



TMATBOEY COMMUNITY PROTECTED AREA COMMITTEE

Cambodia



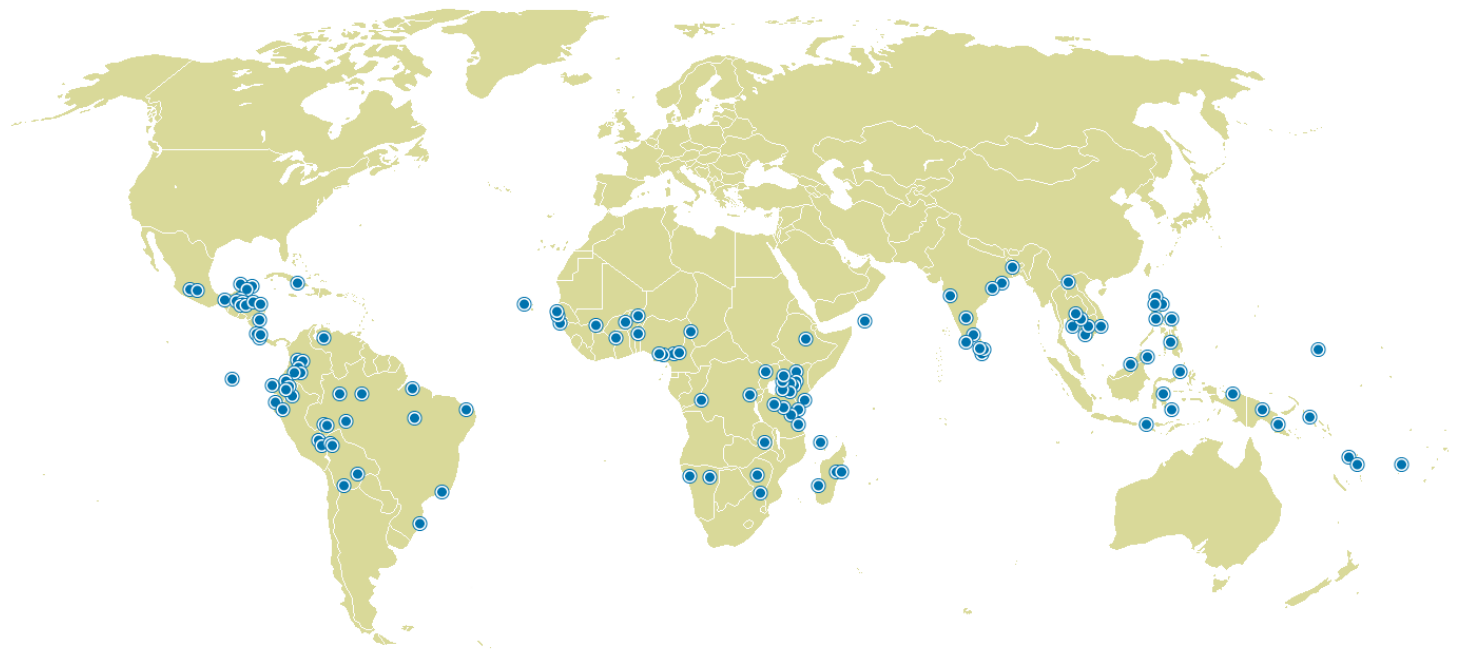
Equator Initiative Case Studies

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Local and indigenous communities across the world are advancing innovative sustainable development solutions that work for people and for nature. Few publications or case studies tell the full story of how such initiatives evolve, the breadth of their impacts, or how they change over time. Fewer still have undertaken to tell these stories with community practitioners themselves guiding the narrative.

To mark its 10-year anniversary, the Equator Initiative aims to fill this gap. The following case study is one in a growing series that details the work of Equator Prize winners – vetted and peer-reviewed best practices in community-based environmental conservation and sustainable livelihoods. These cases are intended to inspire the policy dialogue needed to take local success to scale, to improve the global knowledge base on local environment and development solutions, and to serve as models for replication. Case studies are best viewed and understood with reference to *'The Power of Local Action: Lessons from 10 Years of the Equator Prize'*, a compendium of lessons learned and policy guidance that draws from the case material.



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Design

Oliver Hughes, Dearbhla Keegan, Matthew Konsa, Kimberly Koserowski, Erin Lewis

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PROJECT SUMMARY

The village of Tmatboey comprises 236 families, some from the Kui minority ethnic group, and lies within Preah Vihear province, in the remote Northern Plains of Cambodia. The plains of Preah Vihear are home to the world's largest breeding populations of Giant Ibis and White-Shouldered Ibis – both critically endangered species. In total, the area supports 50 species on the IUCN Red List, and is for many of these species a last refuge, making the Northern Plains a focus for conservation interventions.

One approach has used revenue from ecotourism to 'reward' Tmatboey community members for conserving these rare bird species. The Tmatboey Community Protected Area Committee, in partnership with the Wildlife Conservation Society, has developed a community-based monitoring scheme in which local residents are paid a small fee for reporting and monitoring nests of endangered species, rather than selling the eggs on the thriving black market operating on the Thailand-Laos border.

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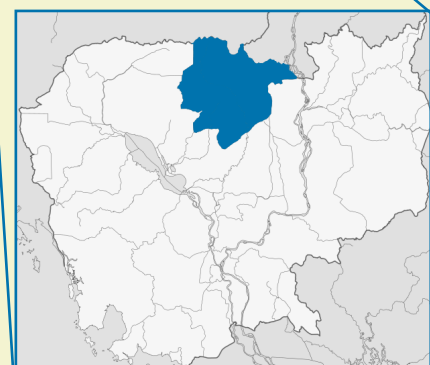
KEY FACTS

EQUATOR PRIZE WINNER: 2008

LOCATION: Preah Vihear Province

BENEFICIARIES: 236 families

BIODIVERSITY: Kulen Promtep Wildlife Sanctuary



Background and Context



Tmatboey is a remote forest village of 236 families, some from the minority Kui ethnic group, which lies within Kulen Promtep Wildlife Sanctuary in Preah Vihear province, in the Northern Plains of Cambodia. The community lives on the edge of a protected area within the deciduous dipterocarp forests. Similar forests across Southeast Asia have been converted to paddy fields to provide food and livelihoods for a rapidly expanding population. Preah Vihear is one of the last bastions of standing forest of this kind, and is home to wildlife endemic to this particular ecosystem and forest type. Conversion of these forests to agricultural land (by both the local community and external industry groups) is incontrovertibly the most significant threat to the protected area.

Protected areas in the region have historically been, and to some extent still are, considered by outsiders to be open access lands, where traditional land use patterns, community-based property rights, and local resource entitlements are not recognized. The erosion of local rights has functionally eroded a stewardship buffer, which traditionally enabled environmental conservation and the pursuit of local livelihoods to coexist, and opened the area up to destructive extractive industries.

A last refuge for threatened species

The Northern Plains of Preah Vihear are home to the world's largest breeding population of giant and white-shouldered ibis, critically threatened and endangered species. The region supports a number of threatened bird populations, including three vulture species (white-rumped, slender-billed and red-headed) and eight species of large water bird (greater adjutants, white-winged duck, sarus crane, lesser adjutants, oriental darter, black-necked stork and woolly-necked stork). This unique assemblage of nine globally threatened large bird species makes the Northern Plains an exceptionally important conservation area. The region supports 50 species listed on the International Union for Conservation of Nature (IUCN)'s Red List of Threatened Species, and is for many of these species a last refuge.

Linking local incomes to the health of local ecosystems

Tmatboey Community Protected Area Committee evolved from a pilot community-based ecotourism project in the village of Tmatboey, which was initiated by the Wildlife Conservation Society (WCS). Tmatboey was identified and selected for the pilot because of the area's wealth of endemic wildlife species and corresponding demand from international birdwatchers to observe critically endangered bird species in their ever-shrinking natural habitat. The community worked with WCS, through a participatory approach, to establish a locally-elected village committee which would govern all aspects of ecotourism and, importantly, all land management in the village area. The committee was legally recognized and incorporated by the Ministry of Environment and the Commune Council (the lowest administrative unit of government in Cambodia).

Once the committee was in place, a local NGO partner, the Sam Veasna Center for Wildlife Conservation (SVC), was enlisted to promote the site in Siem Reap. SVC was a logical choice for this partnership, both because of its location in Cambodia's tourism hub and its mission to carry out the legacy of Sam Veasna, a bird-watcher and one of Cambodia's first conservationists. The SVC assumed leadership in ensuring responsible tourism in Tmatboey and in promoting the village through website, brochures and advertisements. The target for Tmatboey tourism is a mid- to high-end market of birders, those interested in social and environmental responsibility and willing to pay a premium based on the understanding that revenues are invested in community development and conservation efforts. Tourists contribute to the local economy directly, through payments to villagers for services such as accommodation, guiding, cooking and transportation, and indirectly through a USD 30 donation to the village development fund.

The initiative has resulted in a number of benefits, including growth in the populations of endangered wildlife and threatened species of endemic birds; positive changes in villagers' attitudes towards con-

ervation; and increased income for the local population which is directly dependent upon the protection and conservation of wildlife, natural resources and ecosystems. By linking growth in local income to the health of local ecosystems and endemic wildlife, this conservation model has been successful in changing local attitudes to wildlife. This is not an insignificant link, as many of the threatened species found in the Northern Plains make their homes and breed in the forested eco-agricultural mosaic which also provides for the wellbeing of the local community. The model has also proved to be flexible and resilient in the face of changing management issues, complementing the new and emerging conservation tools and land management strategies of the community.

Tourism activities in Tmatboey are managed by the elected village committee which is responsible for the management of all tourism benefits and the disbursement of funds. Tourism services are provided by four groups in the village:

1. The elected village committee (twelve members) which handles guesthouse guarding, allocation of land to community members, and organization of the nest protection program;
2. The village guide association (14 members) which is composed of tour guides and community patrollers;
3. The cooks group (female-only, four members) which provides

meals for visitors and tourists; and

4. The guesthouse management group (female-only, four members) which cleans the guesthouses and sells goods to tourists.

Local leadership has also been an essential factor in the success of the initiative. Mr. Dib Kimoun, Chief of the Tmatboey Community Protected Area Committee, along with a team of dedicated advocates, worked tirelessly to convince the community of the benefits of the model, slowly and steadily building a critical mass of support amongst the villagers. Part of this mobilization effort involved fostering a sense of community ownership, shared responsibility and co-creation throughout the process.

A large majority of the local population are subsistence farmers. It was, therefore, critical for the architects of the project to not only demonstrate to the local population how ecotourism activities could provide benefits and funding for future generations, but also to demonstrate how ecotourism would be integrated into village land use planning, in way that would continue to accommodate local subsistence needs. Behavior and attitudes were not easy to change. It was not sufficient to convince the villagers of the intrinsic importance of wildlife conservation, they also needed to be convinced that conservation could yield meaningful improvements to their livelihoods and wellbeing.



“What I am asking for is for more recognition that we as a community can make decisions how to allocate resources, especially land, to community members...Allow us to do this and we will do it well”

Ashish John, Wildlife Conservation Society

Key Activities and Innovations



According to Cambodia's Protected Area Law, the Ministry of Environment must demarcate four zones within protected areas: a community zone, a sustainable use zone, a conservation zone and a core zone. This demarcation is applied in all 23 of the country's protected areas. Protected area authorities have, as a matter of practice, generally demarcated all four zones at the same time which can have problematic implications for land use planning, frequently resulting in the conversion of forest or other key conservation areas to agricultural use.

Sequencing land demarcation

Tmatboey was the first village in Kulen Promtep Wildlife Sanctuary to *proactively* demarcate their community zone. By doing so, the committee was able to undertake a participatory process that fostered local ownership and engaged key stakeholders (the community, WCS, provincial authorities and Ministry of the Environment staff) while also mitigating potential conflicts between community members and the park authorities over the remaining demarcation. As there are no guidelines for the sequencing of zone demarcation, this set an important precedent for the prior demarcation of the community zone as an alternative to demarcating all four zones at once. This practice of sequencing zone demarcation such that community land use plans come first is now being replicated in five other villages and one commune.

Tmatboey successfully linked bird conservation to the tourism industry through an agreement between the community, the Wildlife Sanctuary and WCS. The agreement stipulates that tourism revenue to the village is subject to the villagers agreeing to sustainably manage habitats and protect key species through a detailed village land use plan and a strict no-hunting policy. The land use plan draws its legitimacy from its basis in government approved zoning. It was decided upon through community consultation, and sets out defined areas for agricultural use, residential use, and for the sustainable harvesting of natural resources.

Financial incentives for conservation

Tmatboey Village's no-hunting policy is accompanied by a measure that pays community members not to collect the eggs or chicks of threatened bird species from their nesting sites. Facilitated by middlemen on the border of Thailand and Laos, a black market had emerged in the sale of threatened eggs. The eggs of the sarus crane were among the species fetching a particularly high price. In response to this problem, Tmatboey assumed leadership for an initiative called the 'Bird Nest Protection Program' which enlists local residents to locate, monitor and protect bird nesting sites. The project was initiated by WCS, but responsibilities have increasingly been transferred to Tmatboey, as experience has shown that a greater number of nests can be found and successfully protected by working in direct cooperation with local communities. Under the program, community members are offered a financial incentive (in the form of a monetary award of up to USD 5) for reporting nests and serving as monitors of such sites until chicks have hatched and matured. Monitors receive USD 1 per day and earn an extra USD 1 after the chicks successfully fledge. Full payment is also made if it can be verified that nests failed due to natural causes, including predation. Rates were agreed upon in consultation with the community.

This innovative incentive scheme is complemented by a program, administered by the Tmatboey Committee, which uses ecotourism revenue to pay local resin tree owners USD 10-13 annually to protect bird nesting sites. Ibises in particular tend to nest in resin trees, which are also an important source of income for villagers.

Another noteworthy innovation in this regard is an agri-environmental payment program that was initiated in 2007. Under this program, farmers adhering to the village's land-use plan and no-hunting rules are granted access to a marketing association through which they can sell their rice for a higher premium. The market association not only offers preferential prices to member farmers, but also serves an outlet for their produce to national markets, avoiding middlemen

who previously monopolized village trade. In addition, the association provides start-up capital for small ecosystem-based enterprises and trains farmers in new agricultural techniques. Profits accrued by the association are shared between participating farmers and village organizations.

The Tmatboey Community Protected Area Committee has developed and enforced a community-based land use plan and put in place programs for the conservation of the nesting and feeding sites of globally threatened bird species. Through the Committee's work, community members have been empowered to enforce local land use planning regulations, including controlling the clearance of forest for agricultural purposes. Enforcement is usually based on verbal or written contracts between individuals and the Committee to stop illegal activities or to relocate agricultural plots in accordance with the land use plan.

Incentives for conservation enforcement will continue to be needed, as escalating national land prices have dramatically increased incen-

tives for land-grabbing. To date, however, this approach has led to substantial improvements in local livelihoods and in the abundance and health of local wildlife. The ecotourism program has demonstrated to local people the importance of endemic bird species and the economic value of conservation.

Institutionally, the initiative relies upon four parties, each of which plays a key role. The Tmatboey Community Protected Area Committee is responsible for site management of tourist services, the management of income received and funds dispersed, local enforcement of land use plans and no-hunting agreements, and reporting violations to the protected area authorities. The protected area authorities are responsible for legally improving tourism agreements and local land rights law enforcement. The Sam Veasna Center is responsible for marketing, site promotion, tourism bookings, and monitoring on behalf of village-level enterprises. Finally, various partners in the private sector provide tourist bookings, which are the ultimate source of revenue driving conservation efforts.



Impacts



BIODIVERSITY IMPACTS

The giant ibis (*Pseudibis gigantea*) is Cambodia's national bird and a near-mythical species for bird-watchers, naturalists and conservationists. Known from only a handful of previous sightings, the ibis's continued existence in the Northern Plains of Cambodia was revealed by WCS surveys in 2000. With support from Committee, WCS now conducts an annual census of the white-shouldered ibis, sarus crane, vultures and other key species in the region. WCS also employs a team of research rangers that monitor nests and wildlife in the area. These activities provide reliable information regarding increases or decreases in key wildlife populations (as represented in Figure 1 and 2 below).

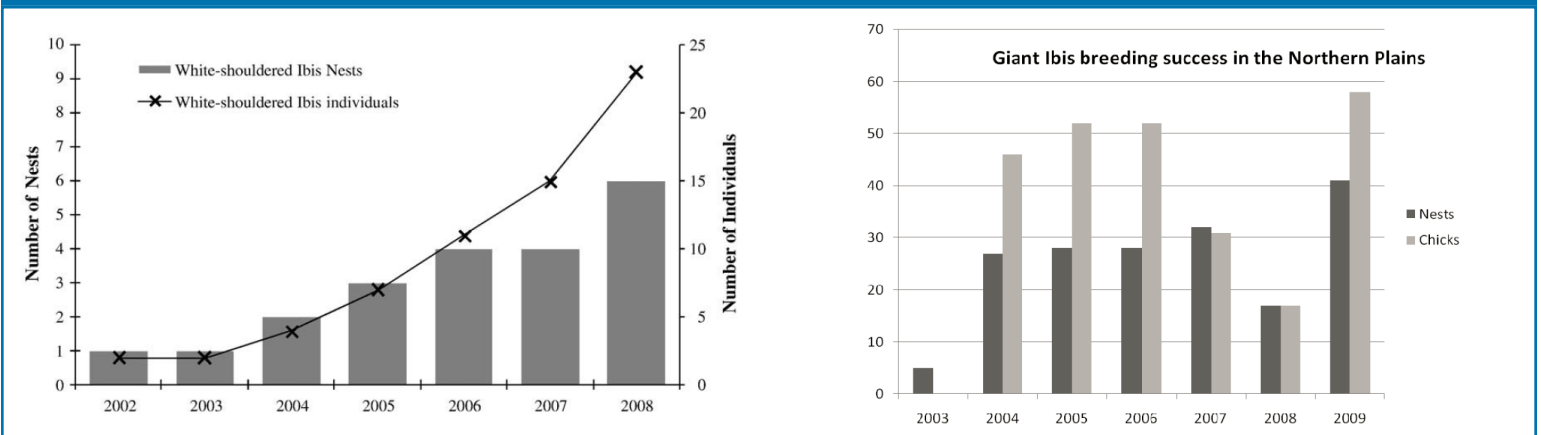
In 2003, WCS staff discovered a small breeding population of the critically endangered white-shouldered ibis (*pseudibis davisoni*), consisting of a single breeding pair, at Tmatboey. At the time, this was the only known breeding site for this species in mainland Asia.

Since 2003, however, the population of this species in the area has grown from this single nest and one breeding pair, to six nests and 23 individuals in 2008. WCS's monitoring has also shown that breeding populations of the giant ibis are widespread in the area, with 41 pairs monitored in 2009.

The Tmatboey Community Protected Area Committee has reached out to the community to increase awareness of the presence of these threatened species. Through the Committee, the community has committed to the conservation of the wide variety of globally threatened large birds found at Tmatboey, using the ibises as 'flag-ship' species. The approach chosen by the community for the conservation of local bird populations through tourism enterprise has since been extended to seven sites in Cambodia, with more planned.

The forests of the Northern Plains also support many other threatened species, including Eld's deer (*Rucervus eldii*) which are found almost nowhere else in the world. Conservation agreements made

Fig. 1: Increases in White-shouldered and Giant Ibis populations in Tmatboey, 2002-2009



LEFT: White-shouldered Ibis populations at Tmatboey, 2002-2008. Source: T. Clements et al., 2010. RIGHT: Giant Ibis breeding success 2003-2009. Source: WCS internal report, 2009.

with the community have helped to protect this endangered species. The Committee and community members have assumed full legal responsibility for the management of the wildlife and land around the village, and as a result, deforestation rates have declined and encroachment into key wildlife areas has ceased, as community now abide by defined land use boundaries.

SOCIOECONOMIC IMPACTS

The development of tourism in Tmatboey, based on the conservation of rare bird species, has made a dramatic difference to the income of community members, by providing employment opportunities and a source of revenue for the village's development fund.

Tourist numbers at Tmatboey have increased by an average of 36 per cent annually since 2005. Over the same period, revenue increased by an average of 100 per cent annually. Villagers have improved service quality, allowing them to raise prices, and have diversified the range of services they provide in order to capture a greater proportion of the tourism value chain. Average per tourist payment for services increased from USD 10 in 2004 to USD 67 in 2008. Over the same period, the percentage of tourism revenue spent locally has risen from 11 per cent to 24 per cent.

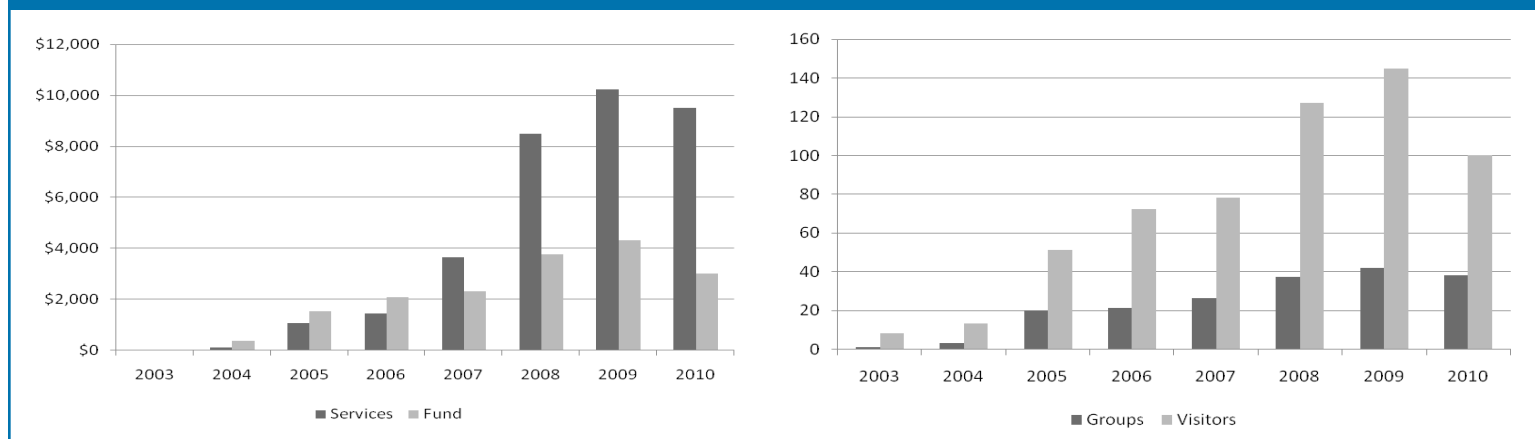
By 2007-2008, the village had received USD 12,000 in revenue as a result of tourism activities, USD 3,500 of which came from contributions to the village fund, and nearly USD 8,500 of which came from payments for services provided by villagers. In 2007-2008, 25 individuals, from 236 families, were employed on a part-time permanent basis as guides, cooks and guesthouse managers, each receiving on average USD 20-40 per month during the tourism season (average of USD 160 per year, maximum USD 400 per year). These sums are significant for families otherwise dependent on subsistence agriculture and the harvesting of forest products, in a region where the average cash income per family is USD 350-500 per year. A further 65 individuals have benefited in some manner through temporary employment, for example as occasional guides, in guesthouse maintenance, carrying water, or through local trade within the village mainly for food.

In total, therefore, around 40 per cent of the village's families have been involved to some extent in the initiative's activities. Donations to the village fund have been used to help pay for a new school, build a road, construct fish ponds, repair water pumps and dig new wells. Some of the profits were used by the committee to pay villagers for local patrols and the guarding of nesting birds. Money has also been used to repair and maintain tourism facilities, including replacing the tourist bungalows' thatched roofs.

Traditional and cultural norms in rural Cambodia dictate that women and young girls are responsible for many time-consuming household tasks, which results in poor completion for girls in education, and a preference for families to send sons to school, rather than daughters. Tmatboey has only a single primary school, and few children go on to attend high school. Although the Committee remains male-dominated, an effort has been made to include women in its activities and governing body. The ecotourism committee is democratically elected and currently includes two female representatives.



Fig. 2: Income from ecotourism (USD) and tourism volume, 2003-2010.



Source: WCS internal report, 2010

A women's self-help group has also emerged to sell goods, including drinks, food, t-shirts and handicrafts, to tourists. The cooks group that provides meals for visiting tourists is composed of four women, and the guesthouse management group also consists solely of four women.

The inclusion of poorer and more marginalized segments of the population in the running of the initiative is promoted through democratic processes whereby decisions, including on how to allocate tourism revenues, are made with consultation to all members of the community.

POLICY IMPACTS

The Tmatboey Community Protected Area Committee has been recognized as an example of best practice by provincial authorities,

specifically regarding community zoning and the successful replication of this approach in other villages within Kulen Promtep Wildlife Sanctuary. The Provincial Director of the Ministry of Environment has promoted the Tmatboey model, whereby the community zone is demarcated prior to the allocation of zones for other uses, advising that it be replicated in other wildlife sanctuaries in the province.

The Ministry of Environment is also supporting Tmatboey's activities, monitoring its progress with an eye to replicating the procedures in another sanctuary. It is expected that Tmatboey will be used as a model for the development of national-level, legal procedures for the mapping of community zones. The Minister of Environment has cited Tmatboey several times as an exemplary model of ecotourism. He has twice visited the village to show his support to the community, and has presented the village with a medal in recognition of their outstanding work.



Sustainability and Replication



SUSTAINABILITY

One of the most important ingredients in the sustainability of the Tmatboey initiative is community appreciation for the intrinsic dependence of their tourism economy on the conservation of local biodiversity. Community members are acutely aware that tourists visit their village in order to observe specific threatened and endangered bird species and that in order for benefits to the community to be maintained, its members must regulate land use to ensure the protection of these bird populations. Ecotourism revenues are used to ensure the sustainability of ecotourism activities and the enforcement of land use plans. As long as tourists continue to visit the region, the project will be environmentally, economically and socially sustainable.

Another key element of project sustainability is the high degree of community ownership over the programs and community participation in decision-making. Beyond financial incentives, the community takes pride in, and has been empowered by, the positive results that they have achieved through the initiative.

The partnership model has been important in sustaining the initiative to date. The Wildlife Conservation Society works in partnership with the Ministry of Environment to manage the Kulen Promtep Wildlife Sanctuary and this connection has been critical to the project's success. Sam Veasna Center for Conservation builds the capacity of the local community to improve their service provision to tourists and attract bird-watchers to Tmatboey.

REPLICATION

With respect to community zoning, Tmatboey's approach, whereby the community zone was demarcated prior to the demarcation of other zones, has been recognized as an example of best practice by provincial authorities, and this approach has been replicated

successfully in other villages within Kulen Promtep Wildlife Sanctuary. The Provincial Director of the Ministry of Environment has promoted the Tmatboey model and advised that it be replicated in other wildlife sanctuaries in the province.

The community of Tmatboey has shared their experience with other villages in Kulen Promtep Wildlife Sanctuary as well as with villages from outside the Sanctuary, and even from other provinces in Cambodia. Five villages from within the Sanctuary have come to visit Tmatboey to learn from their success. Representatives from villages outside the sanctuary have also visited Tmatboey to understand their model for implementing community zoning, land use planning and community-based ecotourism. There are currently nine villages replicating the land use planning activities of Tmatboey and seven villages replicating various aspects of their ecotourism activities.



Members of the Tmatboey Community Protected Area Committee have become trainers for other communities such as Dangphlat and Prey Veng villages. This experience has reinforced the value of and demand for peer-to-peer learning, as community representatives receiving training have expressed a preference for this community-to-community model of knowledge exchange. Several participating communities have expressed that a peer-to-peer model of information exchange is critical for the cultivation of local support, building trust and successful replication.

A specific example of the replication, uptake and subsequent adaptation of the Tmatboey model is Dangphlat village, where the community there has established 'vulture restaurants' where tourists can stay in safari tents and watch rare and endangered vultures in their natural habitats. This particular project has also integrated the observation of other rare species, including gibbons and white-winged ducks.

PARTNERS

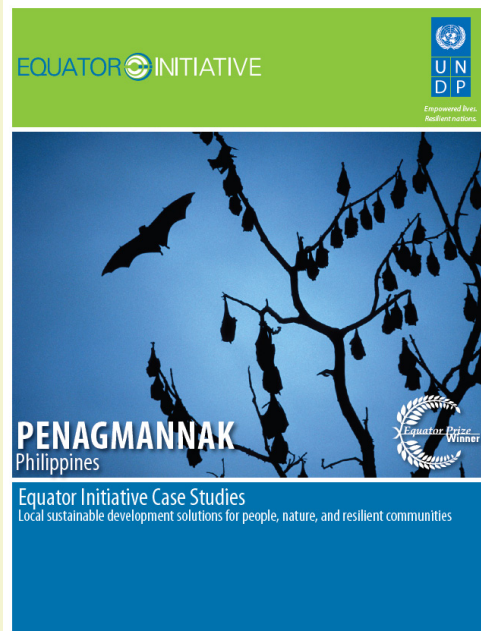
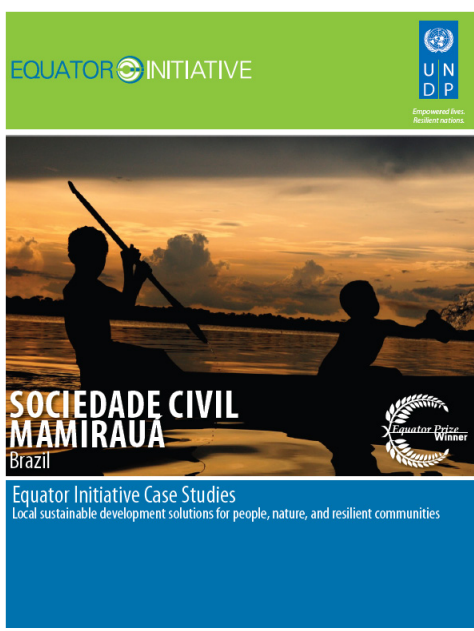
- **Wildlife Conservation Society:** Supports the Ministry of Environment and Forestry Administration in the management of Kulen Promtep Wildlife Sanctuary; advises the government and assists them in the development of procedures and projects to conserve natural resources and protect wildlife.
- **Cambodia's Ministry of Environment and Forestry Administration:** Manage Kulen Promtep Wildlife Sanctuary and implement activities.
- **Sam Veasna Center for Conservation:** Uses bird watching tours to generate income that can then be used to support conservation activities; builds the capacity of communities to improve their ecotourism services.
- **Commune Councils and Village authorities:** These governing bodies help the Committee obtain support from the village and organize village meetings. They also support the Committee in the enforcement of regulations.



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Equator Initiative
 Environment and Energy Group
 United Nations Development Programme (UNDP)
 304 East 45th Street, 6th Floor
 New York, NY 10017
 Tel: +1 212 906-6691
 Fax: +1 212 906-6642
www.equatorinitiative.org



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