







#### Introduction

In the northwestern part of Vietnam's Nghe An province lies the 75,000 hectare Pu Hoat Nature Reserve, which was established in 2013. The forested upland reserve is rich in biodiversity, providing habitats for a broad and diverse range of animals and plants. Despite the reserve's protected area status, unsustainable exploitation of natural resources due to lack of law enforcement is threatening wildlife populations and leading to loss and degradation of the forest areas.

The USAID-funded Vietnam Forests and Deltas Program is working in close collaboration with the protected area staff to implement models and tools for improved management and protection of this new reserve. As a first step, field surveys and community mapping exercises were undertaken in order to gain a thorough understanding of the biodiversity values of the area, analyze threats, and identify community forest use patterns. The outcomes allowed to define conservation priorities and design tailored interventions.

# Assessment of biodiversity, threats and community forest use

To design effective interventions for safeguarding the integrity of the Pu Hoat Nature Reserve, it is important to understand the current situation and key issues. Field surveys and community meetings were conducted in order to obtain data on biodiversity, threats and community forest use. Based on the findings, recommendations were made for improving forest management and protection.

## Biodiversity flagship species survey

To assess the reserve's conservation significance, a field survey was conducted to determine the occurrence of a number of easily identifiable flagship species – rare, threatened or endemic species with high conservation importance. The findings indicate the existence of relatively large populations of primates, bears, deer and other key species. The survey provides insight in which biodiversity hotspots should be prioritized for regular species monitoring and forms the basis for developing conservation action plans.

#### Community forest use & threats

Community meetings were organized in 10 villages to gain insight in community forest use patterns and identify key threats to wildlife and forest protection. Through participatory mapping techniques, group discussions and interviews, data was collected from 254 individuals. The results show that forest products are often collected beyond the community forests due unclear park boundaries. Key threats identified include hunting and trapping animals, illegal timber logging, unsustainable collection of non-timber forest products, and swidden agriculture.

These findings highlight the urgent need to strengthen conservation efforts, notably through improving law enforcement, establishing community-based conservation models, and creating alternative livelihood options.











### Capacity building of forest rangers

Based on the identified issues and conservation needs, trainings were developed for the reserve staff. A total of 25 forest rangers received formal and on-the-job training on a broad range of topics including biodiversity conservation, protected area management, engaging communities, interview methods, participatory mapping, flagship species and threat monitoring, and forest fire control. A key part of the training program consisted of practical learning sessions on the use of GPS and other tablet-based tools in monitoring activities. These tools can strongly support conservation efforts as they allow for more efficient and accurate data collection and analysis. The trainings also included a study tour to three protected areas in Hue and Quang Binh provinces, in order to facilitate knowledge exchange.

"The Pu Hoat Nature Reserve Management Board has noticed a remarkable improvement in the capacity of officials who received training through the program, notably in GIS mapping and biodiversity monitoring. Trained staff are applying their new knowledge and skills in their day-to-day work which helps to improve natural resource management and enhance forest protection."

 Mr. Nguyen Thanh Chung - official from Pu Hoat Nature Reserve

### Involving communities in conservation

Local communities can play a key role in conservation efforts, as they often contribute to the overexploitation of forest resources, while at the same time being dependent on the sustainable management of these resources for their livelihoods. To ensure all communities understand their rights and responsibilities it is important that the

boundaries of the reserve and of community lands are well understood. In six communes, the USAID Vietnam Forests and Deltas Program worked with the reserve staff and the village leaders to set up and implement participatory boundary mapping exercises. Using maps and GPS devices, villagers set out to demarcate the boundaries of their lands, which allowed them to detect problem areas and resolve any disputes.

Once the boundaries were clear, the villagers received training on where forest products can and cannot be harvested, how to harvest these in a sustainable way, and how to report violations of forest law. In villages in the buffer zones, alternative livelihood options are being introduced, notably home gardens and grass planting for livestock. Plans are underway for implementing community based forest management schemes, which will reward households financially for protecting forest areas. The program will continue to support community engagement in conservation activities in order to achieve improved forest quality while enhancing the wellbeing of local population groups.

## Interprovincial cooperation for impacts at scale

Key sustainability issues of illegal logging and wildlife hunting are not limited to Pu Hoat Nature Reserve, but go beyond the park boundaries. Effectively addressing these threats requires combining multiple sources of information on biodiversity and forest cover in surrounding forest areas and developing joint management structures. Of particular importance is the neighboring Xuan Lien Nature Reserve in Thanh Hoa province. To increase collaboration between the two reserves, the USAID Vietnam Forests and Deltas Program facilitated an interprovincial agreement between Nghe An and Thanh Hoa which was approved in September 2015. This agreement represents a key step towards addressing transboundary issues and achieving sustainable landscapes.