



**Global  
Forum**  
on Food Security  
and Nutrition

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

Summary of discussion no. 87  
From 4 to 26 February 2013



INTERNATIONAL  
CONFERENCE

on  
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for Food  
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## Global Forum on Food Security and Nutrition

### About the Document

This document summarizes the results of the online discussion "*Forests and trees provide benefits for food security and nutrition– what is your say?*" held on the Global Forum on Food Security and Nutrition (<http://www.fao.org/fsnforum>) from 4 to 26 February 2013.

The following summary aims at providing readers with a general overview of the discussion, including the list of all references shared.

For the full text of all contributions and further background information please refer to the discussion page: <http://www.fao.org/fsnforum/forum/discussions/forests-for-FSN>

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## I. Overview

The discussion *Forests and trees provide benefits for food security and nutrition– what is your say?* was held on the FSN Forum (<http://www.fao.org/fsnforum>) from 4 to 26 February 2013.

In the context of the upcoming International Conference on Forests for Food Security and Nutrition <http://www.fao.org/forestry/food-security> Eva Muller and Fred Kafeero from FAO's Forestry Department turned to the FSN Forum Members to discuss and explore the bottlenecks hindering a greater contribution of forests, trees on farms and agroforestry systems to food security and what policy and practical actions are needed to overcome them.

44 contributions were shared by participants from 21 countries.

The majority of contributors were received from Asia (37%) followed by Africa (23%), Europe (23%), Latin America and the Caribbean (7%), North America (7%) and Southwest Pacific (2%).

This summary provides an overview of inputs shared by the participants.

For the topic introduction, the questions posed and full text of all contributions received please refer to the proceedings: [http://www.fao.org/fsnforum/sites/default/files/files/87\\_Forestry%20for%20FSN/PROCEEDINGS\\_87\\_Forests\\_for\\_FSN.pdf](http://www.fao.org/fsnforum/sites/default/files/files/87_Forestry%20for%20FSN/PROCEEDINGS_87_Forests_for_FSN.pdf)

## II. Introduction

Forests, trees on farms and agroforestry have the potential to contribute to human nutrition through increased production and availability of particularly nutritious fruits, leaves and other products through general diversification of diets. Where food insecurity and malnutrition is linked with limited opportunities for employment or income generation, income from forests and trees on farms can make a significant contribution to rural households' income and their food security and nutrition.

Worldwide an estimated 1 to 1.5 billion people derive directly or indirectly benefits from trees. However most of the international discourse on food and nutrition security is centred on farm production. This is all the more surprising if we take into consideration that only the formally recognized, officially reported monetary contributions of forests to the economies of the developing world into account, these exceed US\$ 250billion; more than double the flow of total development assistance.

Forests and trees contribute to food security in many ways, as direct source of food and fuel, as source for income generation and through the ecosystem services they provide. Harnessing tree crops for the production of non food products such gums, frankincense, resins and of course timber, these can further increase local incomes, thereby improving food security.

Tree crops also help improving households' coping capacity to food insecurity that may arise due to seasonality crop production or crop failure. Forests contribute massively to the ecosystem services that humans value, even if they are not traded or even if it is difficult to put an economic or a food security figure on the value.

Urban and peri-urban forestry and agroforestry can have a crucial role in improving cities' resilience and in facing the increasing poverty, lack of food security, air and soil pollution, and occurrence of human diseases in urban and peri-urban areas. Well designed and managed tree systems in and around cities can produce good quality food and non-food products (such as fruit, timber, wood fuel, natural medicine) thus improving incomes, nutrition security, as well as health conditions for all urban dwellers. The presence of trees and forests also improves the efficiency in watershed functioning and the quality of water, and therefore is essential in improving agro-pastoral systems in bordering lands. Furthermore trees can play a crucial role in providing fodder and shade to cattle, indirectly contributing to food security. By improving the food chains within cities, trees can also support the development of local markets and the generation of jobs and incomes for the local population. The resulting competitive price of local food would make it accessible also for vulnerable people, thus guaranteeing food and nutrition security to the poorest.

Due to its multifaceted nature, and the fact that quantifying the contribution of trees to food security is tricky and only few products , can be easily monetized, the contribution of trees to food security often remains poorly understood, under-estimated and not adequately considered in policy decisions.

Forests and trees are still seen mostly as belonging exclusively to the jurisdiction of the forestry departments with the consequence that they are treated mostly as timber. Even though millions of rural poor depend on forests and agroforestry practices to grow their food and other non timber products, there is a lack of policy and programmes that promote such practices in a concerted way.

In fact, despite the numerous benefits of forestry the sector is largely negatively impacted by adverse policies, legal constraints and lack of coordination between sectors to which it contributes, such as agriculture, forestry, rural development, environment and trade.

The contributors to the discussion agreed that the lack of clarity needs to be tackled as the discussion regarding food and forest is very often overloaded with anecdotes, describing cultural rights and flavoured with poverty romanticism. While these are to be regarded as very useful they are hard to sell to donors, governments and development actors who are more inclined to dealing with hard statistical data.

It was felt that this topic is of particular relevance now, as donors and governments are scaling up their programmes to fight food insecurity and malnutrition mainly through crop production. By not giving adequate attention to the contributions of trees and forests to people's livelihoods and diets, there is high risk of missing a chance and negatively impacting the effectiveness of the development actions.

### III. Key challenges and bottlenecks

The factors hindering a greater contribution of forests to food security are deeply rooted in the institutional landscape. All too often the people in influential decision making position of national and international organizations consider that the forest should be used for timber production and, more recently, environmental conservation.

This is reflected in the mainstream governance model, in which the mandate of forestry departments is mostly restricted to the generation of revenue for the government through the management of resources such as timber and to the management of forests as national parks. While the food production aspect remains connected to agriculture (e.g. the government agriculture department). As a consequence the corresponding policies often suffer from limitations stemming from their own specificity.

This is partly because contributions to food security and nutrition made by forests, trees and agroforestry are either not quantified adequately in order to draw the attention of decision makers, or confined to the poor section of the society where it is too often considered as being statistically insignificant.

In effect, bad governance, including bribery and corruption in the management of forest, adds further stain on the protection of forests and trees as a basis for food security and good nutrition.

In such a setting it becomes very difficult to implement programmes that require co-ordination and convergence between different government actors and the civil society. Some participants also strongly felt that promoting a sustainable, community based forest management geared towards food security would conflict with international forest policies of influential donors and their commitment to the REDD+ objectives thus making the issue hard to advocate for.

As a result, all too often, forestry policies tend to benefit mainly stakeholders not living in the areas such as –national urban elites or affluent societies abroad. This is particularly problematic as the needs and interests of these developed countries are not necessarily the same as those of developing ones. Forestry policies advocated by the west or by international organizations often focus more on carbon sequestration or environmental protection that benefit more the affluent societies, while ignoring food security and cultural aspect important for people in lesser developed countries.

This contrasts with the evidence that in many places, it is the poorest and most marginalized social groups which rely on trees and forest resources the most. These forest dependent communities often collect a variety of seasonal fruits, tubers and medicinal herbs to supplement their nutrition requirements. This utilization of forests and trees remains however little studied and there are few directed approaches toward augmenting these efforts. Most of the forest development programmes deal with plantation and promoting livelihoods practices that would help the forest dependent communities "reduce" their dependency on forests.

In fact evidence shows that initiatives to formalize and 'rationalize' management of trees and forests often end up harming exactly the vulnerable groups who rely on these resources as their access to trees is often reduced when interventions formalize the tenure system or increase the economic value of trees.

A further side effect of such interventions aiming at reducing the role of forest and trees for food security and at curbing the multipurpose management of forest is the disruption of transfer

of traditional knowledge that is present in many populations, which rely on forest products for their livelihoods. Lack of such knowledge risks making these resources idle and it may give a wrong economic signal to the owners of resources to invest resources in alternative uses.

Lack of this knowledge also make it more difficult for local people to see the benefits of programmes that aims at planting new tree as these benefits often present itself only after decades.

However, besides protecting the vanishing traditional knowledge, Members also pointed to the lack of , modern agroforestry farming knowledge and the low technology employed, which require both investments and training.

It should also be kept in mind, that at times, agroforestry can compete with other land uses that arguably contribute more to nutrition. Research in the Gambia documented that donor efforts to promote agroforestry (controlled by men) resulted in the displacement of irrigated vegetable production (which had been controlled by women).

## IV. What is needed for policies to recognize the role of forests



### Planting trees in Niger

A little known success story of trees and their inextricable link to food security can be found. Different donors began to use community based forest management as a basis for “drought proofing” their communities.

This project was evaluated after a longer time span with remarkable results.

It was conservatively estimated that over 3 million hectares, mostly in the most densely populated regions, are now benefitting. Tree density over the 30 years has increased 20 fold and crop yields are two to three times higher without the use of chemical fertilizers.

Forum contributors identified some elements that are necessary to protect and to foster the contribution of forests and trees to food security and nutrition. These included:

- Current forest-related data collection is deficient in its representation of activities and benefits from forests and trees that are not exchanged for cash, that are in the informal sector, and that are not recognized by forest authorities. An improved understanding and assessment of this aspect could benefit from a greater role of FAO in obtaining this information followed by strong joint analysis of the data. More methodological research is needed on simple and inexpensive techniques for data-gathering which will appeal to governments and multilateral organizations.
- Secure tenure, keeping in mind the gender dimension, is critical for household food and nutrition security as a clear sense of ownership helps give local people the sense of responsibility to conserve forest resources and the incentive to invest in sustainable management. In this regard it is crucial to assess whose nutrition and livelihoods trees contribute to in a given area, in order to be sure not to undermine stakeholders' access.
- Due to the importance of forests and trees for the whole ecosystem it is important to implement Integrated Ecosystems and Ecosystem Based Management Approaches. Projects must look beyond the direct benefits of trees and see how trees can interact within the agricultural system for the enhancement of food security. Highlighting forests, trees and nutrition security linkages is therefore crucial to face the challenge and reach one of the eight Millennium Development Goals: ending hunger and guaranteeing food and nutrition security to all. A multisectoral and multi stakeholder approach, involving practitioners, policy and decision makers, civil society, scientists, is required to cope with this challenge.
- To address regional diversity, it may be important to ensure that regional specific conditions and seasonality's are thoroughly understood including traditional coping mechanisms associated with trees.
- Projects need to evaluate forest food's nutrient content and adopt advice on healthy diets and nutrition accordingly by training extension workers in relevant nutrition and dietary aspects of forest and tree crops.

- There is need for governments and development partners to support sustainable forest management and rehabilitation of degraded lands in order to strengthen food security
- Policy makers should also acknowledge that forests provide a range of environmental services. Hence, the traditional communities living in or adjacent to forests and involved in their sustainable management should be compensated through economic incentive mechanisms. These economic incentives do not just decrease the communities' opportunity costs and therefore deforestation/degradation of native forests, but are also an important source of income that can be diverted to further secure livelihoods. The Brazilian *Bolsa Verde* project, which offers payments for the environmental services (PES) provided by the communities is an example of this approach.
- Since investments in trees and forests is often a medium to long term undertaking, programmes need to plan ahead and take into consideration also the direct needs of people in two or three generations .
- Many developing countries experience an increase in growth of small forest enterprises. While large-scale, commercial forestry can play a role in poverty reduction, small and medium enterprises offer better prospects because they help to secure local community resource rights; accrue wealth locally; empower local entrepreneurship; enhance social capital; and help maintain local environmental accountability.
- Policies need to be put in place to remove existing biases against small scale enterprises and guarantee adequate market and institutional mechanisms.
- An increased collaboration with fair trade entities could be beneficial as this commercial model favours smaller cooperatives, women and other disadvantaged groups. There is need for greater assistance and more consolidated information for small cooperatives to understand the legal status of the forest products, and how to overcome market barriers to the sale of forest products.
- Inclusion of traditional knowledge in local educational and agricultural extension systems and simple innovations to overcome difficulties of traditional processing systems would facilitate effective utilization of resources and their conservation efforts.

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Part 1  
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Part 2 (Annexes)  
[http://www.fao.org/fsnforum/sites/default/files/files/87\\_Forestry%20for%20FSN/UGANDA%20Part%202%20ANNEXES%20Shepherd%20C%20Kazoora%20and%20Mueller.pdf](http://www.fao.org/fsnforum/sites/default/files/files/87_Forestry%20for%20FSN/UGANDA%20Part%202%20ANNEXES%20Shepherd%20C%20Kazoora%20and%20Mueller.pdf)

### Web resources:

- International Conference on Forests for Food Security and Nutrition  
<http://www.fao.org/forestry/food-security/en>
- Learning event on agroforestry, food security and climate change. organized jointly by the MICCA Programme and the Agroforestry Programme of FAO's Forestry Department  
<http://www.fao.org/climatechange/micca/79527/en>
- *Bolsa Verde* programme  
<http://www.brasil.gov.br/sobre/cidadania/brasil-sem-miseria/rural/bolsa-verde>
- UN REDD Programme  
<http://www.un-redd.org/AboutREDD/tabid/102614/Default.aspx>
- Forestry Nepal – Your gateway to forestry information in Nepal  
<http://www.forestrynepal.org>
- Bhutan set to plough lone furrow as world's first wholly organic country  
<http://www.guardian.co.uk/global-development/poverty-matters/2013/feb/11/bhutan-first-wholly-organic-country?INTCMP=SRCH>