

Appendix 10: Some Tree Species Producing Non-Timber Forest Products

In all forms of tree planting for poverty alleviation, the species used should be from the group that can produce non-timber forest products (NTFP).

Why plant NTFPs?

NTFPs are biological resources other than timber. They include fruits, nuts, oil seed, latex, resin, gums, medicinal plants, spices, wildlife and wildlife products, dye, ornamental plants, bamboo and rattan. The potential of NTFPs for poverty alleviation is very important, as the rural poor collect various kinds of products throughout the year to sustain their livelihood.

When planning to plant trees for NTFPs, a mix of species is required that can generate immediate or short term benefits, as well as medium and longer term benefits. The examples below illustrate potential values of NTFPs in well established forests.

Non-timber forest products provide an excellent incentive for rural communities to manage and conserve forest resources. Rural people possess a wealth of knowledge on the ecology and growth cycles of forest products. In a study from an area in Rattanakiri Province, average annual returns from NTFPs were estimated to be around US\$ 4,000/ha compared to US\$ 1,697 for timber logging. This alternative is even more attractive when one adds the benefits of increased watershed protection and biodiversity value (Bann 1997).

Medicinal plants: As part of NTFPs, medicinal plants constitute an important group among all of mankind's natural resources. Today, according to the World Health Organization (WHO), as many as 80 percent of the world's people depend on traditional medicine for their primary health care needs (Kanta *et al* 1998). In 1981, about 400 species of plants were reported in products marketed by the herbal industry in "health-food" stores throughout United States and valued at US\$ 360 million (Tyler 1986). This number increased to US\$ 36 billion in 1994 (Hasler 1995).

Bamboo: Bamboo is considered a fast growing species and gives a fast return in terms of yield. It needs two to three years to establish and later produces a large biomass. Bamboos produce shoots, stalks, light construction materials, leaves for fodder, and raw materials for handicrafts. Examples of bamboo species that can be planted for the purpose of poverty alleviation are *Bambusa bambos* (Rusei khley), *Bambusa blumeana* (Rusei roleak), *Bambusa vulgaris* (Rusei keo), *Dendrocalamus membranaceus* (Rusei srok), *Gigantochloa albociliata* (Ruseikhleysrok), *Arundinaria falcata* (Rusei ping pong).