

Valuing Conservation

The economic valuation of forest services to local, national and our global community has been slow to develop. The conservation of earth's biodiversity is well recognized as a very important goal for forest management, but the actual values of species is difficult to determine. In addition, values are increasingly being attached to forest and soil carbon, water resources, and even disaster mitigation from natural events ranging from storms to climate change. It is generally recognized that communities value forests both for the environmental services they provide, as well as for a wide range of forest products.

In Cambodia, for example, forest products have been essential to the survival of the population for centuries. In 2005, eighty-four percent of the population was rural, with many communities heavily dependent on forests in the form of subsistence goods, as well as cash income. Most energy for cooking and heating is from firewood, while forest timber provides raw materials for house construction, tools, fish pens, and carts. Forest foods and medicines provide much of that consumed by rural households. A recent study in Kratie, Mondulkiri, Pursat, and Kg. Cham found that Non-timber Forest Products (NTFPs) contributed 42% of household income among poor families ranging from \$280 to \$345 per year. The subsistence value of forest products could be significantly greater. With over 11 million rural Cambodians, if one million households have a similar level of economic dependency on forests, the cash income alone in Cambodia may exceed \$300 million per year. Community forestry not only helps secure household rights to subsistence and commercial forest products, but can help rural communities to better process and market their goods through sustainable management. A national CF program that effectively supported a sustainable forest product industry driven by rural communities, could increase the current production values many times. Rural Cambodians are conserving forests based on a recognition of their environmental and economic values.

In Northeastern India, many of the 240 entho-lingusitc groups that inhabit the region have traditionally protected forests for spiritual, hydrological, and biodiversity reasons. In strict conservation areas, no green cutting, fires, or disturbance is allowed. Unfortunately, social and economic changes are placing pressures on community conservation areas. To ensure communities sustain these areas it is important for organizations and individuals who value the unique biodiversity in that area help provide the financial resources necessary for effective management, just as the public supports the national protected area system. CFI field project experience indicates that dense old growth forests with unique biodiversity can be valued in terms of the annual management costs. For example, in Mawphlang Sacred Grove, CFI pays \$10 per hectare per year, so the value of the 75 hectare reserve is \$750. For more open forest that provides a buffer area, the value has been assessed at \$5 per year. While other methods may give a higher value for this unique tropical montane cloud forest, current rates are creating effective incentives to revitalize community management of the old sacred grove and encourage community expansion of the forest.



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Community Forestry & Biodiversity Conservation

Overview of CFI's Strategy

CFI's Communities and Conservation strategy is designed to assist rural villages to develop methods to conserve and protect their environmental resources while, at the same time, managing them for their immediate household needs. CFI engages governments and development agencies to formulate policies and national programs to empower communities through community-based forest and wildlife stewardship agreements.

Over the past two centuries, the nationalization of much of Asia's forests has resulted both in their degradation, as well as the marginalization of forest dependent communities. Government forest departments and environmental agencies, which are vested with authority over the "state domain," have limited fiscal and human resources and face immense difficulties protecting millions of hectares of remote forest lands. While national protected area systems have been established throughout Asia, many exist as "paper parks" where poaching and illegal logging are rampant resulting in habitat destruction and rapid biodiversity loss. The failure of formal conservation systems has resulted in resource depletion, environmental degradation, and entrenched rural poverty that now threatens biodiversity, critical hydrological functions, and traditional values and social systems. CFI believes that Asia's national biodiversity conservation strategies need to include resident peoples as active participants in conservation area management. CFI's projects engage communities living within formal protected areas and wildlife sanctuaries, as well as villages that protect small forest fragments that provide critical habitat or Community Conservation Areas (CCAs).

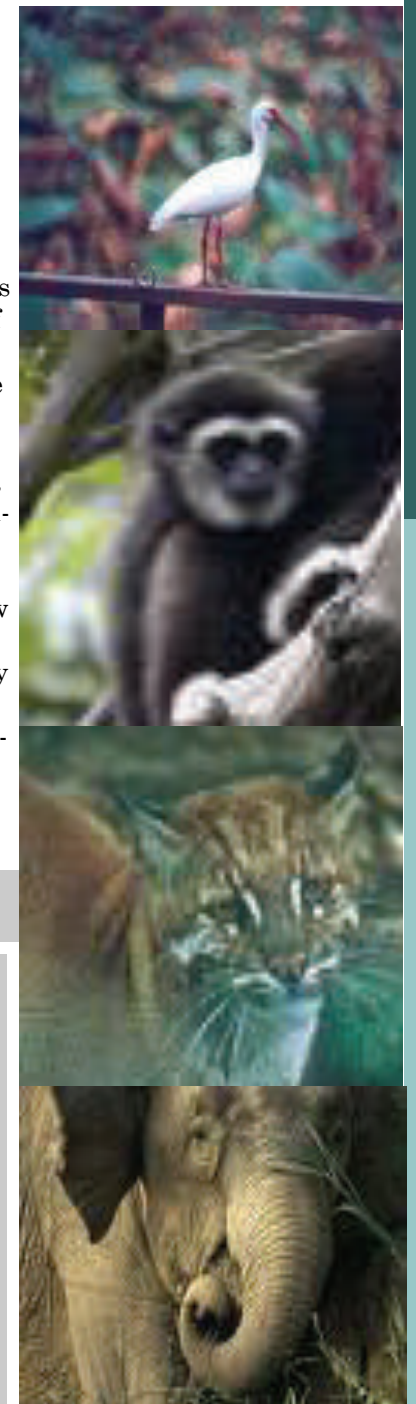
Biodiversity Highlights

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| <ul style="list-style-type: none">• Asian elephant• Golden cat• Black gibbon• Clouded leopards• Duoc langur• Hairy-nosed otter• Pileated gibbon• Sun bear• Wild water buffalo• Cormorants• Cranes• Egrets• Pheasants | <ul style="list-style-type: none">• Herons• Pelicans• Wild ducks• White shouldered Ibis• Coral-billed ground cuckoo• Greater spotted eagle• Siamese fire back• Spot-bellied eagle owl• Freshwater dolphin• Hoolock gibbon• Hornbill | <ul style="list-style-type: none">• Rare Amphibians• Wild boar• Jackal• Pangolin• Jungle Myna• Rock Pigeon• Swallow• Porcupine• Spotted Dove• Python• Cobra• Jungle Fowl• Tree frogs |
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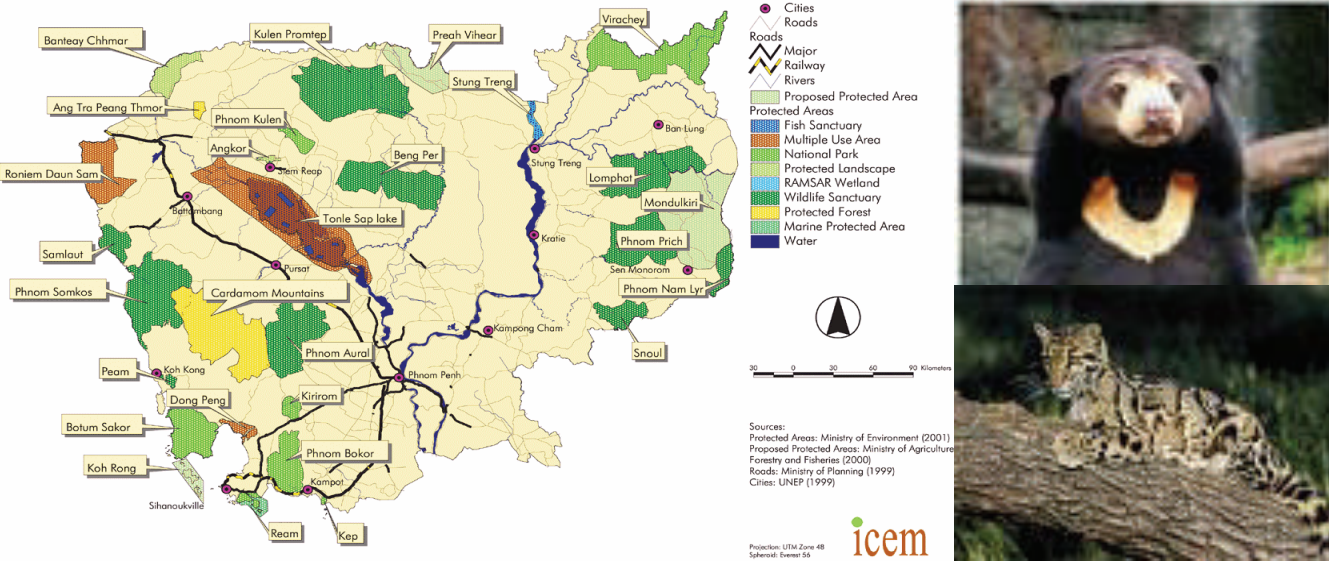


Cambodia’s Community Protected Area Program

The Royal Government of Cambodia is in the processing of approving the Community Protected Area (CPA) Sub-Decree creating new opportunities to engage resident peoples in and around protected areas in natural resource management and ecotourism. This situation opens up legal avenues to address problems of resource conflict, land alienation, illegal logging, and social marginalization that is negatively impacting rural communities and indigenous peoples, especially in the northeastern part of the country. CFI is working closely with the national Department of Nature Conservation and Protection, international organizations, local NGOs, and universities to form a unified vision regarding the national strategies for participatory protected area management. Pilot projects in 3 to 4 national parks and wildlife sanctuaries will be initiated in 2008 to formally establish Cambodia’s first CPAs.

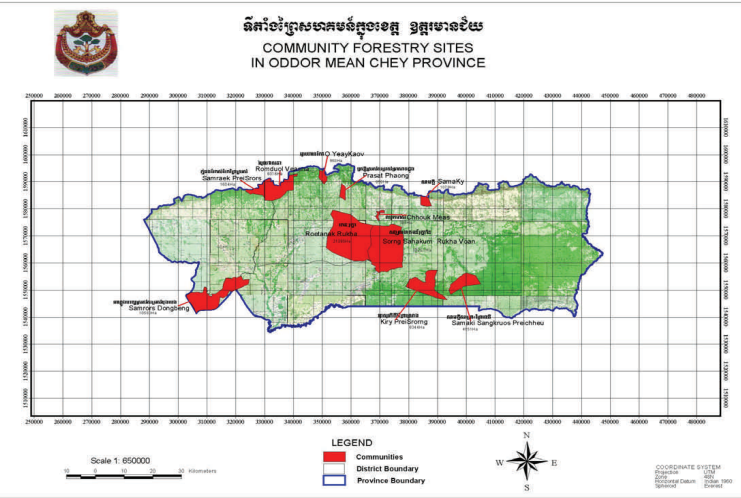
One proposal suggests supporting six protected area sites reflecting: 1) diversity of locations, 2) interest of communities, 3) bordering on inside protected area, 4) prior work by NGOs or presence of NGO as support group. A working group could be established to guide the project with different members responsible for specific sites and roles such as funding, training, mapping, community organizing, ecotourism activity development, etc.

Cambodia’s Protected Area System



Community Conservation Forests in Oddar Mean Chey Approved

In Oddor Mean Chey Province in northwestern Cambodia, the Ministry of Forestry and Fisheries is in the process of approving 78,873 hectares of community forest. Samrong CF was formed by a group of Monk’s to protect 14,000 hectares of dry evergreen forest from illegal logging. With its approval, this habitat will provide extensive additional habitat and act as a conservation buffer for neighboring Kulen Promtep Wildlife Sanctuary.

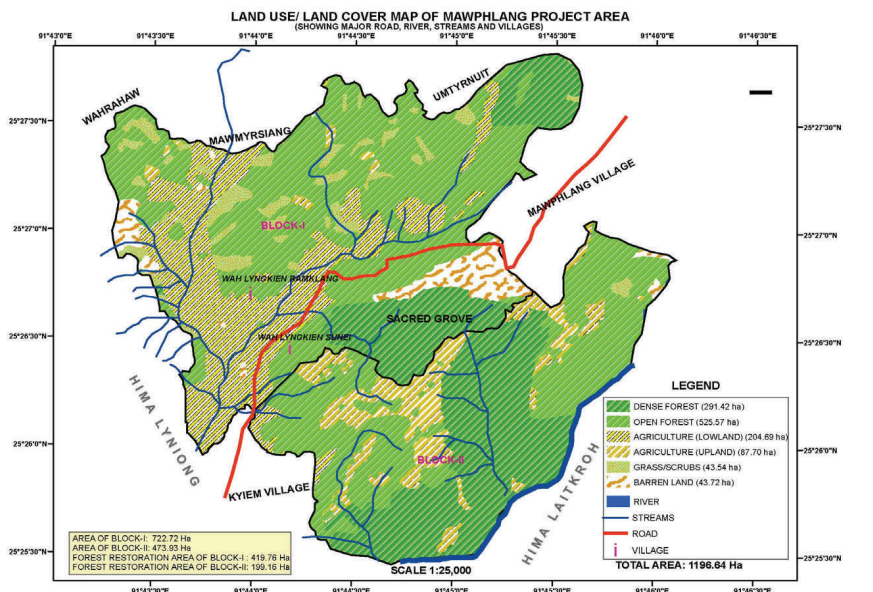


Financing Community Conservation Areas

The concept of paying for the various services provided by ecosystems –what some have called Environmental Service Payments (ESP)– is gaining acceptance worldwide as a resource management mechanism. It is being applied in an expanding variety of contexts as the field of resource economics has helped determine the value of these ecosystem ser-

vices, and as markets in these services have begun to operate. The role of rural communities in these markets, however, still needs to be better defined. It is important to consider the role that rural communities might play in markets and payments for ecosystem services because of: (1) their geographical proximity to

critical natural environments; (2) their historic and continuing involvement in resource stewardship, and (3) the fact that these communities are frequently living in poverty. Over the past decade, Community Forestry International and its associates have been supporting action research projects in Asia to develop innovative systems to finance community-based environmental management, with a special emphasis on upland watersheds



Mawphlang Sacred Forest

Mawphlang Sacred Forest illustrates the type of Community Conservation Area that CFI is supporting. The 400-year old grove has been protected by generations of Khasi villagers, under the spiritual head or Lyngdoh. The forest is situated at 5,600 feet on the top of Meghalaya Plateau. One of the heaviest rainfall areas on the earth combined with high elevation has created a classic Tropical Montane Cloud Forest. Unusual biological wealth is present in these cloud forest ecosystems due to they unique habitat, with a disproportionate amount of endemic species. Over 230 plant species are present in the 75 hectare Sacred Grove in Mawphlang, with an extraordinary variety of epiphytes including orchids, mushrooms, ferns, and climbers, as well as endangered birds and amphibians.. In the state of Meghalaya, Northeast Hill University surveys indicate that there are 10,511 hectares of sacred forests, unfortunately only 42 per cent remain in a dense, undisturbed condition. Khasi, Garo, and Jaintia communities require financial and technical support to re-establish effective conservation systems of these unique and endangered habitat. Sacred groves scattered across the Meghalaya Plateau not only provide a landscape level system of biodiversity habitat, but are spiritual centers where ancestral rituals are performed and provide cultural continuity from generation to generation.

