

Hardawati Yahya 2006: Sustainable Uses of Some Minor Forest Products at Ban Thung Soong Community Forest and Homestead in Krabi Province, Thailand. Master of Science (Tropical Forestry), Major Field: Tropical Forestry, Interdisciplinary Graduate Program. Thesis Advisor: Assistant Professor Duangchai Sookchaloem, D.Sc. 178 pages. ISBN 974-16-1803-4

This study of sustainable uses of some Minor Forest Products at Ban Thung Soong Community Forest and homestead in Krabi Province focused on botanical characteristics, utilizing method and quantitative ecological data based on local wisdom. The studies were conducted by collecting data from 12 stands (20x50 m²/stand) at three elevation levels of 0-100 m, 100-200 m and 200-300 m and by interviewing local people. The results show that, at the highest level of 200-300 m altitude, the number of trees and total basal area were the highest. From data analysis for Important Value Index, there were 65 species of plants found in Ban Thung Soong Community Forest. The five dominant species were as follows: *Xylia xylocarpa* (Roxb.) Taub. var. *kerrii* (Craib & Hutch.) I.C.Nielsen, *Homalium undulatum* King, *Mangifera caloneura* Kurz, *Vatica stapfiana* (King) Slooten and *Lithocarpus collettii* A. Camus. There were 49 species categorized as Minor Forest Products (MFPs). The dominant MFPs used as medicinal plants were as follows: *Azadirachta indica* A.Juss. var. *siamensis* Valeton, *Bouea oppositifolia* (Roxb.) Meisn. *Cratoxylum maingayi* Dyer, *Mangifera caloneura* Kurz and *Schima wallichii* (DC.) Korth. The dominant edible plant species were *Azadirachta indica* A.Juss. var. *siamensis* Valeton, *Bouea oppositifolia* (Roxb.) Meisn., *Gnetum gnemon* L. var. *tenerum*, *Garcinia cowa* Roxb. ex DC, *Cratoxylum maingayi* Dyer and *Eurya acuminata* DC. var. *acuminata*, and non-edible plants consisted of *Aporosa villosa* (Wall. ex Lindl.) Baill., *Diospyros undulata* Wall. ex G.Don var. *undulata*, *Homalium undulatum* King and *Memecylon garcinioides* Blume. Bamboo was one of the main MFPs highly found in Ban Thung Soong. The study of bamboo aimed to sustain the resource and uses of bamboo in community forest and homestead. There were six bamboo species found in BTS homesteads as follows: *Dendrocalamus asper* (Roem. & Schult.) Backer ex Heyne, *Bambusa bambos* (L.) Voss, *Bambusa blumeana* Schult.f., *Melocanna humilis* Kurz, *Cephalostachyum pergracile* Munro and *Bambusa tulda* Roxb. *Bambusa bambos* (L.) Voss was the dominant bamboo species in BTS Community Forest. Based on biomass study, the production of bamboo culms indicates that people can generate income from bamboo biomass and planting for future economic and community development. The grand total biomass of *Dendrocalamus asper* (Roem. & Schult.) Backer ex Heyne contained 2.40 tons/culm, with 2.24 tons/culm for *Bambusa bambos* (L.) Voss and 1.53 tons/culm for *Melocanna humilis* Kurz.

Student's signature

Thesis Advisor's signature