



PROJECT NUMBER: 12-01-06-1-03

PROJECT TITLE:

**Integrating Biodiversity Conservation and Local Economic Growth
in a Sustainable Model, Thma Bang District, Koh Kong Province, Cambodia**

April 1, 2012 – March 31, 2013

PREPARED BY:

CONSERVATION INTERNATIONAL CAMBODIA

SUBMITTED TO:

KEIDANREN NATURE CONSERVATION FUND (KNCF)

April 26, 2013

Introduction:

Conservation International - Cambodia received a grant from the Keidanren Nature Conservation Fund (KNCF) to implement a project *Integrating Biodiversity Conservation and Local Economic Growth in a Sustainable Model, Thma Bang District, Koh Kong Province, Cambodia*. This twelve-month project started in April 2012 and ended in March 2013 with the overall objective to *secure viable populations of globally threatened biodiversity in the forests and rivers of the Cardamom Mountains in Southwest Cambodia through community livelihood support to offset loss of earnings from practices and activities that are harmful to threatened biodiversity*.

CI-Cambodia has pursued conservation of natural resources in the country for over a decade. The management of the Cardamom Mountains - namely the Central Cardamom Protected Forest (CCPF) - is one of its core areas of support. While the CCPF covers an area of over 401,000 hectares, the KNCF funds were delegated to implement community engagement initiatives in the forest's southern region, inhabited by numerous IUCN Red Listed species including Asian Elephant, Siamese Crocodile, and Asian Arowana. The area's human population exceeds 3,500 inhabitants, most of whom are indigenous people from five communes (see Appendix 1, a map indicates location of the five commune, and Appendix 2, population in the communes). CI-Cambodia's adopted strategy was to engage these local communities in conservation efforts to ensure the success of the CCPF's management. In this regard, funds from KNCF were used to support community engagement activities supplemented with funds from CI's Conservation Stewards Program (CSP)/Mulago Foundation.

This report presents the activities and results of the project implementation.

Conservation agreements:

CI Cambodia used conservation agreements to engage local communities in the CCPF management process. With this approach, community members sign conservation agreements and receive direct payment or other compensation for local conservation activities. This incentivizes local populations to abandon livelihood activities which destroy and deplete the natural environment, such as poaching or clearing forest for swidden agriculture.

Conservation agreements were first introduced to the area in 2006 and are annually renegotiated between May and June, then signed in July. The negotiations, facilitated by CI's Community Engagement Team, seek to identify the achievements of the last agreement and define activities to pursue in the next round of implementation. Negotiations generally include meetings with key village representatives who help to verify accomplishments and identify potential and existing threats to the environment and community livelihoods, as well as define actions to overcome such threats. The results of these meetings are then presented to a community resource management committee and local authorities (village heads and commune councils). If committee members and local authorities wish to contribute new ideas or alter existing content, a plenary discussion is held within the community to seek a consensus.

The conservation agreement for the 2013 fiscal year (July 2012 – June 2013) contained the following agreed-upon activities: patrols, education support, repair of tilling machines, and capacity building to the community committees.

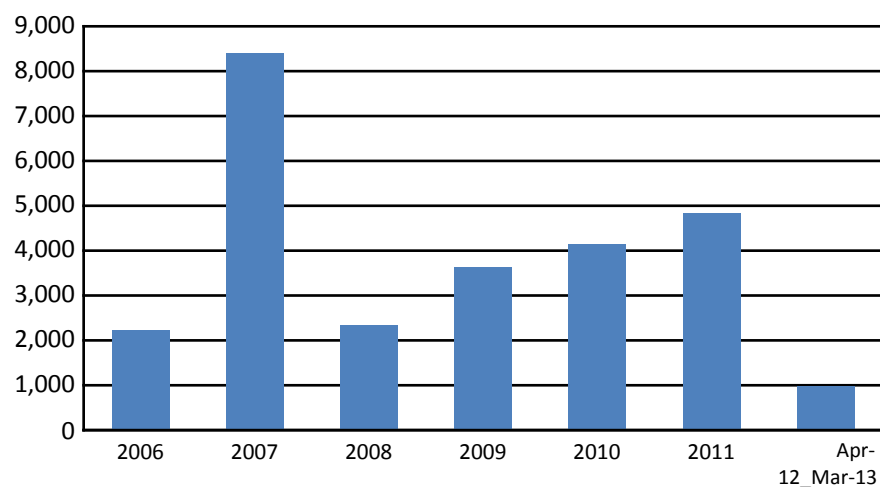
Patrols:

Community patrols are organized in each commune to reduce threats to the forest and wildlife. Patrols currently have limited capacity to effectively combat illegal activities. Patrollers can remove snares from forests but are not authorized to arrest offenders or file a complaint. In such cases, community patrols are encouraged to educate offenders and/or make a report to the Forest Administration (FA) staff.

Patrol trips occur regularly with groups of four villagers traveling for five days to designated areas, often trekking as far as 15 kilometers into the jungle. The frequency of patrol trips varies from one commune to another depending on village proximity and the determined degree of environmental threat. Prolay, the largest commune, consists of four distant villages. Each village conducts separate patrols to account for a greater coverage area. As a result, Prolay conducts four to five patrols per month while other communes conduct only two to three per month. The table below shows how many villagers participated in patrols from April 2012 to March 2013, as well as the numbers of patrols conducted, and the resulting number of snares removed.

Month	patrollers	patrollers(women)	# of patrols	Snares removed
Apr-12	44	11	11	100
May-12	38	9	11	138
Jun-12	50	19	14	0
Jul-12	44	13	11	103
Aug-12	56	14	14	71
Sep-12	56	7	14	70
Oct-12	60	2	15	0
Nov-12	60	8	15	180
Dec-12	60	13	15	150
Jan-13	48	7	12	110
Feb-13	40	3	10	12
Mar-13	52	5	13	45
Total	608	111	155	979

The table below demonstrates the annual number of snares removed from 2006 - 2012. As indicated, far fewer snares were removed from April 2012 to March 2013 (<1000) than in previous years. Many of these traps target the pangolin, a highly threatened animal that has largely disappeared from the CCPF in Cambodia and the region as a whole. Local patrollers believe that the number of snares decreased due to a reduction in the pangolin population, poacher frustration over the patrols' constant snare removal, and stricter enforcement of best practices by the FA rangers.



Dragon fish

The conservation outlook of two threatened species—Asian Arowanas (dragon fish) and the Siamese crocodile—was greatly improved by the community patrols. Dragon juveniles in Cambodia are found only in the Areng valley in Thma Doun Pao commune and were heavily harvested for commercial purposes before the implementation of the agreements. The establishment of community agreements with local inhabitants led to a drastic reduction in dragon fish collection. Village patrols opted for more frequent rounds at breeding grounds during the harvest period and now report that they no longer find locals harvesting dragon fish.

Siamese Crocodile

The Siamese crocodile is another IUCN Red Listed species in the area severely threatened by habitat loss (e.g. forest clearance). Traditional indigenous peoples believed the crocodile to be a sacred animal capable of bringing harm to one's home or family if threatened or injured. These belief structures helped to protect crocodile habitats from forest clearance and maintain local ecosystem biodiversity. But new comers have rejected these traditional beliefs in favor of forest clearance activities. Community patrols worked to educate community members and stop devastating forest clearance and the local people have anecdotally reported more frequent crocodile sightings.

Forest clearance

Conservation agreements seek to halt the expansion of upland agriculture plots to new forested areas. Since 2006, they've successfully diminished forest clearance expansion and saved hundreds of hectares of forest from slash and burn agriculture practices annually. In conjunction with the community agreements, CI-Cambodia distributes financial packages that enable villagers to purchase small tilling machines used to restore two-decade idle lowland rice farms from which hundreds of hectares of the farms have been revitalized. Without these machines hundreds of hectares of forest would have been cleared for upland rice farms.

Numbers of Hectares of low land rice paddy field have been revitalized by communities

Commune	2002	2006	2011	2012	Abandoned farms remaining
Tatai Leu	2	20	69	74	120 (Ha)
Russei Chrum	0	0	10	0	70
Thmar Doun Pao	1	2	12	17	85
Chumnoab	3	25	68	76	600
Prolay	3	8	64	69	600

Reporting on illegal activities

Community agreements seek to educate and encourage communities to report any illegal activities concerning forest and wildlife in their area. Reports are crucial to adequately combat illegal activities, particularly those threatening wildlife or associated with luxury wood trading. As a result of community reporting, FA rangers confiscated over three cubic meters of illegally traded rosewood between June and October 2012. In May 2012, community reporting helped FA rangers to halt illegal traders attempting to transport four pangolins by motorbike. Also in May 2012, the committee and chief of Tatai Leu commune reported illegal forest clearing within the commune. The report was officially signed and submitted to the local Forest Administration (FA) who then made a formal complaint to the court.



Figure 2: Rosewood confiscated by FA rangers as a result of local community reporting. Photo © CI.

Animal Observation

During patrol rounds, community patrollers recorded animal sounds and tracks to document species diversity in the area. Community Engagement Team members maintained a monthly excel spreadsheet to compile their findings, demonstrated in the table below. The results indicate the number of places in which patrollers saw, heard, or visually documented an animals' presence (with track marks or dung residue) during a one year period. For example, patrollers found evidence of Asian Elephants (visual or oral) in eight different locations. . This is the first year of data from these patrols, which will contribute to

developing a baseline understanding of the populations of these species in the area.

Animals	Spots/places
Asian Elephant	8
Banteng	1
Bear	4
Black Giant Squirrel	5
Civet	1
Dragon fish	5
Long-tailed macaque	30
Otter	8
Pangolin	1
Peacock	15
Pileated Gibbon	22
Red muntjac	22
Sambar	29
Siamese Crocodile	4
Silvered Langur	3
Snack (cobra)	1
Turtle	1
Water monitor	13
Wild dog	1
Wild Pig	257
Total	431

Documents (monthly recorded data, and maps indicating locations of each species are separately attached.

Education

Educational support is another essential component of community agreements. Many remote villages lack the financial resources and trained personnel for traditional school-based education. CI helps facilitate educational opportunities for youth and support community schools by distributing financial support packages to participating villages. The financial packages are allotted to a volunteer teacher and a villager with a higher education degree, who then act as community educators for village youth. Community agreements in 2013 granted salary support for nine teachers from seven schools.

In the Commune of Russei Chrum, financial support is also allotted to students from low-income and impoverished families. Children often live in remote locations far from community schools, decreasing their likelihood of attendance. To address the issue of school attendance, the community committee and commune council created a fund to provide impoverished children with bicycles.

Capacity building

The Community Engagement Team plays a key role in building individual and community capacity, notably through resource management and livelihood opportunities. In June 2012, the CE Team organized a four-day training in Thma Doun Pao commune on tilling machine maintenance and repair. Twenty-seven village participants from five communes attended the training, and received specialized instruction from members of the Government Office of Training and Community Development. CE teams continue to work with local villagers to design management approaches which ensure sustainability and long-term use of the machines.

Conclusion

Local engagement in natural resource management is essential for sustainable protection of forests and conservation areas. CI-Cambodia's community agreements initiative presents a unique solution to resource conservation which promotes local participation, accountability, and conscientiousness. While these agreements often create valuable behavior change among local inhabitants, communities remain unable to effectively combat the illicit activities of outsiders who deplete and extract local resources. For this, the community needs strong support from FA rangers, particularly in compiling documents for the court. National economic development projects and goals put additional pressure on local conservation initiatives. One such project is the controversial plan for hydropower development in the Areng valley, which has endangered local conservation efforts.

A recent government program to provide country-wide land titles further exacerbated forest destruction in Tatai Leu commune, where tens of hectares of new forested areas were cleared for land entitlements. Despite its recently negative impact on resource management, the government land-titling program could provide opportunities for future conservation efforts in the region. The program established boundaries between home agriculture and forest land which, if correctly implemented, could reduce forest clearance and prevent future expansion into forested areas.

In the fiscal year 2012, funds from KNCF were used to match funds from the Conservation Stewards Program (CSP)/Mulago Foundation to implement conservation agreements in the southern CCPF. Thus far, the KNCF is the only organization funding conservation agreements for the 2013 fiscal year. CI-Cambodia is currently waiting on a proposal submitted to the U.S. Fish and Wildlife Service, which could effectively cover the cost of community patrols.

While KNCF funds will still be used for conservation agreements, they will not be allocated to implement community patrols. The main project objective is to encourage communities not to expand upland agriculture plots to forest areas. Recent land titles given to the local inhabitants by a government land-titling program will serve as a key indicator of success.

Appendix 1: CCPF and the location of the five communes supported by the KNCF

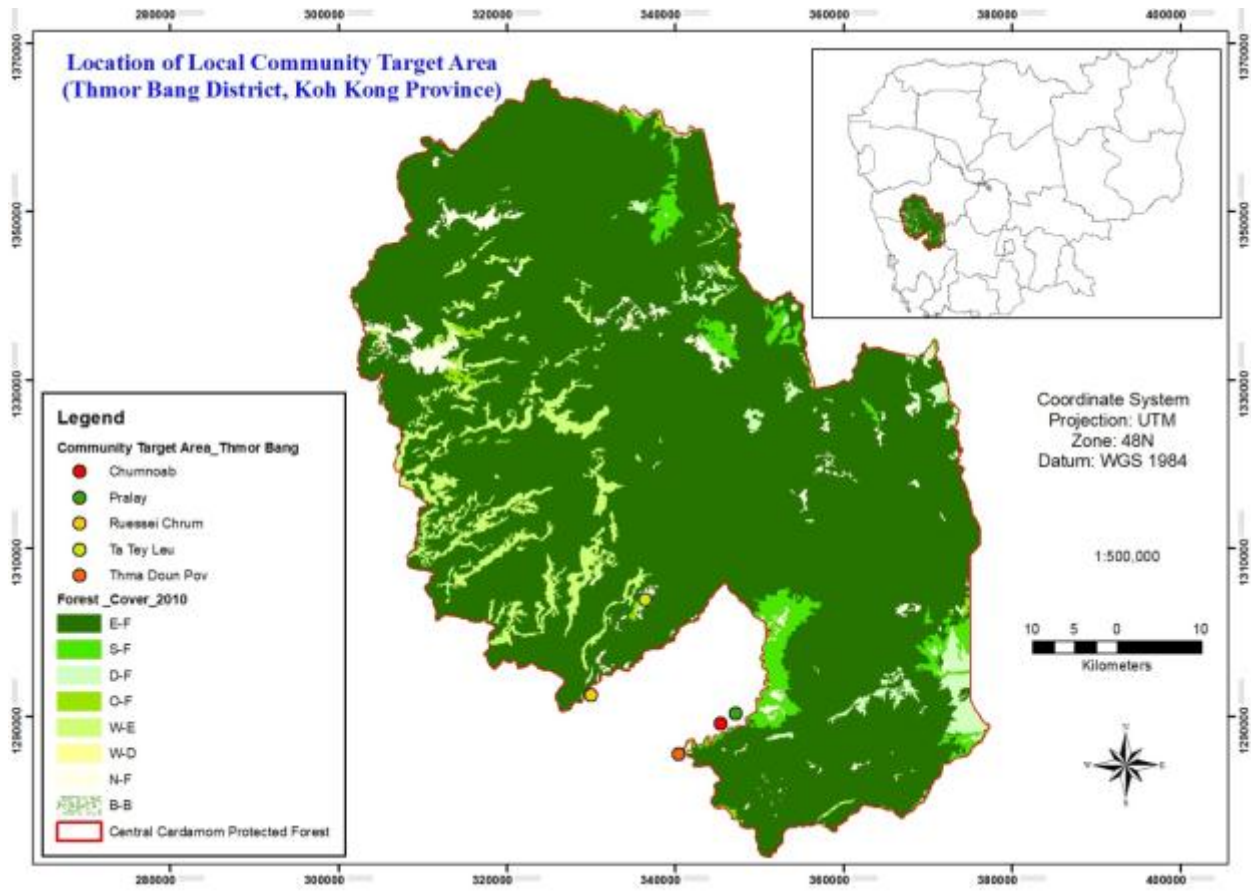


Figure 7: CCPF and the location of the five communes supported by the KNCF fund (April 2012 - March 2013)

Appendix 2: Population in the five communes

Commune Name	# of Household
Chumnoab	76
Thma Doun Pao	113
Prolay	182
Tatai Leu	135
Russei Chrum	272
Total	778