

## Utilization of Bamboo Resources in Sustainable Way: Case study on bitter bamboo shoots in Ban Nam Pheng, Na Mo District, Oudomxay Province



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## 1. Introduction

Bamboo is a product of importance to village populations throughout Laos. Villagers collect bamboo for use as a building material, and its shoots for consumption and selling. House in rural areas are often mainly constructed using bamboo, with bamboo roofs, wall partitions, paneling, mats, ladders, blinds and furniture. Bamboo is also used in the production certain fishing tools, paper and is sometimes used to make musical instruments such as the flute, angklang, and khene. Recognizing the importance of this Non-Timber Forest Products (NTFPs ), the IUCN has worked with villagers in Nam Pheng village to develop a model for its sustainable harvesting and better marketing.

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## 2. Bitter bamboo, an off-season bamboo shoot-production species

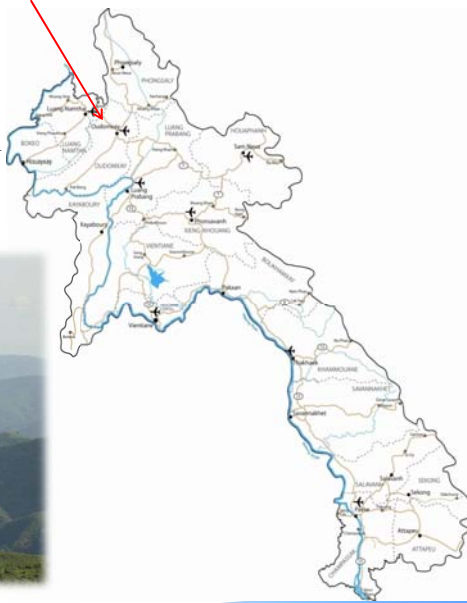
Taxonomic studies on bamboo species in Lao PDR have been conducted since 1992. So far, a total of 52 species from 15 genera have been documented. The mountainous northern part of Laos is one of the richest areas for bamboo. Surveys show it holds at least 50 species, 30 of which differ from those in central and southern Laos. Some of these species are bitter bamboo, Bitter bamboo belong to the group of bamboos with a monopodial or leptomorph rhizome system. The young reddish-bark shoots are located underground, growing of mature root stock. The shoots gain bitterness with age, hence their name “ bitter bamboo shoots”. Bitter bamboo found in the North of Laos, in evergreen forests, some 400 m above sea level.

One of the most important species is Mai khom (*Indosasa cinica*) or charchang. This specie is important not only for eating, but also in the production of handicrafts and as a building material.

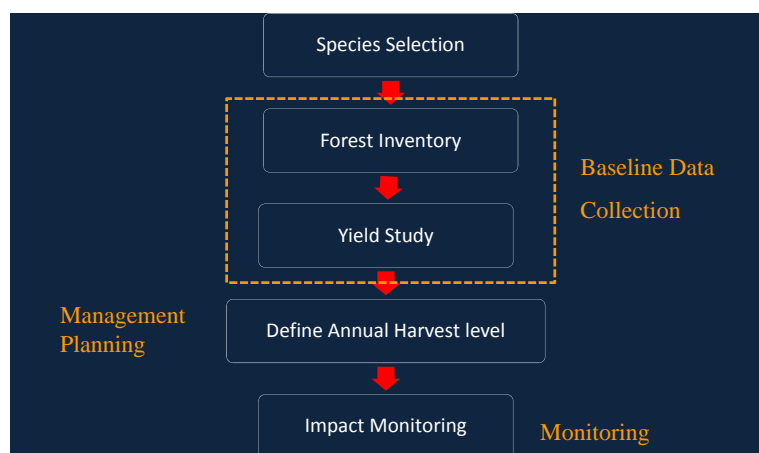
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### 3. Ban Nam Pheng

Ban Nam Pheng was established in 1973 far a way from Xay town to the North 70 Km. Consist of 43 households with population 244 people. Most of them are employed in upland rice cultivation.



### 4. Managing for Sustainable Resource Use



## 5. Socio-economic effects

### NTFPs situation in 1996:

- ✓ Villagers are poor, sell NTFPs to buy food
- ✓ Villagers competed with each other selling shoots by bundles, not per kg
- ✓ Poor prices from traders

### NTFPs situation in 2006:

- ✓ Food security achieved
- ✓ Income increased 5 fold
- ✓ Diversified livelihoods
- ✓ Village generates its own funds for development



## 6. interventions and impacts in Nam Pheng

### IUCN Project Interventions

**Village rice banks:** food security, less need to sell NTFPs cheaply

**Forest land allocation:** secure access, better harvesting rules and control

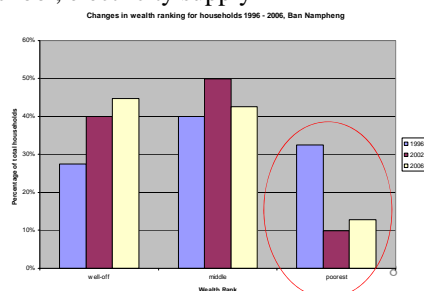
**Marketing groups:** selling in group, by weight, not by bundle

**Drinking water supplies:** Reduced workload, better health, more time to collect NTFPs

**Women's savings group:** Providing credit for new enterprises, more collaboration within village

### Impacts:

- *big increase in cash income* (income multiplied by 5, 10% put aside for village development)
- food security reduced need to over-sell NTFPs or sell cheaply
- Sustainable Forest Management
- Various wealth indicators: clean water, school, electricity supply



## 7. Potentials and limits for scaling-up

### 1. NTFPs not a poverty “trap” but an “escape ladder”!

- Increased cash income from NTFP s sales holds over time
- Number of poor households was reduced over years
- Food security achieved, health and education improved
- NTFPs funds are used to fund new small enterprises

### 2. Side-ways and up-ways spread from pilot sites

- Ban Nam Pheng is very well known, institutional impacts:
- NTFPs have become prominent in Government Policy
- NTFPs network of 50 organizations replicate the model

### 3. How to scale up from here? Limits remaining:

- Poor leadership and organization skills at village level
- Lack of providers of training and other services needed for successful group building
- It is not always easy to identify the “golden” NTFPs marketing solution...
- NTFPs-based SME has to compete with “Big business” (rubber, eucalyptus plantations)

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## 8. Conclusion

✓ The village group has shown itself to be capable of improving income by better organization of marketing. The evidence suggests that management of collecting NTFPs for sale can reap greater financial benefits than agricultural production of rice. Which is currently the main income source for many of the rural people in Laos.

✓ NTFPs, in this case bitter bamboo shown to be a good alternative to shifting cultivation. Through their collection, the need for slash and burn diminishes and can perhaps eventually disappear altogether.

✓ A major advantage of sustainable NTFPs development, and particularly of bitter bamboo, as an alternative to shifting cultivation.

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## 8. Conclusion (Cont.)

✓ The success of the marketing group has made villagers more interested in forest management. Villagers are now keen to try and establish a sustainable harvesting system through forest management and harvesting experiments.

✓ The introduction of a development fund has been a very positive step and has led to the creation of a pool of money which is being used to develop various community facilities and amenities, and to provide user group members with loans.

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**Thank you**

