

Natural environment of North Malawi and way of life of the Tumbuka people (Semi-arid example)

We introduce the Tumbuka people of Malawi in South-East Africa, who live by practicing traditional agriculture alongside cultivation of tobacco as a cash-crop⁽¹⁾.

Village Profile

The site under study is Nchuka in northern Malawi, home to the Tumbuka people. In semi-arid conditions with an annual rainfall of around 600mm, the natural vegetation consists of sparse (Mionbo) woods dominated by pea-type shrubs. Here, around 500 villagers are engaged in stock-farming and crop cultivation. Sima, a dough made from corn flour and hot water, is a staple of their diet. Other food sources can also be found throughout the year - grasses and vegetables such as planted tomatoes, beans and potatoes, and at certain times insects such as winged ants and caddis flies.



The natural environment and livelihood from agriculture

The village is surrounded by hills, with two different cultivated areas. The field called the Munda is set in a hilly area with good exposure to the sun; it is the main area for growing corn and tobacco. Seeds are sown at the beginning of the rainy season around December. The other area, the Dimba, is set in the base of a valley; maize and beans, cultivated together, are planted along with other types of seeds. Planting there is done as needed from April to November. This is thought to be due to the Dimba's valley terrain, which has large amounts of moisture even in the dry season. Having access to these fields means that it is rare for the village to suffer from food shortages. When the crops from the Munda are harvested and used up, they can be supplemented with harvest from the Dimba. Even during the drought of 2000, a harvest could be obtained from the Dimba, making it resistant to drought.

Woodland usage and change in woodland composition

There are two different wooded areas, used by the villagers for different purposes. The woods on a gentle slope near to their homes have been heavily felled to produce fuel for brick-making and shade for tobacco, leaving it dominated by fast-sprouting Uapaca shrubs of the Euphorbiaceae family. A second area, further from the homes and situated on a steep slope, has been comparatively less deforested, and is still dominated by the Mionbo's trademark pea-family Brachystegia shrubs. These two wooded areas are sources for different products - the Uapaca woods provide a large amount of berries for food, whereas the Brachystegia woods are a source of good honey.

These woods are however being burned to provide pasture for grazing cattle within them. Uapaca grows back quickly; the Brachystegia woods, however, appear to have seen destruction resulting in a change of the dominant species. In recent years the number of cattle owned by the village has increased, leading to an expansion of the area burned for pasture. This is due to increased income from tobacco.

Advantages and disadvantages of tobacco cultivation

Tobacco cultivation began in the village in 1986. The area used for this cultivation has been on the increase, and now equals that used to grow maize, the staple crop. The income from tobacco has allowed the villagers to purchase mobile phones and solar panels.

Risks associated with the increase in land used for growing tobacco are deforestation to make room for tobacco fields and a switch from growing cassava, a hardy crop. Since the introduction of tobacco, the land devoted to growing cassava has shrunk and all but disappeared. Cassava can be grown even with poor rainfall, making it an important crop for safeguarding the village's food supply in the same way as the Dimba. Tobacco cultivation also requires chemical fertilizer and intensive labor, for which the village relies on government loans. The repayments can be made if the rainfall meets that of an average year, but not under poor rain conditions. The villagers are pursuing tobacco cultivation in order to gain profits despite these risks.

The Satoyama Initiative perspective

Practicing traditional agriculture under semi-arid conditions, the people of Nchuka, built two fields based on the terrain, using hardy plants, they set up a system that could provide food throughout the year even in the face of droughts. It can be seen that the introduction of cash crops around 30 years ago has led to this traditional, danger-averting system beginning to be sacrificed.

- (1) Tomohiro Fujita “Livelihood of Tumbuka people and natural environment in northern Malawi ”
Geography, October, Vol. 52, p80-85, 2007 [in Japanese]