



# **Status of Village Seed Source Management**

**in Cambodia**

# First site: Krang Chek village, Koh Kong province

Community forestry agreement with the Forestry Administration and Forest Concession Company.

An organisational structure is in place

Community Forestry Committee consisting of 10 members.

AFSC collaboration gaining an additional benefit to the ongoing community development activities.

Inventoried within the community forest and the data is in processing.

Potential users have been identified, and can be individually targeted.

Potential seed stands were identified

Participatory land use planning exercise conducted. Potential seed sources within the community forest mapped

The potential seed sources were visited and assessed, 10 species identified

Promotional leaflets have been developed

Training: a short time training in selection of mother trees, seed collection, and processing

Next plan:

Marking mother trees

Product: Assessments of seed availability from each seed source (seed catalogue)

Training on survey of seed phenology, estimation of product, seed collection and processing for selected seed collector and local Forestry Administration staff

Management for the identified stands will be included within the overall community forestry management plan.



## **Second site: Svay Leu commune, Siem Reap province**

A seed stand of four priority species was established

Meeting with District Head, Commune Council, military

Discussion with Contonment Dep. Head and the provincial representative of FAO on the possibility of establishment of community forestry around the seed source.

The ideas was supported and source of funding was identified (FAO, FA, CTSP)

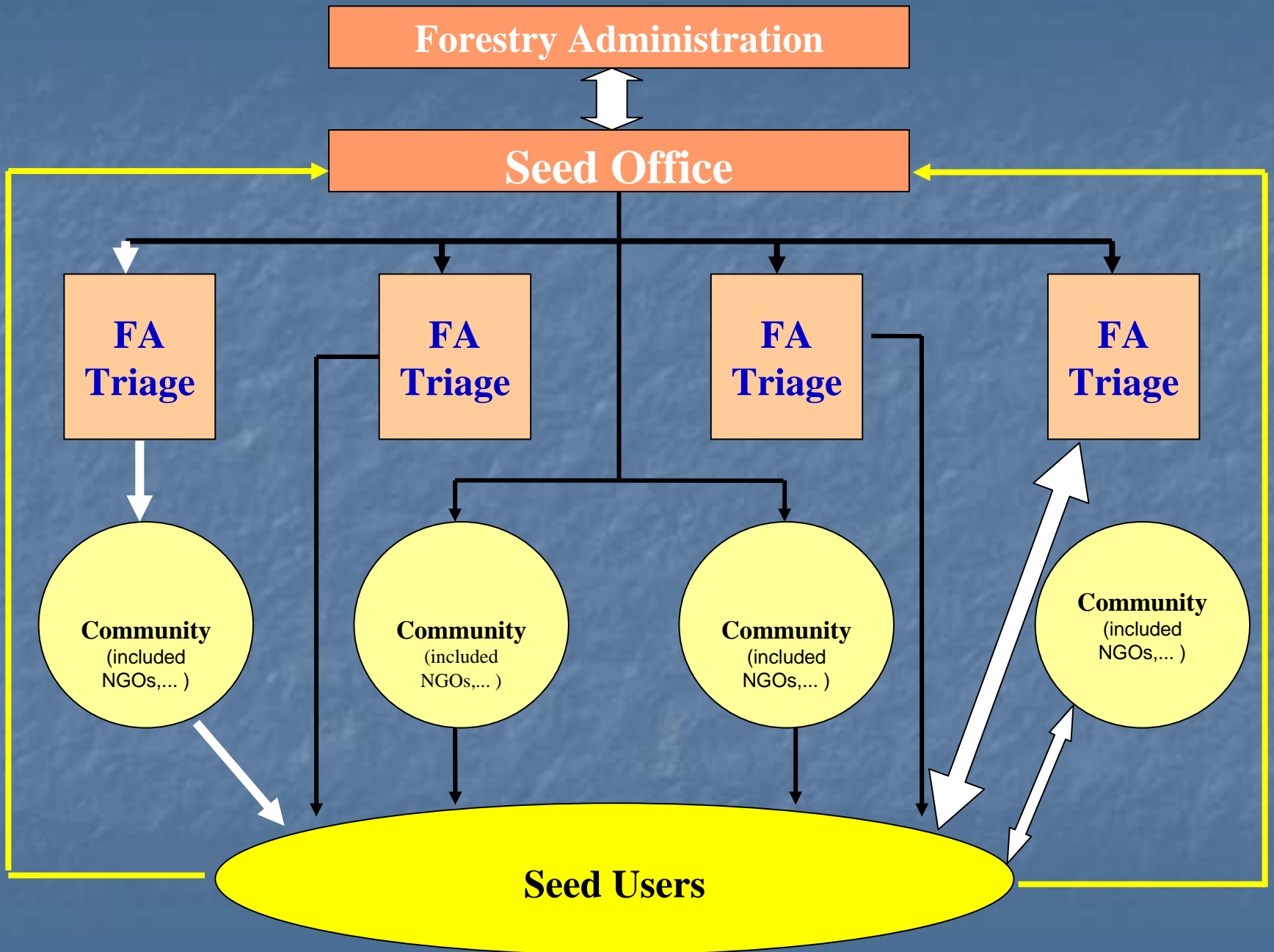
A plan of activities for est. of community forest was approved by the funding agencies and a team within the Contonment is ready for the field work

The work was started late October & plan to finish in January 2005

A management plan for the community forestry will be produced

One CTSP staff involve with the field works from the beginning







# Strengths

- income generation through seed sales
- benefits to the poor
- villagers' interest in seed collection and sale
- communities well placed to manage seed sources close to their villages
- villager interest in conserving species important to them
- selected villagers trained in seed collection and storage
- supported by the Forest Gene Conservation Strategy, Statement on Forest Policy and Forest Law
- FA/ CTSP facilitation

# Weaknesses

- weak local organisational structures
- potential income for villagers is extremely limited
- lack of knowledge of marketing, and potential seed demand
- lack of quality controls on seeds collected and distributed
- trade



# Opportunities

- expected increase in demand for seeds due to government priorities for reforestation
- integration of seed source management and seed collection into ongoing community development activities
- potential future seed sources within community forests



# Threats

- lack of demand for quality seed
- lack of willingness to pay for quality seed
- unclear benefit sharing and unequal benefit distribution within the community leading to conflict
- poor seed procurement planning



# Estimated Seed Prices

No	Species	Price
1.	<i>Afzelia xylocarpa</i>	5
2.	<i>Aquilaria crassna</i>	130
3.	<i>Azadirachta indica</i>	10
4.	<i>Dalbergia bariensis</i>	75
5.	<i>Dalbergia cochinchinensis</i>	120
6.	<i>Dipterocarpus alatus</i>	20
7.	<i>Dipterocarpus costatus</i>	20
8.	<i>Fagraea fragrans</i>	200
9.	<i>Hopea odorata</i> and <i>H. pierrei</i>	25
10.	<i>Pinus merkusii</i>	100
11.	<i>Pterocarpus macrocarpus</i>	50
12.	<i>Shorea roxburghiana</i>	20
13.	<i>Sterculia lychnophora</i>	15
14.	<i>Tarrietia javanica</i>	15

# Promotion

- In the absence of a marketing system for tree seed, the Seed Office will assume a role in advertising. It will maintain a register of certified seed sources, and a catalogue of species, locations, availability, and price. Advertising leaflets will be developed for each Village Seed System for distribution and promotion to potential users, which will enable them to procure seed directly from the source.
- The market for quality seed is fairly small, **potential users have been identified, and can be individually targeted**. An advertising campaign would be beneficial in raising awareness of the importance of using quality seed. The Seed Office has conducted such campaigns in the past through TV spots aimed towards farmers, and this experience can be tapped in aiming campaigns towards larger scale seed users.

# Product

- Assessments of seed availability from each seed source
- Potential revenue of a given stand can be estimated, but difficulties arise surrounding the question of the long-term sustainability of that revenue, which in itself is dependent on the responses of seed source managers to price changes, including over-harvesting, or cultivation and domestication (Neumann 2000). In the latter case, the issue of forest genetic conservation is critical, to ensure the availability of seed for infusion into domestication programmes. Revenue of end products can also be affected by substitution by other natural or synthetic products, which in turn may reduce the demand for seed.
- It should be noted that the characteristics of some tree seed increase the possibility for market failure. Tree seed is available only at certain times of the year, and for some species the life span of the seed is as short as a few days. The timing of the marketing of different species is therefore, quite crucial, and infrastructure needs to be in place to enable swift transfer of recalcitrant seed, which cannot be stored. Some tree species do not seed every year, they may have limited seed, or may suffer insect attack, all of which limit opportunities for advance ordering, or long-term agreements. Tree seed is a highly non-transparent product, as its quality is not proven for many years.



- The costs and benefits of seed source management, and their distribution have yet to be fully assessed against those identified above, although most of the financial costs are incurred by the supporting organisations. However, the villagers of Krang Chek are interested in managing seed sources of species that are valuable to them, whether in terms of economic value or traditional value, many of which appear on the Forestry Administration's priority species list. In conserving the species, they will receive additional benefits from the tree products, such as sales of malva nuts, and high value resin. Some of the seeds will be used in the village for rehabilitation of degraded areas, and private planting.
- The villagers have secure rights of use through their community forestry agreement, and customary use rights in common access areas within the village, and they have ongoing support from an NGO with a keen interest to develop alternate income generating opportunities. AFSC have, however, noted that the poorer segments of the population are less likely to participate in forest activities due to their needs to secure their immediate subsistence requirements.

- The ten priority species identified (*Dalbergia bariensis*, *Pterocarpus macrocarpus*, *Tarrietia javanica*, *Dipterocarpus retesus*, *Hopea recopei*, *Diospyros crumenata*, *Diospyros hasseltii*, *Shorea cochinchinensis*)

1. *Sindora cochinchinensis*: 87 mother trees
2. *Xylia xylocarpa*: 141 mother trees
3. *Pterocarpus macrocarpus*: 160 mother trees
4. *Haldinia cordifolia*: 62 mother trees

# **Training & Extension**