

Tapping the Potentials of Nipa Palm

Farmers see nipa production as a livelihood opportunity in Nakhon Sri Thammarat, Thailand.

Background

Nipa palm is a member of the *Nypa fruticans* species. Nipa forest plays an important role for typical ecosystems in most tropical forest habitats. It is an economically and ecologically important mangrove species to people in the Pak Phanang River Basin Area, Nakhon Sri Thammarat, Thailand. Nipa grows naturally in the area at approximately 3,200 hectares. It is commonly seen in the swamplands in the upper reaches of estuaries as well as in saline areas throughout the Basin. Compared to the coconut palm, the nipa palm appears to lack a trunk, with its leaves growing straight out of the ground.

Uses and Economic Importance

The nipa palm is one of the most versatile plants in the coastal zone, from which a number of food and household products are derived.

Economically, coastal villagers in the basin earn their income from the palm in several ways, most importantly in using leaves as roofs. Nipa leaves are quite durable and used for thatching houses. Weaving the roof takes 1 day to complete and is usually sold at 3-5 baht per thatch. Each family unit works together in the process of harvesting, weaving and selling nipa. A single household could earn at least 3,000 baht per month from selling nipa roof. In addition to making roofs, dried young nipa leaves are used to roll tobacco which is particularly popular among old folks in the province. As such, nipa leaf collection and weaving provides employment of about 300 households in Pak Phanang.

Moreover, nipa sap is also a known

source for sugar and its content is reported to be 14 to 17 percent sucrose. The average production in the area is 1,000 kg/hectare of sugar per month with 8 tappable months per year. Nipa sugar is used primarily as a confection for desserts and as an elegant sweetening alternative to ordinary table sugar for coffee and tea.

Aside from sugar, nipa sap is also used to produce wine. Currently, Nakhon Sri Thammarat has 3 nipa palm winery which can process more than 400 bottles of nipa wine per day. The wines are sold locally at 40 baht per bottle. Moreover, vinegar from

nipa sap is also used in domestic cooking, industry and food processing.

Nipa not only provides a direct means of livelihood, it also provides a habitat for economically important species including crab, prawn and other fish which are highly-priced crops. Its horizontal creeping stem stabilizes river banks preventing soil erosion. Like the coconut, nipa's versatility could provide additional income for households who rely on farming and fishing. As shown in Table 1, it is estimated that 90% of the households exploit Nipa for sap. As such, tapping nipa provides income generating activities for households in the area.



(Left) Using nipa leaves to roll tobacco and make roofs provide employment opportunities especially among women in Pak Phanang.

Table 1 Local direct benefit of Nipa palms to households in Pak Phanang

Benefits	%households	Production	Value/yr (Baht)	Value/rai/yr (Baht)
Direct benefits	-	-	23,100	6,846
Old leaf (set of leaf/year)	60%	3,206	9,031	2,109
Young leaf(set of leaf/year)	50%	190	3,466	1,200
Sap (kg/year)	90%	2,147	9,168	3,056
Trunk (kg/year)	8%	776	1,435	481
Processed benefits	-	-	25,250	8,629
Vinegar	7%	650	1,585	767
Wine (alcohol)	8%	665	8,000	2,640
Sugar	90%	1,130	15,665	5,222
Total value			48,350	15,475

Notes: 1 hectare = 6.25 rai
1 rai = 0.16 hectare

Source: Le Thi Thu Ha (2004). Value of Nypa palm (*Nypa fruticans*) and its significance in management planning in the Pak Phanang River Basin, Thailand.