Utilization of Forest Products in the Gabonese Rainforest

Year: 2014

Place of field work: Gabonese Republic

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Key words: forest products, secondary forest, utilization of plants, edible plants, medicinal plants

Research background

The rainforest is regarded as an absorption source of CO2, and it has high biodiversity. Its reduction causes global warming and the degradation of biodiversity. The Gabonese Republic, my research site, is located in an equatorial rainforest on the African continent. Although it seems to be a virgin forest, the biota cannot be explained without artificial influences. Therefore, it is considered to be a secondary forest. Moreover, secondary forests are thought to be relatively "rich" because of their abundance of useful plant and animal species. Thus, people in the rainforest have enjoyed an affluent life through interaction with their environment.

Research purpose and aim

In this study, I investigate how local people collect and utilize forest products, such as plants, mushrooms, bush meats, fish, and insects, in order to understand the cultural and ecological relationships between humans and the rainforest. I would then like to make a suggestion regarding how locals can make their living without causing deforestation.

Results and achievements of fieldwork

The survey was conducted for 60 days between January 1 and March 2 at M Village in Nyanga Province, southwestern Gabon. This research period ranged from the middle of the minor rainy season to the beginning of the major dry season. Most of the villagers belonged to the Punu ethnic group, one of groups of Bantu agriculturalists. Some people of other ethnic groups, coming from neighboring places, also lived in the village because of marriages with Punu villagers. The land around the village is a secondary forest in which parasol trees (*Musanga* sp.) can be found. Locals make their living chiefly by slash and burn cultivation. Staples, such as cassava and banana, and vegetables are harvested. Evidence of their raising cash crops cannot be found while minor deals regarding their cultivated crops are confirmed. Bush meat is one of the most important protein sources. Antelopes, porcupines, and apes are captured and killed by traps or guns. It is sold at a high price and is a very important income source.

In this survey, 82 useful plants (13 herbaceous plants, 69 woody plants) were found. They comprised 7 edible medicinal plants, 10 edible plants, and 65 solely medicinal plants. The minor rainy season is the fruition period for many woody plants. Locals were busy gathering the fruits of the bush mango (*Irvingia gabonensis*), which are useful. As for mushrooms, 4 to 6 edible species were observed. All of them seemed to be wood-destroying fungi, and they grew on the burnt woods remaining on the farm.





Photo 1: Mushrooms on a burned trunk

Photo 2: Fruits of Irvingia gabonensis

Implications for and impact on future research

In this survey, I mainly recorded plants and mushrooms, both of which were either edible, medicinal, or both. The next survey, in addition to these items, I will attempt to obtain data regarding plant utilization as material culture. The next survey will be conducted between mid-July and mid-October; therefore, I expect to obtain data in the future that will supplement this survey.