

World Agroforestry Centre TRANSFORMING LIVES AND LANDSCAPES

### IN PRO-POOF ENVIRONMENTAL SERVICES

# **Bundling of payments/rewards for environmental services** A viable incentive system under development in the uplands of Northern Vietnam

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Mechanisms for Payments for Environmental Services (PES) and Reducing Emission from Deforestation and Degradation (REDD) are developing in the world in general and in Vietnam in particular. It is clear in Vietnam that single payments for water as an environmental service from forest, or for forest carbon through a REDD mechanism, gives forest owners insufficient income, thereby limiting livelihood improvements and forest protection.

A viable incentive system that contains rewards, payments and livelihood options—'bundling' payments for ecosystem services or 'co-investment for PES'—being developed in Ba Be district, Bac Kan province, is an option to this limitation (Photo 1). Bac Kan was chosen owing to it 40% poverty rate, 55% forest cover and complex landscape.

### 'Co-investment' is a suitable mechanism

Three environmental services were defined through participatory landscape analysis: water, landscape beauty and carbon. Stakeholders (district, commune and village) perceived that forest cover in the upstream area of Leng River watershed (Photo 2) relates closely to water availability in Ba Be Lake. Sediment and alluvial soil is also narrowing Ba Be lake near Pak Ngoi village (Nam Mau commune), causing drought in the dry season and high-frequency flooding in the rainy season. The clear links (water and landscape beauty) between upstream environmental services providers and downstream users is being used for investment negotiation. Thirty thousand paying visitors come to Ba Be National Park annually. Part of the entrance fee and some of the services provided to tourists could be used for protecting upstream forest and encouraging agroforestry. Improving eco-tourism in Ba Be lake can also bring more tourists to the area. Thereafter, rewarding upstream farmers for their environmental services in the Leng River catchment could be sustainable (Box 1).



Photo 1. Ba Be National Park, surrounding Ba Be Lake. Core area of 10 048 ha, buffer zone of 34 702 ha. Land conflict between the park management and local, ethnic, shifting cultivators living in the buffer zone is a serious problem, having a negative influence on water quality and quantity in the lake and also on landscape beauty



**Box 1. Developing** environmental services rewards mechanisms in Leo Keo village,



## Quan Khe commune

The World Agroforestry Centre Vietnam and Ba Be National Park are collaborating with the people of Leo Keo village in Bac Kan province to develop a common understanding of environmental services issues. Leo Keo village is located in the buffer zone of Ba Be National Park. Together we will incorporate rewards for environmental services into community planning and prepare a contract with local people to reward their expansion of bamboobased agroforestry on shifting cultivation land. Part of this process includes assisting market development for bamboo handicrafts (Photo 3) . Carbon storage by two agroforestry systems including home and bamboo-based forest gardens— is being assessed. This will enable a comparison of carbon storage between shifting cultivation, forest and agroforestry systems. The findings will be used to negotiate rewards for carbon storage provided by agroforestry farmers. The World Agroforestry Centre, as intermediary, is exploring various potential 'coinvestment' options with the village, such as the community fund from IFAD for community development, Direct Aid from the Australian

**Photo 3.** Discussion between staff of IFAD project, Ba Be National Park, World Agroforestry Centre and Leo Keo farmers with the Australian Ambassador on the possibility of obtaining Australian aid to assist market development for bamboo handicrafts and investment from the IFAD project in eco-tourism at Ba Be Lake



### How to expand the bundling approach

The World Agroforestry Centre Vietnam and partners such as the People, Resources and Conservation Foundation will gather successful conservation case studies in the uplands of northern Vietnam, particularly in Bac Kan province.

Embassy, and Ba Be National Park through ecotourism at Ba Be Lake (Photo 3). The assumption is that market links for bamboo is through sale of handicrafts to eco-tourists at Ba Be Lake. Thereafter, bamboo-based agroforestry, that replaces shifting cultivation, can help to improve the livelihoods of local farmers.

**Photo 4.** Rewards for environmental services should bring direct benefits to local people, particularly children.

The case studies will serve as the starting point for the development of an initial system for forest protection incorporating rewards/payments for carbon environmental services.

> Several recommendations about how to build on existing successful models will be produced.

• Links between providers and sellers of carbon environmental services

will also be explored to bring more food and schooling to local children (Photo 4).

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