

**THE LOCAL WISDOM OF FOREST PEOPLE COMMUNITY IN UTILIZING NON-TIMBER FOREST RESOURCES FOR THEIR HOUSEHOLD NEEDS, WHILE ALSO CONSERVING FOREST ECOSYSTEM:
Study on utilization of sugar palm trees (*Arenga pinnata*) by people community around
Gunung Walat University Forest, Indonesia**

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ABSTRACT

Forest people community are people community which reside around forest and has interacts with the forest ecosystem. This interaction occurs in the people's daily life so that there is a learning process which creates understanding on the role and function of living creatures in an ecosystem. Results of such learning process develop further into social capital in the form of local wisdom which plays a role in sustainably maintaining forest resources availability. They have the view that people should be able maintain forest resources sustainability so that ecosystem functions are maintained because that will affect their lives.

Condition of social, economic and cultural development which has occurred up to now, make the utilization of forest resources by people community around the forest, be conducted not only for fulfilling their daily need (subsistence), but also for their household income. In this research, study was conducted on local wisdom of people community around Gunung Walat University Forest (GWUF) in utilizing non-timber forest products from sugar palm tree (*Arenga pinnata*), which has been practiced by the people for many generations. Sugar palm tree is multipurpose tree because all parts of the tree can be utilized for human life. Products obtained from sugar palm tree are sugar palm sap which can be processed to palm sugar and traditional beverage, palm-fiber for house roofing material, broom and rope/cordage, sugar palm fruit as food (candied fruit), sugar palm stem as material for sugar palm flour, leaves for cigarette paper and root for medicine. Rooting system of sugar palm tree is in the form of fibrous root which is very strong for stabilizing soil condition, so that the tree is very important for soil conservation. Soil condition in sloping land which is grown with sugar palm trees is not easily eroded and not susceptible to landslide.

Naturally, sugar palm trees grow and are distributed in nearly all areas of Indonesia. Population of sugar palm tree in the GWUF territory and in the surrounding people's garden and fields, develops naturally and is spread sporadically in line with the development of plantation forest vegetation structure inside the territory of GWUF which develops toward the structure of natural forest. Results of sugar palm tree inventory in people's garden or fields showed data of the tress distribution in each garden or fields with complete vegetation structure, ranging from seedlings, up to adult trees. The growth and distribution of these sugar palm trees are aided by civets (*Paradoxurus hermaproditus*) which eat the ripe fruit of sugar palm and discard their feces in the form sugar palm seeds which are ready to germinate. Sugar palm seeds which exhibit embryonic dormancy, undergo ripening inside the civet's stomach which digest only the fruit flesh. This phenomenon occurs because civet has imperfect process of digestion and creates condition which eliminate seed dormancy.

Understanding the role of civet for the growth of sugar palm tree, becomes an important factor for the sustainability of the tree. People possess wisdom in utilizing sugar palm tree, namely in the utilization of sugar palm fruit which never harvest all fruits from one bunch of sugar palm fruit. They always leave some fruits to serve as civet's food. Even some people cultivate plants which produce fruits relished by civets, such as papaya and pineapple, so that the civets will always be around their neighborhood. This action of course will have impact on civet's sustainability in nature, and afterwards on sustainability of sugar palm tree and livelihood of the forest people community in utilizing the sugar palm tree (see Fig. 1).

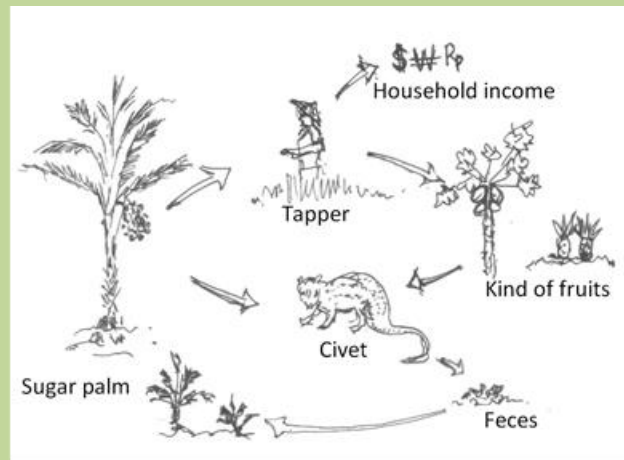


Fig 1. illustration of a beneficial mutual-relationship in the utilization of sugar palm

Utilization of sugar palm tree by harvesting the palm sap, make the sugar palm tree can survive in a long life because without cutting it, namely can reach 30 years old, so that household income can be maintained sustainably. Although sugar palm trees are available in relatively abundant quantity, each household of sugar palm sap tapper only utilized not more than 10 sugar palm trees. This phenomenon was due to tapping technique which is still traditionally practiced, and their economic orientation is still confined only for obtaining income to fulfill their daily needs. Harvesting of other parts of the sugar palm tree is in the form of palm fiber and their young leaves, which were proven to be not disturbing the sugar palm growth, because collection of palm fiber only caused leaf sheath to be more open; and collection young leaves did not disturb the palm-leaf rib.

Forest people community around GWUF has shown that they possess knowledge on interaction (symbiosis) between biotic components of an ecosystem. With their wisdom, such interaction is maintained because it benefits their life. The form of wisdom which is practiced by them in utilizing sugar palm tree has been proven to give income to the household in sustainable manner, and to be able to preserve the population sustainability of the civet in nature.

Key words: local wisdom, sugar palm tree, civet

