

BUILDING A COMMUNITY-BASED CONSERVATION,
MANAGEMENT AND SUSTAINABLE DEVELOPMENT MODEL

OF THE BON BO TREE

CONTRIBUTING OF BIODIVERSITY CONSERVATION

in Que Phong district, Nghe An province



A community-based conservation, management and sustainable development model of the Bon Bo (ALPINIA BLEPHAROCALYX K. SCHUM) tree contributing to of biodiversity conservation in Que Phong district, Nghe An province.

Project number: VNM/SGP/OP5/Y4/STAR/2014/14

Location: Nam Nhoong and Chau Thon communes, Que Phong district, Nghe An province

Duration: 10 Dec. 2014 – 28 Feb. 2017

Implementation agency: Nghe An Center for Consultation on Forestry Development

Project Budget: USD 48,000 – **contribution from Local community:** USD 26,748

Project background and objectives

Que Phong is geographically located from 19°26' to 20° north latitude and from 104°30' to 105°10' east longitude. It is a mountainous district northwest of Nghe An province which shares a border that is 73.10 km long with Sam To – Hua Phan District in Lao People's Democratic Republic in the west. It also borders Thanh Hoa province in the north and Quy Chau and Tuong Duong districts of Nghe An province in the east and the south, respectively. The district consists of 155,061 hectares of agricultural land, which is 82.01% of the total natural area of 189,086 ha. According to forest inventory data published in 2016, the forested area of the district is 145,004 ha. Que Phong is one of the four districts with the largest forest area and forest cover in Nghe An province. The Pu Hoat Nature Reserve, with 85,770 ha, is located in the district.

The Que Phong district has 13 communes and one town with a population of 63,124 people, 90% of which is the ethnic minority (Thai, Kho Mu, H'Mong, and Tho). The rate of poor households in the district is high, 44.39% in 2015. 2,200 households in the district were relocated within the district due to the Hua Na Hydropower Project (2010–2012), but their lives are still difficult due to the lack of land for agricultural and forestry. Que Phong is an agricultural district, growing at an annual rate of 4–6% per year. Que Phong district is experiencing slow economic development compared to the whole province. For example: product value per ha of land for cultivation in Que

Phong is VND 41.28 million compared to the provincial average of VND 69.51 million (59.4%). Because of this, people in this district greatly depend on forests, whose resources are harmed by deteriorating biodiversity. The project selected two communes Nam Nhoong and Chau Tho to carry out project activities.

	Nam Nhoong commune	Chau Thon commune
Nat. Area (ha)	4,109	6,205
Forestry area (ha)	3,083	5,068
Household (No.)	514	823
Population(Person)	2,337	3,634
Ethnic minority	Thai and Kho Mu (100%)	Thai and Kho Mu (97%)
Poor HH rate (%)	86.22	65.41

Table 1: Brief socio-economic data of the project location

In the natural forest of Nam Nhoong and Chau Thon communes there are a lot of Bon Bo trees, a NTFP species that protects the soil, water sources, and the environment. Bon Bo seed is a source of high value export medicine. On average, each hectare of Bon Bo earns an annual income of VND 10–20 million. The Bon Bo is also tolerant of shade and moisture and grows well under the secondary forest canopy and in poor natural forest. Therefore, it plays a great role in indirectly limiting the illegal exploitation of natural forests and directly enriches forests where Bon Bo is managed, preserved, and exploited sustainably. The Bon Bo trees height is 1.5–2.5m and its fruit has a size of 3 × 2.5cm. The Bon Bo tree blooms from April to June and its fruits develop from July to December.

In order to overcome the unsustainable situation of exploiting natural forests, limit forest degradation, and the deforestation and spontaneous exploitation of Bon Bo fruits in the community, the Nghe An Center for Consultation on Forestry Development created the above mentioned project funded by UNDP-GEF SGP in Viet Nam. This project also aimed to contribute to the conservation and development of Bon Bo trees associated with natural forest management and protection towards sustainable development, job creation, and income generation for ethnic minorities in Que Phong district.



LONG-TERM OBJECTIVE

The project has the following long-term objective: Knowledge and capacity of farmers and ethnic minority women in Nghe An province improved to protect natural resources and forest environment, conserve biodiversity on the basis of economic development, poverty reduction from Bon Bo benefits.

SPECIFIC OBJECTIVES

- **Objective 1:** Two successful community-based models of conservation, development, and sustainable use of Bon Bo tree species developed: (i) 14 hectares of new tree planting model, and (ii) 40 hectares of forest enriching model.
- **Objective 2:** Knowledge and capacity of ethnic minority women, farmers in Que Phong upland district, Nghe An province to protect and develop Bon Bo tree species improved and was applied to real life for economic development, job creation, income increase, poverty reduction and forest protection, biodiversity conservation and sustainable environmental protection.

2. Project Activities



- **Developing models of conservation, development, and sustainable use of Bon Bo tree species.** The participants in the models were involved in all project steps, including training, selection of household participation, and selection of the model types; they participated in tree planting, tending and protecting, accepting test and payment, benefiting the model results, and pledged to contribute Bon Bo seeds to the Bon Bo development fund of the community according to regulations.
- **Raising awareness and building capacity for communities to conserve and develop Bon Bo trees through training courses and workshops.** The project organized two training courses on planting techniques, management, conservation, and development of Bon Bo trees for 52 households participating in the model in Nam Nhoong and Chau Thon communes, and one training course for 73 participants on being leaders in the Commune Women's Unions and the Commune Farmers' Associations, extension workers, forestry staff, and staff in charge of poverty alleviation (30A program) of 13 communes in the district; representatives of the District Women's Union, the District Farmers' Association, the Agriculture and Rural Development Division, the Agricultural and Forestry Extension Station, and Forest Protection Unit of Que Phong District, and Pu Hoat Nature Reserve. A district workshop on conservation and development of Bon Bo trees for Que Phong district was successfully held on 17/11/2016 in Nam Nhoong commune with 82 participants.

The project produced 21 news articles on Bon Bo tree conservation and development which were broadcasted on different radio and TV stations in the local communes, district, and Nghe An province. They also appeared in the local newspapers and web sites of Nghe An Agriculture and Rural Development Services, Western Nghe An Biosphere Reserve, Provincial Extension Center, Nghe An Forest Protection and Development Fund and Que

* Nguồn ảnh: <http://www.baonghean.vn/>

Phong District People's Committee. In addition, two panos are displayed in the commune centers of Chau Thon and Nam Nhoong communes, 1,000 calendars were delivered to communities providing information on Bon Bo development, and 2,000 booklets on Bon Bo conservation and development were prepared and disseminated to 14 communes, towns, and agencies in the district.

- **Piloting a Bon Bo Conservation and Development Fund for the communities.** With the project's initial support of VND 160 million, a revolving fund was established and managed by a Management Board led by the Chairman of the Commune Farmers' Association. The Management Board has developed and implemented regulations and has also organized households to borrow from the revolving fund to develop Bon Bo tree.
- **A local cooperative group** has been established to produce and sell products made from Bon Bo seeds in Nam Nhoong commune, Que Phong district, and to create a premise for the development of a cooperative model among ethnic minority people;



Classification of Bonbo seed before sale



Selling Bonbo seeds to the wholesaler



Community meeting in Na village Nam Nhoong commune



Community meeting in Na village Nam Nhoong commune

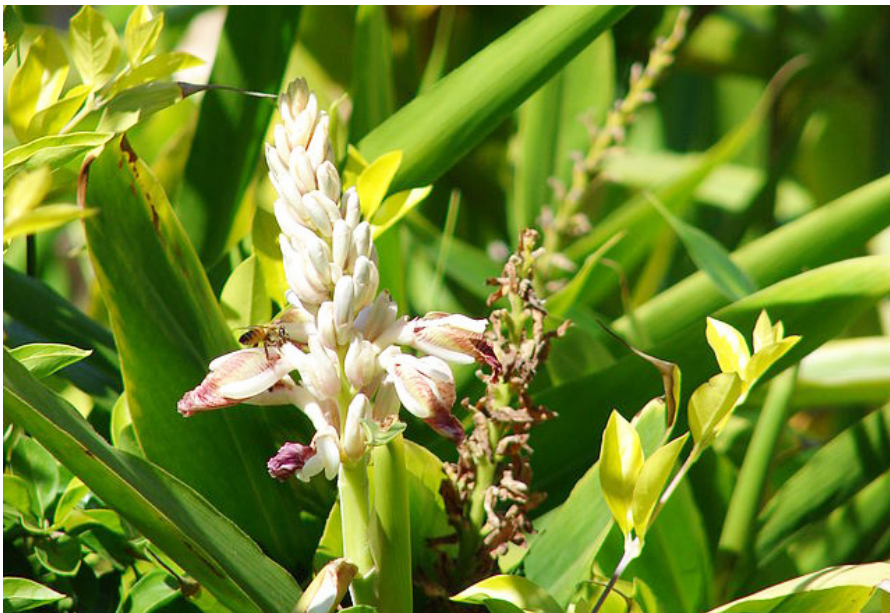


Display at UNDP Fair & Share on Green Initiative 1/9/2016

3. Highlight Results

- Developed 14 hectares of new tree planting model (800 tree/ha) and 40 hectares of forest enriching model (200 trees/ha). In the two communes, there are five villages with 52 ethnic minority households participating in the model development. By the end of the project, all households achieved 100% the targets in terms of plantation area, number of tree planted, and the model quality. Moreover, Nam Nhoong commune has 28 households participating in the model, in which 16 households have larger plantation area than the allocated model area. There are 24 households participating in the model in Chau Thon Commune, in which 12 households grow more than the allocated model area.
- Through training, the trainees learned basic knowledge of plantation, management, protection, conservation, care, development, exploitation, and processing of Bon Bo seeds to disseminate, advocate, mobilize, organize, and guide their members and staff in their organizations and units participating in the project activities. By participating in the project they gained knowledge and experience to improve their work in forest protection and development, poverty alleviation.

- The Bon Bo tree conservation and development fund is another innovative approach in the project. The fund has helped shape new business thinking among ethnic minorities including: borrowing funds in order to finance initial production and then paying back the loan with profits earned from production, overcoming and gradually eliminating the mentality of waiting for grants and subsidies from the Government and non-government programs and projects, and doing business based on calculating economic efficiency. In 2016, 32 households borrowed money from the fund and have planted 32 hectares of Bon Bo (800 plants/ha), which is 100% checked and accepted jointly by the project and the Commune People's Committee. Group activities of the borrowers and their interest payments have been carried out by households as stipulated. The ownership of the fund was transferred to the Farmers' Associations of the two communes after the completion of the project.
- The project established a local cooperative group with 24 members to produce and consume Bon Bo products in Nam Nhoong commune to help its members share information, improve knowledge and skills of plantation, management, protection and processing and selling Bon Bo seeds. They also help each other in forest patrolling and protection. The cooperative group was established in Nam Nhoong commune and started its operation since early 2017.



4. The environmental impacts

Bon Bo trees have grown well if its surrounding forest environment is well protected. On the other hand, the Bon Bo trees caring process creates a good opportunity for other forest trees to grow better. Both of the Bon Bo sites have been demonstrated in the poor natural forest which has not yet produced timber volumes. After a period of time this forest will evolve into better forest. The mixed planting of Bon Bo trees will increase the tree species and forest structure. Many kinds of animals in the soil (e.g worms, crickets, etc.) and wild animals can return. Income from Bon Bo and mixed NTFPs has helped ethnic minority households to improve their lives, reduced conversion of forest land to agricultural land, limited deforestation, helped conserve biodiversity, and contributed to sustainable ecosystem protection.



5. The social benefits:

The project contributes to the poverty alleviation efforts of the local people and authorities. Investing in Bon Bo does not require much capital, such as the development of other agricultural crops (e.g Lemon, Sugarcane, Rubber, etc.), and hence is very suitable for poor ethnic minority people. The project has established the Bon Bo production and consumption cooperative group in Nam Nhoong commune to help its members share information and improve knowledge and skills such as: planting, managing, protecting, exploiting, and processing Bon Bo seeds, as well as procuring Bon Bo seeds, providing material inputs to members to increase business efficiency, and innovating production models in agriculture and forestry production.

6. Economic and policy impacts:

- **For mountainous people in Que Phong district:** starting from the Bon Bo model with only 52 participating households supported by the project, and 32 households in the model that the project sources provided loans, the number of participating households is now 186. The total area of protected, specifically grown and managed Bon Bo trees has increased to 175.1 hectares from almost zero.

- **Local people income: by planting, protecting and exploiting the Bon Bo trees**, in 2016, each local household can make at least 2–3 million Dong; the highest income was 25–30 million Dong and the average was 7–8 million Dong per household. In 2016, Nam Nhoong commune harvested 28.57 tons of dried seeds of Bon Bo, equal to an 1 billion Dong income.
- **For Chau Thon and Nam Nhoong communes** – the project implementation area, the development of the Bon Bo tree associated with forest protection was included in the document of the Communist Party Congress at the commune level of the term 2016–2020.
- **For the People’s Committee of Que Phong:** with the support and impact of the project, 2 decisions related to Bon Bo have been issued. These are Decision No. 204 / QD-UBND dated 11/4/2016 approving the Project for Conservation and Development of Medicinal Plants of high economic value for the period 2016–2020 with 3 main tree species including Bon Bo, Dang Sam and Hoa Vang Tea, in which Bon Bo is the main plant which is developed and multiplied in 7 communes: Chau Thon, Nam Nhoong, Tri Le, Nam Prat, Muong Nien, Chau Kim, Tien Phong with the total area of 235 hectares. Decision No. 474 / QD-UBND dated 29/6/2016 on the promulgation of technical procedures for Bon Bo conservation and development in Que Phong district to direct localities and agencies to implement.
- **The provincial PPC of Nghe An** has issued Decision 87/2014 / QD-UBND dated November 17, 2014, which promulgated a number of policies to support agricultural and rural development in Nghe An province, including the list of models of Bon Bo trees but have not yet allocated funding for implementation. Under the impact of the project, in 2016, 200 million Dong has been provided for the People’s Committee of Que Phong to continue replicating the Bon Bo conservation and development model associated with forest protection.

Learning from the project’s success, the Vietnam Forest and Delta (VFD) Project (funded by USAID) has surveyed and applied field training to **286 households in five villages** of Nam Giai commune in 2016; continued to expand to **800 households in twenty five villages, seven communes of three districts of Que Phong, Tuong Duong, Ky Son** on the development of Bon Bo trees to create livelihoods associated with forest protection in 2017.

7. Project sustainability:

From the project practical activities and based on the project proposal the People’s District Committee of Que Phong has issued Decision No. 474/QD-UBND dated 29/6/2016 on the promulgation of technical procedures for conservation and sustainable development of Bon Bo trees in Que Phong district. The District People’s Committee has also issued Decision No. 204/QD-UBND dated 11/4/2016 approving a project on conservation and development of medicinal plants of high economic value, where Bon Bo is a major tree species, for the period 2016–2020.

The project signed a cooperation minutes with the Vietnam Forestry and Delta (VFD) Project Management Unit in Nghe An Province, supported the VFD Project in Nghe An Province to conduct technical training on Bon Bo conservation and planting techniques for 286 households in five villages of Que Phong district, shared experiences, and supported each other.





NGHE AN CENTER FOR CONSULTATION ON FORESTRY DEVELOPMENT

No. 152 Ha Huy Tap street, Vinh city, Nghe An province

Phone: 090 465 7347 / +03 8385 1411

Email: thanhnamnna@gmail.com

Contact person: Mr Nguyen Thanh Nham, Director

GLOBAL ENVIRONMENT FACILITY - SMALL GRANTS PROGRAMME (SGP)

304 Kim Ma street, Ba Dinh, Hanoi, Vietnam

Phone: +84 4 385 00150 | Email: gef-sgp-vietnam@undp.org

Website: www.vn.undp.org | www.sgp.undp.org