Forests and food security

“Hungry season” food from the forests

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A forest is a productive component of the rural community's food base, and it is important that the importance of this food base is greater. The reasons for this are several:

1. Forests provide food resources in most seasons, in the form of edible leaves, fruits, vegetables, roots and tubers and wildlife. It is at these times when fruit and vegetable supplies are in short supply.

2. In southern Africa, for example, leafy vegetables, roots and tubers are used in sauces when other products are unavailable. (Fox and Young, 1982).

3.key biomass of the diet, especially during the hunger period. In Mukupu village, for example, the tubers Raphionacme burkei and Raphionacme arbuscula are highly valued for their dry season flushes which provide leaves when few other vegetables are available (Giffard, 1975). In the semi-arid Pokot region of Kenya, however, the leaves of the forest trees Diospyros mespiliformis, Strychnos cocculoides and Sclerocarya birrea are most popular. They are generally consumed as snacks (by 95 percent of those surveyed), but in some households they are consumed as meal foods. In the Dzimbe laugh you're in the forest. Food consumption is highly variable during the dry season even in drought years when few vegetables are available. Tree foods also provide valuable food for household subsistence activities (Fox and Young, 1982).

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Development options: Gearing forestry activities to people's food needs

Forests have traditionally met, and still can meet, specific dietary needs. The potential for programmes to help fill important food gaps can be summarized as follows:

Supplementary foods: Forest species that meet daily dietary needs, as well as providing foods of cultural importance.

Seasonal foods: Forest species that produce during food stress periods. Also important are species that produce during peak agricultural labour periods when energy requirements are greater and there is less time for meal preparation. Research will be required to identify species that leaf or fruit during the desired period; the potential for development of simple methods of altering leafing or fruiting periods of valuable species should also be evaluated. Emergency foods: A different variety of food is required during these periods. Roots and tubers, for example, are often more important than fruit since they provide more calories and are more pest resistant in drought. Before trees are introduced as emergency or drought species, a clear understanding of how they perform under extreme conditions is needed. In many cases, the time and land investment for emergency food production may be too great for the potential risks involved.

Marketing Timeliness - conserving fruits (used to make a nutritious beverage) can be stored for several months after harvesting.

In all three categories above, but particularly in the case of emergency foods, there is an urgent need to tap sources of traditional knowledge.

The potential of forests and trees to provide forest resources, especially during food scarce periods, depends largely on appropriate management. Protection and development (through selection) of forest food resources are essential. Forest fruit and nut species are generally found in low densities in natural stands; appropriate selection and management of forest food species can lead to increased densities. Forest areas can be managed for the production and protection of wildlife and fish species. Wildlife habitat management such as selection for forage species, small clearings and buffer strips along stream edges can all contribute to increased, or sustained forest production.

Although it may be a truism, access to forest areas by local people is essential if forest foods are to be used and appreciated. Development efforts that restrict the access of local people to previously available resources will need to provide alternative sources of food or income if negative nutritional impacts are to be avoided.

On the other hand, careful attention will also need to be paid to programmes or policies that rationalize forest land previously subject to traditional or private control. Issues of common property resource management will be of particular importance.

Of course, the nutritional value of forest foods in terms of smoothing seasonal imbalances in food supply will need to be more fully understood in order to plan and manage their continued or increased utilization. However, being aware of nutrition problems is not enough. An understanding of cultural tastes and traditions is also important, especially if the introduction of new products is foreseen. In addition, the timing of new needs and sources of income need to be considered. Many institutional seasonalities can influence resource use. Forest species that produce goods to fill these institutionally created hard times can also directly affect household food security. Similarly, periods of peak labour demand can have important repercussions on the use of forest foods as well as on people's nutritional needs. Thus, nutrition information (e.g. hunger periods), cultural (e.g. food preferences) and economic information (e.g. labour demand) must be balanced with forestry management and technical expertise to form the base from which forestry projects can address the development potential of forest food resources.

Bibliography


FAO. 1952. Supplementary and emergency food plants of West Africa. Rome, FAO.


Fox, F.W. & Young, M.E. 1986. Food from the veiled edible wild plants of southern Africa botanically identified and described. Cape Town, Delta.


Giffard, J. 1979. Les gommiers als essences de reboisement pour les régions sahéliennes, Bois et forêts des tropiques, 16(13).


