



## Celebrating the International Year of Biodiversity with Success Stories from the Field

### From Conflict to CALM: Establishing conservation Areas Landscape Management in the northern plains of Cambodia

The abundance of wildlife found in the northern plains of Cambodia was once compared to the African savannahs by the conservationist Charles Wharton. Wharton filmed impressive herds of wild cattle (banteng and gaur) and other big game animals roaming in this area as recently as the 1950s.

By the early 1970s, as with rest of the country, the region was engulfed in armed conflict. At one point the Northern Plains became a central base of the Khmer Rouge. Many local villages were relocated both as a result of the ongoing conflict and due to the deliberate policy of the Khmer Rouge of moving local communities out of the area.

The conflict had many negative impacts on wildlife as both fighters and the general public hunted them for food and trade. But land and resource use conflicts soared with the cessation of armed conflict in late 1990s when many people started to return to the region in search of livelihoods. Many animals and birds were hunted for commercial purposes – both for sale inside Cambodia and for illegal export. Open access to wetlands was also leading to over-exploitation, as a result of destructive fishing methods such as dynamite, poisons and electric fishing, and through wetland conversion to paddy fields. Logging concessions and illegal logging operations threatened forests. Logging tracks opened up the area to further exploitation by people seeking land for agriculture.



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Despite this confluence of threats, this region remains one of the largest relatively intact landscapes of exceptional global importance in Southeast Asia. The area hosts more than 40 species listed in the IUCN Red List of globally threatened species—including five most threatened (Critically Endangered) species. The *Giant Ibis Pseudibis gigantea* was only known from a handful of records in the early twentieth century, until it was re-discovered in considerable numbers in this area. The area is also home to many mammals of high conservation importance, such as *Banteng Bos javanicus*, *Asian Elephant Elephas maximus*, *Pileated Gibbon Hylobates pileatus*, *Eld's Deer Rucervus eldii*, *Dhole Cuon alpinus*, and the *Fishing Cat Prionailurus viverrina*.

The region is sparsely populated, with densities as low as 5.5 people/km<sup>2</sup> in some areas. The vast majority of families rely on subsistence rain-fed paddy rice growing, collection of forest products and seasonal fishing. Shifting cultivation is practiced by many families for vegetable and rice production. Fish, and to some degree wildlife, is the principal source of protein.

The project, “Establishing Conservation Areas Landscape Management (CALM) in the Northern Plains”, implemented by UNDP, and executed by Wildlife Conservation Society (WCS) in collaboration with the

Ministry of the Environment and the Forestry Administration, was designed to respond to the threats to the outstanding biodiversity of the northern plains and focuses on three key objectives: (1) strengthening biodiversity management by government at key sites; 2) Incorporating biodiversity considerations into provincial level land use planning; and 3) establishing incentives for communities and local businesses to support conservation.

The project first identified priority conservation areas which led to the establishment of the 189,987 hectare Preah Vihear Protected Forest in 2002. With the establishment of this protected forest the total area under protection in the Northern Plains doubled. As a result, 80% of the total area of 530,000 ha of Northern Plains is now legally protected. The project is now working to improve the Government's management of these protected areas.

The project is also creating community incentives for conservation by helping local people secure land tenure. In addition to the incentive this provides, the project is using the simple tool of demarcating household and communal lands from surrounding forest and this reduces forest loss. Communities develop land use plans for the area that they use and in partnership with site managers, and using national laws, develop rules and regulations for use of the forest.

Working with several partners, the project is also promoting ecotourism and biodiversity friendly agriculture in the productive landscapes of the region. One innovative incentive scheme that the project has successfully introduced is the production of wildlife-friendly rice. Farmers receive a premium price for their rice if they agree to abide by conservation agreements that are designed to protect rare water birds and other species. Over 30 tons of such fragrant rice was purchased from farmers in these villages between December 2008 and January 2009, at almost double the price initially offered by local middlemen. Marketed as "Wildlife Friendly Ibis Rice" to valuable tourist markets in Cambodia, over 40 families have received a premium from sale of the rice and the program is being expanded in 2010.

The implementation of this activity in each village follows a prescribed number of simple steps. First, a land-use plan is developed by the local community which clearly identifies areas that farmers are permitted to clear for agriculture. They then develop a 'no-hunting' agreement, which outlaws the hunting and collection of rare birds (such as Giant Ibis and Sarus Crane) and other wildlife. These agreements are overseen by a locally elected natural resource management committee, which is composed of representatives from the village, and thus guarantees a high degree of 'local ownership' of the scheme. The government provides support to this system. A Village Marketing Network (VMN) is also formed in the village. The VMN is responsible for purchasing the rice from farmers and verifying that the farmers have respected the conservation agreements, with oversight from the natural resource management committee. A number of hotels and restaurants catering to foreign visitors have been buying the rice in the nearby tourist centre of Siem Reap near the Angkor Wat area. Since the majority of the inhabitants of rural communities in Cambodia are engaged in rice farming, the scheme has the potential to benefit a high proportion of the population within each village. Over 350 families also benefit from employment through ecotourism activities.

The project demonstrates a very simple pathway to success in a post-conflict situation. The CALM project helped establish secure tenure for local people while providing targeted technical assistance in rice production that provided a price premium in exchange for conservation actions. Going forward sustaining conservation and peace will require the committed partnership of Government and international partners. Development of sustainable financing for both local and government partners is essential for long-term management and alongside Ibis Rice, the development of a landscape-scale REDD project is envisaged.

**Project Facts: Duration: 2006-2012, GEF grant US\$ 2.3 million Co-finance US\$ 1.705 million Project cost US\$ 4.005 million. For more information, please contact Hugo Rainey at [hrrainey@wcs.org](mailto:hrrainey@wcs.org) or visit the project website: <http://www.wscambodia.org/saving-wild-places/northern-plains.html>**

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*Editor's note: To celebrate the International Year of Biodiversity, every two weeks we will highlight a GEF project that is creatively addressing the challenges to conserve and sustainably use biodiversity. These examples of good practice in conservation and sustainable use will demonstrate the contributions that biodiversity makes to local and national economies and that halting the loss of biodiversity is indeed possible.*