

Forests and trees provide benefits for food security and nutrition – what is your say?

As an entry point into policy development we agree with the statement that forests and trees provide benefits for food and nutrition security and we would like to accentuate this with a few statements.

Challenges & Bottlenecks

For practical reasons the environment and its services have been defined with different definitions depending on the sector that produces the definition. For example agriculture has been defined simply as cultivation for food (fibre, fodder & fuel) or forests as being land with canopy cover of more than 10 percent. As a consequence the corresponding policies developed through the use of these definitions have become limited by their own specificity. For example, food production has been connected to agriculture (e.g. the government agriculture department) and trees and timber to forest (e.g. forestry department).

Perhaps it is the plethora of benefits, or their sheer diversity that has meant that trees themselves have fallen into categories, in order to be better managed. Fruit and nut trees like cocoa and cashew, were not in the same context as plantation species like pine and fir. However in the context of food security the multiple benefits of trees must be realised.

Concepts such as environment, livelihoods, socio-ecological systems, watersheds or landscapes are absent reflecting that there is a need to move towards a trees & food approach beyond these sectors.

Multiple Benefits

There is a need to characterise both the direct and indirect benefits of trees. In the context of food security the direct benefits of a tree is the provision of food, commercial products (rubber, palm oil) and carbon storage (in the form of increased biomass or through different climate mitigation initiatives). The indirect benefits are multiple; trees can be a driver of landscape change by creating diverse micro-climates beneath their foliage, blocking direct sunlight, increasing humidity, soil moisture and providing a source of organic matter. Whilst there is little research showing direct causality between trees and food, these effects have been shown to stabilise food production. That has been shown to raise household income leading to greater resilience within rural areas.

In the Maradi/Zinder Sahel region of Niger, a method called Farmer Managed Natural Regeneration (FMNR) uses the *Faidherbia albida* tree for multiple benefits. It defoliates during the wet season leaving crops underneath both access the water without competition from the tree and in the dry season is a source of both fertilizer and fodder for the farmers. Over a wider scale these matrices of trees are contributing to a re-greening of the Sahel, restoring the

soil and creating landscapes where agriculture can again be practiced on a large scale, thus contributing to food security. We must look beyond the direct benefits of trees and see how trees can interact within the agricultural system for the enhancement of food security.

Policy needs

The discussion regarding food and forest is very often overloaded with anecdotes, describing cultural rights and flavoured with poverty romanticism. From a policy perspective these 'stories' have to be seen as dynamic and useful. The questions which need to be raised are; i) how can these well-adapted, accepted and often durable land use systems combining food and forest be extrapolated and ii) how can these systems stay dynamic?

Recommendations

- There is a need to move towards concepts such as environment, livelihoods, socio-ecological systems, and cross-sectoral approaches to enable landscape management for the benefits of food and nutrition security.
- We must look beyond the direct benefits of trees and see how trees can interact within the agricultural system for the enhancement of food security.

Contributing organisations

SIANI is the Swedish International Agriculture Network Initiative

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