

Forests, Trees and Landscapes for Food Security and Nutrition

A Global Assessment Report



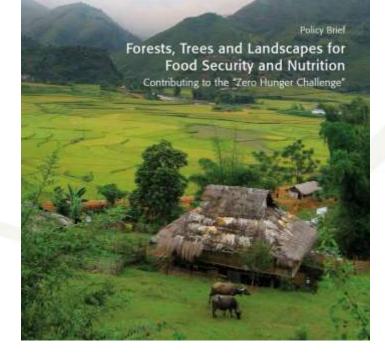
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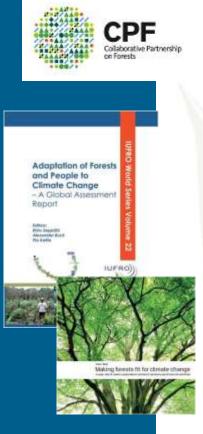
UFRO

World

Series







- International Union of Forest Research Organisations (IUFRO)-led initiative of the Collaborative Partnership on Forests (CPF) since 2006
- Supports forest-related intergovernmental processes by producing assessment reports on emerging global issues of high concern
- Establishes thematic Expert Panels involving leading scientists
- Feeds assessment results into discussions and negotiations in international forums related to forest policy (e.g. UNFCCC, CBD, UNFF)

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- Three scientific assessments published so far (climate adaptation, forest governance, REDD+ and biodiversity)
- Well received by stakeholders in policy processes and the scientific community, considerable global media coverage
 - Background information for discussions, briefing documents for negotiators, guidance for strategic policy development, interdisciplinary and scientifically sound information source
 - Recognized in several decisions of MEAs

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Forests, Trees and Landscapes for Food Security and Nutrition

- Despite impressive productivity increases, there is growing evidence that conventional agricultural strategies alone:
 - fall short of eliminating global hunger;
 - result in unbalanced diets that lack nutritional diversity;
 - enhance exposure of the most vulnerable groups to volatile food prices; and
 - fail to recognise the long-term ecological consequences of intensified agricultural systems

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Forests, Trees and Landscapes for Food Security and Nutrition

- In parallel, there is considerable evidence that suggests that forests and tree-based systems can play an important role in complementing agricultural production in providing:
 - better and more nutritionally-balanced diets;
 - woodfuel for cooking;
 - greater control over food consumption choices, particularly during lean seasons and periods of vulnerability (especially for marginalised groups);
 - and, deliver a broad set of ecosystem services which enhance and support crop production

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GFEP FOREST AND FOOD SECURITY

- GFEP Expert Panel on Forests and Food Security convened to examine the evidence on this issue
- Commenced work in early 2014 leading experts representing various scientific disciplines, regional and cultural diversity as well as gender balance
- Around 60 scientists contributed to development of peer reviewed assessment report
- Framed as a contribution to discussions on post-2015 development agenda and SDGs

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SCOPE OF ASSESSMENT

- Assessment of direct and indirect roles of forests, agroforests and trees in food systems
- Role of food production systems across the forestagriculture continuum
- Analysis of environmental, social, economic, political drivers of forest-food security systems
- Examination of response options across the landscape in the context of their ability to provide food security, natural resource conservation and sustainable livelihoods
- Assessment of macro scale response options in relation to drivers of change (role of markets, incentives, different forms of governance, public policy)

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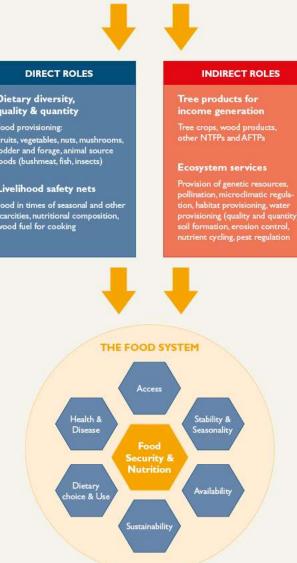


Single species tree

crop production

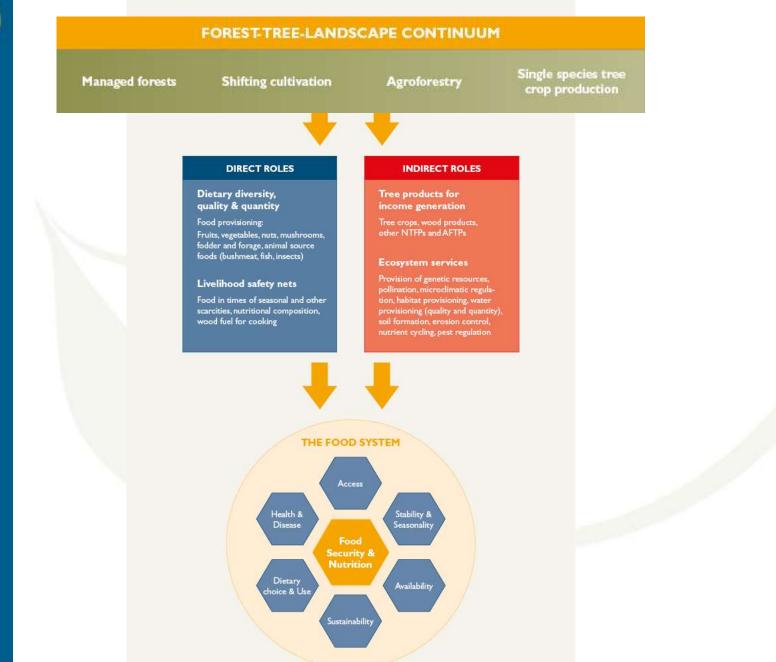
Agroforestry

FOREST-TREE-LANDSCAPE CONTINUUM Shifting cultivation Managed forests DIRECT ROLES Dietary diversity, quality & quantity Food provisioning: Fruits, vegetables, nuts, mushrooms, fodder and forage, animal source foods (bushmeat, fish, insects) Livelihood safety nets Food in times of seasonal and other scarcities, nutritional composition, wood fuel for cooking





Figure





Figure







FOREST-TREE-LANDSCAPE CONTINUUM

Managed forests Shifting cultivation

Agroforestry

Single species tree crop production

INDIRECT ROLES

DIRECT ROLES

Dietary diversity, quality & quantity

Food provisioning:

Fruits, vegetables, nuts, mushrooms fodder and forage, animal source foods (bushmeat, fish, insects)

Livelihood safety nets

Food in times of seasonal and othe scarcities, nutritional composition, wood fuel for cooking

Tree products for income generation

Tree crops, wood products, other NTFPs and AFTPs

Ecosystem services

Provision of genetic resources, pollination, microclimatic regulation, habitat provisioning, water provisioning (quality and quantity), soil formation, erosion control, nutrient cycling, pest regulation





Figure





Figure

FOREST-TREE-LANDSCAPE CONTINUUM Single species tree crop production Managed forests Shifting cultivation Agroforestry DIRECT ROLES INDIRECT ROLES Dietary diversity, **Tree products for** quality & quantity income generation Food provisioning: Fruits, vegetables, nuts, mushrooms, fodder and forage, animal source foods (bushmeat, fish, insects) **Ecosystem services** Provision of genetic resources, pollination, microclimatic regula-Livelihood safety nets Food in times of seasonal and other scarcities, nutritional composition, wood fuel for cooking THE FOOD SYSTEM Stability & Health & Seasonality Disease Security & Nutrition Dietary Availability hoice & Úse Sustainability



KEY MESSAGES

- Forests and trees matter for food security and nutrition
- Integrated governance is necessary for multi-functional landscapes
- Securing tenure and local control is essential for forests and food security
- There is a need to reimagine forests and food security

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ROLE OF FORESTS AND TREES

- Every sixth person depends on forests with food being an essential aspect – major role of forests and tree based systems throughout human history
- Increasing scientific evidence of the importance of forests and other tree-based systems for supporting food production and contributing to dietary diversity and quality
- Especially important in addressing nutritional shortfalls
- Forests and tree-based systems particularly critical for food security and nutrition for the poorest and the most vulnerable, including women

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ROLE OF FORESTS AND TREES

- Non-timber forest products and agroforestry tree products are important sources of revenue to local people
- Tree-based incomes offer a considerably more diversified livelihood portfolio and less risks than single commodity crops
- Forests and tree-based systems provide ecosystem services essential for staple crop production and a range of edible plants, e.g. pollinators
- Advantages over permanent (crop) agriculture: diversity of food products and adaptability to a broader range of environmental conditions (climate change) and changing socio-economic conditions

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GOVERNANCE AND LANDSCAPES

- Landscapes typically a mosaic of different, and often competing, food production systems and other land uses
- Require integrated responses managing resilient, climate-smart landscapes on a multi-functional basis combining food production, biodiversity conservation, other land uses and the maintenance of ecosystem services
- Multi-sectoral and cross-scale governance present best prospect to achieve this
- Policy and regulatory frameworks need to ensure equitable access of the poor, women and disadvantaged groups to forests and tree-based systems

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TENURE AND LOCAL CONTROL

- Bundles of rights over forests vary according to geographical, social, cultural, economic and political factors
- These affect the access of different population groups to trees and their products for food, income and other livelihood needs
- Growing trend towards designating *de jure forest* land and management rights to local people who traditionally hold *de facto* rights to forest - still some 80 percent of forest land worldwide under state ownership
- Policies that support communities' access to forests and that encourage the cultivation of tree products have significant potential to enhance food security

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REIMAGINING FORESTS AND FOOD SECURITY

- Integrated landscape approach provides opportunity for forestry and agriculture to coordinate efforts at the conceptual and implementation levels to achieve more sustainable agricultural systems
- Forest- and tree-based systems underpinned by the accumulated traditional knowledge of local and indigenous communities - contribution needs to be acknowledged and incorporated into management practices and policy.
- Combining the best of traditional and formal scientific knowledge offers tremendous potential to enhance the productivity and resilience of these systems and the flow of direct (nutrition) and indirect (income) benefits to their practitioners

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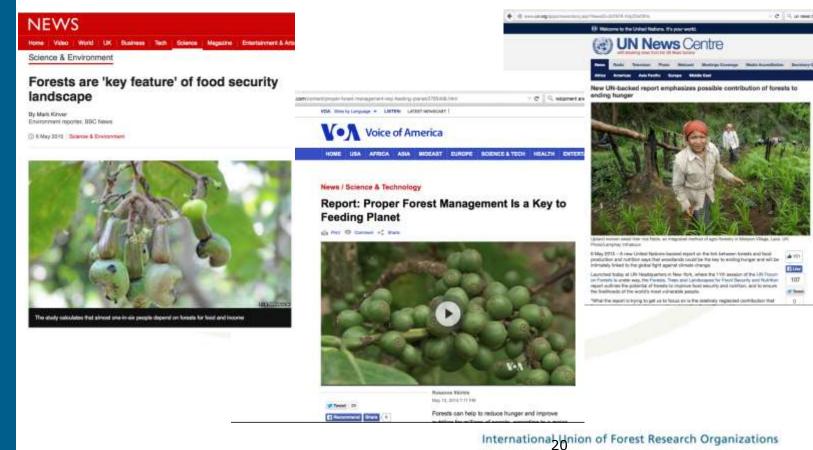
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GFEP FORESTS & FOOD SECURITY

- Information on the Panel's work fed into discussions at CBD COP12 in October and Climate Change Conference (Global Landscape Forum) in December
- Wide distribution of publications to all target audiences (science, stakeholders, decision-makers)
- Recent information and meeting documents at http://www.iufro.org/science/gfep/

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