

UNCCD CoP12 Side Event

The Contribution of Forests and Trees to Food Security in Drylands

Contribution of Forests and Tree-based Systems to Food Security & Nutrition with particular emphasis on drylands

Dr Bhaskar Vira, Director, University of Cambridge Conservation Research Institute & Chair, Global Forest Expert Panel on Forests & Food Security

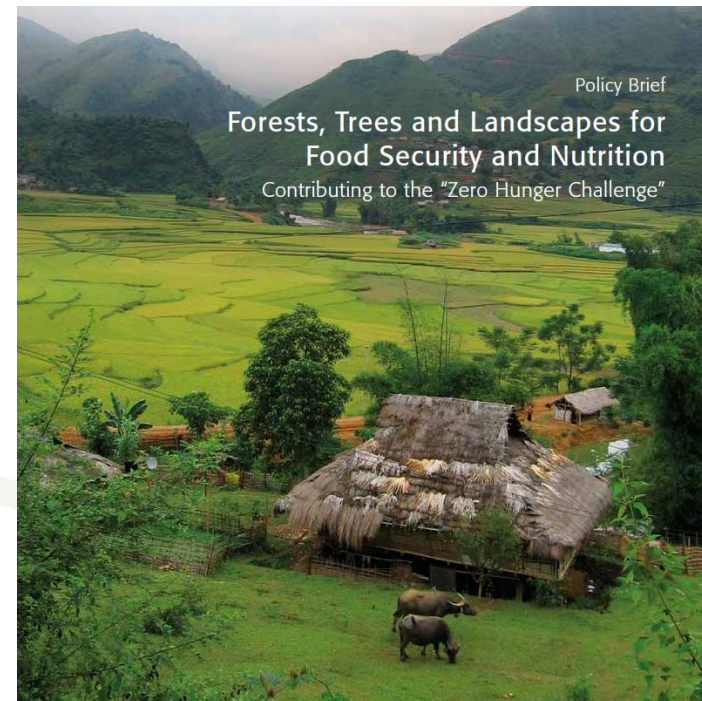
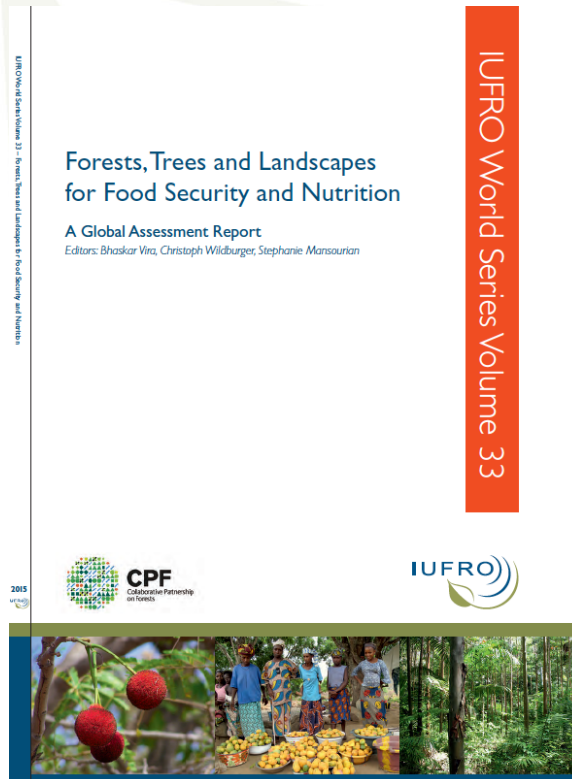


Food and Agriculture Organization of the United Nations

GLOBAL FOREST EXPERT PANELS

Forests, Trees and Landscapes for Food Security and Nutrition

A Global Assessment Report (2015)





Scientific Information

Global Forest Expert Panels

Independent Interdisciplinary Peer-reviewed Scientific Assessments

Science - Policy Interface

UNFF, CBD UNCCD UNFCCC, UN-SDGs

International Policy Processes



CPF Collaborative Partnership on Forests



International Union of Forest Research Organizations

Union Internationale des Instituts de Recherches Forestières

Unión Internacional de Organizaciones de Investigación Forestal

Internationaler Verband Forstlicher Forschungsanstalten

GLOBAL FOREST EXPERT PANELS

GFEP Donors:



CPF Members:



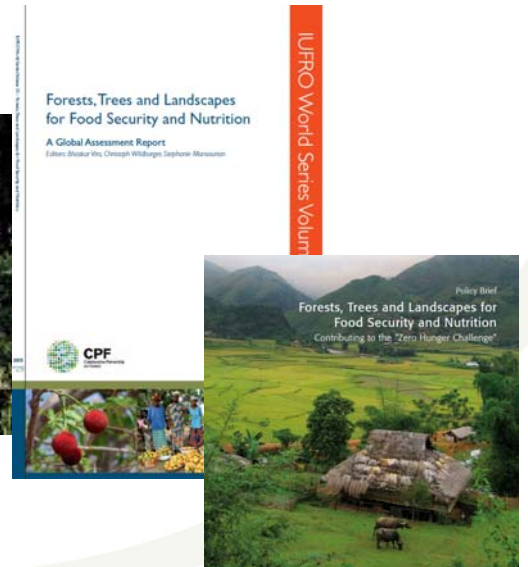
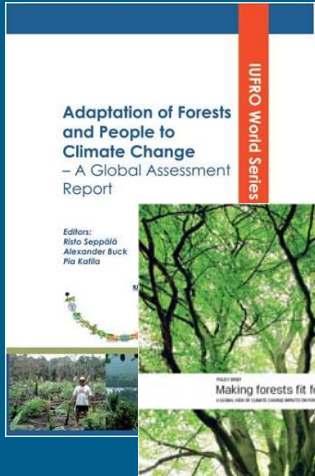
CPF Logo:



CPF
Collaborative Partnership
on Forests



GLOBAL FOREST EXPERT PANELS



Four scientific assessments published so far (climate adaptation, forest governance, REDD+ and biodiversity, forests & food security)



GFEP report on Forests and Food Security

- RELEASED AT THE UNITED NATIONS FORUM ON FORESTS, NEW YORK, 6 MAY 2015

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Science & Environment

Forests are 'key feature' of food security landscape

By Mark Kinver
Environment reporter, BBC News

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New UN-backed report emphasizes possible contribution of forests to ending hunger

Upland women weed their rice fields, an integrated method of agro-forestry in Moipon Village, Laos. UN Photo/Lamphay Inthakoun

6 May 2015 – A new United Nations-backed report on the link between forests and food production and nutrition says that woodlands could be the key to ending hunger and will be intimately linked to the global fight against climate change.


Launched today at UN Headquarters in New York, where the 11th session of the UN Forum on Forests is under way, the Forests, Trees and Landscapes for Food Security and Nutrition report outlines the potential of forests to improve food security and nutrition, and to ensure the livelihoods of the world's most vulnerable people.

*What the report is trying to get us to focus on is the relatively neglected contribution that

Report: Proper Forest Management Is a Key to Feeding Planet

News / Science & Technology

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Rosanne Skirble
May 12, 2015 7:11 PM

Forests can help to reduce hunger and improve nutrition for millions of people, according to a major

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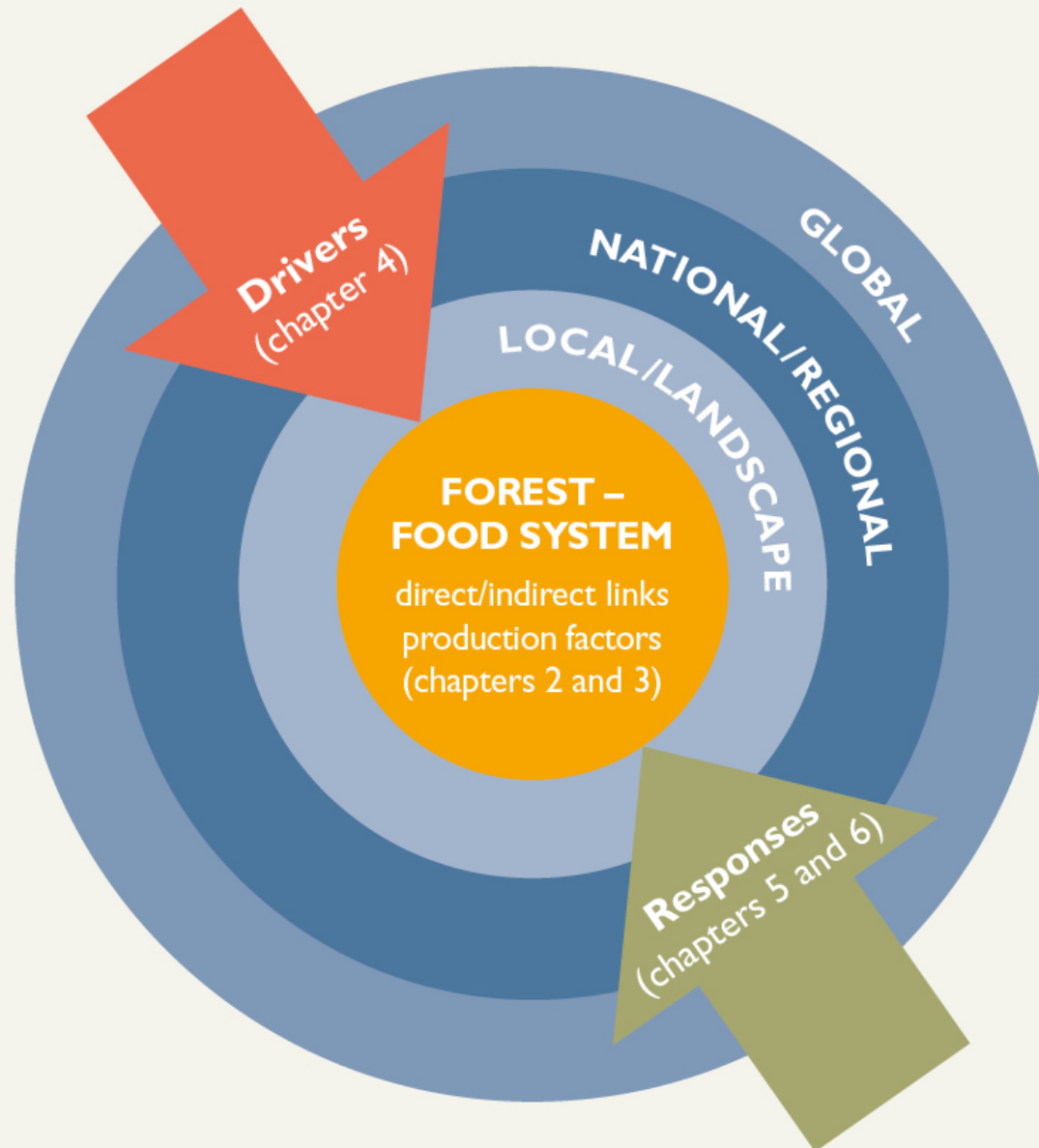
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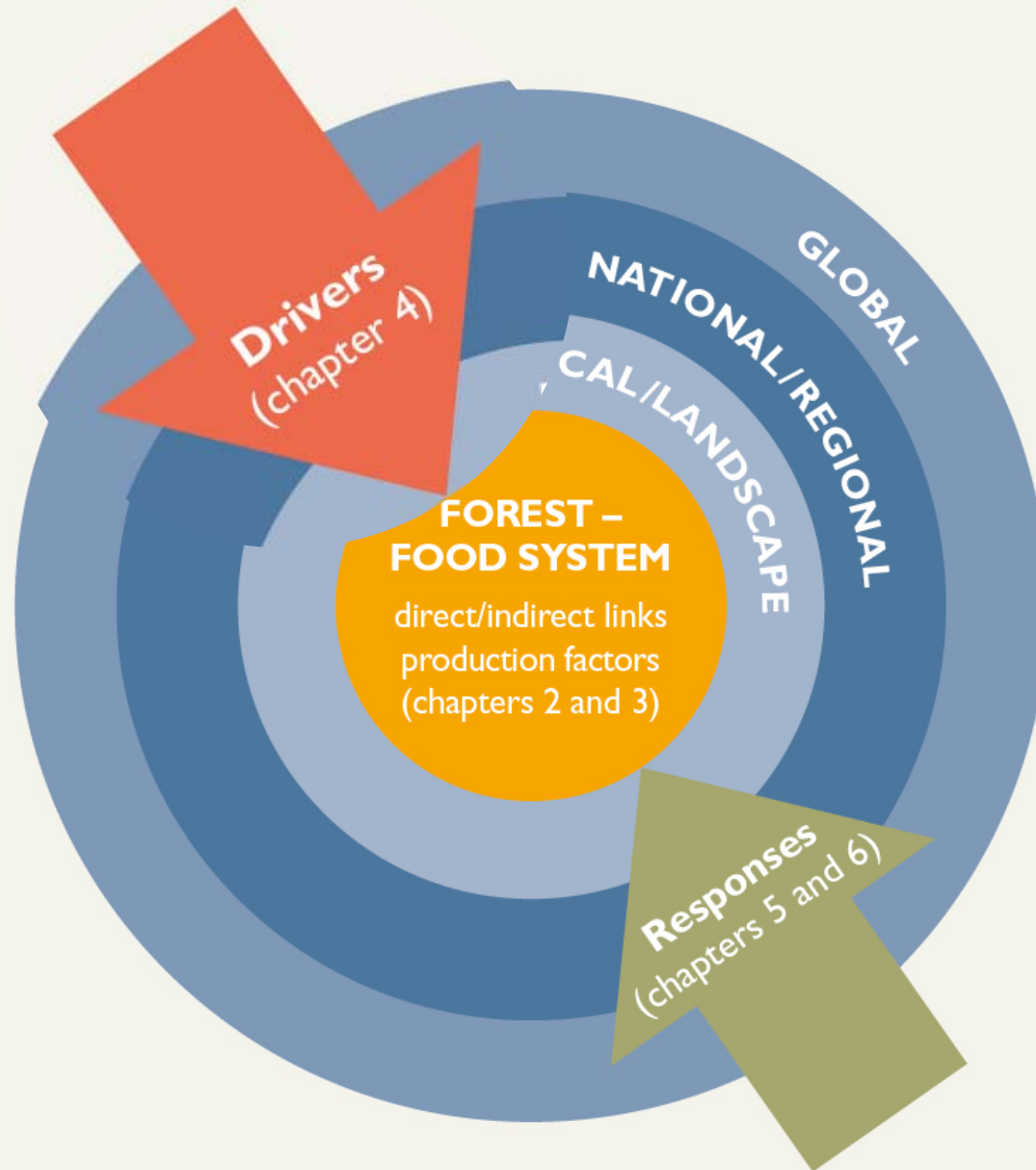


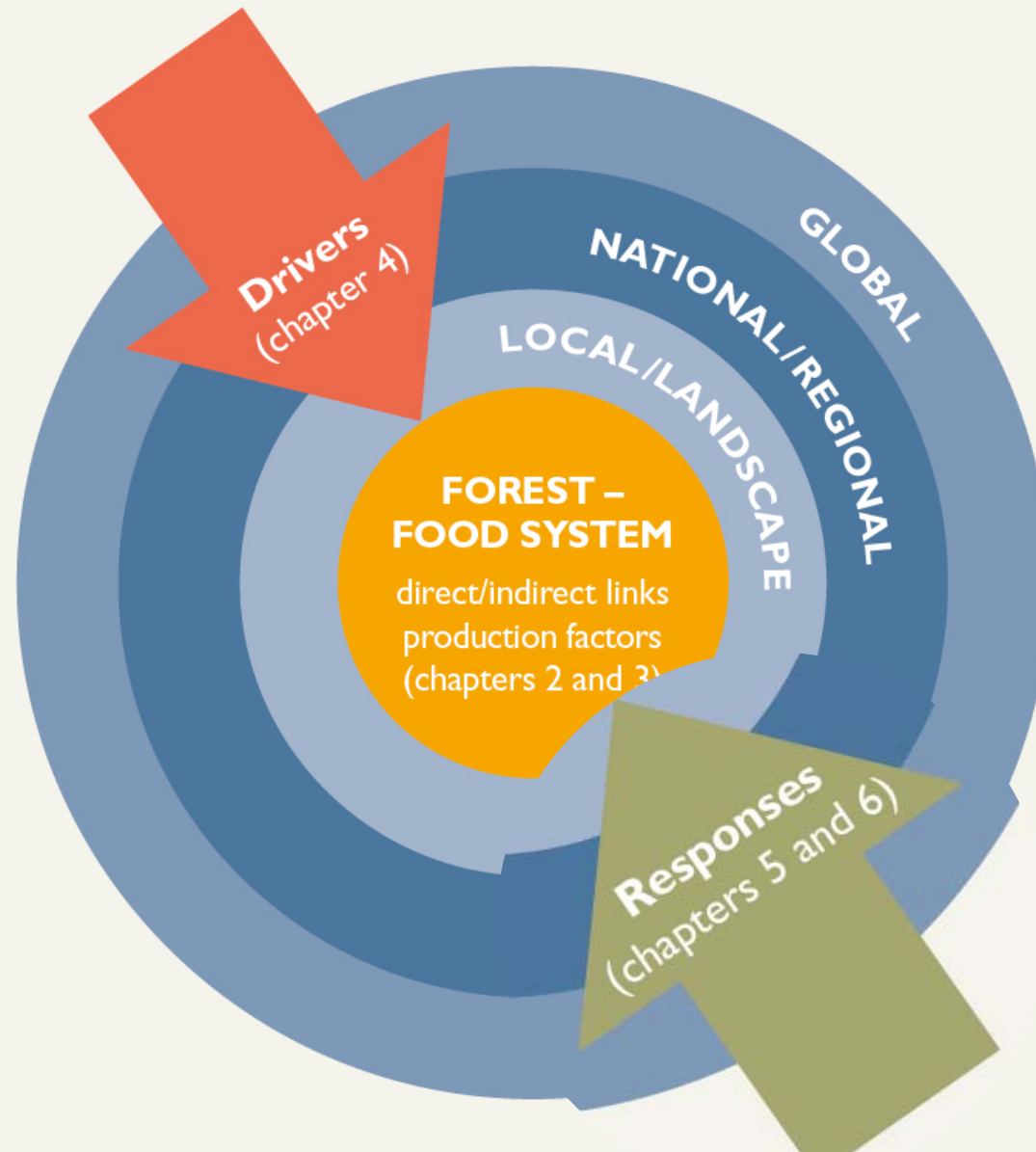
- GFEP Expert Panel on Forests and Food Security commenced work in early 2014
- Around 60 scientists contributed to development of peer reviewed assessment report
- Assessment of direct and indirect roles of forests, agroforests and trees in food systems
- Role of food production systems across the forest-agriculture continuum
- Analysis of environmental, social, economic, political drivers of the forest-food security systems
- Examination of response options across the landscape for food security & nutrition, natural resource conservation and sustainable livelihoods
- Assessment of macro scale response options in relation to drivers of change (role of markets, incentives, governance, public policy)

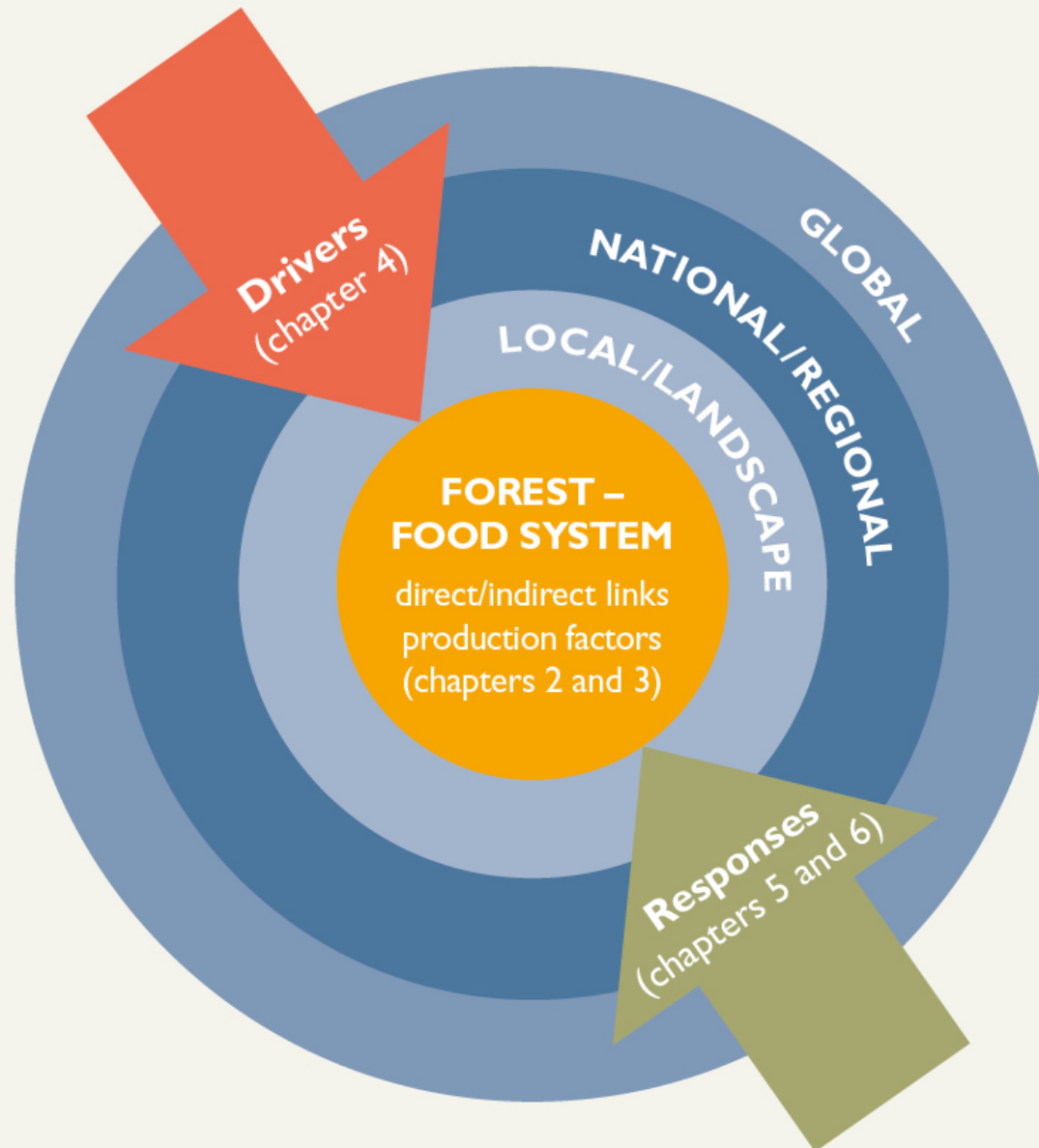




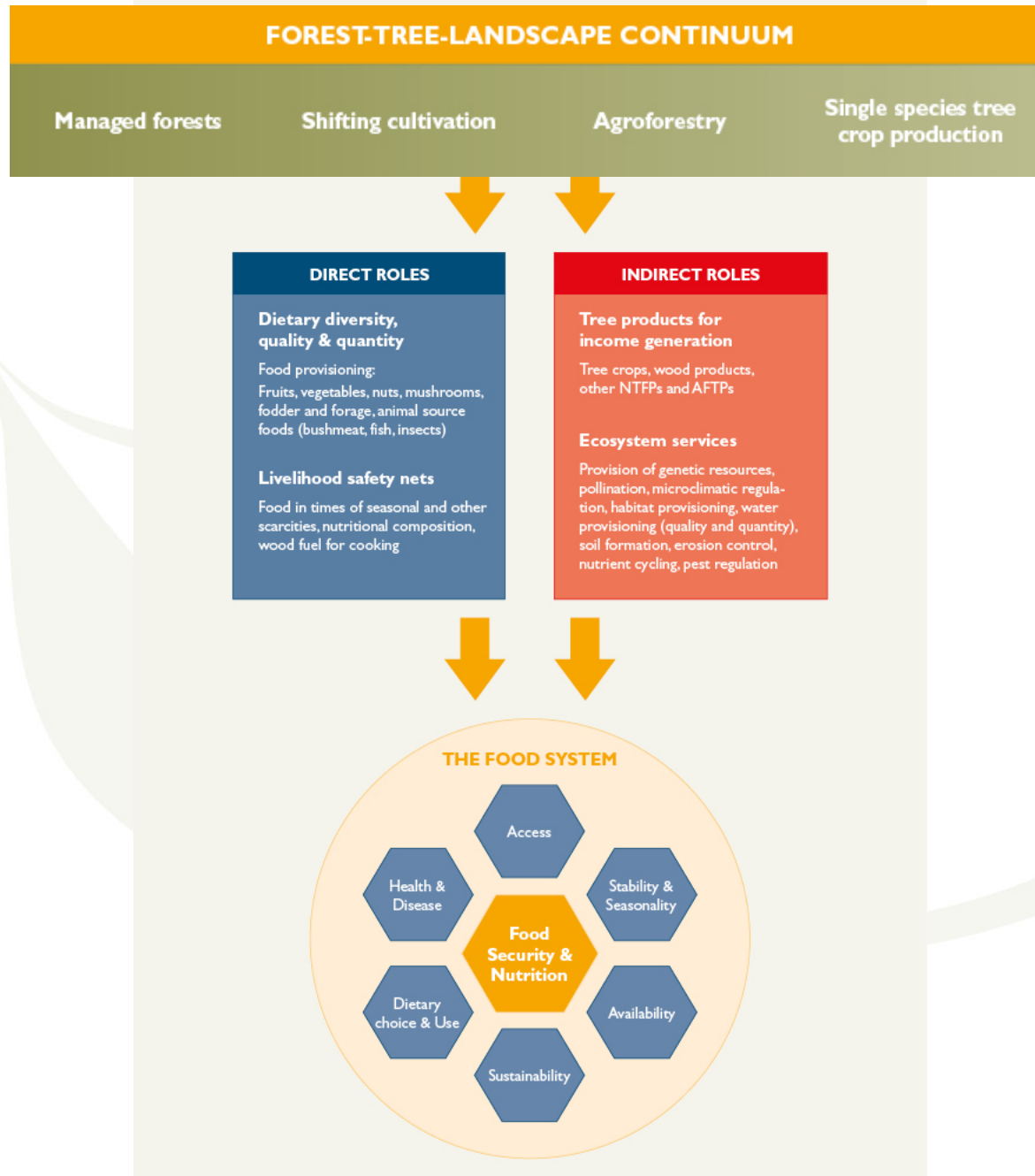














The direct and indirect roles of forests and tree-based systems for food security and nutrition

Figure 1.4





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The direct and indirect roles of forests and tree-based systems for food security and nutrition

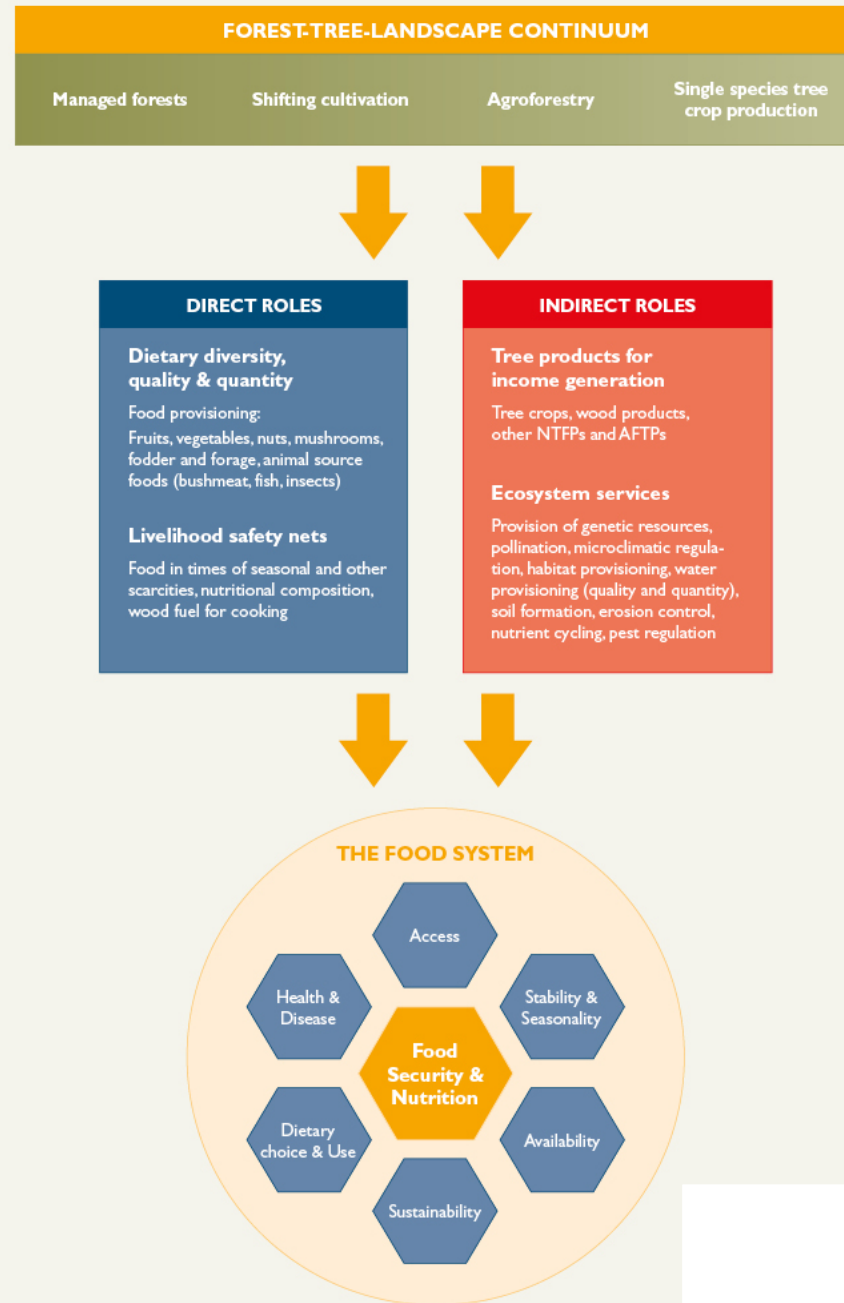
Figure 1.4





The direct and indirect roles of forests and tree-based systems for food security and nutrition

Figure 1.4



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, food security and nutrition, to recognise the complementary role of production systems and conservation across landscapes



FOCUS ON DRYLAND SYSTEMS

- Forests and tree-based systems are particularly critical for food security and nutrition for the poorest and the most vulnerable, including women
- 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



FOCUS ON DRYLAND SYSTEMS

- Land Degradation Neutrality – focus on long term rehabilitation and sustainable use
- Conservation and restoration in human dominated ecosystems must strengthen connections between agriculture and biodiversity – tree-based agriculture as an opportunity
- Develop optimal portfolios of species across agricultural-forestry landscapes (including agroforestry) that best support communities' nutrition needs year-round - cultivation of a wide range of foods, including tree fruits and vegetables
- Support and promote farmer managed natural regeneration (FMNR) providing benefits for staple crop production and forested landscapes
- Develop “nutrient-sensitive” production systems and value chains which deliver food & nutrition from enhanced productivity of land assets





Forthcoming November 2015

Forests and Food

Addressing Hunger and Nutrition
Across Sustainable Landscapes



EDITED BY BHASKAR VIRA, CHRISTOPH WILDBURGER
AND STEPHANIE MANSOURIAN



<http://www.iufro.org/science/gfep>



UNIVERSITY OF CAMBRIDGE
CONSERVATION RESEARCH INSTITUTE

International Union of Forest Research Organizations

Union Internationale des
Instituts de Recherches
Forestières

Unión Internacional
de Organizaciones de
Investigación Forestal

Internationaler
Verband Forstlicher
Forschungsanstalten

Main drivers affecting forests and tree-based systems for food security and nutrition – Conflicts in and about forests

Prof. Dr. Daniela Kleinschmit

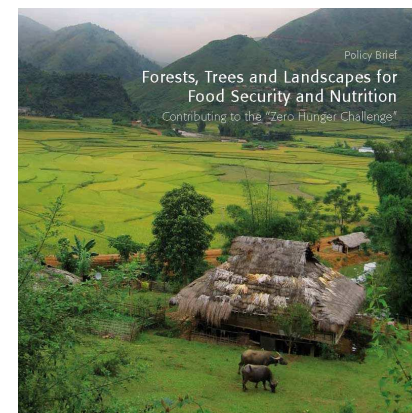
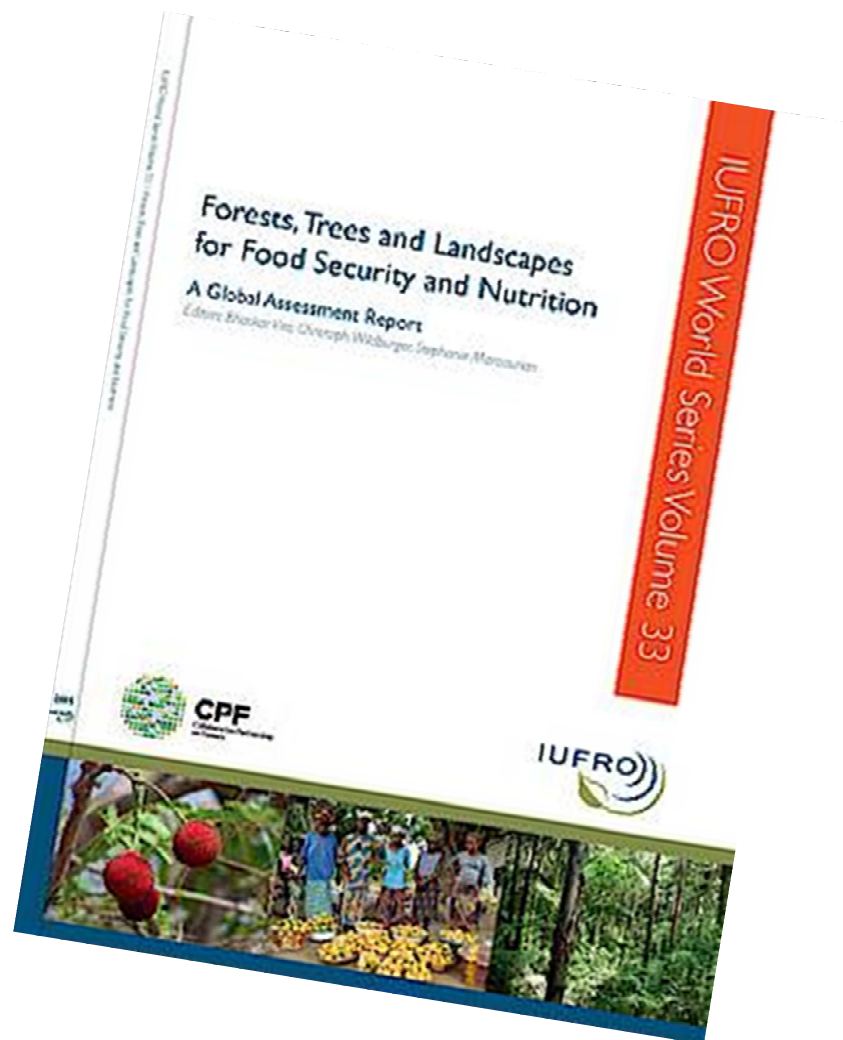
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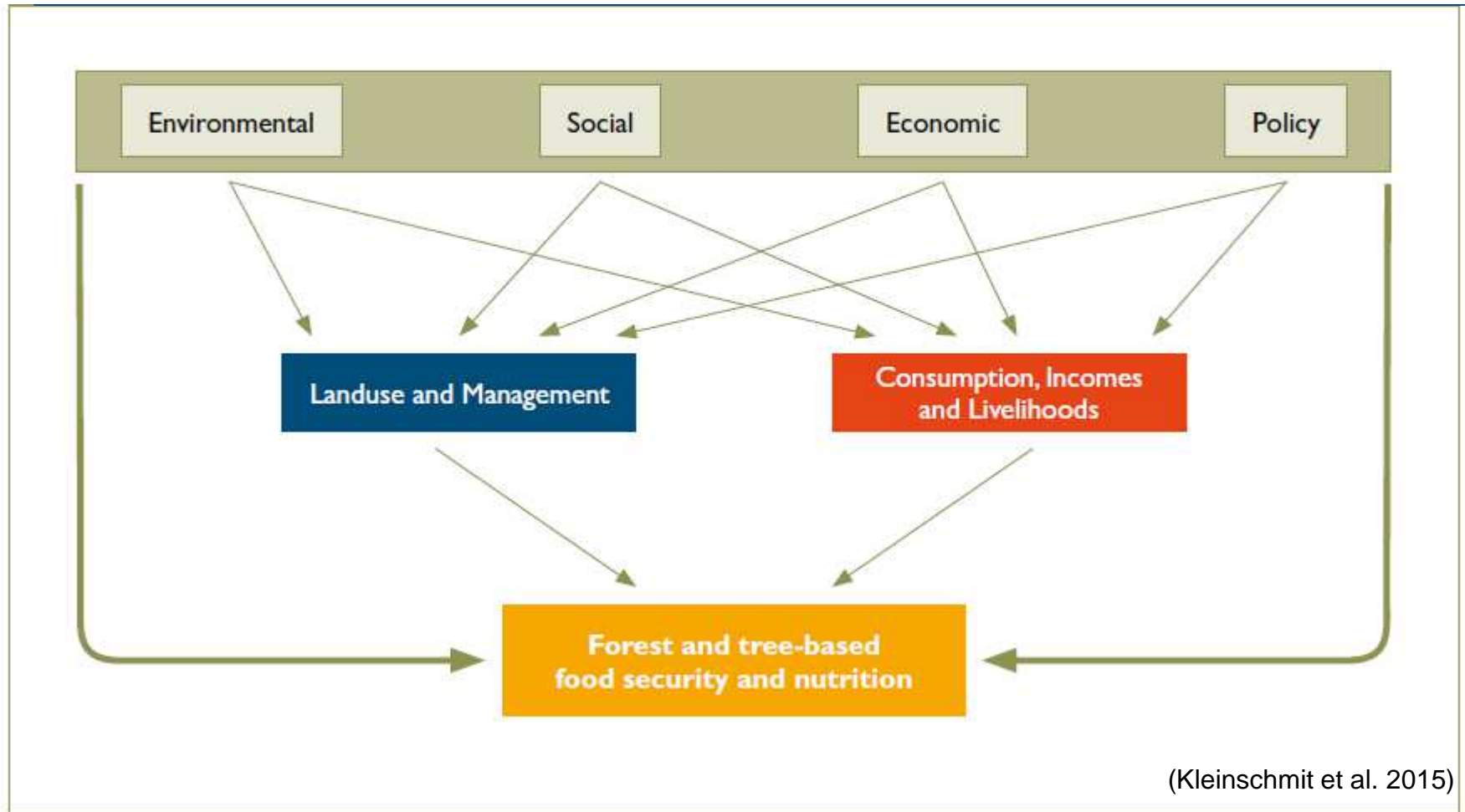


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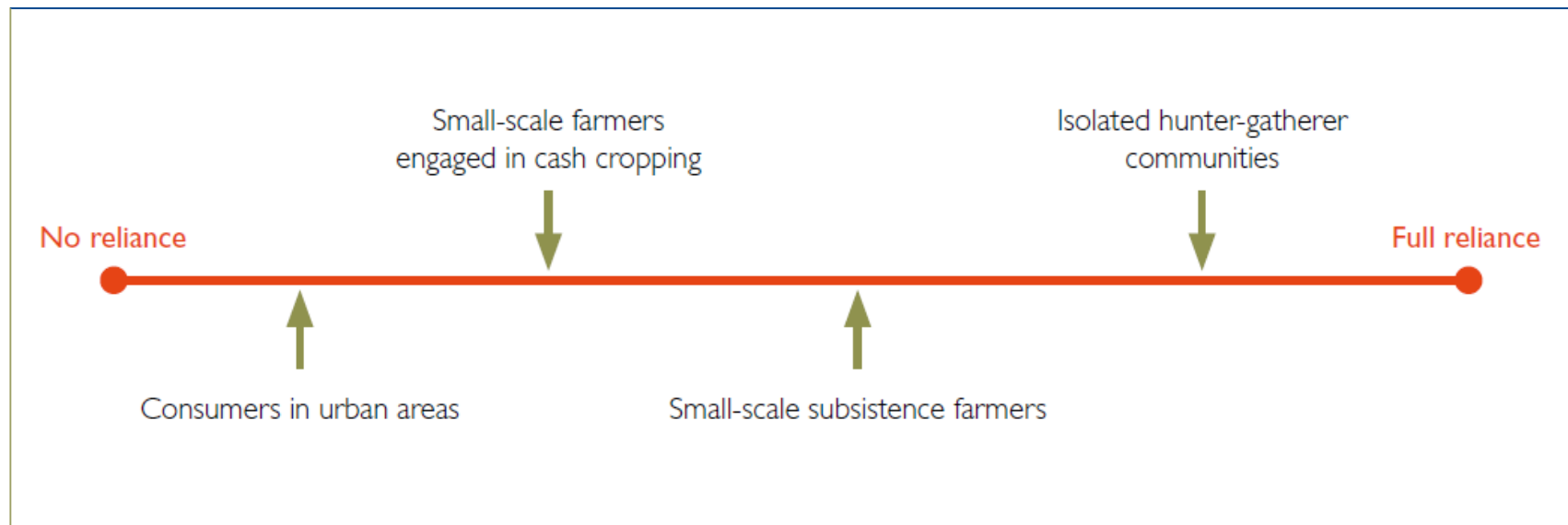
- Chair of Forest and Environmental Policy
- Coordinator IUFRO Division 9
„Forest Policy and Economics“



Drivers impacting food security

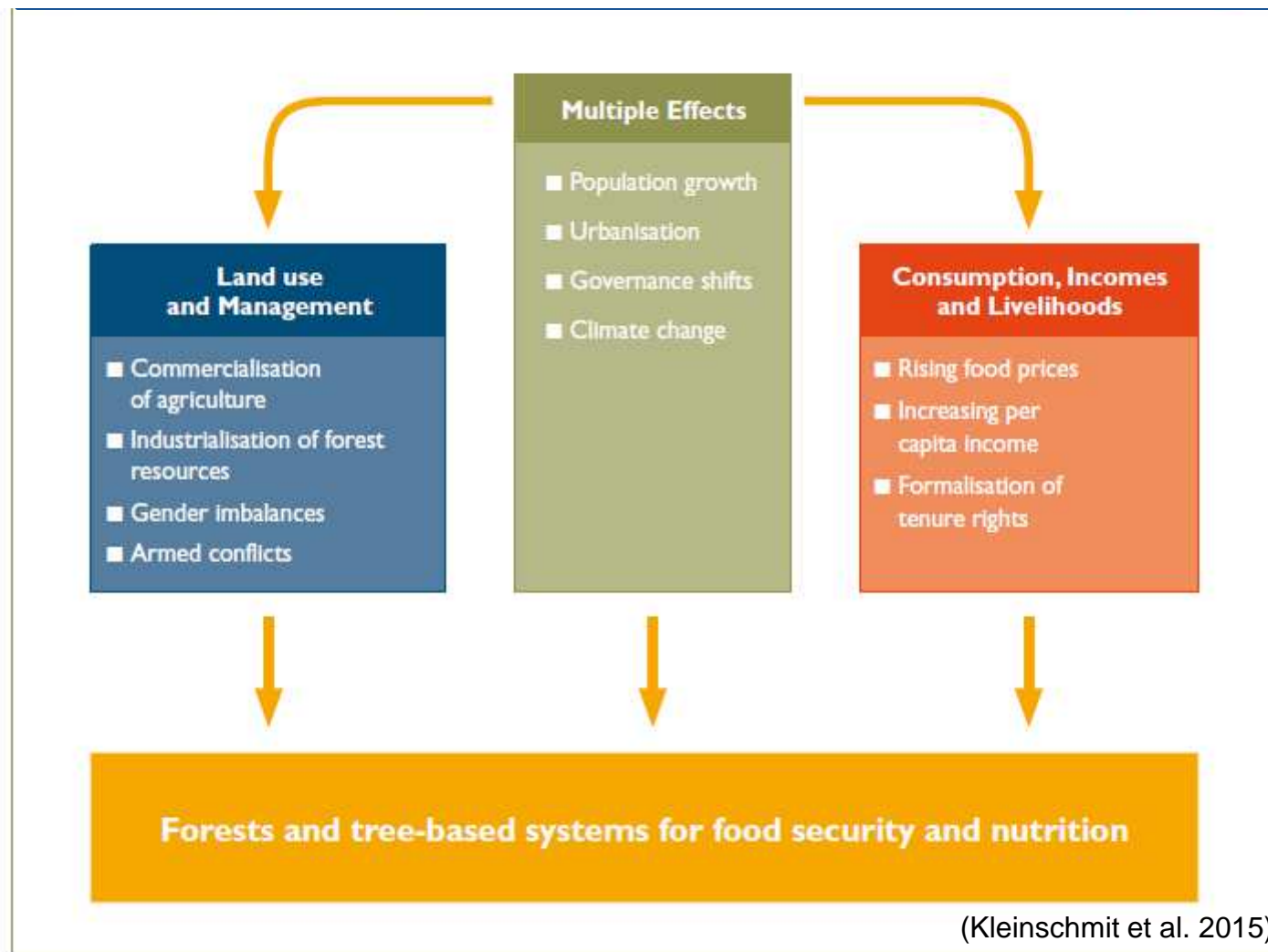


Forest food security reliance continuum



(Kleinschmit et al. 2015,
based on Smith-Hall et al., 2012)

Major drivers affecting forests for food security



Thank you for your attention

Reference:

Kleinschmit, D., Sijapati Basnett, B., Martin, A., Rai, N.D., Smith-Hall, C., Dawson, N.M., Hickey, G., Neufeldt, H., Ojha, H.R., Walelign, S.Z. (2015): Drivers of Forests and Tree-based Systems for Food Security and Nutrition In: Vira, B., Wildburger, C. & Mansourian, S. (eds): *Forests, Trees and Landscapes for Food Security and Nutrition: A Global Assessment Report Vienna*. IUFRO World Series 33, Vienna: 87-110.



Intersectoral landscape management- Global issues, national experiences

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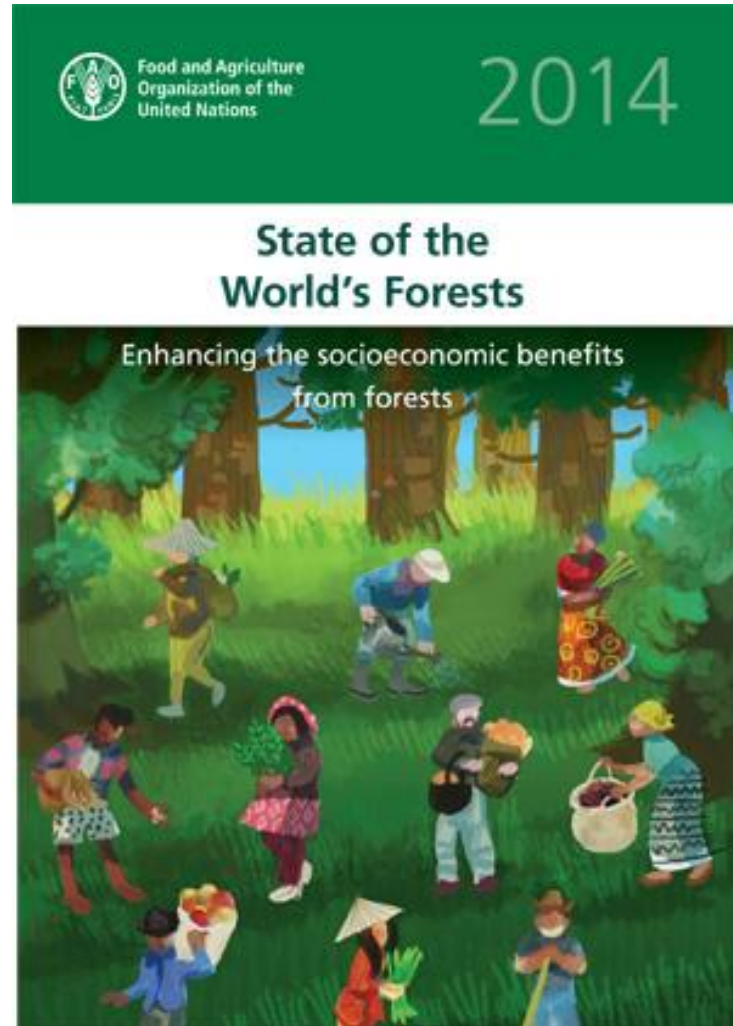
Forestry Department , FAO



Food and Agriculture
Organization of the
United Nations

Summary of the findings

- Forests have a tremendous potential to contribute even more to sustainable FSN
- Forests are playing an important role in FSN at global level, but yet underestimated



Challenges

Data, evidence at global and country levels

Knowledge gap

Data issues

Limited existing
evidence

Definition; Indicators

Lack of
awareness

**Lack of consideration
at policy level**



Challenges

Current forestry policies

- Few cross-sectoral policies on FO & FSN
- Insufficient recognition of non-food aspects forests' contribution to FSN



Opportunities: FAO's Latest Efforts

2017 HLPE report
topic:
“Sustainable
Forestry for Food
Security and
Nutrition”

International
Conference
on Forests for
Food Security
and Nutrition
(May 2013)

Committee on
World Food
Security, CFS
40 (October
2013)

Committee on
Forestry,
COFO 22
(June 2014)

Committee on
World Food
Security, CFS
41 (October
2014)



FAO's work on forestry and FSN



1. Better understanding of non-food aspect of Forests' Contribution to Food Security and Nutrition for Policy Advice & Support

2. Improved Data Collection for Monitoring and Analysis of Forests' Contribution to Food Security and Nutrition



3. Development, Implementation and Monitoring of inclusive/Cross-sectoral Forestry Policies

4. FAO's Strategic Objectives and collaboration with partners



SOFO 2016

Title: *“Forests and Agriculture – Land Use Challenges and Opportunities”*

Focus of analysis:

- competing demands for land for forests and agriculture; and
- the relationship between forest cover changes and food security



SOFO 2016

- Using case studies to highlight the potential opportunities for countries to meet food security objectives without doing so at the expense of forest
- Select 10 countries for the case studies: countries that both achieved to increase or maintain their forest cover and to improve their food security



SOFO 2016

Scope and Content

- Trends in land use change
- The governance and management of land use change
- Making room for forests and food security
- Towards better governance of land use for forests and agriculture



Case studies

1. Countries increasing or maintaining their **forest area** during the 1990 – 2015 period
2. Countries increasing or maintaining their forest area during the 1990 – 2015 period **that have also achieved MDG target**
3. Countries increasing or maintaining their forest area during the 1990 – 2015 period **that have both achieved MDG and WFS target**



Methodology

- Data compilation using the latest FAO data available from FRA 2015 and SOFI 2015 ;
- Choice of the period of study 1990-2015
- Selection of the relevant indicators for the study :

Food security

Suite of 40 indicators available.

Choice of **prevalence of undernourishment (MDG target)** and **number of people undernourished (WFS target)** from SOFI 2015.

Undernourishment : below the minimum level of dietary energy consumption

Forest

Calculation of the **growth rate in forest area from 1990 to 2015**, using the forest cover data from FRA 2015.

$$GR\ 90 - 15 = \frac{\text{Forest area in 2015} - \text{Forest area in 1990}}{\text{Forest area in 1990}} \times 100$$

- Data compilation with Excel and use of filters.

	A	B	C	D	E	F	G	H	I	J	P	Q	R	S	T	U	V	W
1	Countries			Forest area (1000 ha)					TSFOR	Growth rate in forest area (%)						Prev		
2	Name	Code	Region	Land area (1000 ha)	1990	2000	2005	2010	2015		1990-2000	2000-2005	2005-2010	1990-2010	2010-2015	1990-2015	1990-92	2000-01
4	Albania	ALB	Europe	2,740.00	788.8	769.3	782.4	776.3	771.5	1	-2.47%	+1.70%	-0.78%	-1.58%	-0.62%	-2.19%	<5.0	<5.0
14	Australia	AUS	Oceania	768,230.00	128541	128841	127641	123211	124751	2	+0.23%	-0.93%	-3.47%	-4.15%	+1.25%	-2.95%	1990-2015: Greater than "-0.03"	
15	Austria	AUT	Europe	8 240 90	3776	3838	3851	3860	3869	3	+1.64%	+0.34%	+0.23%	+2.22%	+0.23%	+2.46%	<5.0	<5.0

Case studies

Tunisia

- Not a lot of forest in absolute value, but a growth rate in forest area from 1990 to 2015 of 62%.
- MDG target 1C achieved, WFS target close to being achieved (will be achieved before 2020 if observed trend persists according to the SOFI 2015).

The Gambia

- Only low-income country to have a positive growth rate in forest area from 1990 to 2015, and good results in food security.
- Gambia has not achieved the WFS target (Status in the SOFI 2015: with slow progress), even though it has accomplished great improvements in food security within the last 25 years, achieving MDG target 1C.



Case studies

Chile

- Increase in forest area of 16% from 1990 to 2015, a lot of forests in absolute value. MDG target 1C and WFS target achieved.

Turkey

- Increase of 22% in forest area from 1990 to 2015. Nearly all the forests in Turkey are state-owned and administrated by the General Directorate of Forestry. The government is very involved in forest management. MDG target 1C and WFS target achieved



Challenges

Complex Landscapes

- Overlapping sectoral jurisdictions
- Investment and land use strategies not always aligned
- Differing values and norms and historical mistrust between sectors
- Forestry sector often neglected or forgotten in larger national development planning
- Forest and farm producers confused by conflicting policies and rarely included in investment planning



The Forest and Farm Facility

Forests and family farms together
sustaining livelihoods and landscapes



FOREST AND FARM PRODUCER ORGANIZATIONS
CONNECT, ENABLE AND AMPLIFY OPPORTUNITIES



Strengthening Producer Organizations and Governments

FFF – Partnership between FAO, IIED & IUCN, hosted at FAO

Vision

“Smallholders, communities, indigenous peoples and women’s organizations have improved livelihoods and decision-making over forest and farm landscapes”

5 year multi-donor funded programme

Working in 10 countries and globally



MINISTRY FOR FOREIGN
AFFAIRS OF FINLAND



SWEDEN



Federal Ministry
of Food
and Agriculture



Forests, trees and family farms *together* form productive agro-ecological systems

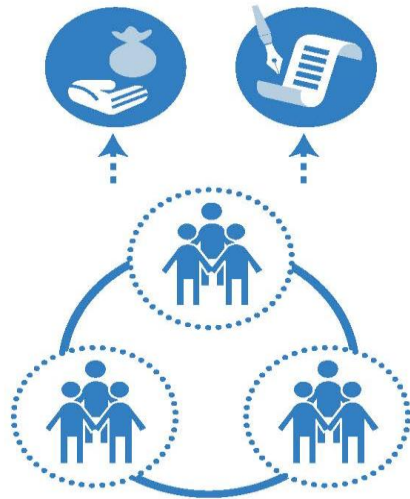
Forests and family farms together
sustaining livelihoods and landscapes



FOREST AND FARM PRODUCER ORGANIZATIONS
CONNECT, ENABLE AND AMPLIFY OPPORTUNITIES

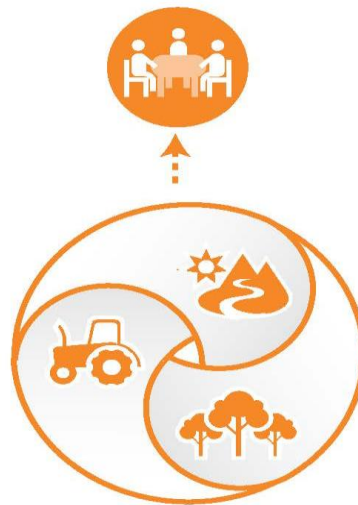
- Ensuring essential ecological functions and services
- Increasing food security and improving nutrition
- Providing a range of products for subsistence and markets
- Increase resilience and adaptation to climate change

FOREST AND FARM PRODUCER ORGANIZATIONS FOR LIVELIHOODS AND DECISION MAKING



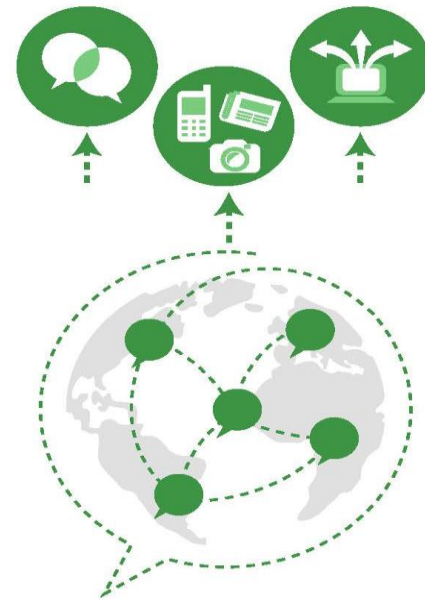
PILLAR 1

Strengthen smallholder, women, community and Indigenous Peoples' producer organizations for improved business and livelihoods and effective engagement in policies



PILLAR 2

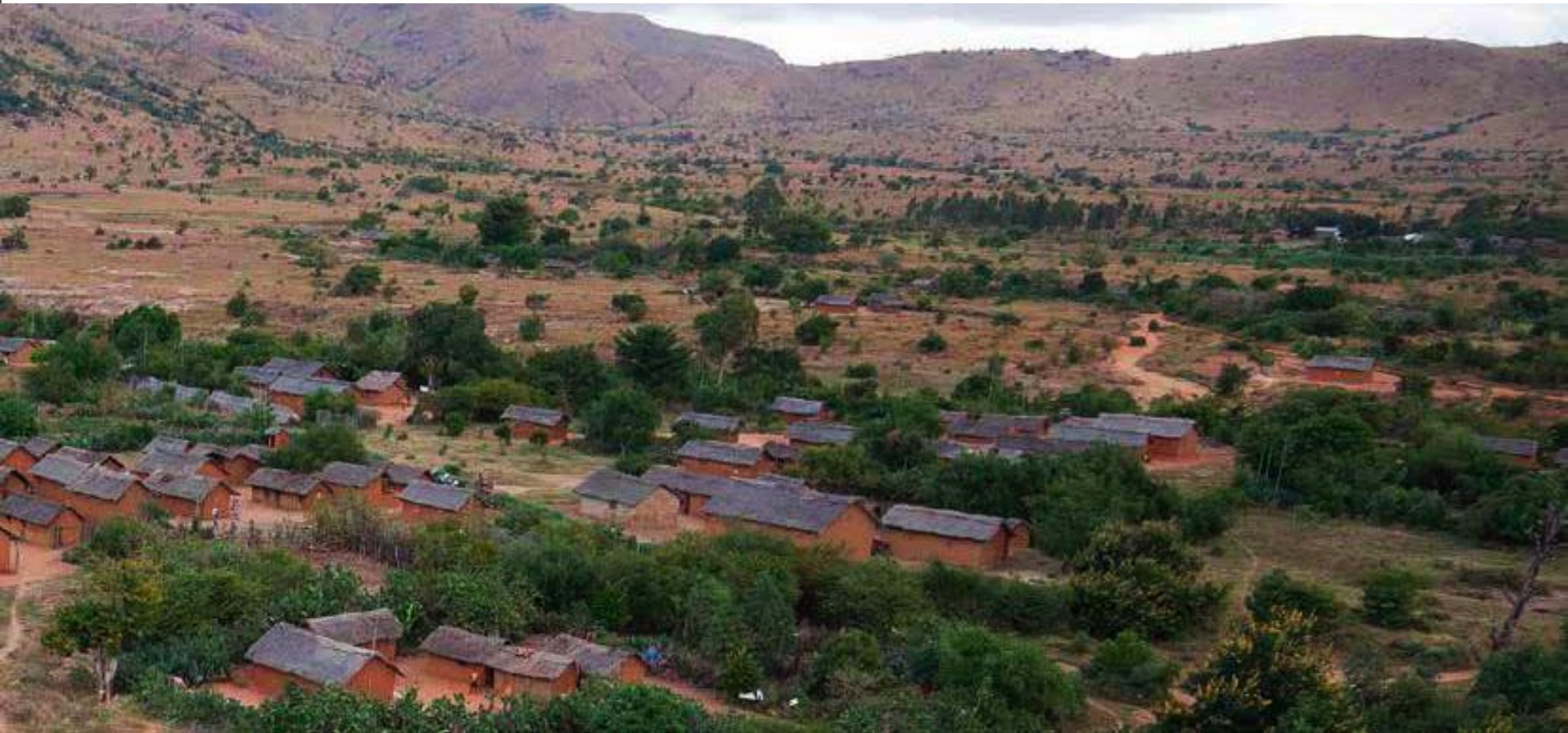
Catalyze multi-sectoral stakeholder policy platforms with governments for enhanced policy dialogue between stakeholders and government



PILLAR 3

Link local voices and learning to global arena through communication, genuine participatory processes and information sharing

Forest and Landscape Restoration



Key Principle of FLR



Balancing ecological functions with human development needs (how to deal with multi-functionality of landscapes)



Enhancing resilience



Continuous learning process and trade-offs



Engaging multiple stakeholders

Multiple benefits and commitments



Bonn challenge (Restoration of at least 150 million hectares by 2020)



CBD Aichi Biodiversity Target 15 (Restoration of 15% of degraded ecosystems by 2020)



UN Climate Summit Declaration on Forest (New York) with 350 million hectares by 2030



Sustainable Development Goal and target 15.3 on Land Degradation Neutrality (LDN) as well as SDG 2 on food security + others

Main global initiatives on FLR



The Global Partnership on Forest and Landscape Restoration (GPFLR)



Landscapes for People, Food and Nature (LPFN) led by Eco Agriculture Partners



The Forest and Landscape Restoration Mechanism (FLRM) launched by FAO in 2014



The Forest and Ecosystem Restoration Initiative (FERI) launched by CBD in 2014

The Africa Great Green Wall (GGW)

- A people-centred approach to land management that seeks to capitalize on the dynamic linkages in the landscape between human and natural systems

