>)	Reptiles	CR
Chinese three-striped box turtle (<i>Cuora trifasciata</i>)	Reptiles	CR
Zhou's box turtle (<i>Cuora zhoui</i>)	Reptiles	CR
Vietnamese pond turtle (<i>Mauremys annamensis</i>)	Reptiles	CR
Asian yellow pond turtle (<i>Mauremys mutica</i>)	Reptiles	EN
Chinese stripe-necked turtle (<i>Mauremys sinensis</i>)	Reptiles	EN
Wattle-necked softshell turtle (<i>Palea steindachneri</i>)	Reptiles	EN
Four-eyed turtle (<i>Sacalia quadriocellata</i>)	Reptiles	EN
Jullien's golden carp (<i>Probarbus jullieni</i>)	Fishes	EN

These investments were complemented by investments under Investment Priority 1.5, which targeted little known species that were in great need of improved information on their distribution and conservation needs before action could be effectively taken for them. CEPF grants targeted 10 of the 12 species prioritized for research. Of the remaining two, red-necked pond turtle is known only from China, while no applications were received for white-eyed river-martin (*Eurychelidon sirintarae*).

Of the 10 species targeted by CEPF grants under Investment Priority 1.5, new information was generated on six of them. In the case of three of these species (white-eared night-heron, Vietnamese pond turtle (*Mauremys annamensis*) and East Asian giant softshell turtle (*Rafetus swinhoei*)), the new information guided conservation action for them during the investment phase. For two of them (spoon-billed sandpiper (*Eurynorhynchus pygmeus*) and Zhou's box turtle (*Cuora zhoui*)), funding applications to work on the species have been received for the second phase. For the sixth species (otter civet (*Cynogale bennettii*)), a small grant to WCS revealed new information about the taxonomic status of 'Lowe's otter civet', an enigmatic form collected in northern Vietnam. Of the remaining four species, efforts to locate extant populations of kouprey, Wroughton's free-tailed bat (*Otomops wroughtoni*) and Edwards's pheasant (*Lophura edwardsi*) were unsuccessful, although important syntheses and analyses of available knowledge were undertaken. Finally, Vietnam leaf-nosed bat (*Paracoelops megalotis*) was shown to be an invalid species, through analysis conducted outside the scope of the CEPF investment program.

With a few exceptions, such as large waterbirds in Cambodia and certain primates in Vietnam, the population status of individual globally threatened species in Indo-Burma is not monitored systematically. Of the core populations of priority species targeted by CEPF grants, most were assumed to have remained stable or, in a few cases, observed to increase over the CEPF investment phase. Nevertheless, it should be reiterated that none of these interventions covered the entire global population of the species and that the situation for the species as a whole may, in many cases, be bleaker than information from sites with conservation interventions would

suggest. From a species conservation perspective, the most sobering occurrence during the investment phase was the extinction of the Vietnamese population of lesser one-horned rhinoceros (*Rhinoceros sondaicus*) in 2010, which was documented thanks to a WWF-led study supported by a CEPF small grant. While the study revealed that the population was already functionally extinct, having previously been reduced to one individual, its extinction reduces the global distribution of what is arguably the world's rarest mammal to a single population on the Indonesian island of Java. The loss of the Vietnamese population is a collective failure of government, civil society and the donor community, and highlights the need to redouble species conservation efforts in Indo-Burma.

Response to the Wildlife Trade

Over-exploitation was identified as the major threat to priority species in the Indo-Burma Hotspot. While *in situ* protection can, given sufficient resources and suitable methods, secure core populations from over-exploitation, this can only ever be a temporary solution as long as the drivers continue to operate. Consequently, CEPF investments in identifying and securing core populations were complemented by investments in combatting the illegal wildlife trade under Investment Priority 1.2.

The most widely adopted approach was for civil society organizations to facilitate collaboration and information sharing among enforcement agencies, within as well as between countries. This approach was adopted for a large grant led by Wildlife Alliance, a key result of which was the formal establishment of a Cambodian Coordination Unit for the ASEAN WEN: the major regional initiative promoting international collaboration to combat illegal wildlife trade. The project cultivated links between the new unit and other government agencies responsible for different aspects of wildlife law enforcement, and supported the operations of the Wildlife Rapid Rescue Team to tackle wildlife trafficking between Cambodia and Vietnam. During the two-year project period, 9,659 animals were rescued from wildlife traders, including 114 individuals of 11 CEPF priority species.

Promoting inter-agency collaboration and intelligence-led enforcement was also at the heart of a large grant led by FFI, which sought to improve transboundary collaboration between neighboring Lao and Vietnamese provinces. The project improved understanding of socio-economics, land-use patterns and wildlife trade dynamics in the Vietnamese communes that border Lao PDR's Nakai Nam Theun National Protected Area. It also conducted capacity building workshops for various enforcement agencies in Ha Tinh province and facilitated collaboration among them, as well as organizing journalist trainings to raise the issue of illegal wildlife trade in the Vietnamese media. While the project was successful at improving inter-agency collaboration on wildlife law enforcement within Vietnam, it was unable to facilitate better coordination across the international border. Although the Lao authorities were keen to re-ignite transboundary coordination that had been dormant since the early 2000s, their Vietnamese counterparts were unwilling to commit to a joint action plan in the absence of committed financial resources. This obstacle is symptomatic of wildlife crime enforcement being a low budgetary priority for governments in the hotspot.

This underlying barrier to controlling the illegal wildlife trade in Vietnam was addressed as part of a large grant to WCS under Investment Priority 3.3. Under this project, the most comprehensive analysis of cross-border wildlife trade to date in Vietnam was undertaken. Focusing on the Mong Cai border crossing between Vietnam and China, and employing various innovative investigative, analytical and communication techniques, the project brought the scale and severity of the problem to the attention of stakeholders within multiple branches of government and the diplomatic community. Significantly, the project framed wildlife crime

within the context of transnational crime more generally, elevating it as a political priority and catalyzing action by senior levels of government. The project also built capacity among frontline enforcement officers and developed a network of journalists to disseminate environmental news within Vietnamese media. In this way, a solid foundation was put in place for reducing illegal transnational trade of wildlife through the Mong Cai area, although continued efforts for many years will be needed to build on this foundation and ensure a sustained reduction in wildlife trade flows through the crossing.

ENV adopted an alternative approach to supporting government enforcement agencies in Vietnam, by engaging the general public in reporting wildlife crime through an e-mail and telephone hotline. During the three-and-a-half-year project, 2,930 new cases of wildlife crime were logged by ENV's Wildlife Crime Unit, including more than 1,000 cases reported by members of public via the hotline, and more than 400 cases reported by a network of volunteers. In many cases, these reports enabled a prompt and targeted response by the relevant authorities. For example, in January 2010, Environmental Police in Ho Chi Minh City confiscated two Asian small-clawed otters (*Aonyx cinereus*) advertised for sale on the internet, after ENV was alerted to the advertisement by a wildlife volunteer. Under the project, over 2,000 new volunteers were recruited and trained, doubling the size of ENV's volunteer network. They were coordinated and motivated through a network of nine wildlife protection clubs established in major urban centers and other wildlife trade hotspots across Vietnam, and undertook over 2,300 monitoring missions. Furthermore, 50 celebrities joined ENV's wildlife protection efforts, including by appearing in public service announcements. This is one of the first examples of mass participation in conservation action by Vietnam's emerging urban middle class, and helped broaden civil society participation in the conservation movement beyond the small cadre of conservation professionals.

The strategy of engaging the general public in efforts to combat the wildlife trade was extended to two small grants aimed at reducing demand for rhino horn among Vietnamese consumers, which is driving a poaching crisis in southern Africa. One of these projects, led by ENV, prepared two public service announcements and an infographic film, each of which was broadcast for a month on more than 35 television stations around the country, reaching an audience of millions. The films were also disseminated via a viral internet campaign, which resulted in almost 120 websites and forums posting the campaign banner encouraging the public to become actively involved in rhino protection by not consuming or trading rhino horn and reporting crimes relating to rhino horn to ENV's hotline. As part of the second project, led by WCS, trainings in investigative journalism were held in Hanoi and Ho Chi Minh City, with the participation of 38 journalists and 22 government officials. Following the trainings, 26 articles were published online and in print, including on the news page of the Communist Party, covering different aspects of the rhino horn trade. Although it is difficult to measure changes in behavior as a result of such campaigns, feedback received by CEPF grantees indicates that they influenced public attitudes significantly.

Local-language Reference Materials

As discussed previously, only a small number of grantees developed local-language materials, in part because a large number of key documents (field guides, training manuals, etc.) were translated into local languages after completion of the ecosystem profile. All the same, a limited number of local-language materials were published with support from CEPF grants. FFI published 1,600 'toolboxes' on human-elephant conflict, as a guide for communities living in areas with wild elephant populations in eastern Cambodia. PanNature published 2,820 copies of a poster and postcards on Tonkin snub-nosed monkey and François's leaf monkey to increase awareness of, build pride in, and reduce threats to these primates at priority sites in the Northern Highlands Limestone corridor. Also in the Northern Highlands Limestone corridor, WARECOD

published 100 posters on the aquatic biodiversity of the Nang River, as well as 1,500 leaflets on methods and results of participatory research into aquatic species.

Key Biodiversity Areas

New/Expanded Protected Areas

At the time when the CEPF investment strategy for the Indo-Burma Hotspot was prepared, the protected area systems of the hotspot countries were relatively well developed in terms of coverage of terrestrial ecosystems, with only Myanmar (which was not eligible for support during the first phase) having major gaps. Conflicting land uses, limited political support for protected areas and insufficient resources to effectively manage protected areas already established meant that opportunities for further protected area establishment in Cambodia, Lao PDR, Thailand and Vietnam were limited. Consequently, the ecosystem profile did not emphasize expansion of conventional protected areas, although piloting of alternative models was included as an investment priority.

Such protected area establishment as was supported during the investment phase focused on residual gaps in coverage of national protected area networks. Foremost among these were wetland ecosystems, especially lowland rivers, which are poorly represented in protected area networks. The major investment in this regard was a series of linked grants to WWF, CRDT and Community Economic Development (CED) to expand protected area coverage of the Mekong Flooded Forest along the Mekong mainstream in Cambodia. This is the single most important section of the Mekong River from a biodiversity conservation perspective, and supports core populations of at least 16 CEPF priority species and other species of conservation concern. After overcoming many challenges, the initiative was finally able to secure formal conservation designations to protect the species and habitat of the Mekong Flooded Forest. In August 2012, the Cambodian Prime Minister signed a sub-decree designating an area of 81,634 hectares as the Mekong Irrawaddy Dolphin Protection and Management Area to protect the Critically Endangered Mekong River subpopulation of Irrawaddy dolphin (*Orcaella brevirostris*). In April 2013, the Minister of Agriculture, Forestry and Fisheries signed a prakas designating an area of 37,265 hectares as the Mekong Flooded Forest Management and Conservation Site for Biodiversity and Fisheries Resources. These designations came late in the project, and meant that planned activities related to management planning and establishing management structures and systems were severely curtailed, although these activities will be taken forwards after the project, with funding from BMZ and other sources.

In spite of these delays with securing appropriate management designation for the site, a number of approaches were piloted to conserve key elements of biodiversity on the ground, including direct payments for protection of bird and turtle nests. These efforts resulted in the successful fledging of 164 lesser adjutant (*Leptoptilos javanicus*), 85 white-shouldered ibis and 50 river tern (*Sterna aurantia*) chicks, among other species, over the four years. Another important achievement was the success of efforts to control artisanal gold mining, which emerged as a conservation issue during the initiative.

On a smaller scale, a number of other grants piloted the community fisheries co-management models along rivers in the Mekong Basin, which featured the designation of fish conservation zones: a form of community-managed protected area. For instance, under a large grant to WWF, nine fish conservation zones, with a total area of 33 hectares, were established along a section of the Mekong mainstream between Bokeo province in Lao PDR and Chiang Rai province in Thailand, believed to contain the spawning grounds of Mekong giant catfish. In so-doing, the project established a foundation for sustainable management of aquatic resources by local

communities in Lao PDR and Thailand, as well as a transboundary agreement on fisheries management, which is the first of its kind in the hotspot and could be a model for replication elsewhere. These achievements with regard to community-based natural resource management are being consolidated by a three-year Mekong River Commission fisheries management project at the same location.

Further downstream along the Mekong mainstream, IUCN promoted the establishment of four fish conservation zones, totaling 160 hectares, along the section between Luang Prabang and Vientiane. Also in Lao PDR, WWF supported the establishment of 24 fish conservation zones totaling 97 hectares in the Sekong Basin, comprising 14 in Attapeu province and 10 in Sekong province. Across the border in Thailand, Living River Siam supported the establishment of fish conservation zones totaling 180 hectares in 18 communities in the Ing Basin. Finally, WorldFish Center, local authorities and other stakeholders collaborated to establish three fish conservation zones along the section of the Mekong mainstream upstream of Stung Treng town in Cambodia: Anlong Kambor (170 hectares); Preah Sakhon (150 hectares); and Anlong Kol 46 (140 hectares). The management responsibility for each fish conservation zone was shared among several villages, enabling larger areas, further from human settlement, to be protected. Because these three sites were included within the Mekong Irrawaddy Dolphin Protection and Management Area, they are not included in the summary statistics, to avoid double counting.

Other wetland ecosystems to benefit from protected area establishment supported by CEPF grants included three community conservation areas (totaling 3,000 hectares) around dry season ponds in the Kampong Prak area of Tonle Sap Lake, established with support from CI, and Anlung Pring Management and Conservation Area (1,108 hectares), established with support from WWT, in collaboration with BirdLife and the Forestry Administration.

Finally, CEPF grants supported protected area establishment for saola, which, as mentioned earlier, had been overlooked by conservation efforts in the previous decade. In Lao PDR, a large grant to WCS was instrumental in confirming the occurrence of the species at Phou Sithone in the northern Annamite Mountains, and in supporting establishment of an endangered species conservation area at the site, covering 14,186 hectares. An 11,474 hectare extension of the site was proposed, which, if approved, would increase the total area to 25,660 hectares. In Vietnam, a large grant to WWF supported the designation of Saola (Quang Nam) Nature Reserve (15,822 hectares) in the central Annamites, and the expansion of the adjacent Saola (Thua Thien Hue) Nature Reserve by 3,400 hectares. In combination, these grants extended formal protection to the only two sites for saola with confirmed records in the last decade.

Overall, the CEPF portfolio supported protected area creation and expansion totaling 156,885 hectares. While this represents an increase of less than 1 percent in the protected area coverage of the four countries covered by the investment phase, these increases were all very strategic, filling key gaps in coverage of species and ecosystems, and demonstrating new models for protected area management with potential for wider replication.

Strengthened Management of Protected Areas

Because the protected area systems of the four countries covered by the investment phase were relatively complete in terms of coverage, the major focus of CEPF investments in protected areas was on strengthening the management of existing sites. The sites benefiting from strengthened management totaled 1,596,847 hectares. The management of other protected areas was also improved but, as these were not yet guided by sustainable management plan, they did not contribute to this monitoring indicator.

CEPF tracked the impact of its investments in protected areas by using the SP1 METT to monitor changes in management effectiveness. This tracking tool was completed by protected area managers at 14 protected areas receiving support for periods greater than 12 months. Eleven protected areas (79 percent) reported improved management effectiveness over the period of CEPF support, with the average increase of 16 points. In most cases, the CEPF grants leveraged investments by other funders that had been supporting work at these sites prior to the investment phase.

The most significant results, in area terms, were reported from Lao PDR. WCS reported strengthening the management of Nam Et-Phou Louey National Protected Area (595,000 hectares) by training protected area staff in tiger (*Panthera tigris*) monitoring, preparing tiger monitoring guidelines and implementing a tiger monitoring plan that enables managers to evaluate the effectiveness of conservation interventions. WWF reported strengthening the management of Eld's Deer Sanctuary (93,000 hectares) in Savannakhet province, by addressing hunting, disturbance and habitat loss. This project strengthened the capacity of local communities and government officers in wildlife protection and sustainable natural resources management, especially through supporting three joint patrolling teams. Monitoring results showed a reduction in threats (disturbance, tree cutting, land clearance for rice cultivation) in two of the three patrolling areas, a recovery of the Eld's deer population from c.40 individuals prior to the project, to 60-80 individuals by the end, and an increase in the SP1 METT score.

Elsewhere in Lao PDR, FFI reported strengthening the management of Nakai-Nam Theun National Protected Area (371,000 hectares), as well as the contiguous Vu Quang National Park (56,000 hectares) in Vietnam, through strengthening the capacity of and facilitating collaboration among various enforcement agencies to address cross-border wildlife trade, which was identified as a major threat to the remaining wildlife populations of the two protected areas. Other results reported from Vietnam included strengthened management of Saola (Quang Nam) Nature Reserve (15,822 hectares), Saola (Thua Thien Hue) Nature Reserve (15,506 hectares) and the western extension to Bach Ma National Park (16,248 hectares) under the WWF grant described earlier.

In Cambodia, CI reported strengthening the management of Central Cardamoms Protected Forest (400,000 hectares) by intensifying snare removal and introducing the Management Information System (MIST) monitoring system to inform smart patrolling. At Tonle Sap Lake, WCS reported strengthening the management of Prek Toal Core Area (21,342 hectares) through ranger patrols, colony protection and the use of MIST to monitor patrols and threats. In the Mekong Delta, WWT reported strengthening the management of Anlung Pring (1,108 hectares) and Boeung Prek Lapouv (9,276 hectares) Management and Conservation Areas, through developing site management plans and supporting priority conservation actions, including patrolling by local conservation groups. In addition to the figures given above, small grants were responsible for improvements to the management of 2,495 hectares spread across protected areas in Cambodia, Lao PDR and Vietnam.

Strengthened Management of Production Landscapes

The CEPF investment strategy focused heavily on securing priority sites and species populations from immediate threats, while working to mitigate root causes, including wildlife trade and incompatible development agendas. While there was no explicit emphasis on conservation of natural ecosystems in production landscapes, the inclusion of significant areas of agricultural and forestry land, as well as important fisheries, within priority sites created opportunities to do so. CEPF grantees reported strengthening management of biodiversity in production landscapes

totaling 361,749 hectares, which was a relatively modest result compared with the area strengthened within protected areas.

In Cambodia, WWF, CRDT and CED strengthened biodiversity conservation along a 180-kilometer-long section of the Mekong mainstream, through a combination of awareness raising, alternative livelihood development, and community-based natural resources management. The landscape covered by these interventions was estimated to cover 450,000 hectares, of which 331,101 hectares was used for fisheries, forestry or agricultural production, outside of protected areas. WWF also worked closely with the Fisheries Administration to improve natural resources management and enforcement of existing conservation laws. This led to the development of four community fisheries, at Koh Pdao, Ampil Teuk, Koh Chba and Kampong Phnov villages.

A similar set of approaches were adopted by Save Cambodia's Wildlife to strengthen biodiversity conservation within forests and ponds used by indigenous communities for forest product collection and fishing. A total of 336 hectares spread across nine villages benefited from strengthened management along the Srepok River, while 283 hectares in three communes were targeted along the Sesan River. Along the third major tributary of the Mekong River in northeastern Cambodia, the Sekong River, the Royal University of Phnom Penh reported strengthening biodiversity conservation on six islands covering a total area of 67 hectares, by initiating nest protection activities for sandbar-nesting birds.

Another CEPF grantee to promote strengthened biodiversity management within community forests in Cambodia was Action for Development, which integrated conservation measures for Bengal florican and other threatened bird species into the management plans of five community forests covering 6,147 hectares. Elsewhere in Cambodia, CI integrated conservation measures for otters and other threatened species into the management of 10,000 hectares of flooded forest within Kampong Prak community fishery on Tonle Sap Lake. CI also integrated conservation measures for turtles into the management of 20 hectares of wetlands outside of Peam Krasop Wildlife Sanctuary and 45 hectares of sandbars along the Mekong Mainstream near Sambor town. Working in the buffer zone of Anlung Pring Management and Conservation Area, Mlup Baitong promoted the adoption of biodiversity-friendly farming practices, such as synthetic-pesticide-free farming, across 100 hectares of agricultural land. Finally, FFI promoted the adoption of improved management practices for mitigating human-elephant conflict across 150 hectares within Prey Long forest.

In Vietnam, TRAFFIC improved biodiversity management across 1,500 hectares of forest within the buffer zone of Nam Xuan Lac Species and Habitat Conservation Area by helping non-timber forest product (NTFP) collectors introduce sustainable harvesting practices for four species of medicinal plant: *Amomum villosum*, *A. xanthioides* var. *xanthioides*, *Alpinia malaccensis* and *A. latilabris*. Elsewhere in northern Vietnam, FFI reporting strengthening conservation of threatened primate and tree species over 12,000 hectares of forest outside protected areas, through support to community patrol teams at Muong La (5,000 hectares), Tung Vai (5,000 hectares) and Khau Ca (2,000 hectares) KBAs.

SOCIOECONOMIC RESULTS

Delivering socioeconomic benefits to local communities is integral to many CEPF projects. During the first investment phase, 186 local communities received direct socio-economic benefits from CEPF grants, in terms of increased income, food security, resource rights or other measures of human wellbeing. A greater but unquantified number received indirect benefits through the conservation of natural ecosystems that deliver essential provisioning and regulating services.

One way in which CEPF grantees delivered socioeconomic benefits to local communities was by introducing more sustainable natural resource management practices. For instance, TRAFFIC developed a management plan for four species of medicinal plant harvested from the buffer zone of Nam Xuan Lac Species and Habitat Conservation Area. The project also trained more than 100 medicinal plant collectors from seven villages in sustainable harvesting techniques, and helped them acquire more stable income by obtaining harvesting licenses, increasing their access to information on market prices, adding value to harvested products and making initial links with processors to stabilize contracts in the trade chain. Sustainable harvesting techniques appear to have been adopted by these people, and they appear to be able to negotiate higher prices with middlemen. However, some obstacles to sustainable harvesting remain, not least lack of clear tenure over land and forest resources in the buffer zone, and absence of clear demand for sustainably harvested products from the domestic market. These results offer encouragement that sustainable collection of wild medicinal and aromatic plants may be attainable in the current context in Vietnam, although more time is required to demonstrate that this can meet the sustainability criteria necessary for FairWild certification.

Also in the Northern Highlands Limestone corridor, WARECOD promoted more sustainable use of aquatic resources in Tuyen Quang Lake, by piloting community fisheries co-management, an alternative model for aquatic resource conservation with greater participation by local people, which had hitherto been untested in northern Vietnam. Introducing more sustainable resource use required destructive fishing practices to be phased out. This was achieved through a compensation scheme for fishing households who abandoned the use of electro-fishing equipment, supported by public communication events to change attitudes and behavior. The provincial authorities showed interest in the model, and there are signs that they will adopt it more widely.

This was one of a number of grants to promote community co-management of fisheries, which was an approach common to all four countries covered by the investment phase. In total, these grants facilitated the establishment of 58 fish conservation zones and brought socioeconomic benefits to 53 local communities. Local people almost invariably reported increased fish yields, in terms of catch per unit effort, within one-to-two years of introducing community co-management, although these reports require verification by scientific studies. One study that was undertaken as part of the CEPF investment program was a detailed socioeconomic analysis of the values of aquatic biodiversity in the Sekong Basin, conducted by WWF, which revealed that that aquatic biodiversity accounts for 79 percent of food from animal sources consumed by fishing communities in the basin.

Another approach, tested by CRDT under two large grants, was to reduce dependence on natural resources (and thereby threats to biodiversity) by introducing alternative livelihoods. One of these projects, within Stung Treng Ramsar Site, delivered measurable livelihood, health and food security benefits to the members of 15 community-based organizations and their families. These livelihood interventions were explicitly linked to biodiversity conservation goals, so that the conservation outcomes of the project could be clearly monitored. The final evaluation showed that dependence on natural resources (as measured in number of days per month spent extracting them) had reduced by 25 percent for fisheries resources and 69 percent for forest resources. These activities also complemented a grant to WorldFish Center at the same site, by incentivizing communities to participate in community fisheries co-management, and compensating them for lost income during the time lag between establishment of the fish conservation zones and recovery of fish stocks. Monitoring results suggested that no community members suffered a net

loss of income due to the conservation measures, and that there was widespread support for maintaining them.

The CRDT grant was one of several to employ self-help groups (also referred to as savings groups) as a means of improving livelihoods. This approach was used in the buffer zone of Anlung Pring Management and Conservation Area by Mlup Baitong, where 9 percent of the annual household incomes of self-help group members in 2012 came from income-generating activities supported by loans from the groups. Membership of these groups was conditional upon support for conservation objectives, thereby creating an incentive to comply with management regulations, such as restrictions on hunting or agricultural expansion.

As well as promoting sustainable use of natural resources, CEPF grantees also helped communities to secure formal recognition of their traditional rights to land and natural resources. For example, CED supported indigenous communities living along the central section of the Mekong River in Cambodia to have their land and natural resource rights formally recognized by government, thereby imparting protection against wholesale conversion to agro-industrial plantations developed by outside business interests. Two villages had their communal land title recognized by the Ministry of Rural Development and legally registered with the Ministry of Interior, comprising 1,883 hectares in O’Kok and 855 hectares in Punta Chea; both villages are currently in the process of formally registering with the Ministry of Land Management, Urban Planning and Construction. At the same time, community forests covering 1,200 hectares in O’Kok village, 1,749 hectares in O’Krasang village and 2,713 hectares in O’Krieng village were established and recognized by Kratie Provincial Forestry Cantonment. CED further strengthened the voice of indigenous communities by facilitating their participation in a community forestry network and helping them resolve land disputes. In one case, 30 hectares of land was returned to an indigenous community by an Indian agribusiness, which established an important precedent for successful resolution of land disputes with economic land concessions.

As discussed earlier, CEPF grantees also tested a range of cash and non-cash incentives to motivate conservation actions by local people. The most ambitious project in this regard was implemented by WCS, in collaboration with the Sam Veasna Center and Sansom Mlup Prey, which successfully piloted and scaled up a number of incentive-based approaches for conserving large waterbirds and their habitats. The expansion of an ‘ibis rice’ eco-labelling scheme, which paid a premium to producers who abided by conservation agreements (including land-use plans, developed using a participatory process, which improved land-tenure and promoted sustainable management of forest resources), increased the annual income of 349 families across 11 villages. Also, the expansion of an ecotourism scheme, with an associated benefit-sharing mechanism managed by a local committee, increased the income of local people in nine villages, by ensuring that they received direct payments for providing services such as guiding, food and accommodation. In addition, a nest protection scheme for threatened waterbirds at Prek Toal Core Area of Tonle Sap Biosphere Reserve increased the income of 39 community rangers, including former poachers.

Some of the approaches demonstrated under this project were replicated by other CEPF grants. For instance, the Sam Veasna Center developed community-based ecotourism projects at Snoul/Keo Sema/O Reang KBA, linked to black-shanked douc (*Pygathrix nigripes*), which resulted in increased income for three communities. The Cambodian Institute for Research and Rural Development, on the other hand, conducted a feasibility study for implementation of a rice eco-labelling scheme at Kampong Trach KBA, based on the ‘ibis rice’ model.

A key feature of these projects was the way in which economic incentives were directly linked to conservation outcomes, and informed by systematic monitoring of socio-economic and biological outcomes. Another success factor appeared to be a long-term commitment to working in a particular community, to allow time to build trust and tailor approaches to specific local conditions. Indeed, those CEPF grants that built on a history of collaboration between communities and civil society organizations tended to be more successful in delivering positive socio-economic and biological outcomes.

ENABLING CONDITION RESULTS

Economic Context

The economies of the hotspot countries are at various stages of transition from predominantly rural, natural-resource-based and centrally planned to urban, diversified and market-based. Nevertheless, agriculture, fisheries and forestry remain important natural resource sectors, while mining and energy, including hydropower, have grown in importance. Over the last decade, Indo-Burma has witnessed levels of economic growth that are among the highest of any hotspot, with an associated boom in development projects with environmentally damaging impacts, ranging from highways to dams to agro-industrial plantations. At the same time, international financial institutions are being replaced as the main source of funding for these projects by private sector investment, particularly from within the region, which is typified by a lack of transparency and weak social and environmental safeguards.

It was in response to these trends that CEPF focused heavily on analyzing development plans and programs, evaluating their impact on biodiversity and ecosystem services, and proposing alternative development scenarios and appropriate mitigating measures. This section summarizes the main results in this area, which, albeit not negligible, must be viewed against a backdrop of massive investment in development sectors with large environmental footprints.

To a greater or lesser extent, the ability of civil society organizations in the hotspot to question the prevailing paradigm of “economic growth at all costs” or challenge individual development projects on social or economic grounds is constrained by restrictions on their registration, funding and operations. To exert influence in this context, PanNature adopted an approach of sensitizing journalists to environmental issues, and allowing them to present them in their own words, in news media trusted by senior government decision makers. Under a large grant, PanNature organized exposure visits for journalists to “hotspots” of environmental issues in the northern highlands of Vietnam, including mining, forest clearance for plantations and construction of tourism infrastructure. In this way, the project significantly increased the volume and quality of public debate on environmental issues in national and local media, which, in several cases, translated into tangible action on the ground after media coverage triggered intervention by the Prime Minister’s Office, requiring the relevant ministries or provincial people’s committee to look into an issue or take action. Specific results included a moratorium on new mineral exploration and extraction licenses in Cao Bang province, scaling down of a major infrastructure development within Tam Dao National Park, and cessation of wolfram mining within Phia Oac-Phia Den Nature Reserve.

IUCN adopted a different approach to mainstreaming biodiversity considerations into development decision making in the northern highlands of Vietnam, by developing a regional geographical information system (GIS) database for Tuyen Quang and Bac Kan provinces, overlaying an analysis of land-cover change over time with development and land-use information. The database was then used to catalyze bi-provincial cooperation on establishment of a conservation corridor linking Ba Be and Na Hang National Parks, and to raise awareness

among provincial leaders about the environmental impacts of mining. The project results and staff capacity were also incorporated into new projects supported by the German Federal Ministry for Economic Cooperation and Development and UNDEF.

While the above projects mainstreamed biodiversity into development at the corridor scale, a number of projects worked at the site scale, including a WWF-led initiative to improve local land-use planning through the development of an integrated spatial development plan for the core zone of Eld's Deer Sanctuary in Lao PDR. As a tool for establishing land-use objectives through a participatory process, integrated spatial development planning has potential to minimize the impacts of forest conversion to sugar cane and other large-scale land concessions. In this regard, the project had important demonstration value, by piloting the approach and training provincial and district staff. More time is needed, however, to evaluate the efficacy of the approach.

The development sector with by far the greatest attention from CEPF grantees was the energy sector, especially hydropower development in the Mekong Basin, which emerged as one of the defining conservation issues of the investment phase. CEPF supported a complementary portfolio of grants, aiming to empower civil society to promote balanced, evidence-based decision making in a more coordinated, credible and effective manner. The information base for these efforts was enhanced through a grant to the University of Canterbury, which conducted a rigorous and detailed analysis of hydrological changes resulting from historical and potential future hydropower development on the biodiversity and natural ecosystems of the Mekong Basin. The results of this analysis provided timely and authoritative scientific analysis of the potential implications of different hydropower development scenarios, and were placed in the public domain via journal papers, presentations at conferences, and briefings for key stakeholders.

The results of this analysis were taken up by CEPF grantees looking at two sets of hydropower projects: a cluster of operating and proposed dams in the '3 S Rivers' (i.e., the Sekong, Sesan and Srepok); and a cascade of proposed dams along the mainstream of the Mekong River downstream of China. Save Cambodia's Wildlife and the 3 S Rivers Protection Network strengthened the capacity of local communities along the Sesan and Srepok Rivers to engage in natural resource governance at local, provincial and national levels. This was achieved through raising awareness about biodiversity conservation and natural resource rights, and empowering local people in four communes to advocate for good governance of natural resources. With this support, local people raised concerns about hydropower dam construction along the two rivers through letters to concerned agencies, such as the Ministry of Environment, the Ministry of Water Resources and Meteorology, the Cambodian Parliament, and the Chinese Embassy in Phnom Penh. At the same time, the communities displayed closer collaboration with local authorities in reporting illegal activities, and engaged with the commune investment planning process in order to integrate natural resource protection activities into commune work plans and budgets.

Regarding the Mekong mainstream, attention of grantees was focused on the most advanced hydropower projects, particularly the Xayaburi dam between Luang Prabang and Vientiane in Lao PDR. Results of the University of Canterbury study and other research were taken up by International Rivers and used to promote greater transparency, accountability and public participation in the decision-making processes surrounding this and other mainstream dam projects. Although influencing the ultimate decision to proceed with this dam was beyond the direct control of the project, given strong support from the proponent government and the main financial backer, it was successful in revealing failings in the Procedures for Notification, Prior Consultation and Agreement (PNPCA) process, as well as in stimulating unprecedented discussions of the dam's impacts among the affected countries at the highest levels of

government. This work led to Cambodia and Vietnam publically voicing their opposition to the dam, and rejecting the PNPCA process as flawed.

As well as seeking the cancellation of the Mekong mainstream dams, International Rivers also promoted alternative energy solutions for the region, commissioning an alternative power development plan for Thailand (the main importer of electricity from most of the proposed mainstream dams). This plan was endorsed by 140 civil society groups in Thailand and calls for more realistic energy forecasting, improved energy efficiency measures and increased use of more sustainable energy technologies. Although the Thai government has incorporated a few of the recommendations in the country's 2010 Power Development Plan, version 3, continued pressure from civil society will hopefully lead to the government adopting more of the recommendations, which provide alternatives to sourcing electricity from environmentally destructive Mekong mainstream dams.

Other CEPF grantees worked closely with International Rivers to disseminate analysis of the potential social and environmental impacts of mainstream dam developments to key audiences. WARECOD, for instance, made use of the mass media and a series of multi-stakeholder dialogues to raise awareness among decision-makers, opinion-formers and the general public in the Mekong Delta of Vietnam about the potential impacts of upstream dam development on the lower Mekong River. Although evaluating the ultimate conservation impacts of such activities is exceedingly difficult, the grantee provided anecdotal evidence that they were successful in raising awareness of the issue among decision makers at the central level, including National Assembly members. The work of local civil society organizations such as WARECOD was supported by the Henry L. Stimson Center, a Washington DC-based policy think tank, who mentored them in using economic, security and geopolitical arguments relevant to policymakers, and facilitated new connections within government and news media.

While the ultimate outcome of the campaign to keep the lower Mekong mainstream free from destructive dams is still unclear, it has already contributed to greater expectations on the part of regional governments, donors and civil society for higher standards of transparency and public participation in decision making concerning major dam projects, which may mean that future dams are subject to greater scrutiny than would otherwise have been the case. To promote this outcome, Green ID established a Mekong Delta Think Tank Group in December 2012, as a foundation for further meaningful civil society engagement in development issues related to the delta. The mandate of this group is to track hydropower developments and provide a watchdog role for future PNPCA processes.

Policy Context

Few CEPF grants made during the first investment phase had an explicit focus on policy implementation, and only a handful were able to demonstrate tangible results. There are several explanations for this, including that policy advocacy work often takes a long time to reach fruition, that governments in the hotspot countries have created limited space for civil society to participate in policy making, and that policy reforms can rarely be attributed to the actions of a given project or organization. Compounding all of these factors is the fact that few civil society organizations active in the hotspot possess the necessary skills and experience to become effective advocates for policy reform.

In response to this last constraint, one of the most important CEPF investments was to strengthen the capacity of PanNature in policy analysis related to the environmental impacts of development and, in so doing, expand the influence of Vietnamese civil society in the policy arena. Under this grant, PanNature conducted four pieces of independent policy research, covering the potential

impacts of reducing emissions from deforestation and forest degradation-plus (REDD+) on protected areas, the implications of safeguard policies in international development finance, environmental charges in the mining sector, and Vietnamese investment in hydropower development in the Mekong basin, and disseminated the findings via local-language reports, media articles and briefings to members of the National Assembly.

It is inherently difficult to establish causality between policy analysis and policy change and, thereby, evaluate the ultimate impacts of a project of this nature. PanNature did not report any immediate impacts but predicted that the project's results would inform three pieces of key environmental legislation being revised in coming years: the Law on Environmental Protection; the Law on Biodiversity Conservation; and the Law on Forest Protection and Development. The project also enabled PanNature to raise concerns about the impacts of hydropower development in the Mekong Basin with government ministries and National Assembly members, including catalyzing, perhaps for the first time, reflection on Vietnam's overseas environmental footprint. The project was also reportedly influential in the Vietnamese government's recent announcement that it is considering joining the Extractive Industries Transparency Initiative (EITI) by 2015.

On a smaller scale, one area where CEPF grantees were able to demonstrate tangible policy results was wildlife crime. Work by Cleveland Zoological Society was instrumental in East Asian giant softshell turtle and Indochinese box turtles (*Cuora galbinifrons*, *C. bourreti* and *C. picturata*) being listed as protected under wildlife protection Decree 160/2013/ND-CP in Vietnam. Also in Vietnam, work by WCS to build support for a robust response to wildlife crime by the Supreme People's Procuracy contributed to the drafting of an ordinance on African elephant and rhinoceros-related crimes, which provides guidance to local prosecutors in how to deal with these cases and defines the seriousness of these crimes for sentencing decisions.

Civil Society Context

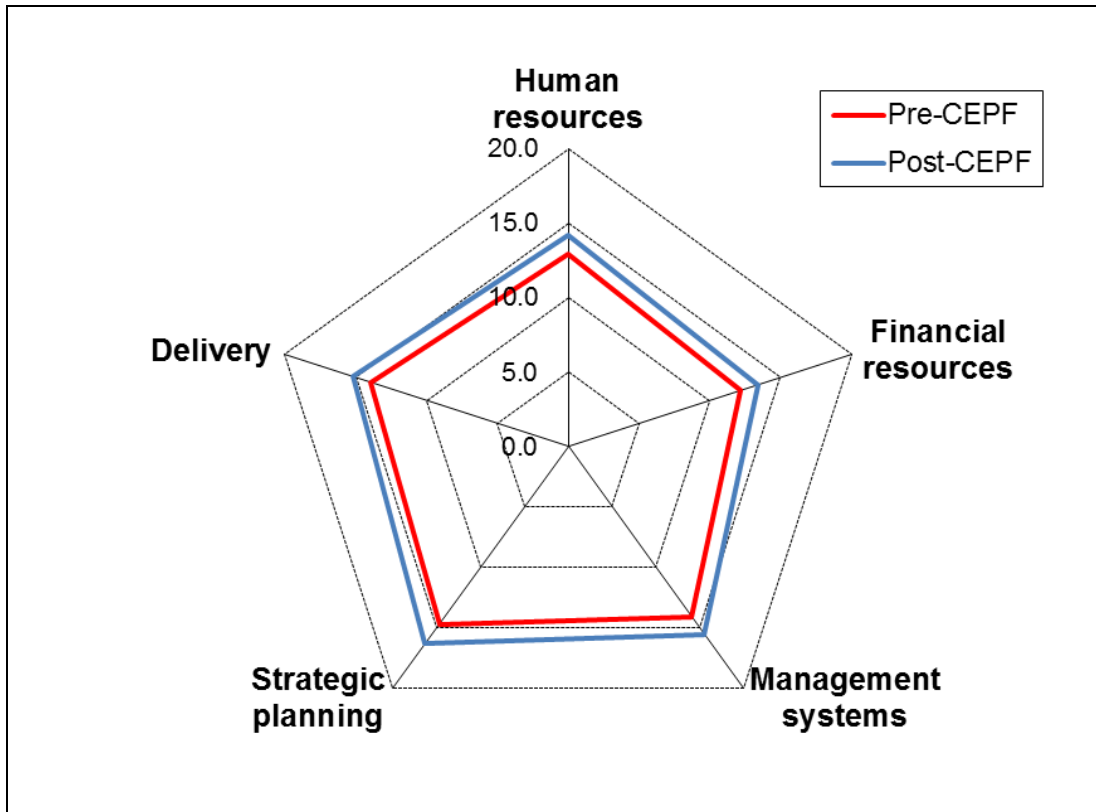
CEPF aims to strengthen the involvement and effectiveness of civil society in conservation and management of globally important biodiversity. Consequently, the investment program placed a strong emphasis on engaging and strengthening the capacity of local civil society organizations. The opportunities to do this varied among countries. Lao PDR and Vietnam had relatively few local organizations active in conservation at the start of the investment phase, although this was offset to some extent by substantive, albeit hesitant, opening of political space to civil society. In contrast, Cambodia and Thailand had substantially more local civil society organizations at the start of the investment phase but a deteriorating operating environment, due to financial and legal restrictions. In all countries, the majority of CEPF investment went to international organizations, which were often best placed to take the actions necessary to conserve globally important biodiversity. Nevertheless, CEPF directly engaged 25 local organizations as grantees, and indirectly engaged a further 11 as sub-grantees under large grants. These comprised 16 organizations in Vietnam, 15 in Cambodia, three in Thailand and two in Lao PDR. Twenty-nine of these local organizations were NGOs, five were universities and two were community-based organizations or networks. This last category of local civil society organization is one that CEPF could be more pro-active about engaging in the future, particularly as sub-grantees.

CEPF uses the Civil Society Organizational Capacity Tracking Tool to track the impacts of its investments on local organizations. All local organizations that were direct grantees and two of the sub-grantees were requested to complete this tool as a self-assessment, at the beginning and end of the period of CEPF support. The results from these 27 organizations were then compiled, and analyzed for trends. The 'average' civil society organization had a total score of 67.7 at the start of the period of CEPF support, increasing to 74.6 by the end (an increase of 10 percent). The average increase was distributed fairly evenly across the five dimensions of civil society capacity

measured by the tool. Baseline scores were lowest for financial resources and human resources and highest for strategic planning, and this pattern was repeated in the final scores (Figure 2).

Of the 27 organizations to complete the civil society tracking tool, 25 (93 percent) reported an increase in capacity over the period of CEPF support, while the other two reported no change. The magnitude of these increases ranged from 1 to 22.5 points, with organizations showing the largest increases (10 points or more) generally being ones that reported moderate baseline scores (less than 70 points). This suggests that organizations with higher capacity to begin with had less opportunity to strengthen their capacity further.

Figure 2: Civil Society Organizational Capacity Tracking Tool scores for 27 local grantees



Although no CEPF grants had capacity building of individual civil society organizations as their main objective, it was included as an explicit project component within several grants. For instance, the large grants to PanNature included explicit components to strengthen the organization’s capacity in, respectively, working with media to promote voice and participation of different stakeholders in the development process, and analyzing development policies with major implications for biodiversity conservation. Another large grant included an explicit component to expand and strengthen ENV’s Wildlife Crime Unit, to allow handling of an increased number of reported crimes.

Other grants invested in the capacity of individuals, particularly journalists. For example, PanNature organized training workshops and field investigation missions for more than 300 journalists in Vietnam, as well as a training course on potential impacts of and responses to development strategies in the Mekong river system for 54 participants from research institutions, universities and civil society organizations in the Mekong Delta.

In addition to capacity building of individuals and organizations, several grants built civil capacity at the network level. For example, International Rivers facilitated networking among civil society organizations campaigning against hydropower dams on the Mekong mainstream, under the umbrella of the Save the Mekong Coalition, which it helped to coordinate with Towards Ecological Recovery and Regional Alliances (TERRA). This involved convening coalition meetings, and providing individual civil society organizations with material, informational and moral support. Outside the context of individual grants, BirdLife also brought CEPF grantees together at national and regional levels, convening workshops and facilitating information flow through its regional newsletter, *The Babbler*.

LESSONS LEARNED

The final assessment workshop provided an opportunity for CEPF grantees to exchange experience on cross-cutting topics of common interest. Twelve topics were discussed by participants in break-out groups, with each group being posed three questions: what approaches have been adopted; what has worked, what has not worked and why (i.e. conditions for success); and how can we do things better going forwards? The following sections summarize these discussions. It should be emphasized that the views expressed are those of the workshop participants, and do not necessarily reflect the views of CEPF or its donor partners.

Strengthening protection of key sites and core populations

The CEPF grant portfolio produced a significant body of experience on the relative effectiveness of different approaches to on-the-ground protection of biodiversity. This complemented a much larger body of experience on different approaches to site-based conservation, principally with protected areas, generated over the last two decades. Participants reflected that many approaches adopted over this period had met with limited success, although they were able to identify some approaches with encouraging results (albeit over short timeframes) that point the way towards improved means of working.

Common approaches to strengthening the effectiveness of conventional protected areas have included capacity building for management and enforcement staff, and introduction of technology to guide their activities and monitor results (e.g., GIS, MIST and SMART software). Participants observed that such approaches can deliver improvements in management effectiveness but depend upon external technical and financial support. Hence, there are few examples of improvements being sustained following withdrawal of this support. This points to the need for sustained interventions by civil society and donors, although the number of sites for which these could be realistically sustained is limited.

Participatory approaches, including collaborative management and support to government staff by community patrol teams, have also been widely tested, including under several CEPF grants. Participants felt that, by and large, such approaches have not been tremendously successful, due to low interest on the part of communities and limited willingness on the part of government to devolve powers to local people or give them a meaningful voice in protected area governance. Also, participants felt that incentives for local people to participate in management were often too low. For instance, benefit sharing opportunities were often constrained by restrictions on harvesting forest products.

Many initiatives have grappled with this challenge of incentivizing local community participation in site conservation. Participants felt that conventional alternative livelihood approaches had frequently been unsuccessful or, at least, insufficient, because benefits to local people had been limited, slow to materialize and not directly linked to conservation actions. In contrast, direct

incentives (whether cash or in-kind) were considered to have greater potential, particularly when linked to participatory land-use plans specifying which human activities can take place in which areas. Incentive-based mechanisms were explored in more depth by another break-out group, whose discussion of lessons learned follows in the next section.

Participants pointed to sustainable financing as a major obstacle to effective site conservation, observing that government budget allocations for protected areas, while in some cases substantial, tended to be heavily skewed towards capital investment and away from operational management. Participants reviewed different financing mechanisms explored by civil society organizations, including REDD+, ecotourism and payment for ecosystem services, and concluded that lack of a supportive legislative framework, appropriate professional expertise and a developed market for ecosystem services had constrained development of effective demonstration models, and that simply making financial flows to site conservation more sustainable would not, by itself, ensure that these resources were put to good use. Consequently, they argued that addressing the challenge of financial sustainability should not distract attention away from the need for effective management models.

To this end, participants made a number of recommendations for strengthening protection of key sites, drawing on lessons learned. First, they proposed that protected areas should be adequately staffed, with a professional cadre of government staff supported by conservation teams drawn from local communities, who should be legally empowered to enforce management regulations. Second, they proposed establishing models for true community participation in protected area governance, involving not only space for community representatives on management committees but also capacity building for them to perform this role effectively. Third, they identified a need for effective models of protected area management (both conventional and community-based), incorporating elements of good practice from existing projects, and suggested that major donors could have a role in promoting their wider replication by government. Fourth, participants felt that the priority for resourcing and capacity building should be strengthening law enforcement, in order to protect at least some core populations from the ravages of over-exploitation, and establish nuclei for eventual recovery and restoration efforts. Finally, participants felt that there was a need for further experimentation with innovative protected area financing mechanisms, including privately owned protected areas, and ‘conservation concessions’, where management responsibility would be devolved to civil society organizations.

Conservation incentives

One of the themes running through the CEPF grant portfolio was the adoption of nest-protection payments, eco-labelling, conservation agreements and other incentive-based mechanisms. Civil society organizations have tested a range of such mechanisms in recent years, including incentive payments to ranger teams based on outputs, incentives based upon cultural norms and spiritual beliefs (such as taboos on hunting certain species), financial incentives based on ecotourism (such as cash bonuses to guides or village development funds for sightings of target species), and incentive payments to informants for information about illegal activities. Workshop participants discussed three of these approaches in detail, reviewing challenges encountered and making recommendations for improvements going forwards.

First, participants discussed payments for nest protection, which have been used most commonly in Cambodia for waterbirds and sandbar-nesting turtles. In some cases, nest guarding has been linked to ecotourism, with benefits from tourism being paid into a village development fund, thereby providing benefits to the community as a whole, complementing direct payments for nest protection, which, by necessity, are targeted at a small number of people. Nest protection has followed written agreements in some cases and verbal agreements in others.

The main challenges identified by participants included cheating (where up-front payments per nest motivated people finding turtle nests to split up the clutch, leading to increased mortality), jealousy (where nests were maliciously destroyed by people not receiving nest protection payments) and disturbance (where nest guards or other community members inadvertently disturbed nesting birds by showing them to visitors). Modifications to the design of nest protection schemes were able to mitigate most such problems when they arose. More persistent challenges identified included how to verify success and how to ensure long-term sustainability of payments, particular where successful nest protection leads to population recovery and more nests to protect. Participants also observed that nest protection does not necessarily address the underlying causes of nest predation and disturbance by people.

The most important lesson was to ensure close monitoring of compliance with agreements and be willing to impose sanctions in the event of unsuccessful outcomes, although it was noted that it is often easier to reduce cash payments to individuals than to take away benefits from communities. Participants also recommended having different incentives for different deliverables, for instance separate payments for locating nests and successful hatching, because the nest finder may not be the most appropriate person to protect it. In some cases, passive nest protection, such as fitting plastic baffles to nesting trees to minimize predation by wild animals, may be more efficient than active protection by nest guards. Finally, participants recommended that nest protection efforts should be combined with outreach and alternative livelihoods, to minimize local egg collection and consumption and provide a lasting solution to the threat.

The second approach to be explored in detail by participants was savings groups (also known as self-help groups). These groups, although widely used in development projects, are a relatively new tool for conservation projects and few organizations have significant experience in their use. This unfamiliarity with the approach has led to instances of savings groups being poorly designed, with insufficient monitoring and a lack of sanctions for defaults. In common with many other livelihood interventions, participants recommended that savings groups be closely linked to conservation objectives, through enforceable conditions of membership.

Finally, participants discussed eco-labelling schemes, such as ibis rice, under which a premium price for agricultural commodities is paid to farmers in exchange for biodiversity-friendly land-use and natural resource management. Such schemes can be unfamiliar to local people and, thus, difficult to introduce, although, once they are up and running, benefits are rapid and tangible. The main challenge, therefore, was felt to be taking pilot projects to scale. There needs to be sufficient market demand for the commodity to make it financially sustainable, and a willingness among buyers to pay a premium. In this regard, commodities sold to consumers, such as rice, appear to be more suitable than ones sold to companies, such as rubber and palm oil. Also, turnover needs to be fairly large before costs of branding, marketing and compliance monitoring are fully recouped, and grant funding is needed to subsidize these costs until the scheme becomes financially self sustaining. Another recommendation was for regular monitoring of compliance with agreements, to maintain consumer confidence in the quality of the product and the veracity of claims being made about its conservation benefits.

Combating the wildlife trade

Given its scale, covert nature, nebulous pathways and association with international organized crime, the illegal wildlife trade is one of the most challenging conservation issues to address in Indo-Burma, its global epicenter. Participants were able to share experience of a wide variety of approaches, some of which gained in the context of CEPF grants. In the absence of robust tools for evaluating their effectiveness, however, there was considerable debate about which approaches work and under which circumstances. One point on which there was consensus was

that there is no single ‘silver bullet’ solution to the wildlife trade crisis that has engulfed the region and is steadily spreading its tentacles across the globe. Participants identified several approaches that experience to date suggests should be components of any comprehensive response to the problem.

Strengthening the capacity of enforcement agencies, and, critically, improving coordination among them (both within countries and across international borders) was considered to be an important approach. In this regard, participants highlighted the need to work with prosecutors and judiciary to ensure convictions, not only with frontline agencies, while the need to work through and not duplicate existing structures, such as the ASEAN WEN and CITES Management Agencies, was emphasized. Another approach that has been shown to work, at least in Vietnam, is engaging the public in monitoring and reporting wildlife crime, to better target enforcement efforts. Participants recognized that, for all of these approaches to work, there was a need to build political support and, in this regard, it can be helpful to discuss wildlife crime in the context of broader efforts to eradicate corruption, promote good governance and combat illegal trafficking of drugs, arms and human beings. In this regard, participants argued that wildlife trade monitoring can be very valuable, in establishing an evidence base for advocacy with government decision makers, as can raising public awareness of the issue through engaging journalists, although neither should allowed to become a displacement activity for an active response to the wildlife trade.

The approaches summarized above were considered to be priorities for the short-term, to reduce the volume of wildlife being traded, and alleviate pressure to some extent on wild populations. Participants recognized, however, that none of these represents a permanent solution to the problem as long as demand for wildlife and wildlife products exist. In the long-term, therefore, increasing attention must be given to demand reduction, focusing on major (mainly urban) markets for wildlife within and outside the hotspot. Participants felt that there was insufficient experience with demand reduction methodologies to evaluate which were the most effective but pointed to integration of conservation messaging into school curricula, media campaigns and social marketing as strategies worthy of further testing. They also suggested several complementary approaches to support the required society-wide changes in attitudes and behavior, including increased salaries and incentives for law enforcement officials to reduce corruption, strengthened legal framework and institutional arrangements for combating wildlife crime, and increased transparency and accountability of public servants.

Setting priorities: research and Red Listing

The participants discussed current approaches to setting conservation priorities at the species level, including Red Listing and research to fill gaps in knowledge. The IUCN Red List was considered to be the most important tool for identifying species-level conservation actions. Taxonomic gaps in coverage of the Red List were noted as one factor constraining its application, although it was recognized that recent CEPF-supported work had gone some way towards filling major gaps with regard to freshwater biodiversity and selected plant families. Another limitation is that the conservation assessments in the Red List, being based on the global conservation status of species, are not always a reliable indicator of conservation priority at the national or regional level, because species at severe risk of extinction within the hotspot might be much less threatened in other parts of their global range. One response to this has been to develop National Red Data Books, which has so far been done in Thailand and Vietnam. These national analyses were considered to be not without their limitations, including limited involvement of conservation NGOs and international experts, low accessibility and long periods between updates. Nevertheless, participants recommended developing National Red Data Books for the other hotspot countries.

Filling information gaps was also identified as a need going forwards, with participants pointing to the large proportion of species for which there were insufficient data to assign an IUCN Red List category. For instance, fully 37 percent of the 2,515 species covered by the recent freshwater assessments undertaken by IUCN were considered Data Deficient, with crabs (56 percent) and fishes (44 percent) being especially poorly understood. This highlights the urgent need for further research on the status and distribution of such species, to fully understand the impacts of the rapidly increasing threats to biodiversity in the hotspot, and more effectively target the conservation response. This need was not felt to be limited to Data Deficient species, with participants arguing for Critically Endangered and Endangered species to be considered research priorities, in order to better understand their ecology, identify populations with the best potential for persistence and recovery, and evaluate the effectiveness of conservation actions for them.

Participants recognized that addressing these research objectives would require a major investment in scientific capacity, particularly in the fields of taxonomy and ecology. It was recognized that, although many of the foremost scientists at national academic institutions were approaching the end of their careers, an increasing number of young field workers had emerged over the last decade. This was felt to be especially true for Cambodia, where the Centre for Biodiversity Conservation at the Royal University of Phnom Penh, in collaboration with FFI, has developed a masters in biodiversity conservation. This course, which features student placements with conservation organizations to provide practical experience of applied ecology, was considered a best practice model, which participants recommended replicating in Lao PDR and Vietnam (Thailand already having several high caliber graduate courses). Other recommendations included establishing permanent small grants mechanisms, to support applied research by early-career scientists targeted at addressing research priorities set by the conservation community, training early-career scientists in writing research proposals and funding proposals, and establishing internship programs at leading local and international conservation organizations.

Linking livelihoods to conservation

Many conservation projects in the Indo-Burma Hotspot have incorporated livelihood activities linked in some way to conservation objectives. Examples from Cambodia, Myanmar, Thailand and Vietnam were discussed but the break-out group had little information related to Lao PDR. Reflecting the fact that conservation projects most commonly work with rural communities, which usually have agriculture and/or fishing as their economic mainstay, many have promoted livelihood improvements in these areas, such as introducing new agricultural techniques (e.g., chicken raising, System of Rice Intensification, organic composting, etc.), establishing community fisheries, and developing value-added products (e.g. fish paste, etc.). Other projects have trained communities in the development of other products, such as honey and handicrafts. In addition to increasing production, introducing new products and adding value, projects have established savings groups to provide micro-finance for equipment, agricultural inputs, livestock and small business development, and supported communities with marketing, through value-chain analysis, real-time price information, and producer cooperatives. Other common activities have included ecotourism (especially community-based ecotourism) and energy solutions (e.g., biogas and fuel-efficient stoves).

After reviewing the effectiveness of these different approaches, participants were able to identify several success factors. First, the capacity of the implementing organization was considered to be critical, with motivated, experienced staff prepared to live and work among rural communities for extended periods of time being the most valuable asset. Second, a trusting relationship with the participating communities and good cooperation with local authorities was considered important, as was an ability to coordinate support with other NGOs working in the same communities. Third, participants considered it important that livelihood support be conditional upon

conservation commitments by local people, and implementers be willing to impose sanctions should these commitments be broken. The fourth success factor identified was a long-term engagement. Livelihood activities often need a long time to be introduced and adapted to the local context, and for the market linkages necessary to make them financially self sustaining to be put in place. Participants felt that donors needed to be realistic about the length of time required to achieve sustainability, with five years or longer being the minimum requirement. Related to this, participants felt that, to become social sustainable, some benefits from livelihood activities needed to be shared with the community as a whole, rather than being captured by a small number of households. Related to this, monitoring was identified as a success factor, because of the need for regular follow up to refine and evaluate the effectiveness of different approaches.

The participants also catalogued some of the major obstacles to developing livelihood activities linked to conservation. Lack of markets was identified as a common cause for failure, with some projects neglecting to undertake a thorough market analysis, leading to unrealistic assumptions about demand for particular products or services. Other projects did not establish a socially acceptable benefit sharing mechanism, leading to tensions within the community and abandonment of the activities being promoted. In other cases, projects did not take into account the context in which they were operating, and the observed livelihood benefits were an insufficient conservation incentive to communities facing major population growth, land encroachment, high demand for wildlife and other natural resources, or other over-riding pressures. In addition, weak financial controls led to misuse of funds, embezzlement and other financial misdoings in some cases. Finally, participants observed that alternative livelihood activities and the micro-credit that often supports them tended to be taken advantage of by women more than by men. Because men tend to be the ones involved in the activities most threatening to biodiversity (i.e., hunting, timber extraction, forest clearance, etc.), providing livelihood activities for women did not necessarily provide an alternative occupation for men.

In response to these challenges, participants pointed to several things that implementers and funders could do better, to improve the application of livelihood activities as a conservation tool. For implementers, the main recommendation was for thorough planning, to form more realistic assumptions. In this regard, baseline socio-economic surveys of the targeted communities, market analysis, and land-use and natural resource use mapping were all considered important activities during project planning. Another recommendation for implementers was to conduct third party evaluations of projects, to learn lessons and avoid repeating failures. The key recommendation for funders was to take a long-term approach to supporting livelihood activities, and have realistic expectations about the length of time they need to become financially self sustaining.

Community co-management of fisheries

Drawing on experience from both within and beyond the CEPF grant portfolio, the key message to come out of the break-out group on community fisheries was that positive results can come quickly but sustainability is the challenge. For Cambodia, Lao PDR and Thailand, where a legal framework for community co-management of fisheries is in place, the approach can be very efficient and deliver quick results, building community support for follow-on activities. The clear legal framework also gives confidence to local people that their rights over fisheries resources will be enforceable, thereby encouraging them to forego immediate returns in favor of sustainable management. In the case of Vietnam, where the legal framework is less conducive to rapid implementation and regulations have needed to be painstakingly developed on a project-by-project basis, pilot initiatives have been slower to deliver results.

In spite of being technically uncomplicated, few communities have been able to establish community fisheries without external support. The challenge to civil society organizations

providing this support has, therefore, been striking the right balance between efficiency and local ownership. Another condition for success has been involving local government agencies in the process, to provide on-going support to communities with patrolling and enforcement. A good practice identified by several projects has been to facilitate peer-to-peer learning, using the first communities to successfully establish community fisheries to introduce the approach to other interested communities. Once again, participants highlighted the importance of benefit sharing to building social sustainability. In this regard, establishing village funds or savings groups, whereby poorer members of the community also have an opportunity to benefit from sustainable management of fisheries, was identified as good practice.

As mentioned above, the main challenge to expansion of the community fisheries approach is sustainability. Patrolling community fisheries to prevent infringements of management restrictions can be resource intensive, in terms of time and fuel, although these costs have been kept to a minimum in communities where the fish conservation zone has been sited within view of a village. Regulating harvesting and allocating a proportion of the income to cover recurrent management costs can be another effective approach. Another challenge is equitability. Participants observed that poorer households can be disproportionately affected by the establishment of community fisheries, because they are more vulnerable to short-term loss of income in the period between introduction of management restrictions and recovery of fish stocks. Impacts on such households can be mitigated, however, by a combination of alternative income-generating activities and exemptions from restrictions on harvesting aquatic resources. Finally, participants noted that community fisheries have been seen not to work in contexts with low community cohesion, where outsiders (or even insiders) are able to harvest fish without respecting the management restrictions introduced by the community.

To improve the implementation and accelerate the amplification of community co-management of fisheries going forwards, participants made a number of recommendations. To improve the governance of community fisheries, management structures should be broadened, to include households of different economic status. A defined role should be found for local government officials who are in a good position to support patrolling and enforcement. Local ownership of community fisheries should be strengthened by channeling external financial support to village development funds, or similar, managed by the community but with financial oversight by the implementing organization. Delivery of on-going technical support to community fisheries can be optimized by leveraging the complementary capabilities of international and local organizations. Participants also felt that such relationships could be used to capture experience from the local level and channel it into policy reform at the provincial or national level, to ensure a more supportive legal framework for community fisheries. Finally, participants recommended integrating sustainable fisheries management into the curricula of schools serving fishing communities, in order to introduce the concepts and techniques to the next generation.

Mainstreaming biodiversity into development plans and policies

Participants reviewed a wide range of approaches for mainstreaming biodiversity into development that have been adopted by civil society organizations, observing that they mostly assume evidence-based policy making and decision making by governments, which they seek to influence through providing new information and analytical tools and exposing decision makers to the environmental impacts of development. In terms of information provision, some civil society organizations have concentrated on setting conservation priorities at the species, site and corridor scales, and making these data available to governments. Others have engaged with environmental assessment processes, making biodiversity data available to environmental consultants, preparing 'shadow' environmental impact assessments (EIAs) or critiquing those prepared by project proponents. In terms of new analytical tools, civil society organizations have

promoted GIS as a decision-support tool for sustainable development, and undertaken economic valuations of key ecosystem services. To expose decision makers to environmental impacts, civil society organizations have prepared policy briefs and given briefings to legislators, organized study visits for government officials to see issues at first hand, and supported journalists to report on environmental issues.

Other approaches have not engaged with government directly but, rather, sought to strengthen the capacity of local communities and civil society organizations to engage with and influence development decision-making processes. For instance, civil society dialogues and forums have been organized, bringing different groups together around an issue of common concern, to develop a common position or, at least, exchange information and perspectives. For some issues, civil society organizations have come together around a common agenda for short-term campaigns or more durable networks and coalitions. Training and networking have also been provided for local communities, to help them understand their rights in relation to development plans and projects, and help them make a coordinated response.

With specific reference to the approaches demonstrated under the CEPF grant portfolio, some grantees felt that it was too early to evaluate the impact of their activities, while others felt that most activities seemed to have had mixed results. Case studies from Vietnam suggest that training journalists to report on environmental issues and undertaking policy research can be successful. For instance, PanNature is now recognized by the National Assembly as an official source of policy advice. Elsewhere, experience from Thailand suggests that shadow EIAs can be an effective tool, particularly when combined with a media strategy to disseminate findings to the public. Indeed, a general conclusion of the groups was that simply generating data and analysis was not enough, and that civil society organizations needed to ensure information was translated in readily accessible formats and to make active efforts to disseminate it to key decision makers. This may require civil society organizations to recruit specialized policy and communications staff, in order to build their credibility as policy research organizations.

With this background, participants suggested six key strategies for more effective biodiversity mainstreaming. The first was to make a stronger argument that biodiversity conservation supports human well-being, for instance by showing how conserving biodiversity can help achieve the Millennium Development Goals and national/provincial development objectives. The second was to make greater use of existing environmental laws (e.g., EIA laws, protected area laws, etc.), while promoting legal reform to strengthen provision for public engagement in development planning and environmental clearance processes. Third, it was suggested that civil society organizations make use of pilot sites and demonstration projects to showcase best practice, organizing study tours for policy makers and journalists, and developing case studies. Fourth, participants recommended that civil society organizations should form partnerships with organizations in China aimed at strengthening environmental safeguards for Chinese overseas investments and making them more accountable. Fifth, participants felt there was a need to engage as early as possible in development planning processes, because of the limited opportunities for influencing projects beyond the initial planning stage. They suggested that this could be done by advocating for strategic impact assessments, building civil society networks to share information, and developing 'early-warning systems' about pipeline projects. Finally, it was suggested that civil society organizations should not automatically oppose all development in but rather promote rational and sustainable use of natural resources, and work with project proponents willing to improve their environmental performance.

Responding to agro-industrial plantations

This break-out group was one of several to consider civil society responses to specific threats, in this case agro-industrial plantations. Such plantations, in the guise of economic land concessions, are a particularly severe threat to biodiversity and local livelihoods in Cambodia and Lao PDR, and it is from there that most of the experience considered by the group was gained. Participants reviewed five approaches that have been tested within and outside the context of CEPF grants. Three approaches involved supporting local communities secure their traditional rights to land and resources: supporting land titling for indigenous communities; assisting local communities to establish community forests; and raising awareness of community rights with respect to environmental land concession regulations. The other two involved engaging with government land-use planning processes: integrating conservation priorities into provincial land-use plans or protected area zoning plans; and undertaking cost-benefit analysis of economic land concessions, in terms of their contributions to local livelihoods and national economies.

Interestingly, none of the participants reported engaging constructively with concession holders to promote environmental or social safeguards. While this was mentioned as an approach worthy of further exploration, participants observed that a prerequisite for such engagement is a clear business case for companies to improve their environmental and social performance. In the current context, most companies behind environmentally damaging economic land concessions derive their license to operate from political patronage, have access to capital from sources within the region and do not, therefore, place a high premium on a reputation for sustainability. Moreover, many produce commodities that are sold to other companies, not directly to the public, such as rubber, and do not have a strong interest in commodity certification.

Participants felt that results to date had been mixed, with more setbacks than successes. Nevertheless, the most effective approaches were felt to be establishment of community forests (such as those established in Cambodia's Kratie province under the CEPF grant to CED), and empowering indigenous communities by raising awareness of their rights and strengthening community-based organizations. Prey Long in Cambodia was held up as an example where a combination of community activism and media attention has helped contest planned concessions. On the flip side, integrating conservation priorities into commune, district and provincial land use plans was not considered to have been very successful, at least in Cambodia, where decisions to award economic land concessions are often taken at a high level, overriding land-use plans and, even, protected area designations.

Looking to the future, participants felt that preventing all establishment of agro-industrial plantations within protected areas was not a realistic goal, particularly for the large protected areas in Cambodia and Lao PDR, which, in any case, are not of uniform biodiversity value. Consequently, they recommended developing management and zoning plans for protected areas, in an attempt to divert developments away from areas with highest conservation importance. They also recommended piloting conservation concessions, along the lines of Harapan forest in Sumatra, to provide governments with an economic alternative to conversion of natural forest to other uses. It was recognized, however, that conservation concessions are a very resource-intensive conservation strategy, which should be reserved for sites of the very highest conservation importance that cannot be protected by other means.

Other recommendations related to building networks of civil society organizations from grassroots to international levels, leveraging the complementary capabilities of multiple actors to influence different points along the production cycle. This could involve providing legal training and support to communities to challenge individual concessions, engaging constructively with companies to promote sustainable practices, analyzing sources of investment to place pressure on

concession holders via their investors, and sensitizing the general public to the issue through campaigns.

Responding to hydropower development

Another threat to be considered during the workshop was hydropower development, which emerged as one of the defining issues of the first CEPF investment phase. Although the scale of the threat was not envisioned a decade ago, CEPF was in a good position to be able to respond to it, having identified the Mekong River and its major tributaries as a geographic priority for investment and included mainstreaming biodiversity into development among its thematic priorities. Consequently, the CEPF grant portfolio generated a substantial amount of experience about the effectiveness of different responses to hydropower development.

Civil society organizations have responded to the threat from many angles. Research projects have taken the form of scientific research undertaken by leading experts, as well as participatory knowledge generation by local communities. Research findings have been used to inform advocacy at multiple levels, targeting local and national governments, project proponents, banks and other financial institutions funding hydropower projects, and major energy buyers (such as the Electricity Generating Authority of Thailand), as well as the Mekong River Commission and its donors. In particular, research findings have been used to assess potential impacts of hydropower development on aquatic biodiversity, food security, sediment flows and flooding regimes (especially around Tonle Sap Lake and in the Mekong Delta), as well as to critique EIAs and develop shadow EIAs. The body of knowledge generated through this research and analysis has also been disseminated to local communities, in accessible formats, to help them understand potential impacts to their lives and livelihoods. Alternative energy options have been developed and promoted, while standards and tools for responsible, balanced energy development have been promoted. Finally, the multifaceted efforts of civil society have been enhanced through capacity building for organizations and key individuals, and networking.

It is inherently challenging to evaluate the effectiveness of different approaches to influencing decision making surround major development projects, such as hydropower dams. These decisions are influenced by many factors, making it very difficult to establish causality. Also, there are strong disincentives for decision makers to admit that decisions have been influenced by civil society, even where this might indeed be the case. Although participants were thus unable to point to any approach as having been successful in influencing the ultimate decision about whether or not to proceed with a specific dam project, they felt that the combined efforts of CEPF grantees and other civil society organizations had been instrumental in raising the profile of the issue in general, and the proposed dams on the Mekong mainstream in particular, among decision makers, eliciting public statements of opposition to the Xayaburi dam from regional governments, and raising expectations about the standards of transparency and participation that should be ascribed to by future mainstream dam projects.

Another lesson learned by participants was that science (and even social and economic data) is not the most important factor influencing decision making surrounding large dam projects, which are driven by powerful business and political interests with few incentives to listen to voices of concern from neighboring countries and even less to listen to affected communities and concerned civil society organization. This challenge is compounded by a lack of transparency about hydropower development projects, making it very difficult for civil society to gain access to EIA reports or even become aware of projects sufficiently early to intervene before an unstoppable momentum has built in favor of the project. Other challenges identified by participants included the absence of any regional organization capable of mediating conflict among countries over development of shared rivers, no legal requirement for public participation

in decision-making processes around hydropower projects, and lack of avenues to challenge developments through the legal system.

Looking forwards, participants suggested a number of ways in which civil society organizations could respond to these challenges. In spite of cautioning that scientific evidence is not the most important factor driving decisions, participants felt that civil society could do more to make results of studies more accessible to decision makers, including by translating them into local languages, framing them in terms of their impacts on security, food security or migration (rather than biodiversity), making use of personal connections to reach key figures, and making information available faster so that it can feed into decision-making at an earlier stage. Participants also felt that more could be done to establish a common platform for advocacy with civil society groups in fields other than conservation, and noted that, in some contexts, public protest can be an effective tactic.

Participants felt that responding to individual hydropower projects is important, as it may be the only means of delaying the most advanced ones and because it can raise the bar for the level of transparency and participation expected of future projects. Nevertheless, they felt that addressing individual projects in a piecemeal fashion was not a sustainable strategy, and that these efforts needed to be twinned with a complementary strategy to reform the policy and institutional environment within which hydropower development is taking place. In this regard, they pointed to the need to reform the Mekong River Commission and establish new forums for governance of trans-national rivers, such as ASEAN or the Greater Mekong Subregion. They also highlighted the need for improved safeguards on overseas investment by Chinese, Thai and Vietnamese companies and banks, and for greater transparency about investments in the energy sector. Finally, participants also identified a need for greater public participation in decision making, which requires capacity building for local people to participate, in addition to simply creating legal provisions.

Strengthening the capacity of civil society

To frame their discussions, participants adopted a similar definition of civil society to that used by CEPF, encompassing a wide-range of organizations outside the spheres of government and the family, including academia, NGOs and community-based organizations. Experience was drawn not only from the CEPF grant portfolio but also from the civil society sector as a whole, including from initiatives in other fields, such as livelihoods, health and human rights. Participants identified three broad categories of approach for strengthening civil society in the Indo-Burma Hotspot. First, capacity can be strengthened through knowledge generation, whether by facilitating communities to generate their own knowledge around a sustainable development issue relevant to them, facilitating joint knowledge generation between communities and external experts, or translating knowledge products into local languages and locally appropriate formats. Second, capacity can be strengthened by building networks, be they horizontal networks among community-based organizations or vertical networks linking community-based organizations to national NGOs to international NGOs. Third, capacity can be built by building sustainability, for instance through integrating activities of community-based organization into commune development plans and budgets, establishing commercial ventures (e.g., ecotourism), providing training in organizational management, fundraising and proposal writing, or setting up savings groups.

Participants felt that knowledge generation was an important strategy because conservation priorities based solely on 'expert' knowledge can limit ownership by local people, and because a number of approaches had been seen to work. 'Thai Baan' research, or research undertaken by local communities addressing research questions relevant to them, has been piloted in several

hotspot countries, for instance in relation to fisheries management, and was felt to be an appropriate methodology for community-led knowledge generation. Community-generated media, such as photography and videography, was also felt to be an appropriate methodology, by which messages from local people can be readily shared through social media and mass media or conveyed to decision makers in an impactful format. Another means of helping local people's voices reach government officials is by convening community dialogues, which have more equitable power relations than more top-down trainings.

Participants noted, however, that government officials and academics may not necessarily accept community-generated knowledge, viewing it as unreliable or 'unofficial'. Another lesson learned from this type of approach was that knowledge generation can become an end in itself, if there is not a clear plan from the beginning to translate it into action. Furthermore, participants pointed out that knowledge generation that is not in the first language can undermine social capital within indigenous communities, especially for the older generation.

Several approaches to network building adopted by civil society groups in the hotspot were considered to have worked well, in terms of facilitating flows of knowledge, experience and resources. Participants pointed to several effective horizontal networks, including the Thai People's Network of Eight Mekong Provinces, which has been campaigning against Mekong mainstream dam, and a network of community fisheries groups in Thailand's Chiang Rai province, which established its own network of fish conservation zones. Examples of effective vertical networks held up by participants included the Vietnam Rivers Network, the Kratie Provincial Network on Community Forestry and the Save the Mekong Coalition.

In terms of what has not worked so well, participants noted that NGOs can become a barrier to information flow among community-based organizations if they concentrate on facilitating communication within their own networks but not among them. They also observed that civil society networks seemed to be strongest at regional and local levels but that there were gaps between the two levels that inhibited information flow. The experience with civil society networks in Cambodia has been that, where network meetings are externally funded, they rarely persist beyond the cessation of this support. This is symptomatic of a wider phenomenon with civil society capacity building, where community-based organizations induced mechanistically with external support do not tend to function well or be sustained, whereas community-based organizations established spontaneously by motivated community members are more likely to endure and deliver impacts on the ground. This suggests that NGOs and funders should look to identify existing community-based organizations rather than setting up new ones. Moreover, participants observed that some NGOs claiming to speak on behalf of local communities had a credibility gap, both with government and the communities themselves, because of a lack of accountability to the communities they worked with. In Lao PDR and Vietnam, this shortcoming was also felt to extend to community-based organizations themselves, where ordinary community members often had a limited role in their governance.

Building sustainability has been a challenge for civil society capacity building, just as it has for most aspects of conservation. For community-based organizations, savings groups have tended to work well, in large part because local people, being the main contributors of funds, feel ownership of them. Similarly, networks have tended to be more sustainable where meetings costs are covered by their members, not external sources, because there is greater ownership with less risk of the 'boom-and-bust' dynamics associated with short-term grant funding. The final lesson learned shared by participants was that trainings for community groups tended to have more sustainable outcomes and better power relations when they were delivered on a peer-to-peer basis, rather than in a top-down fashion by external experts.

Building support for conservation among the general public

There have been many efforts to sensitize the general public to conservation issues and obtain their support for conservation goals. Approaches have included school-based education programs, village-level outreach campaigns, campaigns targeting urban consumers of wildlife and wildlife products, and campaigns using mass media (i.e., radio, television, newspapers, internet, etc.). However, these have almost always been short-term programs or campaigns, which, although effective at raising awareness in the short term have rarely been demonstrated to have a lasting impact on attitudes or behavior. Part of the problem is that few donors have been prepared to fund sustained, systematic efforts to elicit behavioral change. Another issue is that there has been almost no evaluation of the long-term impacts of any awareness campaign or program, because evaluation has either not been incorporated into project design or limited to pre- and post- activity attitude surveys.

In spite of the lack of systematic evaluation, participants felt that certain approaches had been effective in certain contexts. For instance, public service announcements broadcast over television or radio can raise awareness among large numbers of people, although the effects wear off over time. Social media campaigns have been seen to work well in engaging public support for specific issues (e.g., the campaign against closure of the Animals Asia Foundation bear sanctuary at Tam Dao National Park in Vietnam) but they are very target dependent. Social marketing is another approach with considerable potential, involving systematic application of marketing tools, along with other concepts and techniques, to achieve specific behavioral goals. After reviewing the approaches felt to have worked best, participants identified four conditions for success. First, the messaging should be tailored to the specific audience, which can require draft materials to be tested and refined. Second, the campaign should be long term. Third, because no single approach can reach all audiences, an integrated approach is required, which may best be delivered through a coordinated approach by multiple organizations with complementary capabilities. Fourth, awareness raising by itself is of limited value unless it changes behavior in some way (e.g., reporting wildlife crime, stopping consumption of wildlife, writing letters of support, etc.).

Looking forwards, participants felt that there was a need to move away from the paradigm of campaigns *against* threats (e.g., consumption of rhino horn) towards one of programs *for* nature. To this end, they recommended long-term investment in television series on the natural history of Indo-Burma tailored to each national audience, as well as systematic integration of locally relevant environmental topics into school curricula. Nature camps and other forms of experiential learning for children were proposed, as was engagement of celebrities and other opinion formers in social marketing campaigns. Participants also advised conservation organizations to learn how to effect behavioral change from the example of health and development NGOs. Finally, participants advocated for piloting of creative ideas (with appropriate evaluation), such as messages at automated teller machines, on mobile phone scratch cards, and on consumer products (e.g., beer bottles).

Leveraging sustainable funding

The final topic to be explored by participants at the final assessment workshop was leveraging sustainable funding for conservation programs. Short-term grants (between one and three years in length) remain the main source of funding for civil-society-led conservation efforts, with corporate sponsorship, philanthropic donations and fees for services being important sources of funding for a small but growing number of initiatives. Compared with other regions in the world, philanthropy is an emerging concept in the hotspot countries, with China having the highest level of philanthropic activity. Also, only a small number of long-term funding mechanisms for conservation have been put in place, such as the Thailand Environmental Fund, and some of these

are not open to applications from civil society organizations, such as the Vietnam Conservation Fund. Participants felt that securing sustainable funding for their programs remained a major challenge for most conservation-focused civil society organizations in the hotspot, and noted that a grant-by-grant approach was inherently unsuited to funding conservation efforts, which require steady (and not necessarily large) flows of funding over a decade or longer.

Participants argued that, given the limited prospects for significantly increasing funding flows for conservation for the foreseeable future, the available funding should be targeted towards the last remaining strongholds for biodiversity, and for actions that cannot be supported with other (more plentiful) funding available for livelihood improvement or climate change, namely effective monitoring and law enforcement. Participants also argued for improved accountability of civil society organizations for the resources they use, including increased use of third-party evaluation. At the same time as making better use of available resources, participants identified a need to learn from successful conservation financing models from other countries, such as the Forever Costa Rica public-private initiative, the debt-for-nature swap model implemented in Indonesia and elsewhere, and private foundations in China, such as the Yunnan Green Environment Development Foundation. Finally, participants recommended that, for a conservation ethos to really take root in the hotspot, there was a need for long-term financing mechanisms to be locally established, and supported with locally sourced funding.

PROGRESS TOWARDS LONG-TERM CONSERVATION GOALS

Because biodiversity hotspots are, by definition, the biologically richest and most threatened terrestrial ecoregions on the planet, the scale of the conservation challenge in these places is, on average, greater than elsewhere. Also, in most hotspots, conservation efforts are constrained by limited capacity among conservation organizations, unsupportive operating environments, and unreliable funding. Therefore, conservation in the biodiversity hotspots is a long-term endeavor, requiring the combined efforts of many actors over long periods, to achieve the systematic changes necessary to reverse entrenched processes of biodiversity loss.

In order to better evaluate and focus its contributions to long-term, collaborative conservation efforts, CEPF has developed long-term conservation goals for the regions where it invests. These goals are an expression of five key conditions that must be met in order for conservation efforts to meet with enduring success:

1. Global conservation priorities (i.e., globally threatened species, KBAs and conservation corridors) and best practices for their management are identified, documented, disseminated and used by public sector, civil society and donor agencies to guide their support for conservation in the region.
2. Local and national civil society groups dedicated to conserving global conservation priorities collectively possess sufficient organizational and technical capacity to be effective advocates for, and agents of, conservation and sustainable development for at least the next 10 years.
3. Adequate and continual financial resources are available to address conservation of global priorities for at least the next 10 years.
4. Public policies, the capacity to implement these, and the systems of governance in each individual country are supportive of the conservation of global biodiversity.
5. Mechanisms exist to identify and respond to emerging conservation issues.

The attainment of all five goals would not necessarily mean that biodiversity was no longer threatened but only that government, civil society and donors, collectively, were able to respond

effectively to all present threats and any potential future threats that could reasonably be expected to arise. Periodic assessment of progress towards these goals can help identify areas most in need of additional investment from CEPF.

The participants at the final assessment workshops were asked to assess progress towards the five goals, using the criteria and indicators provided, which they were free to adjust to the specific context of Indo-Burma. Participants were asked to apply the criteria and indicators based on the prevailing situation in March 2013. These were then compared these with the situation in March 2008, at the beginning of the CEPF investment phase. This allowed an assessment of change over time to be made with respect to each criterion. The synthesized results are presented in Annex 4

There was broad consensus that five years was quite a short period over which to observe significant change with regard to long-term goals. Nevertheless, when comparing CEPF grantees' perception of the situation prevailing in 2013 with that in 2008, it was notable that significant changes were observed with regard to nine of the 25 criteria (36 percent), and that the direction of change was positive in every case. Specifically, under Goal 1 (conservation priorities), significant progress was observed with regard to: (i) global Red List assessments, with assessments having been completed for five major freshwater taxa and selected families of vascular plants; and (ii) identification of KBAs, with an initial analysis of freshwater KBAs having been undertaken for the first time. In both cases, the improvements were directly attributable to CEPF grants.

Under Goal 2 (civil society capacity), significant progress was observed with regard to only one criterion: management systems and strategic planning. Between 2008 and 2013, the number of priority sites with at least one civil society organization with satisfactory capacity dedicated to their conservation increased from 11 to 17, in part due to support from CEPF for conservation activities at these sites. Participants noted, however, that the increase in high-capacity organizations working at priority sites took place against a backdrop of civil society organizations shifting focus away from biodiversity conservation, due to increasing donor attention being given to other priorities, such as climate change.

No substantive changes were observed with regard to Goal 3 (sustainable financing). Indeed, it was noted that, while funding levels for biodiversity conservation from in-region and international sources have remained broadly unchanged over the investment phase, the scale and intensity of threats to biodiversity have increased significantly, meaning that current funding levels are more insufficient than ever.

Under Goal 4 (enabling environment), significant progress was observed with regard to: (i) legal environment for civil society, with a new law being passed in Lao PDR enabling local civil society organizations to register and receive foreign funding; and (ii) education and training, with an increasing number of senior positions in conservation organizations being staffed by local country nationals. These improvements in the enabling environment cannot be attributed to CEPF funding, although CEPF grants did enable emerging local organizations in all four countries to take advantage of new opportunities created by them. Furthermore, these improvements to the enabling environment were offset, to some extent, by other trends over the investment phase, such as increased intimidation of civil society groups working on issues addressed deemed politically sensitive in certain countries.

Finally, under Goal 5 (responsiveness to emerging issues), significant improvements were observed with regard to: (i) biodiversity monitoring, with systematic monitoring having been initiated for a small but growing number of species and populations thanks, in part, to support from CEPF grants; (ii) threats monitoring, with more systematic monitoring of wildlife crime at

national and regional scales following establishment of the ASEAN WEN; (iv) adaptive management, with many conservation organizations having adapted their programs to respond to emerging issues, such as agro-industrial plantations and hydropower dams, partly facilitated by CEPF support; and (v) discussion of conservation issues in the public sphere, which was felt to have increased substantially since 2008, helped in part by CEPF support. It was noted, however, that public debate of conservation issues does not necessarily influence public policy, although positive examples were identified, some of which were directly attributable to CEPF grants.

In spite of improvements in these areas, overall, there is still a long way to go before the long-term conservation goals for the Indo-Burma Hotspot are met. Participants considered that, of the 25 criteria assessed, only two of them had been fully met by 2013: Key Biodiversity Areas (KBAs identified, covering, at minimum, terrestrial, freshwater and coastal ecosystems); and public sphere (conservation issues are regularly discussed in the public sphere, and these discussions influence public policy). Of the remaining criteria, 12 were assessed as partially met and 11 as not met. The goals with the greatest number of criteria not met were Goal 2 (civil society capacity) with three unmet criteria and Goal 3 (sustainable financing) with four.

CONCLUSION

The Indo-Burma Hotspot is one of the most challenging contexts for biodiversity conservation on the planet, with the highest human population and some of the highest rates of economic growth of any hotspot, and consequently heavy human pressure on remaining natural ecosystems. The conservation response, by governments, donor agencies and civil society, has been significant, albeit insufficient to slow the rate of biodiversity loss. Approaches adopted in recent decades have had mixed results, with unsuccessful models being characterized by weak linkages between conservation and livelihood activities, lack of rigorous evaluation of outcomes and effectiveness, limited ownership by local communities and government, and insufficient attention to sustainability. Nonetheless, a body of good practice has emerged, tested and refined by a growing conservation community, albeit one that remains dominated in most hotspot countries by external leadership and resources.

It was into this context that CEPF implemented a five-and-a-half-year investment program between 2008 and 2013, investing \$9.7 million across 126 grants, and engaging 66 civil society organizations (36 local and 30 international) in their implementation. Informed by an investment strategy developed through a participatory consultation process, guided by an RIT with long experience of working in the region, and drawing on the expertise of more than 140 technical reviewers, the CEPF program learned lessons from the past to forge alliances among civil society organizations and target grant resources at the most strategic priorities. While the challenging conservation context and a determination to confront tough issues and test new approaches ensured that not all investments were successful, an impressive 92 percent of small grants and 86 percent of large grants and were assessed as having met or exceeded expectations.

These investments delivered significant conservation outcomes on the ground, at species, site and corridor scales. Core populations of 32 globally threatened species were secured from overexploitation and illegal trade. Formal protection was extended to more than 150,000 hectares through the creation and expansion of protected areas. Biodiversity conservation was strengthened in a further 1.6 million hectares within existing protected areas, as well as 360,000 hectares in production landscapes. Seven development plans and policies analyzed for their impacts on biodiversity and ecosystem services, and alternative development scenarios proposed. One-hundred-and-eighty-six communities received tangible socioeconomic benefits, in terms of increased income, food security, resource rights or other measures of human wellbeing.

Just as importantly as these immediate outcomes, the CEPF investments established a foundation for transformative change in the future. Key information gaps were filled, particularly with regard to the status and distribution of threatened species. Various conservation approaches were tested in diverse settings, learning valuable lessons about the effectiveness of different models and conditions for success. Several of the approaches developed or tested through CEPF grants appear to be suitable for wider replication. The challenges in the next period are to refine these approaches, promote their adoption by other actors, including government and private sector, and ensure social, institutional and financial sustainability.

As well as acting as a catalyst for innovation, CEPF also facilitated the continued growth of local civil society in the hotspot, through engaging a widening circle of civil society actors in the investment program and building capacity at individual, organizational and network scales. Ninety-two percent of local organizations receiving CEPF grants demonstrated increased capacity at the end of the investment period according to the civil society tracking tool. Overall, the five years of the CEPF investment phase marked a watershed in the emergence of civil society in the Indo-Burma countries, the results of which will be felt for years to come, in future campaigns for sustainable development of the Mekong River and on other issues that have yet to emerge.

Annex 1 – CEPF Investment in the Indo-Burma Hotspot during the First Investment Phase (2008-2013)

Chart 1. Approved Grants by Strategic Direction

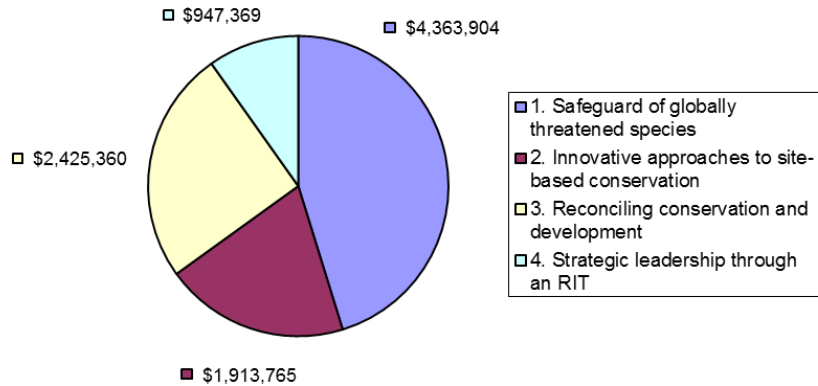


Chart 2. Approved Grants by Corridor and Strategic Direction

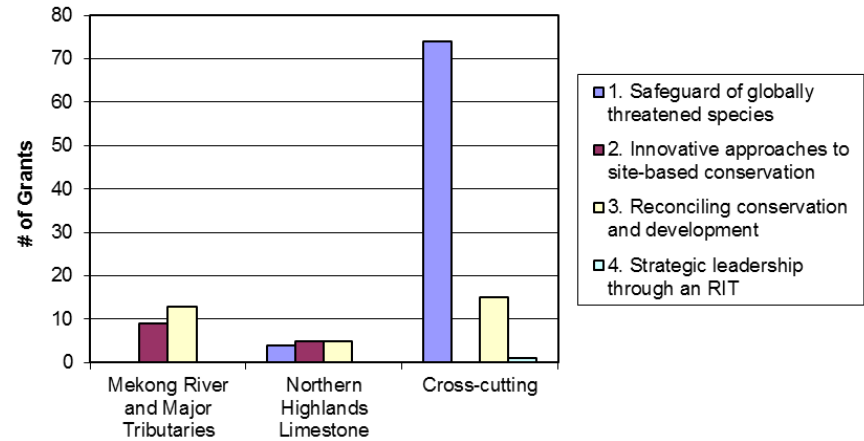


Chart 3. Portfolio Status by Strategic Direction

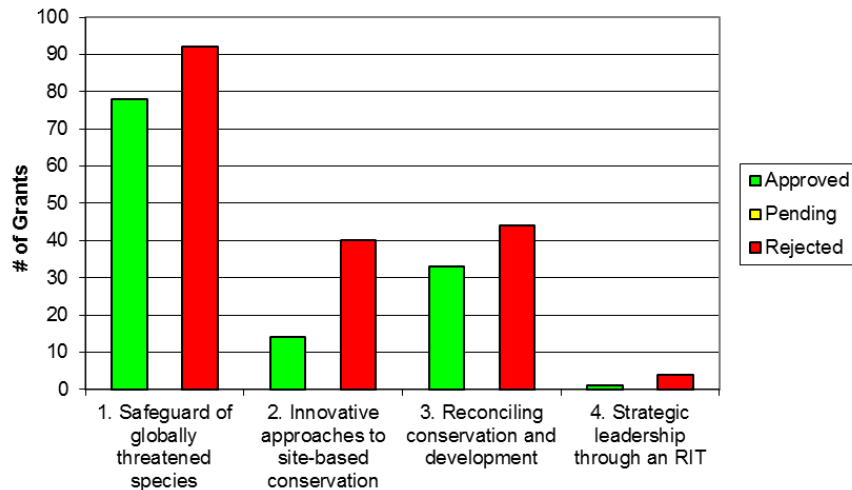
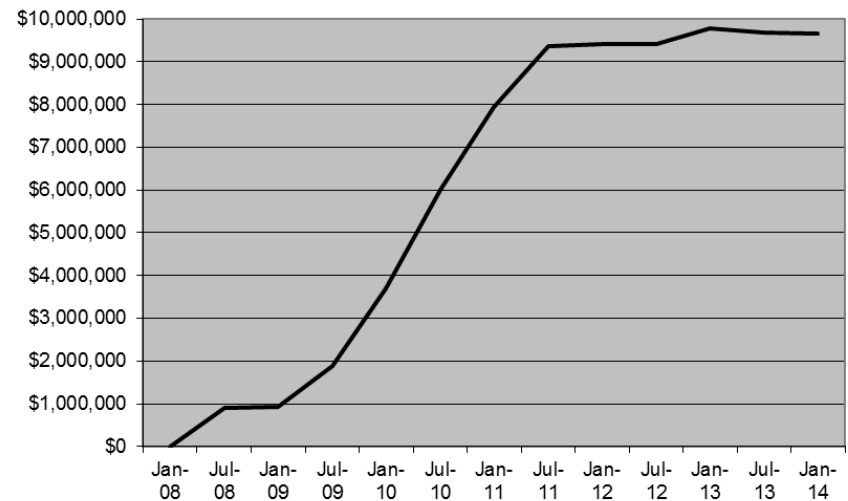


Chart 4. Combined Value of Grants Awarded



Annex 2 – Results of the First Phase of CEPF Investment in the Indo-Burma Hotspot against Targets in the Logical Framework

Objective	Targets	Progress
<p>Engage civil society in the conservation of globally threatened biodiversity through targeted investments with maximum impact on the highest conservation priorities</p>	<p>NGOs and civil society actors actively participate in conservation programs guided by the ecosystem profile.</p> <p>Alliances and networks among civil society groups formed to avoid duplication of effort and maximize impact in support of the CEPF ecosystem profile.</p> <p>28 Key Biodiversity Areas have new or strengthened protection and management.</p>	<p>54 civil society organizations (25 local, 29 international) were directly involved in the implementation of CEPF projects as grantees. A further 12 groups (11 local, one international) were engaged as sub-grantees under large grants.</p> <p>Five alliances were forged among grantees for the implementation of specific projects:</p> <ul style="list-style-type: none"> • Regional turtle conservation. • Conservation of the Mekong Central Section. • Conservation of Stung Treng Ramsar Site. • Sarus crane conservation in the Mekong Delta. • Conservation of Cat Ba langur. • Red List assessment of selected freshwater taxa. <p>In addition, five networks were created to coordinate conservation efforts beyond the scope of specific projects:</p> <ul style="list-style-type: none"> • Indochina Plant Red List Authority under IUCN/SSC. • Informal working group on Indochinese hog deer. • Edwards’s pheasant Working Group. • People’s Council of Ing River Basin (a network of CBOs). • Think tank group for meaningful civil society engagement in development issues related to the Mekong Delta. <p>Moreover, four pre-existing alliances were strengthened:</p> <ul style="list-style-type: none"> • Saola Working Group of the IUCN/SSC Bovid Specialist Group. • Save the Mekong Coalition. • Volunteer network to monitor illegal wildlife trade in Vietnam. • Network of Vietnamese journalists concerned about wildlife trade and other environmental issues. <p>15 of the 28 CEPF priority sites demonstrated improvements in their protection and management: Ba Be; Ban Bung; Ban Thi-Xuan Lac; Khau Ca; Lam Binh (Sinh Long); Mekong from Kratie to Lao PDR; Mekong from Luang Prabang to Vientiane; Sekong River; Sesan River; Srepok River; Tat Ke; Trung Khanh; Tung Vai; and Upper Lao Mekong; and Upper Xe Khaman.</p>

	<p>Development plans or policies influenced to accommodate biodiversity.</p> <p>Improved management for biodiversity conservation or sustainable use within production landscapes in 2 conservation corridors covering 41,547 km² or approximately 3 percent of the region.</p>	<p>Two development policies have been influenced to accommodate biodiversity, and revisions to several other policies are currently under consideration by the respective governments:</p> <ul style="list-style-type: none"> • An ordinance of the Supreme People’s Procuracy of Vietnam provides sentencing guidance on dealing with wildlife crime in relation to African elephant and rhinoceroses. • Directive 23/CT-TTg of the Prime Minister of Vietnam tightens regulation of transshipments through the Vietnamese border to China, restricting the use of semi-legal customs clearance points, calling for stronger enforcement and more thorough checks by the customs, police and border army, and prohibiting a range of products from being shipped through Vietnam. <p>Within the Mekong River and Major Tributaries Corridor, conservation of biodiversity across 331,101 hectares of agricultural land, forest and wetlands along the Mekong River between Kratie and Stung Treng towns was strengthened through the implementation of awareness and enforcement activities and the establishment of community forests, while 680 hectares of forest, 67 hectares of riverine islands and 39 hectares of wetlands along the Sekong, Sesan and Srepok Rivers benefited from strengthened conservation through the actions of local communities.</p> <p>Within the Northern Highlands Limestone Corridor, 5,000 hectares of unprotected forest within Tung Vai KBA and 2,000 hectares within Khau Ca KBA were covered by community protection teams, leading to improved management for biodiversity conservation, while sustainable management of medicinal plant collection was introduced to 1,500 hectares of forest in the buffer zone of Nam Xuan Lac Species and Habitat Conservation Area.</p>
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Intermediate Outcomes	Intermediate Indicators	Progress
<p>Outcome 1: Globally threatened species in Indochina safeguarded by mitigating major threats \$3,950,000</p>	<p>Core populations of priority species identified and secured from overexploitation and illegal trade by implementing targeted, high impact projects.</p>	<p>48 core populations of 32 species, equivalent to 39 percent of the priority species for CEPF investment, were secured from overexploitation and illegal trade:</p> <ul style="list-style-type: none"> • Core population of Asian giant softshell turtle in the Mekong Central Section secured through nest protection and head-starting. • Core population of East Asian giant softshell turtle at Dong Mo Lake secured through community outreach and installation of protective nets. • Core population of yellow-headed temple turtle at Tatai Krome secured through community patrolling. • Core populations of Asiatic softshell turtle, impressed tortoise and yellow-headed temple turtle in the Cardamom Mountains secured through community patrolling and snare removal. • Core population of mangrove terrapin in the Sre Ambel River secured through nest protection and head-starting. • Core population of Siamese crocodile at Prek Toal Core Area secured through protection of foraging habitat. • Core populations of sarus crane, white-shouldered ibis, greater adjutant and Bengal florican at Ang Tropeang Thmor Management and Conservation Area stable following establishment of a community management committee. • Core populations of sarus crane, giant ibis, white-shouldered ibis, lesser adjutant, greater adjutant, green peafowl and white-winged duck in the Northern Plains increased or presumed stable following nest protection and habitat protection. • Core populations of greater adjutant and lesser adjutant at Prek Toal Core Area increased or presumed stable following extension of nest protection. • Two core populations of Bengal florican, at Stoung and Chikraeng Bengal Florican Conservation Areas, secured through community-based habitat protection and hunting prevention. • Core populations of white-rumped vulture, slender-billed vulture and red-headed vulture in northern and eastern Cambodia stable or increased following nest protection, supplementary feeding and control of poisoning. • Two core populations of sarus crane, at Anlung Pring and Boeung Prek Lapouv Management and Conservation Areas, secured through community outreach and enforcement patrolling.

	<p>Public awareness campaigns that reinforce existing wildlife trade policies implemented and contributing to the reduction of consumer demand for priority species and their products.</p>	<ul style="list-style-type: none"> • Core populations of white-shouldered ibis and lesser adjutant in the Mekong Central Section secured through initiation of nest protection. • Core population of white-eared night-heron in Ba Be-Na Hang forest complex secured through initiation of nest protection. • Core population of red-shanked douc at Son Tra Nature Reserve secured through establishment of protection team. • Core populations of black crested gibbon, cao vit crested gibbon, Tonkin snub-nosed monkey and François’s leaf monkey at Che Tao, Khau Ca, Lam Binh (Sinh Long), Trung Khanh and Tung Vai KBAs secured through patrolling by protection teams and development of species conservation action plans. • Core population of Cat Ba langur (subspecies of white-headed leaf monkey) at Cat Ba National Park secured through intensified patrolling and capacity strengthening for enforcement staff. • Core population of Eld’s deer at Eld’s Deer Sanctuary secured through establishment of protection teams and integration of protected area into local spatial plans. • Four core populations of saola at Saola (Quang Nam) and Saola (Thua Thien Hue) Nature Reserves, Bach Ma National Park extension and Phou Sithone Endangered Species Conservation Area secured through initiation of anti-poaching measures and protected area establishment. • Core population of Irrawaddy dolphin secured through designation of Mekong Irrawaddy Dolphin Protection and Management Area. • Core populations of hairy-nosed otter and smooth-coated otter secured through establishment of three community conservation areas in the Kampong Prak area of Tonle Sap lake. • Core populations of sun bear and Asian black bear at Central Cardamoms Protected Forest secured through linking detailed and comprehensive monitoring data to law enforcement patrols and habitat protection activities. <p>Technical trainings and workshops were held to build awareness and capacity of enforcement agencies to reduce the illegal cross-border trade of wildlife from Lao PDR to Vietnam and from Vietnam to China.</p>
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	<p>The status and distribution of globally threatened plant species investigated and results applied to planning, management, awareness raising and/or outreach</p> <p>The global threat status of selected freshwater taxa assessed and the results integrated into planning for the conservation of wetland biodiversity and development plans in the priority corridors.</p> <p>Research on priority species conducted where there is a need for greatly improved information on their status and distribution.</p> <p>Local-language reference materials on globally threatened species published.</p>	<p>Also, news stories were published on diverse environmental and conservation issues in the Northern Highland Limestone Corridor through an on-line portal, contributing to the reduction of consumer demand for priority species and their products.</p> <p>Furthermore, a network of volunteers was built to monitor establishments known to have traded wildlife illegally, thereby strengthening public participation in tackling the illegal trade in Vietnam. These volunteers undertook over 2,300 monitoring missions and reported more than 400 new wildlife crimes.</p> <p>Red List assessments of 607 terrestrial plant species were completed, 519 of which were assessed for the first time. The results were made publicly available via the Red List website.</p> <p>Red List assessments were completed for five freshwater groups, covering 1,178 species of fish, 430 species of mollusk, 473 species of odonate, 182 species of crab and 252 species of aquatic plants. The results were made publicly available via the Red List website.</p> <p>Research was undertaken for 10 of the 12 priority species for which there is a need for greatly improved information; new information has been generated on six of them: otter civet; spoon-billed sandpiper; white-eared night-heron; Zhou's box turtle; Vietnamese pond turtle; and East Asian giant softshell.</p> <p>Four sets of local-language materials were published:</p> <ul style="list-style-type: none"> • 2,820 copies of a poster and postcards on Tonkin snub-nosed monkey and François's leaf monkey for communities in the Northern Highlands Limestone corridor. • 1,600 'toolboxes' on human-elephant conflict for communities in eastern Cambodia. • 100 posters on the aquatic biodiversity of the Nang River. • 1,500 leaflets on methods and results of participatory research into aquatic species.
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<p>Outcome 2: Innovative, locally led approaches to site-based conservation developed at 28 Key Biodiversity Areas</p> <p>\$2,150,000</p>	<p>Innovative local stakeholder-based conservation management and caretaking initiatives established.</p> <p>Regional standards and programs that address overexploitation of biodiversity are developed and piloted at selected sites.</p> <p>Percent of projects that enable effective stewardship of biodiversity and ecosystem services by Indigenous and local communities in focal areas.</p> <p>Percent of targeted communities involved in sustainable use projects that show socioeconomic benefits.</p> <p>Percent of targeted protected areas with strengthened protection and management.</p> <p>Percent of projects outside protected areas that integrate biodiversity conservation in management practices.</p>	<p>Local stakeholder-based conservation initiatives were established at 15 out of 28 priority sites:</p> <ul style="list-style-type: none"> • Community co-management of fisheries was established in Mekong from Kratie to Lao PDR, Mekong from Luang Prabang to Vientiane, Upper Lao Mekong and Upper Xe Khaman KBAs. • Communities were engaged in forest conservation and management in Mekong from Kratie to Lao PDR, Sesan River and Srepok River KBAs. • Nest protection schemes for threatened bird and turtle species were introduced to Ba Be, Ban Thi-Xuan Lac, Mekong from Kratie to Lao PDR and Sekong River KBAs. • Community patrolling was put in place to protect key biodiversity values of Khau Ca, Lam Binh (Sinh Long), Tung Vai and Trung Khanh KBAs. • A community co-managed fishery was established in Na Hang Reservoir, between Ban Bung and Tat Ke KBAs. <p>The FairWild standard for sustainable and equitable harvest of wild medicinal and aromatic plants was piloted at Ban Thi-Xuan Lac KBA.</p> <p>37 percent (46 out of 126) of all grants awarded enabled effective stewardship of biodiversity and ecosystem services by local and Indigenous communities, comprising 22 large grants and 24 small grants.</p> <p>186 communities (119 in Cambodia, 35 in Lao PDR, 15 in Thailand and 17 in Vietnam) targeted by CEPF grants received tangible socioeconomic benefits.</p> <p>79 percent (11 out of 14) of the protected areas targeted by CEPF grantees demonstrated strengthened protection and management, as evidenced by increased SP1 METT scores.</p> <p>72 percent (13 out of 18) of projects working to integrate biodiversity conservation into management practices outside protected areas reported tangible results in this area.</p>
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<p>Outcome 3: Key actors in reconciling biodiversity conservation and development objectives engaged, with a particular emphasis on the Northern Highlands Limestone and Mekong River and its major tributaries</p> <p>\$2,500,000</p>	<p>Civil society efforts to analyze development policies, plans, and programs, evaluate their impact on biodiversity and ecosystem services and propose alternative development scenarios and appropriate mitigating measures implemented.</p> <p>Initiatives that leverage support for biodiversity conservation from development projects and programs.</p>	<p>CEPF grantees analyzed seven development plans and policies, evaluated their impacts on biodiversity and ecosystem services, and proposed alternative development scenarios:</p> <ul style="list-style-type: none"> • A set of guidance materials on mainstreaming biodiversity issues into implementation of the national hydropower development plan for Vietnam was produced and disseminated. • The impacts of hydropower development plans for the Sekong, Sesan and Srepok Rivers in Cambodia were analyzed, and the findings disseminated among affected communities and the relevant authorities. • The impacts of hydropower development plans for the mainstream of the Mekong River were analyzed, the results were widely disseminated, and alternative development scenarios were promoted with decision makers in government and private sector. • Independent policy analysis was conducted on: (i) the potential impacts of REDD+ on protected areas in Vietnam; (ii) the implications of safeguard policies in international development finance; (iii) environmental charges in Vietnam’s mining sector; and Vietnamese investment in hydropower development in the Mekong basin. The findings were disseminated via local-language reports, policy briefs and media articles. <p>CEPF grantees leveraged more than \$1 million from development projects and programs for activities directly contributing to biodiversity conservation:</p> <ul style="list-style-type: none"> • An initiative to conserve threatened large waterbirds in the Northern Plains of Cambodia leveraged over \$400,000 from the Multi-donor Livelihoods Facility towards participatory land-use planning and livelihoods-based conservation incentives. • An initiative to conserve threatened primates and trees in northern Vietnam leveraged over \$400,000 from the European Commission Programme for Non-state actors and Local Authorities in Development. • An initiative to secure rights of indigenous communities over forest resources and land along the Mekong River in Cambodia leveraged almost \$200,000 from ActionAid towards establishment of NTFP collector groups and training in laws related to land and forestry.
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	<p>Targeted outreach and awareness raising for decision makers, journalists and lawyers conducted.</p>	<p>At least 907 decision makers, journalists and lawyers received targeted outreach, training or awareness raising:</p> <ul style="list-style-type: none"> • Training workshops and field investigation missions were organized for more than 300 journalists in Vietnam. • Briefings on the transnational wildlife crime situation along the Vietnam-China border were held for more than 120 national and provincial level decision makers in Vietnam, including National Assembly members. • Nine government officials from Vietnam’s Tuyen Quang and Bac Kan provinces were trained in use of GIS as a tool to incorporate biodiversity into development planning. • A training course on potential impacts of and responses to development strategies in the Mekong river system was organized for 54 participants from research institutions, universities and civil society organizations in the Mekong Delta. • A workshop on the drivers and implications of Mekong mainstream dam development was held for 50 journalists, researchers and business representatives from southern Vietnam, • A trip for 14 Thai journalists was organized to a stretch of the Mekong River threatened by dam development, and a public forum on development of the Mekong River was held in Bangkok, attended by over 190 representatives from civil society, academia, media and government. • Regional workshops on <i>Water governance and sustainable development</i> and <i>Investment cooperation and sustainable development in the Lower Mekong Sub-region</i> were held for representatives of state agencies, civil society organizations and media agencies, with 70 and 100 participants, respectively.
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<p>Outcome 4: A regional implementation team provides strategic leadership and effectively coordinates CEPF investment in the Indochina Region of the Indo-Burma Hotspot.</p> <p>\$900,000</p>	<p>Percent of civil society groups receiving grants that demonstrate more effective capacity to plan and manage conservation projects.</p> <p>RIT performance in fulfilling the approved terms of reference.</p> <p>At least two learning exchanges and/or participatory assessments hosted and documented.</p>	<p>92 percent (23 out of 25) of local civil society groups receiving CEPF grants demonstrated strengthened capacity at the end of the period of support, as evidenced by Civil Society Organizational Capacity Tracking Tool scores.</p> <p>95 percent (41 out of 43) of the deliverables in the RIT grant were achieved by the end of the project.</p> <p>A participatory assessment of progress towards the goals set out in the Ecosystem Profile for the hotspot was held in July 2010, with stakeholder consultation workshops in Hanoi, Phnom Penh and Vientiane, attended by over 90 representatives of civil society, and government and donor agencies. They provided an opportunity to strengthen cross-linkages among grantees, identify synergies with other donor investments, and evaluate gaps in the portfolio.</p> <p>An update of the ecosystem profile was undertaken between May 2011 and January 2012, with national stakeholder consultation workshops in Bangkok, Hanoi, Kunming, Phnom Penh, Shenzhen, Vientiane and Yangon, provincial workshops in Ban Lung, Kratie and Siem Reap, and a regional workshop in Phnom Penh. These workshops provided an opportunity to take stock of changes to the state of biodiversity in the hotspot, threats affecting it and the context for conservation and civil society engagement in it, since 2003. A total of 470 stakeholders were engaged in the process. The updated ecosystem profile was approved by the CEPF Donor Council in October 2012, as a basis for a second phase of investment in the Indo-Burma Hotspot.</p> <p>A participatory final assessment workshop was held in Phnom Penh in March 2013, with more than 110 representatives from government agencies, donors and civil society organizations. The workshop provided a venue for CEPF grantees to exchange results and lessons learned and to network with other civil society groups at national and regional levels.</p>
<p>Strategic Funding Summary</p>	<p>Amount</p>	
<p>Total Budget Amount</p>	<p>\$9,500,000</p>	

Annex 3 – List of Grants Awarded during the First Phase of CEPF Investment in the Indo-Burma Hotspot

Strategic Direction 1: Safeguard priority globally threatened species in Indochina by mitigating major threats

Improved Agricultural Productivity and Capacity-Building for Income Generation among Farmer Households Reliant on the Kampong Trach Sarus Cranes Conservation Area in the Province of Kampot, Cambodia

Increase efforts to conserve an important Indochinese non-breeding site for sarus crane at Kampong Trach Wetland Important Bird Area in the lower Mekong Delta, Kampot province, Cambodia, by strengthening the capacity of the local community on improved and sustainable agricultural production, and by conducting the feasibility study for introduction and implementation of a wildlife-friendly produce scheme in this site.

Amount: \$19,887

Grant Term: 11/10 - 12/11

Grantee: Cambodian Institute for Research and Rural Development

Moving from Planning to Action to Save the Saola: The Second Meeting of the Saola Working Group

Support the technical meeting of the Saola Working Group hosted by Vinh University in Vinh and a second, wider meeting co-hosted by WWF in Hue, gathering national and international technical expertise from Vietnam, Lao PDR and further afield, to update and review actions and strategy, and develop a fundraising strategy and worklist in order to ensure the advancement of saola conservation.

Amount: \$16,952

Grant Term: 05/11 - 05/11

Grantee: Center for Environmental and Rural Development, Vinh University

Pilot Different Survey Methods to Identify Saola Population in the Pu Mat National Park of Nghe An Province

To confirm the existence of the saola (*Pseudoryx nghetinhensis*) population in Pu Mat National Park, Nghe An province, conduct interviews, make observations for possible footprints and feeding traces, collect and analyze dung specimens, coordinate camera trapping, and collect leeches for DNA analysis. A follow-up proposal for the survey of the species in the Northern Annamites will be submitted to the Darwin Initiative.

Amount: \$18,436

Grant Term: 02/13 - 10/13

Grantee: Center for Environmental and Rural Development, Vinh University

Development of Educational Materials and Information Focused on the Tonkin Snub-Nosed Monkey in Northern Vietnam

Develop focused environmental education materials, training and environmental education activities on the Tonkin snub-nosed monkey in local languages, and provide them to students, teachers and local communities to increase understanding of, build pride in, and reduce threats to this monkey around Khau Ca Proposed Protected Area, Ha Giang province, Vietnam.

Amount: \$8,448

Grant Term: 08/09 - 12/10

Grantee: Center for People and Nature Reconciliation

Identifying Priority Populations and Reviewing Current Known Distributions for Threatened Bat and Turtle Species in Northern and Central Vietnam

Fill critical gaps in knowledge on five globally threatened animal species (Indochinese box turtle, four-eyed turtle, impressed tortoise, wattle-necked softshell and Vietnam leaf-nosed bat) for which core populations have yet to be located in Vietnam by undertaking targeted field surveys, formulating specific management recommendations for protected area managers, and conducting targeted awareness raising for local communities.

Amount: \$42,855

Grant Term: 01/10 - 12/11

Grantee: Centre for Natural Resources and Environmental Studies

Confirming the Existence of Zhou's Box Turtle in Northern Vietnam and Developing a Conservation Plan for the Species

Conduct interviews and field surveys to collect data to identify the presence of Zhou's box turtle (*Cuora zhoui*). This species is believed to be highly endemic and restricted to a small area in Ha Giang, Cao Bang and Tuyen Quang provinces. Currently, there are no known wild populations of this species. Develop a subsequent conservation plan if the species is located.

Amount: \$18,123

Grant Term: 03/13 - 10/13

Grantee: Centre for Natural Resources and Environmental Studies

Community Protection of Eastern Sarus Crane and its Habitat in Boeung Prek Lapouv Management and Conservation Area, Cambodia

Conserve a third of the non-breeding Indochinese population of sarus crane at Boeung Prek Lapouv Management and Conservation Area, Takeo province, Cambodia, by strengthening law enforcement, raising awareness of conservation area boundaries, conducting environmental education, enhancing the capacity of the local community for outreach, and seeking long-term funding sources (through ecotourism and other sources).

Amount: \$19,727

Grant Term: 07/09 - 06/10

Grantee: Chamroen Chiet Khmer

Community Actions to Improve Livelihoods Linked to Protection and Conservation of Sarus Cranes and Other Globally Threatened Species in Boeung Prek Lapouv Conservation Area, Cambodia

Create collective local action contributing to the conservation of non-breeding Indochinese population of sarus crane and other globally threatened species at Boeung Prek Lapouv Management and Conservation Area, Takeo province, Cambodia, by raising awareness of the site's importance and supporting legal framework, strengthening the capacity of the local community for conservation activities, and improving the local livelihoods.

Amount: \$19,937

Grant Term: 11/10 - 10/11

Grantee: Chamroen Chiet Khmer

Enabling Continued Protection of the Boeung Prek Lapouv and Anlung Pring Sarus Crane Reserves

Secure conservation efforts for Boeung Prek Lapouv and Anlung Pring Sarus Crane Reserves supported by CEPF under an earlier large grant project. Ensure that Local Conservation Group patrolling activities remain in place to minimize the risk of losing natural habitat before long-term funding is secured, and support identification of land ownership around Anlung Pring.

Amount: \$19,847

Grant Term: 04/13 - 10/13

Grantee: Chamroen Chiet Khmer

Awareness and Research Conservation Program for Swinhoe's Softshell Turtle in Vietnam

Strengthen site-based conservation for the Critically Endangered Swinhoe's softshell turtle (*Rafetus swinhoei*), including awareness activities that focus on the special cultural importance of this species and its need for conservation. Conduct surveys of historical sites for the species that may support surviving animals, which can be the focus of subsequent surveys using environmental DNA techniques to confirm presence or absence.

Amount: \$20,000

Grant Term: 08/09 - 07/11

Grantee: Cleveland Zoological Society

Research and Conservation Action for Tortoises and Freshwater Turtles in Indo-Burma

Materially improve the conservation outlook for several of Indo-Burma's most threatened tortoise and freshwater turtle species by undertaking high-priority conservation actions, including protecting the remaining habitat of Vietnamese pond turtle; identifying priority sites for the conservation of Indochinese box turtle; increasing the protection of mangrove terrapin breeding sites through community ranger programs; and enhancing protection under national laws.

Amount: \$154,948

Grant Term: 10/09 - 03/13

Grantee: Cleveland Zoological Society

Keeping the Legend Alive: Research and Conservation of Swinhoe's Softshell Turtle in Vietnam

Secure the only known habitat of Swinhoe's softshell turtle (*Rafetus swinhoei*) at Dong Mo Lake by installing two additional large nets to prevent the species from escaping, and presenting to the national authorities species conservation strategy that includes environmental DNA and potentially trapping, and bringing remaining animals together to a semi-wild area for conservation breeding and awareness activities.

Amount: \$9,217

Grant Term: 09/13 - 10/13

Grantee: Cleveland Zoological Society

Research and Conservation Action for Tortoises and Freshwater Turtles in Indoburma

Improve the conservation outlook for highly threatened turtles in Cambodia by expanding a community nest protection program for Asian giant softshell turtle; increasing protection of yellow-headed temple turtle breeding sites through community ranger programs; identifying priority sites for Indochinese box turtle in northeastern Cambodia; initiating community incentive programs for impressed tortoise conservation; and enhancing legal protection under Cambodian law.

Amount: \$95,246

Grant Term: 11/09 - 10/12

Grantee: Conservation International

Reducing Exploitation of Trade-threatened Mammals in their Cambodian Strongholds

Improve the enabling environment for otter conservation by building local support, developing a region-wide taskforce and filling key gaps in knowledge of otter ecology and distribution. Mitigate key threats to pangolins in the Central Cardamom Mountains and improve survival of confiscated animals. Conserve bear populations in the Central Cardamoms by more effectively linking monitoring data to protection activities.

Amount: \$119,078

Grant Term: 07/10 - 07/13

Grantee: Conservation International

Safeguarding Vietnam's Douc Langur Population through Conservation and Sustainable Ecotourism

Implement priority conservation actions for a core population of red-shanked douc langur at Son Tra Nature Reserve, Vietnam, by promoting sustainable tourism, including certification of tour guides, and reinforcing protection measures. Determine the status of douc langur populations at a second protected area, Chu Mom Ray National Park, and assess the feasibility of conservation action for them.

Amount: \$40,608

Grant Term: 01/10 - 12/10

Grantee: Douc Langur Foundation

Strengthening Public Participation in Tackling the Wildlife Trade in Vietnam

Mobilize Vietnamese citizens to participate in efforts to tackle the wildlife trade, encourage and support enforcement by government agencies, and work with government leaders to strengthen the application of wildlife protection laws by strengthening a national wildlife trade hotline, developing a national volunteer network, building the capacity of staff and trainers, and securing long-term financing from corporate and membership donations.

Amount: \$167,646

Grant Term: 01/10 - 06/13

Grantee: Education for Nature-Vietnam

Targeted Campaign to Reduce Consumption of Rhino Horn in Vietnam

Address the illegal trade and consumption of rhino horn in traditional Chinese medicine in Vietnam through a combination of effective and sustained campaigning to reduce consumer demand and question the social values of rhino horn users.

Amount: \$19,165

Grant Term: 11/12 - 10/13

Grantee: Education for Nature-Vietnam

Securing and Increasing Asian Elephant Populations in Laos through the Microchipping of Core Populations

Secure and increase Asian elephant populations through microchipping core populations of domesticated elephants. Develop a national computerized registration scheme and complete registration of all domesticated elephants. Raise awareness and promote law enforcement against the illegal capture and trade of elephants, and share information on registration, killing, capture and trade of elephants with neighboring range states and concerned organizations.

Amount: \$35,170

Grant Term: 03/10 - 08/12

Grantee: ElefantAsia

Raising Awareness and Building Capacity to Manage Human Elephant Conflict in Monduliri province, Cambodia

Improve the attitudes of people in northeast Cambodia toward elephants by raising awareness of elephant conservation and human elephant conflict among local communities, ethnic groups, agribusiness, and local government, and enable local people to manage human elephant conflict by providing a range of conflict mitigation strategies including deterrents ranging from chili ropes to watchtowers to fireworks.

Amount: \$19,662

Grant Term: 03/10 - 03/11

Grantee: Fauna & Flora International

Cambodia Crocodile Conservation Programme: Building Civil Society Capacity to Tackle the Unsustainable Exploitation of Siamese Crocodiles

Promote sustainable management and improved regulation of Cambodia's crocodile farming industry, by facilitating the establishment of a Cambodian Crocodile Farmers Association, supporting it to develop protocols and rules to address key industry issues, and initiating a process to shift industry practice towards a sustainable leather industry. Establish a monitoring program to evaluate project impact on the wild stocks of the Siamese crocodile.

Amount: \$34,514

Grant Term: 03/11 - 06/13

Grantee: Fauna & Flora International

Mitigating Transboundary Illegal Wildlife Trade in Central Vietnam to Protect 16 CEPF Priority Species in Nakai Nam Theun National Protected Area, Lao P.D.R.

Mitigate threats to wildlife populations within Nakai Nam Theun National Protected Area, by better targeting management efforts through an assessment of land-use, population centers, wildlife trade dynamics and access routes in neighboring areas of Vietnam, strengthening the capacity of law enforcement agencies in Vietnam's Ha Tinh province, promoting transboundary cooperation between local government officials, and enhancing awareness through media promotion.

Amount: \$120,373

Grant Term: 04/11 - 07/13

Grantee: Fauna & Flora International

Securing Long-Term Sustainable Financing of Community Conservation Teams for the Protection of Tonkin Snub-Nosed Monkeys in Khau Ca, Northern Vietnam

Meet the immediate need for funding of the community conservation teams to maintain on-the-ground protection of the Tonkin snub-nosed monkeys (*Rhinopithecus avunculus*) and their habitat at Khau Ca Species and Habitat Conservation Area while a long-term sustainable financing strategy is secured, reducing the risk of exposure to hunting pressures and other threats for this already diminished and isolated population.

Amount: \$19,994

Grant Term: 04/13 - 10/13

Grantee: Fauna & Flora International

Searching for the Last Kouprey

Analyse all survey reports, camera trap photos of cattle and data from the range of kouprey, especially in Cambodia, to assess whether overlooked traces of the species's persistence exist and to identify places where survey effort has been insufficient for certainty that kouprey no longer occur, in order to guide follow-up surveys.

Amount: \$19,310

Grant Term: 04/10 - 10/10

Grantee: Global Wildlife Conservation

Nurturing the Flame: Promoting Collaboration for Saola Conservation Regionally and Internationally

Support the continued development of collaborative efforts to save saola (*Pseudoryx nghetinhensis*) from extinction by seeking funds from donors in the Middle East, and supporting the Saola Working Group coordinator to present saola conservation efforts and resource needs to zoos in the United States.

Amount: \$8,000

Grant Term: 12/12 - 10/13

Grantee: Global Wildlife Conservation

Conservation through Collaboration: The Third Meeting of the Saola Working Group

Coordinate a five-day meeting of the Saola Working Group with invitations extended to experts in captive management and *in situ* protection. Follow the meeting with a field trip to the Lak Xao area in Bolikhamxay province to familiarize external participants with saola habitat. In preparation for the workshop, convene one-day workshops with key partners in Lao PDR and Vietnam.

Amount: \$16,610

Grant Term: 06/13 - 07/13

Grantee: Global Wildlife Conservation

Increasing In-Country Capacity and Regional Cooperation to Promote Bat Conservation in Cambodia with Particular Reference to *Otomops wroughtoni*

Assess the status and distribution of the lesser-known Wroughton's free-tailed bat by field research in Chhep district, Preah Vihear province, Cambodia. Enhance the capacity of local communities, students and conservationists in bat research and conservation and raise awareness of the important role bats play in the ecosystem through organizing workshops and targeted outreach in the media.

Amount: \$20,000

Grant Term: 10/09 - 05/11

Grantee: Harrison Institute

Moving from Planning to Action to Save the Saola: the First Meeting of the Saola Working Group

Support the first technical meeting of the Saola Working Group in Vientiane, gathering national and international technical expertise from Lao PDR, Vietnam and further afield, to identify and prioritize actions and partnerships, and develop a fundraising strategy to ensure the advancement of saola conservation from discussion and planning to action.

Amount: \$18,760

Grant Term: 07/09 - 09/09

Grantee: International Union for Conservation of Nature, Lao PDR Country Programme

Freshwater Biodiversity Assessments in the Indo-Burma Biodiversity Hotspot: Fishes, Molluscs, Odonates and Plants

Provide essential information for guiding decisions on the conservation and sustainable management of freshwater biodiversity in the Indochina region by assimilating data on the distribution, conservation status and livelihood values of fishes, molluscs, odonates and aquatic plants, using these to define priority areas for conservation and best practices for management, and linking the results to conservation and sustainable development planning.

Amount: \$299,504

Grant Term: 09/09 - 09/12

Grantee: International Union for Conservation of Nature

Launching the Flagship: Collaborative Saola Conservation

Leverage financial and political support from companies, development agencies, government and civil society to turn the plans resulting from the first ever technical meeting of the IUCN Species Survival Commission's Saola Working Group into a strong regional partnership for effective saola conservation.

Amount: \$19,987

Grant Term: 03/10 - 01/11

Grantee: International Union for Conservation of Nature, Lao PDR Country Programme

Baseline Population Assessment of the Critically Endangered Cat Ba Langur and Initiation of a Long-Term Research Agenda

Set up a population and demographic profile baseline and begin long-term data collection on the Critically Endangered Cat Ba langur (*Trachypithecus poliocephalus poliocephalus*) population health. Provide solid data on the trajectory of the population to put in place an early warning system against population erosion, providing incidental protection for the remaining langur population and a long-term research agenda.

Amount: \$19,891

Grant Term: 04/13 - 10/13

Grantee: International Union for Conservation of Nature, Vietnam Country Programme

Raising the Profile of the Saola

Research, leverage funds for, and publish a report on the enigmatic saola: its history, predicament, and the efforts underway to protect it, as well as an executive summary for use in the popular press in saola range states and a basis for a book that will help build international concern and funding for conservation of this highly threatened flagship species.

Amount: \$20,000

Grant Term: 07/10 - 12/12

Grantee: Lore of the Land

Assessment of the Status and Distribution of Globally Threatened Plant Species in Indo-Burma

Assess and make available to policymakers up-to-date, scientifically based data on globally threatened plant species in Indochina, train local botanists and conservation biologists in the correct application of the IUCN Red List Categories and Criteria, and establish an IUCN/SSC Plant Red List Authority for Indochina with members from all of the key botanical institutions in the region.

Amount: \$501,278

Grant Term: 07/09 - 12/12

Grantee: Missouri Botanical Garden

Improving Linkages for Collaborative Research and Conservation of Plants in Indochina

Support 20 junior botanists and students from Vietnam to attend the first international symposium of the “Flora of Cambodia, Laos and Vietnam” in Cambodia, thus helping to build a strong network of academics, researchers, conservation professionals and institutions working together to generate scientific knowledge and primary baseline data for sound decision-making on the conservation of threatened plant diversity in Indochina.

Amount: \$4,606

Grant Term: 12/08 - 12/08

Grantee: Missouri Botanical Garden

Conserving Non-Breeding Populations of Eastern Sarus Crane at Kampong Trach Wetland, Cambodia

Conserve an important non-breeding site for sarus crane, Kampong Trach Wetland Important Bird Area in the lower Mekong Delta, Kampot province, Cambodia, by encouraging involvement of communities in conservation activities, raising environmental awareness, providing livelihood alternatives, and promoting designation of the site as a Sarus Crane Conservation Area.

Amount: \$19,990

Grant Term: 07/09 - 06/10

Grantee: Mlup Baitong

Community Livelihood Development in Support of Sarus Crane Conservation at Kampong Trach, Cambodia

Contribute to sustainable natural resource management at Kampong Trach wetland in the lower Mekong floodplain of Cambodia, build support for the conservation of Sarus Crane and its habitat among local communities and other key stakeholders, and reduce pressures on the site by significantly improving the livelihoods of local people through self-help groups and development of community-based eco-tourism.

Amount: \$89,994

Grant Term: 10/10 - 06/13

Grantee: Mlup Baitong

A Strategic Approach to Conserving the Critically Endangered Edwards’s Pheasant

Assess areas of potentially suitable Edwards’s pheasant (*Lophura edwardsi*) habitat in historical and suspected sites and the whole range of possible areas between Thanh Hoa and Binh Dinh provinces, Vietnam. Using remote sensing data and any other available data, identify the areas with the highest likelihood of the species persistence to form the core priority sites of a survey strategy.

Amount: \$20,000

Grant Term: 05/13 - 10/13

Grantee: Newcastle University

Conserving Three Critically Endangered Vultures in Cambodia

Conserve three Critically Endangered vulture species at Preah Vihear Protected Forest, Western Siem Pang, Phnom Prich Wildlife Sanctuary, Sesan River and Lomphat Wildlife Sanctuary by providing supplementary food, coordinating censuses, protecting nests, and promoting awareness of accidental poisoning. Improve the experience and knowledge of students and professors from Pannasastra University in species conservation.

Amount: \$19,116

Grant Term: 11/12 - 10/13

Grantee: Pannasastra University of Cambodia

Conserving Three Critically Endangered Vulture Species in Cambodia

Maintain conservation efforts for three Critically Endangered vulture species in Cambodia by providing supplementary food, coordinating censuses, protecting nests, and promoting awareness of accidental poisoning. Further improve the experience and knowledge of students and professors from Pannasastra University in species conservation.

Amount: \$15,474

Grant Term: 07/13 - 10/13

Grantee: Pannasastra University of Cambodia

Focused Protection for White-shouldered Ibis and Giant Ibis in Lomphat Wildlife Sanctuary, Cambodia

Contribute to conservation of the two Critically Endangered ibis species of Cambodia by focused protection in Lomphat Wildlife Sanctuary, establish local community site support groups to manage and protect prioritized feeding sites and raise awareness of ibis conservation, and prepare an action plan for ibis conservation for incorporation into the wildlife sanctuary management plan and zonation.

Amount: \$19,940

Grant Term: 12/09 - 12/10

Grantee: People Resources and Conservation Foundation

Strengthening White-shouldered Ibis Conservation Initiatives and Bolstering Local-stakeholder-led Initiatives in Lomphat Wildlife Sanctuary, Cambodia

Protect white-shouldered ibis nests by applying three different methods to compare the effectiveness of three nest protection protocols: employment of nest guardians with regular nest progressing records; regular monitoring by ibis rangers; and use of anti-predator baffles. Conduct a white-shouldered ibis roost count during the wet season to keep the status of the overall population of the species updated.

Amount: \$14,862

Grant Term: 03/13 - 10/13

Grantee: People Resources and Conservation Foundation

Wildlife – Human Friendly Landscape in Northeast Cambodia

Conduct environmental awareness raising and pilot conservation agreements in Vooun Sai and Siem Pang districts in Ratanakiri and Stung Treng provinces of northeast Cambodia, with the aim of securing commitment by local communities to wildlife and forest conservation in return for agreed livelihood activities and development benefits.

Amount: \$19,998

Grant Term: 10/09 - 10/10

Grantee: POH KAO des Tigres et des Hommes

Surveys for Additional Information of Edwards's Pheasant in Dakrong Nature Reserve, Quang Tri

Intensively survey all suitable habitat of Edwards's Pheasant (*Lophura edwardsi*) in Dakrong and Bac Huong Hoa Important Bird Areas, Quang Tri province, with inputs and coordination from World Pheasant Association. Develop a population distribution map and outline species conservation strategy to ensure the advancement of species conservation from survey and strategy to action.

Amount: \$19,825

Grant Term: 03/11 - 03/12

Grantee: Quang Tri Center of Education and Consultancy on Agriculture and Rural Development

Conservation Planning for the Spoon-billed Sandpiper Population of Mekong Delta, Vietnam

Intensively survey all potential habitat of the Critically Endangered Spoon-billed Sandpiper in the Mekong Delta of Vietnam, one of the key remaining wintering sites of the species, and evaluate the threats and propose mitigating actions. Train Vietnamese observers to conduct future survey and monitoring work on the species.

Amount: \$19,356

Grant Term: 04/11 - 03/12

Grantee: Russian Society for Conservation and Studies of Birds

Conservation of Black-shanked Douc through Community-based Ecotourism

Work with three communities in the core area of the Seima Protection Forest in eastern Cambodia to develop tourism packages from the Mondulkiri provincial capital on viewing black-shanked douc and other wildlife in the wild. Help train and improve capacity for local communities and service providers to manage tourists and provide other services and guiding.

Amount: \$19,000

Grant Term: 02/11 - 02/12

Grantee: Sam Veasna Center for Wildlife Conservation

Participatory Survey, Assessment and Conservation of Green Peafowl in Dongkhanthung Provincial Protected Area of Champasak, Southwestern Lao PDR

Intensively survey the Critically Endangered green peafowl (*Pavo muticus*) in the only suspected area in Lao PDR that supports a recent viable population of this species. Provide an assessment of its abundance and distribution, and initiate conservation interventions with local communities and government authorities at the provincial and district levels to secure the survival of the species.

Amount: \$19,930

Grant Term: 10/11 - 09/12

Grantee: The Lao Wildlife Conservation Association

Conservation Initiative for Indochinese Silvered Leaf Monkey in Dong Phouvieng National Protected Area of Savannakhet Province, Central Lao PDR

Implement an intensive survey of probably the rarest and most threatened monkey in Lao PDR, the Critically Endangered Indochinese silvered leaf monkey (*Trachypithecus germaini*), in Dong Sakee Sacred Forest, which supports a viable population of this species. Obtain an assessment of its abundance and threats, and strengthen local capacity for conservation and monitoring of the species.

Amount: \$19,845

Grant Term: 06/12 - 03/13

Grantee: The Lao Wildlife Conservation Association

Finding Saola in the Annamite Range in Lao PDR

Investigate the occurrence and distribution of saola (*Pseudoryx nghetinhensis*) in Nam Mo-Nam Thong Provincial Protected Area, assess the nature of threats to the species there, and fill the biggest gap in knowledge of the species distribution in its presumed range.

Amount: \$19,859

Grant Term: 12/12 - 10/13

Grantee: The Lao Wildlife Conservation Association

Building a Partnership for Establishing Sustainable Management of Key Wetlands for Sarus Crane in the Cambodian Lower Mekong

Develop partnership and joint-planning among the Wildfowl & Wetlands Trust, Mlup Baitong, and Chamroen Chiet Khmer, resulting in submission to CEPF of complementary project plans to establish long-term sustainable management of Boeung Prek Lapouv and Kampong Trach, two key sites representative of the lower Mekong floodplain wetlands with priority non-breeding populations of sarus cranes.

Amount: \$19,370

Grant Term: 03/10 - 06/10

Grantee: The Wildfowl & Wetlands Trust

Establishing Sustainable Management at Key Wetlands for Sarus Crane in the Cambodian Lower Mekong

Fully establish and conserve Boeung Prek Lapouv and Kampong Trach: two key protected areas for Sarus Crane, representative of the lower Mekong floodplain wetlands. Contribute to their long-term sustainable management by developing and revising site management plans, training and supporting local conservation groups, piloting long-term financing mechanisms, and generating increased support among local people for site conservation.

Amount: \$228,917

Grant Term: 10/10 - 07/13

Grantee: The Wildfowl & Wetlands Trust

Feeding and Breeding Ecology and the Conservation of the Vultures in Cambodia

As a basis for long-term conservation action planning, start filling key information gaps in the feeding and breeding ecology, and the threats to, the three Critically Endangered vulture species of northern Cambodia, while building local capacity for research and monitoring.

Amount: \$17,991

Grant Term: 12/09 - 12/10

Grantee: Universität für Bodenkultur Wien (University of Natural Resources and Applied Life Sciences, Vienna)

Conservation Ecology of Bengal Florican in Cambodia

Fill key information gaps for conservation management of the Critically Endangered Bengal florican in Integrated Farming and Biodiversity Areas of the Tonle Sap floodplain, Kampong Thom province, Cambodia by field research (including satellite tracking) to identify important nesting and non-breeding areas.

Amount: \$17,864

Grant Term: 01/09 - 10/10

Grantee: University of East Anglia

Conservation Ecology of White-shouldered Ibis and Local Livelihoods

Assess the population, status and habitat preferences of the Critically Endangered white-shouldered ibis in northern Cambodia, identify threats from and synergies with local community livelihoods, and make recommendations for successful conservation management.

Amount: \$19,404

Grant Term: 01/09 - 10/09

Grantee: University of East Anglia

Measuring the Effectiveness of Conservation Interventions for White-shouldered Ibis in Cambodia

Improve knowledge of the ecology of the Critically Endangered white-shouldered ibis in northern Cambodia and make recommendations for conservation management, particularly focusing on factors influencing the species's patchy distribution, nest failures and effectiveness of nest protection, and positive and negative influences of local livelihoods on ibis habitat requirements.

Amount: \$13,943

Grant Term: 11/09 - 10/10

Grantee: University of East Anglia

Identifying Wet Season Sites and Non-breeding Habitats Used by the Critically Endangered Bengal Florican in Cambodia

Recommend appropriate wet season habitat management and site-based conservation management of the Critically Endangered Bengal florican in the Tonle Sap floodplain, Kampong Thom province, Cambodia by field research including satellite tracking, to locate key wet season sites, identify non-breeding habitat preferences, and assess threats to non-breeding sites.

Amount: \$16,642

Grant Term: 12/09 - 12/12

Grantee: University of East Anglia

Cat Ba Langur Conservation Project

Bolster conservation efforts for Cat Ba langur, one of the world's rarest species of primates, by ensuring strict protection of the remaining population, reducing habitat fragmentation and destruction of natural forest in the buffer zones of Cat Ba National Park and Biosphere Reserve, strengthening the capacity of governmental forest protection agencies, and reducing population fragmentation through intensive management.

Amount: \$55,285

Grant Term: 01/10 - 05/13

Grantee: Westfälischer Zoologischer Garten Münster GmbH (Munster Zoo)

Ecology and Conservation of Green Peafowl in Cambodia

Study ecological and conservation aspects of Green Peafowl (*Pavo muticus*) in Cambodia such as: habitat selection and abundance in different habitats; calling behavior, ranging behavior, social structure, and mating system; role of hunting pressure, local attitudes and livelihoods in peafowl conservation; and estimated total population size in Cambodia.

Amount: \$9,789

Grant Term: 03/11 - 03/12

Grantee: Westfälischer Zoologischer Garten Münster GmbH (Munster Zoo)

Distribution, Population and Habitat Extent of Bengal Florican in Cambodia: a Re-Assessment after Seven Years

Determine the current distribution and an up-to-date number of Bengal Florican remaining in Cambodia through a wide census in grassland patches surrounding the Tonle Sap within seven provinces. Implement a thorough assessment of grassland loss since 2005 and identify any remaining grassland sites outside of the protected areas in Kampong Thom province that should be prioritized for conservation action.

Amount: \$19,547

Grant Term: 12/11 - 12/12

Grantee: Westfälischer Zoologischer Garten Münster GmbH (Munster Zoo)

Improving Wildlife Law Enforcement in Cambodia to Protect CEPF Priority Species from Overexploitation and Illegal Wildlife Trade

Address the cross-border trade of wildlife from Cambodia into Vietnam by facilitating inter-agency collaboration and information exchange and supporting the establishment of a Coordination Unit for the ASEAN Wildlife Enforcement Network focal point to allow Cambodia to participate more effectively in regional and global initiatives to combat illegal wildlife trade.

Amount: \$99,291

Grant Term: 11/09 - 10/11

Grantee: Wildlife Alliance, Inc.

Cambodia Vulture Conservation Project

Protect and monitor the largest Indochinese populations of three Critically Endangered vulture species in northern and northeastern Cambodia by providing uncontaminated food, protecting nests, and working to ban veterinary use of diclofenac (a drug toxic to vultures, which has caused enormous declines elsewhere in their range).

Amount: \$19,730

Grant Term: 03/09 - 03/10

Grantee: Wildlife Conservation Society

Northern Plains of Cambodia Bird Nest Protection Project

Increase important populations of nine globally threatened bird species, particularly waterbirds including ibises and cranes, in the northern plains of Cambodia by increasing awareness and extending a successful model of providing financial incentives for local people to locate, monitor and protect bird nest sites.

Amount: \$19,672

Grant Term: 03/09 - 03/10

Grantee: Wildlife Conservation Society

Assessing the Taxonomic Validity of Lowe's Otter Civet

Assess the validity of Lowe's otter civet (*Cynogale lowei*) through comparative review of pertinent specimens with related museum specimens, including microscopic hair analysis and DNA analysis, in order to provide clear, evidence-based recommendations to the IUCN Species Survival Commission Specialist Group and Vietnamese government authorities, and to guide decision-making for donors currently listing this as a priority species for funding.

Amount: \$3,856

Grant Term: 09/09 - 02/11

Grantee: Wildlife Conservation Society

Conserving a Suite of Cambodia's Highly Threatened Bird Species

Secure core populations of a suite of globally threatened bird species at four sites in Cambodia through a series of innovative conservation interventions focusing on providing direct incentives to local communities, namely payments for birds' nest protection, improved value-chains for 'wildlife-friendly' produce and ecotourism development. Strengthen the capacity of local organizations to engage in long-term conservation efforts for these species.

Amount: \$699,125

Grant Term: 10/09 - 06/13

Grantee: Wildlife Conservation Society

Food Provision to Cambodia's Vultures

Increase sustainability in efforts to prevent the extinction, and restore population sizes, of the largest Indochinese populations of three Critically Endangered vulture species, in northern and northeastern Cambodia, by increasing revenue from ecotourism to vulture conservation, diversifying the funding base for 'vulture restaurants' and raising awareness about harmful effects of misuse of poison.

Amount: \$19,859

Grant Term: 02/10 - 02/11

Grantee: Wildlife Conservation Society

Northern Plains of Cambodia Kouprey Survey

Try to find signs of the survival of kouprey, and improve knowledge of the population status of other wild cattle, through camera-trapping and surveys in remote tracts of grassland and open forest in Preah Vihear Protected Forest; one of the most likely locations in which any remaining kouprey may persist.

Amount: \$19,887

Grant Term: 02/10 - 02/11

Grantee: Wildlife Conservation Society

Strengthening Capacity for Wildlife Product Identification in Indochina

Adapt and translate for Lao PDR, Cambodia and Thailand a recently published English and Vietnamese language identification guide to commonly traded wildlife products, and build on the existing guide to develop a web-based service for providing rapid species identification services to law enforcement agencies in Vietnam, thus improving the identification and regulation of the trade in wildlife.

Amount: \$19,763

Grant Term: 04/10 - 04/12

Grantee: Wildlife Conservation Society

Protection of a Priority Population of Saola: Flagship Species of the Indo-Burma Hotspot

Secure core populations of Saola and other globally threatened and endemic species of the Annamite mountains by implementing intensive conservation management in targeted areas of eastern Bolikhamxay province, Lao PDR, building a constituency for saola conservation at the village level, and establishing a foundation of management capacity and financial support to sustain saola protection activities in the targeted areas.

Amount: \$239,703

Grant Term: 08/10 - 06/13

Grantee: Wildlife Conservation Society

Preventing Poisoning of Cambodia's Vultures

Prevent local extinction of vultures by raising awareness of local communities in Preah Vihear, Stung Treng and Monduliri provinces of Cambodia about the threat from pesticides to vultures, maintaining the population size by supplementing food supplies and monitoring adults and nests, and banning the use of some pesticides from entering the vulture food chain.

Amount: \$19,970

Grant Term: 02/11 - 02/12

Grantee: Wildlife Conservation Society

Conservation of the Siamese Crocodile in Cambodia

Assess the current crocodile population in the Prek Toal Core Area of Tonle Sap Biosphere Reserve. Evaluate the trial release of crocodiles in the area, and the potential for larger-scale releases as part of a national crocodile conservation program. Identify critical habitats used by crocodiles in the area to recommend future changes in the management of Fishing Lot No.2.

Amount: \$18,069

Grant Term: 02/11 - 05/13

Grantee: Wildlife Conservation Society

Conservation of Tiger and Prey Populations by Improved Monitoring of Tiger and Prey Population to Assess the Success of Management Interventions in the Nam Et-Phou Louey National Protected Area, Lao PDR

Generate estimates of tiger and prey populations at Nam Et-Phou Louey National Protected Area: the only tiger source site in Lao PDR. Formulate and implement recommendations for improved management interventions to effectively reduce emerging threats to tigers at the site. Reach consensus on the feasibility and strategic approach for improving tiger conservation through conservation actions in adjacent areas of Vietnam.

Amount: \$49,810

Grant Term: 06/11 - 10/12

Grantee: Wildlife Conservation Society

Addressing the Illegal Trade and Consumption of Rhino Horn in Vietnam

Support the conservation of wild rhinos in Asia and Africa by tackling the illegal trade and consumption of rhino horn in Vietnam, improving understanding of the illegal trade of rhino horn, and increasing domestic media coverage. Strengthen law enforcement across the continuum from prevention, detection, and importantly, suppression of crimes against rhinos and other wildlife in Vietnam.

Amount: \$19,916

Grant Term: 11/12 - 10/13

Grantee: Wildlife Conservation Society

Strategic Planning to Safeguard the Green Peafowl

Identify important areas for green peafowl across its range; assess the importance of populations based on currently available information and expert opinion, evaluate the likelihood of conservation success across the range, and develop a species conservation strategy aimed at preventing a further deterioration in the species' conservation status.

Amount: \$12,758

Grant Term: 02/10 - 02/11

Grantee: World Pheasant Association

Assessing the Conservation Status of Edwards's Pheasant

Intensively survey all suitable habitat of Edwards's Pheasant in Truong Son, Dakrong and Phong Dien Important Bird Areas in Vietnam, through a method that will allow future monitoring of population status on a presence/absence basis. Develop an outline of a species conservation strategy, drawing on the experience of the IUCN Species Survival Commission approach to Strategic Planning for Species Conservation.

Amount: \$20,000

Grant Term: 02/11 - 09/11

Grantee: World Pheasant Association

Conservation of Green Peafowl at Key Sites in Vietnam

Conduct a quantitative assessment of the status of the green peafowl populations at Cat Tien and Yok Don National Parks where possible, and unprotected sites listed by Brickle (2002), to thereby provide a coherent reassessment of the status of green peafowl in southern Vietnam, determine survival prospects and identify long-term conservation needs.

Amount: \$20,000

Grant Term: 06/11 - 02/13

Grantee: World Pheasant Association

Urgent Research to Safeguard the Javan Rhino in Vietnam

Intensively survey all suitable habitat of Javan rhinoceros in the Cat Loc sector of Cat Tien National Park, Vietnam, through video camera traps and systematic dung surveys with detector dogs. Use DNA and hormone analysis of dung to provide a population estimate, and information on whether males are able to reproduce and whether females are pregnant or receptive to breeding.

Amount: \$16,166

Grant Term: 12/09 - 12/10

Grantee: World Wide Fund for Nature

Sustainable Community-Based Conservation of the Priority Population of Grey-shanked Douc

Take priority actions for a core population of grey-shanked douc in Vietnam's Quang Nam province as a foundation for longer-term conservation interventions. Clarify the distribution of the population, build capacity of local partners in survey and monitoring, assess the feasibility of ecotourism as a sustainable financing mechanism, evaluate the effectiveness of village patrol teams and raise awareness among local communities.

Amount: \$30,702

Grant Term: 01/10 - 12/10

Grantee: World Wide Fund for Nature

Safeguarding the Saola within the Species's Priority Landscape in Vietnam

Secure core populations of saola, the flagship species of the Indo-Burma Hotspot, by addressing pressing immediate threats and putting in place a solid foundation for the long-term conservation of the species in terms of funding, knowledge and protected area capacity. Understand resource use patterns among local, forest-dependent communities and develop culturally appropriate economic alternatives to hunting within saola core areas.

Amount: \$242,674

Grant Term: 05/10 - 08/12

Grantee: World Wide Fund for Nature

Identification of Wild Water Buffalo Presence in Mondulkiri Protected Forest, Eastern Cambodia

Understand distribution and movements of wild water buffalo in Mondulkiri Protected Forest relative to the distribution of domestic buffalo adjacent to the protected area to mitigate threats from genetic swamping and disease transmission through producing photographic evidence of extant wild water buffalo. Raise awareness of the significance of Mondulkiri Protected Forest for wild water buffalo among the wider conservation community.

Amount: \$19,131

Grant Term: 03/11 - 12/12

Grantee: World Wide Fund for Nature

Network Based Mekong Giant Catfish Conservation in Cambodia

Conserve the Critically Endangered Mekong giant catfish and other giant freshwater fish species in Ankorban and Rorkakoy communes, Korng Meas district, Kampong Cham province, Cambodia, by engaging communities in conservation activities, raising awareness and education of relevant laws, developing conservation-related capacity, and conducting participatory local assessment of catch and release information.

Amount: \$4,974

Grant Term: 08/10 - 02/11

Grantee: Youth for Peace and Development

Strategic Direction 2: Develop innovative, locally led approaches to site-based conservation at 28 Key Biodiversity Areas

Sustainable Livelihoods for Mekong Biodiversity and Critical Wetland Resource Conservation in Cambodia

Conserve the 'Central Section' of the Mekong mainstream in Cambodia by reducing local people's reliance on natural resources and empowering communities to implement site-based conservation measures. Help at least 500 households adopt alternative livelihoods and increase their disposable incomes. Link these benefits to conservation actions and build local capacity for conservation by establishing community-based organizations and environmental action groups.

Amount: \$191,077

Grant Term: 09/10 - 06/13

Grantee: Cambodian Rural Development Team

Sustainable Development to Support Wise Use and Conservation of the Wetland Ramsar Site in Stung Treng, Cambodia

Ensure the wise use of the critical ecosystems of Stung Treng Ramsar Site and reduce natural resource dependency, through provision of alternative, farm-based livelihoods and the establishment and capacity building of community-based organizations. Link these activities to the conservation objectives of the Ramsar Site through local regulations, environmental awareness-raising and supporting communities to take local conservation actions.

Amount: \$77,818

Grant Term: 04/11 - 04/13

Grantee: Cambodian Rural Development Team

Promoting Community-Based Collaborative Management to Strengthen Long-Term Conservation of Globally Threatened Primates and Trees in Priority Sites of Northern Vietnam

Implement priority actions at 11 target sites in northern Vietnam, with a particular focus on the Northern Highlands Limestone Corridor. Consolidate ongoing, participatory conservation activities for globally threatened primates and trees, develop actions at new sites based on opportunities identified by local communities and conduct surveys at little-known sites to assess their importance for the conservation of target species.

Amount: \$694,009

Grant Term: 01/10 - 03/13

Grantee: Fauna & Flora International

Developing a Conservation Action Plan and Working Group for Hog Deer in Cambodia

Hold a workshop with all relevant stakeholders to develop a draft conservation action plan for hog deer (*Axis porcinus*) in Cambodia and conduct key conservation actions with stakeholders after the workshop to finalize the action plan, which may include captive management as a proposed conservation option to secure the hog deer species.

Amount: \$20,000

Grant Term: 07/13 - 10/13

Grantee: Fauna & Flora International

Conserving Biodiversity and Sustaining Livelihoods along the Mekong River in Luang Phrabang, Xayabouri and Vientiane Provinces, Laos

Provide a sound platform for natural resource planning along the main stream of the Mekong River between Luang Prabang and Vientiane by undertaking detailed biodiversity and community surveys. Identify sites of the highest conservation priority; draft site management plans for them, and form local management groups to implement conservation actions. Establish the first biodiversity monitoring program along the Lao Mekong.

Amount: \$248,248

Grant Term: 05/11 - 08/13

Grantee: International Union for Conservation of Nature

Strengthening Community Conservation of Priority Sites within the Ba Be / Na Hang Limestone Forest Complex, Northern Vietnam

Implement conservation actions at five priority sites in the Northern Highlands Limestone corridor, aimed at supporting conservation at the local level, influencing development projects, and targeting technical and financial support towards global conservation priorities. Establish a catalytic platform on which future conservation interventions can be developed, and contribute to on-going policy dialogue on collaborative natural resource management within protected areas.

Amount: \$150,164

Grant Term: 06/10 - 12/12

Grantee: People Resources and Conservation Foundation

Community-based Protection and Monitoring of Threatened Bird Biodiversity in Sekong River Important Bird Area (Koh Thbeng Island and Surrounding Area)

Strengthen the capacity of local communities along the Sekong River to implement systematic collection of environmental and social data for monitoring the impact of resource management activities, livelihood development and external threats. Develop a community monitoring protocol and a toolkit for seven indicators, establish a pilot program of community monitoring, and organize an initial six-month monitoring results workshop.

Amount: \$19,999

Grant Term: 05/11 - 09/12

Grantee: Royal University of Phnom Penh

Community-Based Monitoring and Conservation of Threatened Fish Species in the 3S (Sekong, Sesan and Srepok) Basin of Cambodia

Support local community fisheries to explore local ecological knowledge of threatened fish species and examine population trends and environmental variables influencing fish communities along the Sekong, Sesan and Srepok Rivers. Promote conservation awareness among local villagers and establish appropriate measures for the conservation of threatened fishes.

Amount: \$19,885

Grant Term: 11/12 - 10/13

Grantee: Royal University of Phnom Penh

Conserving the Last Remaining Wild Populations of Hog Deer in Cambodia

Survey the current status and distribution of hog deer (*Axis porcinus annamiticus*) south of Kratie town and in southwestern Cambodia: the highest priority sites left to survey hog deer. Employ various survey methods, including dung DNA analysis, camera trapping, habitat surveys and interviews.

Amount: \$15,778

Grant Term: 11/12 - 10/13

Grantee: Royal University of Phnom Penh, Centre for Biodiversity Conservation

Stakeholder-based Conservation of Three Large Waterbirds in the Dry Forest of Cambodia

Support local conservation groups to conserve three Critically Endangered bird species, white-shouldered ibis, giant ibis and sarus crane, at Preah Vihear Protected Forest, Kulen Promtep Wildlife Sanctuary and Western Siem Pang Important Bird Area. Improve nesting success rates for the three species through nest protection activities and rigorous monitoring.

Amount: \$18,933

Grant Term: 11/12 - 09/13

Grantee: Sam Veasna Center for Wildlife Conservation

Developing a Model for the Sustainable Wild Collection of Medicinal Plants through the Implementation of FairWild in Viet Nam

Develop a model for sustainable wild harvesting of medicinal plant species in the Northern Highlands Limestone corridor by applying the FairWild standards that can be replicated elsewhere in Vietnam. Reduce over-exploitation of targeted medicinal plant species by developing and implementing sustainable harvesting and management tools, strengthening market linkages, and assessing the demand for third-party certification of the selected products.

Amount: \$79,962

Grant Term: 06/11 - 06/13

Grantee: TRAFFIC International

Planning and Partnership Development for Conserving Freshwater Biodiversity and Resources along the Central Section of the Mekong River in Cambodia

Improve coordination and joint-planning among the WWF Cambodia Country Programme, Community Economic Development and the Cambodian Rural Development Team, resulting in submission to CEPF of revised, complementary project plans to conserve freshwater biodiversity and critical wetland resources for local communities along the Mekong River, Kratie and Stung Treng provinces.

Amount: \$4,022

Grant Term: 12/09 - 02/10

Grantee: World Wide Fund for Nature

Conserving Freshwater Biodiversity and Critical Wetland Resources for Local Communities along the Mekong River, Kratie and Stung Treng Provinces, Cambodia

Conserve the 'Central Section' of the Mekong mainstream in Cambodia by designating key habitats as a Special Management Site, and establishing conservation management structures and capacity. Strengthen community capacity to manage natural resources, and develop sustainable alternative livelihoods that contribute to biodiversity protection and poverty reduction, such as direct payments to local people for protection of turtle and waterbird nests.

Amount: \$359,008

Grant Term: 09/10 - 06/13

Grantee: World Wide Fund for Nature

Strategic Direction 3: Engage key actors in reconciling biodiversity conservation and development objectives, with a particular emphasis on the Northern Limestone Highlands and Mekong River and its major tributaries

Raising Awareness of Possible Impacts from Dams on the Srepok, Sesan and Sekong

Raise awareness of communities along the Sekong, Sesan and Srepok Rivers in Ratanakiri and Stung Treng provinces, Cambodia, of impending hydropower projects and enable, through meetings and development of a film, voices from communities, livelihood impacts, international conservation values and environmental opportunity costs to be taken into account as part of impact assessments and the decision-making process.

Amount: \$17,919

Grant Term: 06/09 - 06/10

Grantee: 3S Rivers Protection Network

Integrating Bengal Florican Conservation in Community Forest Management

Conserve the Critically Endangered Bengal florican in Stung/Prasat Balang Important Bird Area in Kampong Thom province, Cambodia, by integrating conservation objectives into a community forest management plan, continuing the process of legalizing community forestry, enhancing the capacity of the local community for outreach, and carrying out a wildlife survey focused on Bengal florican and other waterbirds.

Amount: \$9,740

Grant Term: 06/10 - 06/11

Grantee: Action for Development

Integrating Bengal Florican Conservation in Community Forest Management - Phase II

Integrate the conservation action plan for the Critically Endangered Bengal florican (*Houbaropsis bengalensis*) into five community forestry management plans. Work closely with the Forestry Administration, Wildlife Conservation Society and the community forestry committees to conduct regular patrol activities and allow suitable tree harvesting to create favorable habitat for the Bengal florican during the wet season.

Amount: \$19,941

Grant Term: 03/13 - 10/13

Grantee: Action for Development

Developing a Conservation Data Management Tool for the Inner Gulf of Thailand

Develop a GIS-based conservation data management tool and a bird conservation status report for the Inner Gulf of Thailand, thus generating a greater understanding of the use of the gulf by people and by its internationally important waterbird populations. Leverage further financial support to ensure sustainability of the database and capacity to maintain, update and disseminate policy-relevant data.

Amount: \$19,594

Grant Term: 09/11 - 11/12

Grantee: Bird Conservation Society of Thailand

Raising Concerns – Reducing Impacts: Providing Inputs to Local Development Policies Related to Biodiversity and Natural Resources through Engaging the Media

Promote sustainable development and good governance in the Northern Highlands Limestone Corridor of Vietnam by engaging the media to investigate the impacts of development policies and projects on biodiversity and ecosystem services. The project will organize field-based trainings for journalists, support them to undertake regular investigative missions and disseminate the findings through national and local media and a policy workshop.

Amount: \$93,567

Grant Term: 09/09 - 08/12

Grantee: Center for People and Nature Reconciliation

Securing Biodiversity and Ecosystem Services in Vietnam through Analyzing Development Policies and Promoting Good Governance of Natural Resources

Strengthen the voice and participation of local civil society in leveraging support for biodiversity conservation and mainstreaming biodiversity into development policies and projects in Vietnam. Monitor and analyze development policies, and propose practical alternatives and solutions. Raise awareness of environment issues among decision-makers and opinion-formers, and strengthen the capacity of the emerging network of conservation policy analysts and researchers.

Amount: \$142,166

Grant Term: 04/11 - 06/13

Grantee: Center for People and Nature Reconciliation

Thai Baan Research on Aquatic Species on the Nang River, Tributary of the Gam River, Na Hang District, Tuyen Quang Province, Vietnam

Train and support local communities to document and identify aquatic species on the Nang River, above the Na Hang dam, thus building the capacity of local people to understand the value of aquatic biodiversity in their area, understand and document ecological changes since dam establishment, and participate in decision-making relating to fisheries, fishing gear, and future developments affecting the river.

Amount: \$19,850

Grant Term: 06/09 - 05/10

Grantee: Center for Water Resources Conservation and Development

Conservation of Aquatic Resources in Northern Vietnam through Promotion of Community Co-management

Contribute to preventing the decline in aquatic resources of the Gam River in Tuyen Quang province, northern Vietnam, by encouraging local people to phase out destructive fishing tools, promoting a co-management model for riverine aquatic resources in a pilot village, and documenting and disseminating experience to promote wider application among fishing communities in the Northern Highlands Limestone corridor.

Amount: \$45,397

Grant Term: 05/10 - 06/12

Grantee: Center for Water Resources Conservation and Development

Strengthening Communities' Resilience to the Potential Risks from Proposed Dams on the Mekong Mainstream

Utilize the mass media to raise awareness among decision-makers, opinion-formers and the general public in An Giang and other Mekong Delta provinces about the potential impacts of main stream dam development on the lower Mekong River. Provide stakeholders with opportunities to voice their concerns, and channel these voices to decision makers and donors at different levels through public dialogues.

Amount: \$50,000

Grant Term: 05/11 - 10/12

Grantee: Center for Water Resources Conservation and Development

Raising Awareness on Potential Impacts of Upstream Development Activities to Hydrological Regimes, Livelihoods and Biodiversity in the Plain of Reeds, Mekong Delta, Vietnam

Promote community-based aquatic biodiversity conservation and river monitoring in Tram Chim National Park, Dong Thap Province, through research, empowerment, and communication. Build capacity for local people to actively participate in river monitoring and resource conservation, particularly aquatic resources.

Amount: \$20,000

Grant Term: 11/12 - 10/13

Grantee: Center for Water Resources Conservation and Development

Establishing Sustainable Community Fisheries and Wetland Management at Boeung Prek Lapouv Sarus Crane Reserve

Support conservation objectives at Beoung Prek Lapouv Sarus Crane Reserve by establishing a community fishery that equitably involves all concerned stakeholders to ensure sustainable harvest of fish and other resources and a resource stream for reserve management.

Amount: \$19,999

Grant Term: 11/12 - 10/13

Grantee: Chamroen Chiet Khmer

Mekong Biodiversity Protection Project

Strengthen community conservation of forests and sustainable management of natural resources along the 'Central Section' of the Mekong mainstream in Cambodia by facilitating the establishment of community-based organizations, helping local people to secure land tenure, and helping them and value to non-timber forest products. Strengthen communities' capacity to engage in biodiversity conservation through training in advocacy, protection and environmental education.

Amount: \$199,878

Grant Term: 09/10 - 07/13

Grantee: Community Economic Development

Community-Based Conservation in Xonnabouly District, Savannakhet Province, Lao PDR

Maintain a sustained interest in Eld's deer conservation among the local communities through development of community-based eco-tourism as a sustainable financing source for Eld's deer conservation. Enhance awareness and capacity through strengthened enforcement and participatory monitoring.

Amount: \$19,243

Grant Term: 11/12 - 10/13

Grantee: Eld's Deer Community Conservation Group in Ban Sanamxai Village

Strengthening Good Governance for Hydropower Dam Development on the Mekong Mainstream, with a Particular Focus on the Mekong Delta, Vietnam

Develop a Mekong Delta think-tank, including scientists, former government leaders, women's representatives, and lawyers, to advocate for sustainable and resilient management of delta systems, and promote understanding of these systems among decision makers, planners and communities. Call for action by lawyers as responsible citizens, by involving them in participatory action research and discussions.

Amount: \$19,996

Grant Term: 11/12 - 10/13

Grantee: Green Innovation and Development Centre

Stung Treng Ramsar Site in Cambodia: Integrating Fisheries Management and Wetlands Conservation

Reconcile livelihood objectives of fisheries-dependent households with biodiversity conservation objectives of Stung Treng Ramsar Site. Update the site management plan, through local stakeholder engagement and consultation mechanisms, including establishment of a Ramsar village network. Seek reconfirmation of a policy-level commitment towards the site through reinvigoration of the management unit. Pilot resource-user-led fisheries conservation and management measures by community fisheries groups.

Amount: \$159,965

Grant Term: 04/11 - 06/13

Grantee: International Center for Living Aquatic Resources Management

Biodiversity and Development of the Hydropower Sector: Lessons from the Vietnamese Experience

Collate information on effects of hydropower development on biodiversity in Vietnam to produce a set of educational and guidance materials on mainstreaming biodiversity issues into hydropower sector development, including the use of Strategic Environmental Assessment, and then disseminate these materials to civil society groups, relevant government authorities, and key hydropower project donors throughout the Indo-Burma region.

Amount: \$20,000

Grant Term: 12/09 - 04/10

Grantee: International Centre for Environmental Management

Protecting the Biological Diversity of the Mekong River

Support and strengthen networks of civil society groups working to protect rivers and help them to engage in a coordinated manner to keep the mainstream of the Mekong River free flowing. Undertake high-quality research to inform policymakers about the environmental and social impacts of proposed dams and raise public awareness about the values of a free-flowing Mekong River.

Amount: \$206,000

Grant Term: 04/10 - 06/13

Grantee: International Rivers Network

Balancing Conservation and Development in the Northern Highlands Limestone through Policy Dialogue, Capacity Development and Regional Planning: Phase I

Mainstream biodiversity into development planning in the Northern Highlands Limestone Corridor by identifying policy issues and options and initiating dialogue between local government and relevant stakeholders on alternative development scenarios in two pilot provinces, building relationships with local government and civil society in three other provinces, and enhancing the role of a local research center as a regional information hub.

Amount: \$99,469

Grant Term: 08/09 - 12/10

Grantee: International Union for Conservation of Nature

Strengthening Local Community Network for Fish Conservation in the Ing River, Thailand

Support conservation of rare and threatened aquatic species in the Ing River, particularly Jullien's golden carp, Asiatic softshell turtle, giant catfish, and Mekong freshwater stingray, through fish protection zones and participatory research on aquatic species in the river. Strengthen and expand a network of local communities for fish conservation in this tributary of the Mekong River.

Amount: \$19,266

Grant Term: 11/12 - 10/13

Grantee: Living River Siam

Community-based Planning of the Lam Binh Forest Area Francois's Langur Conservation Landscape, Tuyen Quang Province, Vietnam

Engage local stakeholders to raise conservation awareness and start addressing threats to the Francois's langur population in the Lam Binh Forest Area Francois's Langur Conservation Landscape, Tuyen Quang province, Vietnam, through participatory forest land-use planning and mapping, conservation agreements, and awareness-raising, supplementing a variety of conservation planning activities carried out at the area.

Amount: \$19,994

Grant Term: 10/11 - 11/12

Grantee: People Resources and Conservation Foundation

Using and Systematizing Fishers' Local Ecological Knowledge to Monitor and Manage Fisheries, with Emphasis on Three Globally Threatened Fish Species, in the Lower Mekong River System of Long An Province, Vietnam

Assemble and systematize the fishers' local ecological knowledge of fisheries in Lang Sen Wetland Reserve, Long An province, with emphasis on the iconic giant catfish, Sanitwongsei's catfish and Jullien's golden carp, laying the foundation for a general local fisheries governance and management system that is based on the combination of fishers' knowledge, scientific fisheries' knowledge and official policy.

Amount: \$19,937

Grant Term: 11/12 - 10/13

Grantee: Research Centre for Resources and Rural Development

Assessing the Status and Distribution of Eld's Deer in Western Siem Pang Dry Dipterocarp Forest, Stung Treng Province

Survey the distribution of the Eld's deer (*Rucervus eldii*) population in Western Siem Pang by using camera traps, interviews with elders, former hunters and foresters, and line transect surveys. Feed results into protected area planning and conservation management at the site.

Amount: \$19,995

Grant Term: 03/13 - 10/13

Grantee: Royal University of Phnom Penh

Community Empowerment for Biodiversity Conservation along Sesan and Srepok Rivers of Mekong Basin

Strengthen grassroots networks and support for conservation and sustainable use of riverine ecosystems along the Sesan and Srepok Rivers. Raise awareness of locally originated threats (such as overfishing) and help communities respond to remotely originated threats (such as hydropower development). Achieve sustainability by integrating conservation measures into Commune Development Plans and establishing civil society networks spanning multiple levels.

Amount: \$107,780

Grant Term: 07/10 - 06/13

Grantee: Save Cambodia's Wildlife

Maximizing CEPF Participation of Civil Society in Thailand

Enable local Thai civil society organizations to access CEPF support, through translation of key documents and Thai language publicity by radio, cell phone network, national newspapers and websites.

Amount: \$1,820

Grant Term: 07/09 - 09/09

Grantee: Thai Fund Foundation

Mekong Decision Points: Building a Dialogue between Policymakers and Civil Society on Water Management

Help civil society organizations engaged on the issue of hydropower development on the Mekong River to penetrate policy circles with accurate and relevant information designed to promote regional cooperation on sustainable development. Improve linkages and relations between these organizations and governments in the region. Enrich public dialogue regarding the full environmental and socioeconomic costs of mainstream Mekong hydropower.

Amount: \$64,220

Grant Term: 04/11 - 03/12

Grantee: The Henry L. Stimson Center

Planning and Partnership Development for Modeling and Monitoring Mekong River Basin Hydrological Cycles

Broaden partnerships and improve joint planning among the University of Canterbury, Conservation International, the Mekong River Commission and other key stakeholders interested in modeling and monitoring potential hydrological changes owing to hydropower development on the Mekong River and its major tributaries.

Amount: \$5,400

Grant Term: 11/09 - 11/10

Grantee: University of Canterbury

River at Risk: Modeling and Monitoring the Potential Impacts of Large-Scale Disruptions to the Hydrological Cycles of the Mekong River Basin on Biodiversity and Natural Systems

Demonstrate and quantify the potential impacts of large-scale disruptions to hydrological cycles of the Mekong River and its major tributaries under currently proposed development scenarios. Positively influence the decision-making process that is currently underway regarding hydropower development, through direct engagement with key stakeholders in the formulation of alternative development scenarios to reduce impacts on biodiversity and natural systems.

Amount: \$298,889

Grant Term: 07/10 - 03/13

Grantee: University of Canterbury

Building Awareness and Capacity to Reduce the Illegal Cross-border Trade of Wildlife from Vietnam to China

Achieve a demonstrable reduction in the illegal cross-border trade of wildlife from Vietnam to China by implementing a targeted program of training, outreach and awareness raising in a key border province aimed at strengthening capacity and building political will. Directly target the main driver of overexploitation in the hotspot and build a constituency for conservation among civil society.

Amount: \$106,719

Grant Term: 09/09 - 08/12

Grantee: Wildlife Conservation Society

Leveraging Support from the Vietnamese Corporate Sector to Reduce Illegal Consumption of Protected Threatened Species

Leverage active participation of selected Vietnamese companies in preventing staff from consuming protected threatened species by raising awareness at multiple levels within the companies, integrating a “zero-consumption of protected wildlife” policy within Human Resource and Finance procedures, and monitoring and obtaining media coverage of results of these innovative actions as a model for other companies operating in the region.

Amount: \$19,947

Grant Term: 03/10 - 03/12

Grantee: Wildlife Conservation Society

Analyzing Trade Dynamics and Catalyzing Enforcement Responses towards Eliminating the Illegal Trade of CEPF Priority Species in Southern Vietnam

Analyze and provide detailed analysis of illegal trade dynamics for CEPF priority and other endangered species in the Ho Chi Minh City metropolitan area, and use these to raise political awareness and commitment to eliminate the illegal trade, and plan strategies to prevent and suppress these crimes.

Amount: \$18,998

Grant Term: 07/11 - 06/13

Grantee: Wildlife Conservation Society

Finding a Place for the Bengal Florican in an Agricultural Landscape

Quantify current land-use in the Tonle Sap grassland zone in areas occupied by the three remaining Bengal florican (*Houbaropsis bengalensis*) conservation units, briefly document development plans, and evaluate feasibility of potential conservation options for Bengal florican in the Tonle Sap grassland zone.

Amount: \$19,165

Grant Term: 02/13 - 10/13

Grantee: Wildlife Conservation Society

Integrated Eld’s Deer Project, Piloting Integrated Spatial Development Planning as a Tool for Reconciling Conservation and Development Objectives for Forests in Lao PDR

Pilot integrated spatial development planning as a tool for reconciling conservation and development objectives for forests in Lao PDR. Test the approach in seven villages in the core zone of the Eld’s Deer Sanctuary in Savannakhet province. Initiate community co-management, including direct incentives for conservation. Evaluate, document and disseminate experience with the approach, to promote replication in other areas.

Amount: \$225,000

Grant Term: 05/10 - 04/13

Grantee: World Wide Fund for Nature

Co-management of Freshwater Biodiversity in the Sekong Basin

Demonstrate to policy makers the importance of healthy freshwater ecosystems to local communities in the Sekong Basin of Lao PDR by fostering the development of community groups to protect critical freshwater habitats. Feed village-level experience into relevant policy processes, through policy briefs, technical reports, press releases, district and provincial level dialogues, and meetings of the Sekong Basin Advisory Group.

Amount: \$200,000

Grant Term: 06/10 - 05/12

Grantee: World Wide Fund for Nature

Engaging with Key Actors in Reconciling Biodiversity Conservation and Development Objectives, Using the Critically Endangered Mekong Giant Catfish as a Flagship Species for Biodiversity Conservation

Conserve the population of the Mekong Giant Catfish spawning in the upper Mekong River of Thailand and Lao PDR by supporting moratoria on catch, improving the understanding of the species's life cycle and the condition of its spawning grounds, and improving fisheries management in and around the spawning grounds via the establishment of fishery management committees and fish conservation zones.

Amount: \$115,500

Grant Term: 03/11 - 03/13

Grantee: World Wide Fund for Nature

Strategic Direction 4: Provide strategic leadership and effective coordination of CEPF investment through a regional implementation team

CEPF Regional Implementation Team in Indo-Burma

Provide strategic leadership and local knowledge to build a broad constituency of civil society groups working across institutional and geographic boundaries toward achieving the conservation goals described in the ecosystem profile for this region. Major functions include assisting civil society groups in designing, implementing, and replicating successful conservation activities; reviewing all grant applications; and awarding small grants.

Amount: \$947,369

Grant Term: 07/08 - 12/13

Grantee: BirdLife International

Annex 4 – Progress towards Long-term Goals for CEPF Investment in the Indo-Burma Hotspot

Goal 1: Conservation priorities

Criterion	2008		2013		Notes
i. Globally threatened species. Comprehensive global threat assessments conducted for all terrestrial vertebrates, vascular plants and at least selected freshwater taxa.	X	Not met		Not met	With CEPF support, comprehensive Red List assessments were carried out of five major freshwater taxonomic groups across the hotspot, as well 607 vascular plants. However, an estimated 20,000 vascular plant species remain unassessed, of which as many as half may be endemic to the hotspot. The other big gap is reptiles, for which a comprehensive Red List assessment is lacking. Some amphibians and small mammals are in need of reassessment.
		Partially met	X	Partially met	
		Fully met		Fully met	
ii. Key Biodiversity Areas. KBAs identified, covering, at minimum, terrestrial, freshwater and coastal ecosystems.		Not met		Not met	A comprehensive analysis of KBAs, in terrestrial and coastal ecosystems was conducted in 2003, as part of the ecosystem profiling process. Since 2008, this analysis was updated and broad-based support was built among civil society, donor agencies and selected government bodies, and an initial analysis of freshwater KBAs was undertaken for the hotspot, all with CEPF support. The analysis of freshwater KBAs could be further refined, and more could be done to promote government recognition of the KBA list.
	X	Partially met		Partially met	
		Fully met	X	Fully met	
iii. Conservation corridors. Conservation corridors identified in all parts of the region where contiguous natural habitats extend over scales greater than individual sites, and refined using recent land cover data.		Not met		Not met	A system of conservation corridors (or landscapes) was defined across part of the hotspot through a WWF-led ecoregion-based conservation assessment in 2001. This analysis was extended to the entire hotspot in 2003, under the ecosystem profiling process. In only a few cases (e.g. Central Annamites, Northern Plains Dry Forests, Western Forest Complex, etc.) is there broad-based support for these priorities among government and civil society.
	X	Partially met	X	Partially met	
		Fully met		Fully met	
iv. Conservation plans. Global conservation priorities incorporated into national or regional conservation plans or strategies developed with the participation of multiple stakeholders.		Not met		Not met	At the regional level, conservation corridors form the basis for the spatial priorities under the ADB's Biodiversity Conservation Corridors Initiative for the Greater Mekong Sub-region. The level of integration of globally conservation priorities into National Biodiversity Strategies and Action Plans varies from total to negligible, although some countries are due to update their plans, which creates an opportunity to include them.
	X	Partially met	X	Partially met	
		Fully met		Fully met	
v. Management best practices. Best practices for managing global conservation priorities (e.g., participatory approaches to park management, invasive species control, etc.) are introduced, institutionalized, and sustained at priority KBAs and corridors.	X	Not met	X	Not met	Regional guidelines on management best practices for protected areas, in the form of the ASEAN Guidelines on Competence. Standards for Protected Area Jobs, were published in 2003, but have not been widely adopted within the hotspot. Examples of other management best practices (e.g. community co-management, use of the SMART patrolling, conservation incentives, etc.) have been piloted at individual sites, sometimes with CEPF support, and in some cases the experience has been documented but these best practices have yet to be replicated at the majority of priority KBAs.
		Partially met		Partially met	
		Fully met		Fully met	

Goal 2: Civil society capacity

Criterion	2008		2013		Notes
i. Human resources. Local and national civil society groups collectively possess technical competencies of critical importance to conservation.		Not met		Not met	Local civil society organizations rate their knowledge and capacity as satisfactory or better for most of the technical competencies considered as priorities in the hotspot. Nevertheless, a number of significant gaps remain for local groups, most notably securing long-term financing, successfully influencing government policies, developing science-led actions for threatened species, and implementing site-based conservation actions.
	X	Partially met	X	Partially met	
		Fully met		Fully met	
ii. Management systems and strategic planning. Local and national civil society groups collectively possess sufficient institutional and operational capacity and structures to raise funds for conservation and to ensure the efficient management of conservation projects and strategies.	X	Not met		Not met	In 2008, 11 of the 28 CEPF priority sites (39 percent) had at least one civil society organization with satisfactory capacity dedicated to their conservation. By 2013, this number had increased to 17 (61 percent). While there has been greater focus by civil society organizations on site-based action for priority KBAs, a shift in donor interest is causing groups in some countries to move away from biodiversity conservation into areas where funding is available, most notably climate change.
		Partially met	X	Partially met	
		Fully met		Fully met	
iii. Partnerships. Effective mechanisms exist for conservation-focused civil society groups to work in partnership with one another, and through networks with local communities, governments, the private sector, donors, and other important stakeholders, in pursuit of common objectives.	X	Not met	X	Not met	In 2008, fully institutionalized and sustainable partnerships dedicated to coordinating conservation actions among key stakeholder groups were not in place at any CEPF priority site. By 2013, they were in place for only two of the 28 priority sites (seven percent). Civil society organizations can find it difficult to work in partnership, in part due to competition for funding. All the same, CEPF catalyzed five alliances for the implementation of specific projects, as well as five networks to coordinate wider conservation efforts.
		Partially met		Partially met	
		Fully met		Fully met	
iv. Financial resources. Local civil society organizations have access to long-term funding sources to maintain the conservation results achieved via CEPF grants and/or other initiatives, through access to new donor funds, conservation enterprises, memberships, endowments, and/or other funding mechanisms.	X	Not met	X	Not met	In 2008, none of the CEPF priority sites had access to stable and diversified long-term funding sources for conservation through support to local civil society organizations. By 2013, the situation had not improved markedly; even international NGOs remain dependent on short-term grant funding to support their work at priority sites. Local groups face strong competition for funding from international NGOs, who pursue the same opportunities if they are allowed to. Although the GEF Small Grants Program and some other schemes are only accessible to local groups, their support is short-term.
		Partially met		Partially met	
		Fully met		Fully met	
v. Transboundary cooperation. In multi-country hotspots, mechanisms exist for collaboration across political boundaries at site, corridor and/or national scales.	X	Not met	X	Not met	There are only a few examples of effective mechanisms for transboundary conservation in the hotspot, such as FFI's work on primate conservation between China and Vietnam, and WWF's work on Annamite forest conservation between Lao PDR and Vietnam. Good examples of wider regional collaboration among civil society organizations are emerging, such as the Save the Mekong Coalition and the Asian Species Action Partnership (ASAP). CEPF has also been a helpful mechanism for promoting cooperation among civil society organizations at site, national and regional levels. International collaboration among civil society organizations in the hotspot faces fewer barriers than inter-governmental collaboration.
		Partially met		Partially met	
		Fully met		Fully met	

Goal 3: Sustainable financing

Criterion	2008		2013		Notes
i. Public sector funding. Public sector agencies responsible for conservation in the region have a continued public fund allocation or revenue-generating ability to operate effectively.	X	Not met	X	Not met	With the exception of Thailand, the financial resources available to the three largest public sector agencies responsible for conservation in each hotspot country are a serious impediment to their effective functioning. Biodiversity conservation is a low spending priority for national governments across the hotspot, and the limited budget allocations that are made are strongly skewed towards infrastructure and staff salaries. The scale of threats to biodiversity has increased since 2008 but there has been no concomitant increase in public sector funding.
		Partially met		Partially met	
		Fully met		Fully met	
ii. Civil society funding. Civil society organizations engaged in conservation in the region have access to sufficient funding to continue their work at current levels.		Not met		Not met	An estimated five of the 10 largest civil society organizations engaged in conservation in the hotspot have access to sufficient secured funding to continue their work for at least the next five years. Most local and international civil society organizations remain heavily dependent upon grant funding, although a few have secured funding from other sources, such as private companies in the extractives sector. A significant proportion of the funding accessed by civil society organizations is intended for other purposes, thus groups find it difficult to support core conservation actions.
	X	Partially met	X	Partially met	
		Fully met		Fully met	
iii. Donor funding. Donors other than CEPF have committed to providing sufficient funds to address global conservation priorities in the region.	X	Not met	X	Not met	Some new donors have made significant commitments to conservation in the hotspot over the next five years, while other donors have scaled down their support or switched to other priorities, such as climate change. Funding levels for conservation from the major donors remain broadly unchanged. Nevertheless, given the massive and increasing scale and intensity of threats to biodiversity, current donor funding levels are insufficient to address more than a small fraction of the global conservation priorities in the hotspot.
		Partially met		Partially met	
		Fully met		Fully met	
iv. Livelihood alternatives. Local stakeholders affecting the conservation of biodiversity in the region have economic alternatives to unsustainable exploitation of natural resources.	X	Not met	X	Not met	In 2013, local communities at only a handful of CEPF priority sites had access to economic alternatives to unsustainable exploitation of natural resources. This is, nevertheless, an improvement over 2008, when almost none did. A relatively large amount of public and donor funding is spent on livelihood activities in and around KBAs but the link to conservation outcomes is usually weak. Some effective models have been piloted with CEPF support but these need to be documented and replicated more widely.
		Partially met		Partially met	
		Fully met		Fully met	
v. Long-term mechanisms. Financing mechanisms (e.g., trust funds, revenue from the sale of carbon credits, etc.) exist and are of sufficient size to yield continuous long-term returns for at least the next 10 years.	X	Not met	X	Not met	There are no CEPF priority sites for which sustainable financing mechanisms are yielding funding such that financial constraints are no longer identified as a barrier to effective conservation management. Long-term conservation financing mechanisms is still an emerging field in the hotspot. Some experience exists with private sector partnerships, especially in Lao PDR, and environmental trust funds in Thailand and Vietnam but performance has been mixed.
		Partially met		Partially met	
		Fully met		Fully met	

Goal 4: Enabling environment

Criterion	2008		2013		Notes
i. Legal environment for conservation. Laws exist that provide incentives for desirable conservation behavior and disincentives against undesirable behavior.		Not met		Not met	The commitments of Cambodia, Lao PDR, Thailand and Vietnam under multilateral environmental agreements are reflected in their national laws, which are elucidated through detailed regulations. However, these laws and regulations do not provide for sufficient incentives and disincentives to encourage behavior consistent with them. In particular, there are few financial incentives for conservation and restoration of natural habitat, while weak and conflicting regulations encourage conversion of natural habitat to other land uses, such as agro-industrial plantations.
	X	Partially met	X	Partially met	
		Fully met		Fully met	
ii. Legal environment for civil society. Laws exist that allow for civil society to engage in the public policy-making and implementation process.	X	Not met		Not met	In 2008, local civil society organizations in Lao PDR were not legally allowed to convene, organize, register, receive funds and engage in conservation activities. However, by 2013, this was allowed in all countries in the hotspot. These laws are taken advantage of by local civil society organizations in each country, although in Cambodia, Lao PDR and Vietnam there remain some politically sensitive issues that are seen as “no go” by civil society.
		Partially met	X	Partially met	
		Fully met		Fully met	
iii. Education and training. Domestic programs exist that produce trained environmental managers at secondary, undergraduate, and advanced academic levels.	X	Not met		Not met	In 2013, the proportion of senior leadership positions in conservation agencies staffed by local country nationals was estimated to be more than 50 percent but less than 90 percent, as many senior positions were staffed by expatriates. This was nevertheless an improvement over the situation in 2008, thanks to the growing number of local country nationals graduating from post-graduate courses in conservation and related fields from overseas universities, as well as domestic institutions in Cambodia and Thailand.
		Partially met	X	Partially met	
		Fully met		Fully met	
iv. Transparency. Relevant public sector agencies use participatory, accountable, and publicly reviewable process to make decisions regarding use of land and natural resources.	X	Not met	X	Not met	Neither public agencies responsible for biodiversity at the national level nor those controlling individual conservation areas regularly hold public meetings or document their decisions and make this available to the fullest extent possible. There is a general lack of accountability in public administration, and the environment sector is no exception. Civil society organizations face restrictions on access to information held by public agencies.
		Partially met		Partially met	
		Fully met		Fully met	
v. Enforcement. Designated authorities are clearly mandated to manage the protected area system(s) in the region and conserve biodiversity outside of them, and are empowered to implement the enforcement continuum of education, prevention, interdiction, arrest, and prosecution.	X	Not met	X	Not met	Protected area management bodies have varying but typically limited jurisdiction over the areas nominally under their management, and very limited influence over activities occurring in their buffer zones. In each country, less than half of the legally designated protected areas are estimated to have their boundaries demarcated on the ground and to be patrolled regularly (at least one week out of every month).
		Partially met		Partially met	
		Fully met		Fully met	

Goal 5: Responsiveness to emerging issues

Criterion	2008		2013		Notes
i. Biodiversity monitoring. Nationwide or region-wide systems are in place to monitor status and trends of the components of biodiversity.	X	Not met		Not Met	National governments have established systems to monitor status and trends in forest cover. Other habitat types are generally not monitored at the national or regional scale, although there are some local initiatives (e.g., for ecosystems in the Tonle Sap inundation zone). A small but growing number of species and populations are benefiting from systematic monitoring efforts (e.g., large waterbirds, vultures, primates, etc.), which is contributing to a gradual move towards evidence-based conservation.
		Partially met	X	Partially met	
		Fully met		Fully met	
ii. Threats monitoring. Nationwide or region-wide systems are in place to monitor status and trends of threats to biodiversity.	X	Not met		Not met	Systems are in place to monitor certain threats (e.g. forest fire, land conversion, hunting, etc.) at the national scale in some countries. The last five years have witnessed more systematic monitoring of wildlife crime, following the establishment of the ASEAN Wildlife Enforcement Network, although information sharing still tends to be reactive rather than proactive. There is no systematic monitoring of invasive species.
		Partially met	X	Partially met	
		Fully met		Fully met	
iii. Ecosystem services monitoring. Nationwide or region-wide systems are in place to monitor status and trends of ecosystem services.	X	Not met	X	Not met	There are no systems in place to monitor status and trends in ecosystem services at the national or regional scale. Global datasets are available that can be used to infer trends in such services as water provision and carbon storage but these are not ground-truthed within the region. There also exist a few initiatives to monitor change in selected ecosystem services at the local scale.
		Partially met		Partially met	
		Fully met		Fully met	
iv. Adaptive management. Conservation organizations and protected area management authorities demonstrate the ability to respond promptly to emerging issues.	X	Not met		Not met	Since 2008, an increasing number of conservation organizations have been observed to adapt their missions or strategies to respond to emerging issues, such as agro-industrial plantations, mining and climate change. At the same time, there are other emerging issues, such as hydrocarbon exploration, that conservation organizations have not yet responded to systematically. The principles of adaptive management have yet to be adopted by more than a handful of protected areas.
		Partially met	X	Partially met	
		Fully met		Fully met	
v. Public sphere. Conservation issues are regularly discussed in the public sphere, and these discussions influence public policy.		Not met		Not met	There is now greater discussion of conservation issues in the public sphere than there was in 2008, and these discussions have been seen to influence policy (e.g. cancellation of commercial fishing lots in Cambodia; cancellation of tourism developments in Vietnam). Nevertheless, achievements are still limited and civil society still finds it difficult to influence policy, especially in Lao PDR.
	X	Partially met		Partially met	
		Fully met	X	Fully met	

Annex 5 – Contribution of the First Phase of CEPF Investment in the Indo-Burma Hotspot towards the Aichi Biodiversity Targets

Goal / Target	Contribution to Date
<i>Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society</i>	
Target 1. By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.	Hundreds of news articles on biodiversity conservation in the Indo-Burma Hotspot published through online and print media, reaching millions of people; local-language materials on conservation themes disseminated to thousands of people in northern Vietnam and Cambodia; documentary film on the importance of ecosystem services to local people’s lives in the Mekong Delta broadcast on Vietnamese television, with an estimated audience of 45,000 people; documentary film on the livelihood significance of the Mekong River’s wild capture fisheries produced.
Target 2. By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.	Biodiversity values of the Mekong River and its major tributaries documented and widely disseminated to promote their integration into development planning processes, especially around hydropower development.
Target 3. By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.	Positive incentives for the conservation and sustainable use of biodiversity, including eco-labeling, direct payments for nest protection and conservation agreements, piloted at multiple sites in Cambodia and Vietnam and adapted to local socio-economic conditions.
<i>Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use</i>	
Target 5. By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.	Strengthened protection and management of nearly 2.3 million hectares of natural habitats within Key Biodiversity Areas, significantly reducing habitat degradation and fragmentation at scale.

Goal / Target	Contribution to Date
<p>Target 6. By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.</p>	<p>Community fisheries co-management piloted in Cambodia, Lao PDR, Thailand and Vietnam, demonstrating effective models for sustainably harvesting fish and aquatic invertebrates, involving the establishment of 58 fish conservation zones, and delivering tangible socio-economic benefits to 53 local communities.</p>
<p>Target 7. By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.</p>	<p>Sustainable harvesting practices for non-timber forest products (NTFPs) introduced to 1,500 hectares of forestry land in Vietnam, with the adoption of the FairWild standard.</p>
<p>Target 9. By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.</p>	<p>Water hyacinth (<i>Eichhornia crassipes</i>) and giant mimosa (<i>Mimosa pigra</i>) control programs implemented at Boeung Prek Lapouv Management and Conservation Area, and best practices incorporated into the site management plan.</p>
<p><i>Strategic Goal C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity</i></p>	
<p>Target 11. By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.</p>	<p>More than 150,000 hectares of terrestrial and freshwater ecosystems conserved through the creation and expansion of protected areas, including community co-managed fish conservation zones as well as conventional, government-managed protected areas; nearly 1.6 million hectares of terrestrial and freshwater ecosystems within existing protected areas afforded strengthened protection.</p>
<p>Target 12. By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.</p>	<p>Forty-eight core populations of 32 globally threatened species secured from overexploitation and illegal trade, with 16 populations stabilized or increased.</p>
<p><i>Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services</i></p>	
<p>Target 14. By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.</p>	<p>Fifty-three local and indigenous communities in Cambodia, Lao PDR, Thailand and Vietnam with secured access to essential services provided by freshwater ecosystems through introduction of community fisheries co-management.</p>

Goal / Target	Contribution to Date
Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building	
<p>Target 18. By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.</p>	<p>Four indigenous communities along the Mekong River in Cambodia assisted to secure formal recognition of their indigenous land title and/or community forests, thereby establishing a basis for conservation sustainable use of biodiversity; seven indigenous communities in the Northern Highlands Limestone corridor in Vietnam engaged in development of sustainable harvesting of NTFPs, with enhanced recognition of their rights of access and management.</p>
<p>Target 19. By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.</p>	<p>Global threat assessments completed for almost 3,000 species, filling major gaps in knowledge, particularly with regard to freshwater taxa and vascular plants.</p>