

Somchittiya Srisuwan 2012: Financial Analysis of Agroforestry Practice at Household Level Under Phu Phan Agroforestry Network, Sakon Nakhon Province. Master of Science (Social Forestry), Major Field: Social Forestry, Faculty of Forestry. Thesis Advisor: Associate Professor Wuthipol Hoamuangkaew, Ph.D. 289 pages.

Objectives of the study financial analysis of agroforestry practice at household level under Phu Phan Agroforestry Network, Sakon Nakhon Province were to conduct the financial analysis of the investment in 3 main agroforestry patterns namely. The using data was collected by employing the designed questionnaires interviewed 56 sampled farmers 1) plant is *Antidesma thwaitesianum* combined with *Dimocarpus longan* and *Gynura hispida* 2) plant is *Antidesma thwaitesianum* combined with *Tamarind indicat* and *Musa sapientum* 3) plant is *Antidesma thwaitesianum* combined with *Annona squamosa* and *Carica papaya* to determine the marketing channel of *Antidesma thwaitesianum* which was the most economical cash crop planting under agroforestry system in the study area. The studied agroforestry plots were divided into 3 size namely small (4-7 rai), medium (8-11 rai) and large size (12-16 rai). The 3 financial analytical methods namely NPV, B/C and IRR were employed for evaluating the achievement of the investment, and with the given interest rates of 5, 8 and 10 percent, and the projected period was given at 25 years.

The study found that all of the agroforestry farm sizes provided  $NPV > 0$ ,  $B/C > 1$  and IRR were much higher than interest rates in the monetary market. The medium plot size from plant is *A. thwaitesianum* combined with *Dimocarpus longan* and *Gynura hispida* provided the highest internal rates of return. Based on the determination of *A. thwaitesianum* marketing channel indicated that it is total production in was 40.88 tons from the distributed to local factories (55.75%) and agricultural processing product groups (44.25%) for wine, drinking juice and concentrate juice production.

---

Student's signature

---

Thesis Advisor's signature