Sustainable Forestry for Food Security and Nutrition

A report by the High Level Panel of Experts on Food Security and Nutrition of the CFS

27 June 2017

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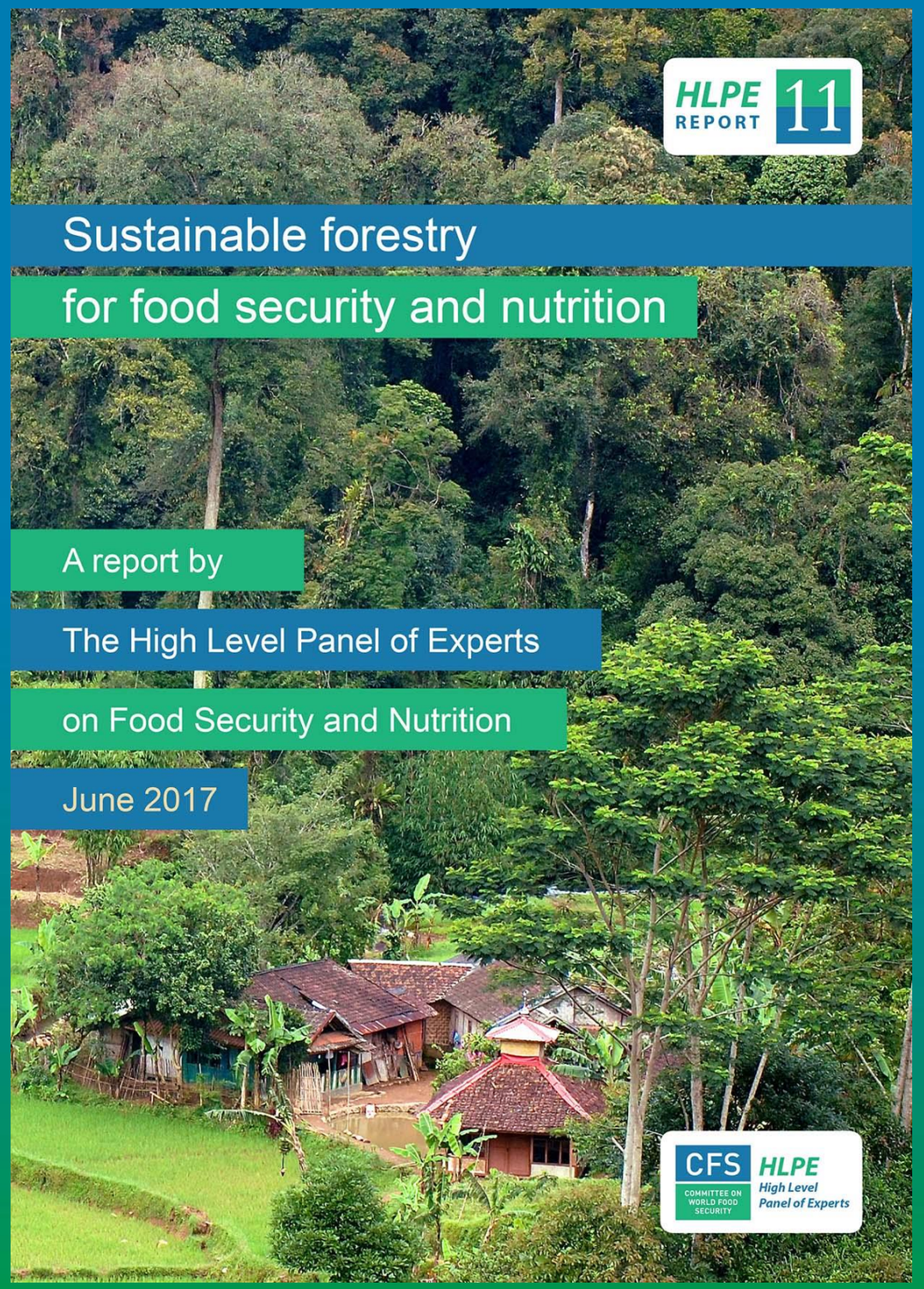


Structure of the report

1) Forests, trees and FSN: Scope and conceptual framework

2) Contribution of forests and trees to FSN

3) Forestry trends: challenges and opportunities for FSN

4) How to optimize the contribution of forests and trees to FSN in a sustainable way?

Recommendations

1) Forests, trees and FSN: scope and conceptual framework

Forest definition

More than 1,660 definitions of forests and wooded areas are used worldwide, reflecting the diversity:

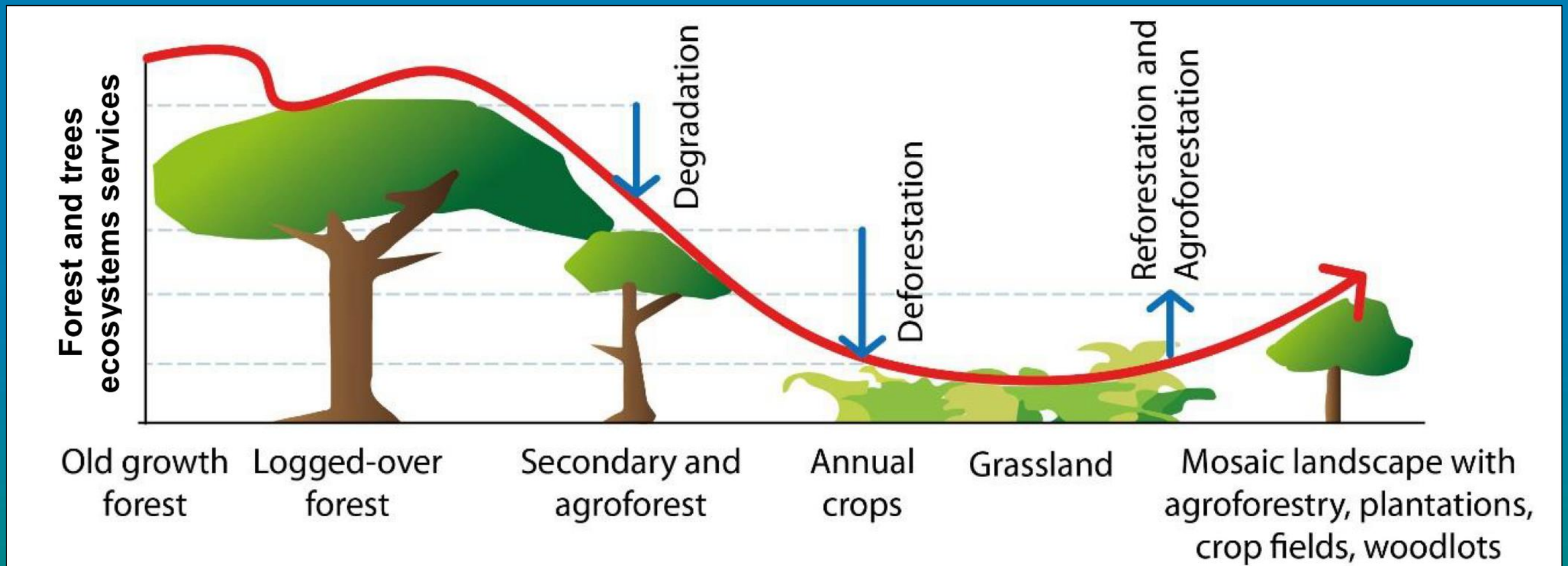
- of forest ecosystems,
- of human perceptions and uses of forests and trees,
- and the level of human modification of forests along the forest transition curve.

In the FRA, FAO defines forest as:

- *Land spanning more than 0.5 hectares,*
- *with trees higher than 5 metres, and*
- *a canopy cover of more than 10 percent.*

This does not include land that is predominantly under agricultural or urban land use.

Forest transition curve



Source: Adapted from CIFOR (2011).

A typology

The typology proposed in this report builds on those definitions and on this forest transition curve.

Five broad categories are distinguished:

- Primary or old growth forests,
- Secondary forests,
- Plantation forests.

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- Other wooded lands,
- Trees outside forests.

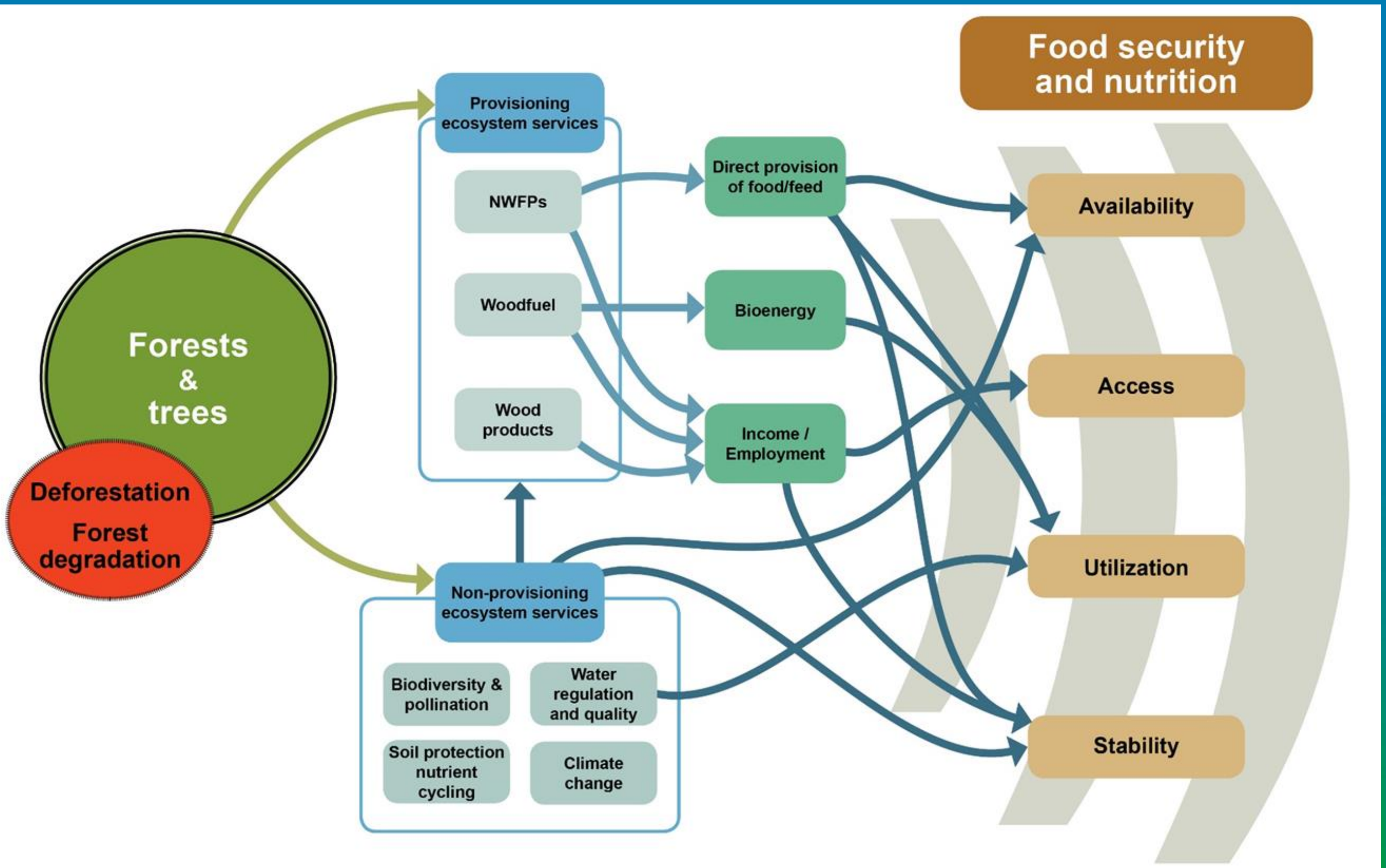
Forest-dependent people

Three categories of forest-dependent people can be distinguished:

- Forest dwellers, including indigenous peoples, who depend primarily on forest for their FSN and livelihoods,
- Rural people living in or at the margin of forests
- People engaged in forest related economic activities, whether formal or informal.

Worldwide, 1 to 1.7 billion people are estimated to be forest-dependent.

Forest functions and their links to FSN



2) Contributions of forests and trees to FSN

Data used in this report

At the global level, the main sources of data on forests and forest products are:

- the FAO *Global Forest Resources Assessments*,
- the FAO *State of the World's Forests.*

The report also uses data from the IUFRO GFEP assessment (2015) and other case studies.

Direct provision of food

Although forest foods represent only 0.6 percent of global food energy supply:

- Nutrient-rich forest foods make an important contribution to dietary diversity and quality,
- Bushmeat, fish and insects are an important source of protein and other nutrients in many countries, not only in rural but also in urban area.
  - 4.6 Mt of bushmeat are extracted annually from the Congo Basin and 1.3 Mt from Amazonia.
  - In Madagascar, loss of access to wild bushmeat would result in a 29 % increase in the number of children with anaemia.

Provision of woodfuel

Globally, woodfuel represent 6 percent of the total primary energy supply (27 percent in Africa).

2.4 billion people rely on woodfuel for cooking. In Africa, two-thirds of the households use woodfuel as their main fuel for cooking.

764 million people use woodfuel to boil and sterilize water.

2.5 million people die each year due to the effects of long-term smoke inhalation.

Income generation

In 2011, the gross value added in the formal forest sector represented USD 606 billion (0.9 percent of the global GDP).

When including the informal sector, this figure increases to almost USD 730 billion, including:

- USD 88 billion for NWFPs collection, and
- USD 33 billion for construction and energy.

Payments for Environmental Services (PES) represent an estimated USD 2.4 billion.

Employment in the formal sector

In 2011, worldwide, the formal forest sector employed 13.2 million people.

An estimated 40-60 million people are employed in the informal forestry sector,

Including at least 41 million people engaged full time in woodfuel production

Gender roles

Available data suggest that women:

- play a lower role in the formal forest sector and in informal activities that generate income,
- and are largely confined to the collection of forest products for subsistence use.

More gender-disaggregated data are needed to better understand:

- the gender repartition of roles in forest activities,
- and the gender distribution of benefits from forests at the household level.

Ecosystem services

Forests and trees deliver numerous ecosystem services essential for agriculture and FSN in the long term, including:

- Water regulation (quantity, quality),
- Soil formation, protection and nutrient circulation,
- Biodiversity (forests host the major part of terrestrial biodiversity),
- Pollination and pest control,
- Climate change mitigation and adaptation.

Contributions to resilience

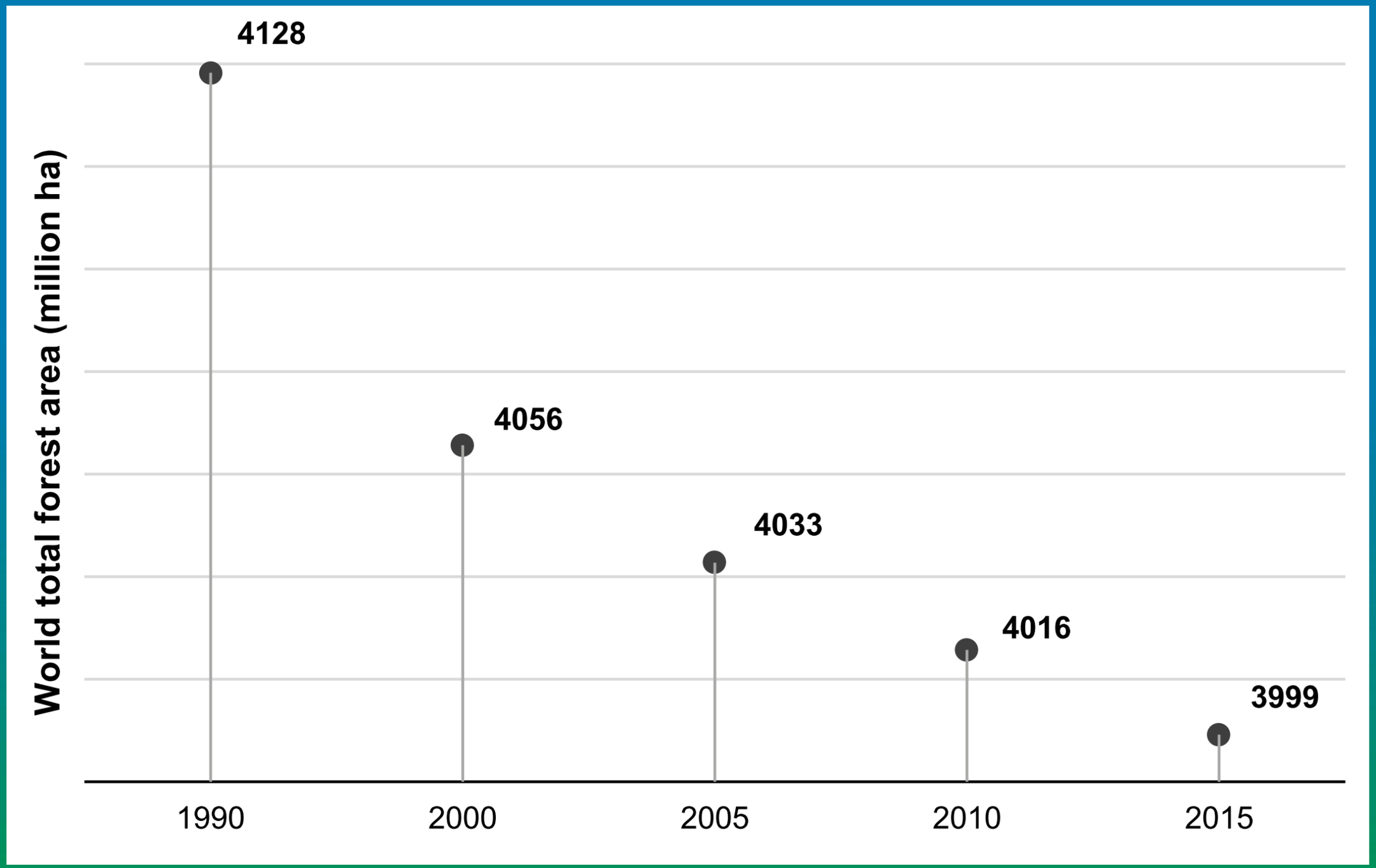
Forests and trees play a crucial role to strengthen resilience of food systems, and ecosystems to climate change, natural disasters or economic shocks.

They act as a safety net in period of scarcity or conflicts, contributing to a diversification of sources of food and income.

These additional sources of food and income can be particularly important for the more vulnerable groups.

3) Forestry trends: challenges and opportunities for FSN

Global net forest loss is slowing down



Contrasted evolutions (1990-2015)

- Decrease in primary forests in the tropics (62 million ha) and subtropics (6 million ha).
- Growing importance of planted forests in terms of surface (from 4 to 7 percent of total forest area) and production (46.3 percent of industrial roundwood)
- Important potential for forest and landscape restoration: more than 2 billion ha worldwide

Increasing and competing demands

- Increasing demand for food due to population growth (9.7 billion in 2050) and changing diets.

- Demand for wood and fibre is expected to double by 2030. (planted forests could represent 69 percent of wood production by 2050).

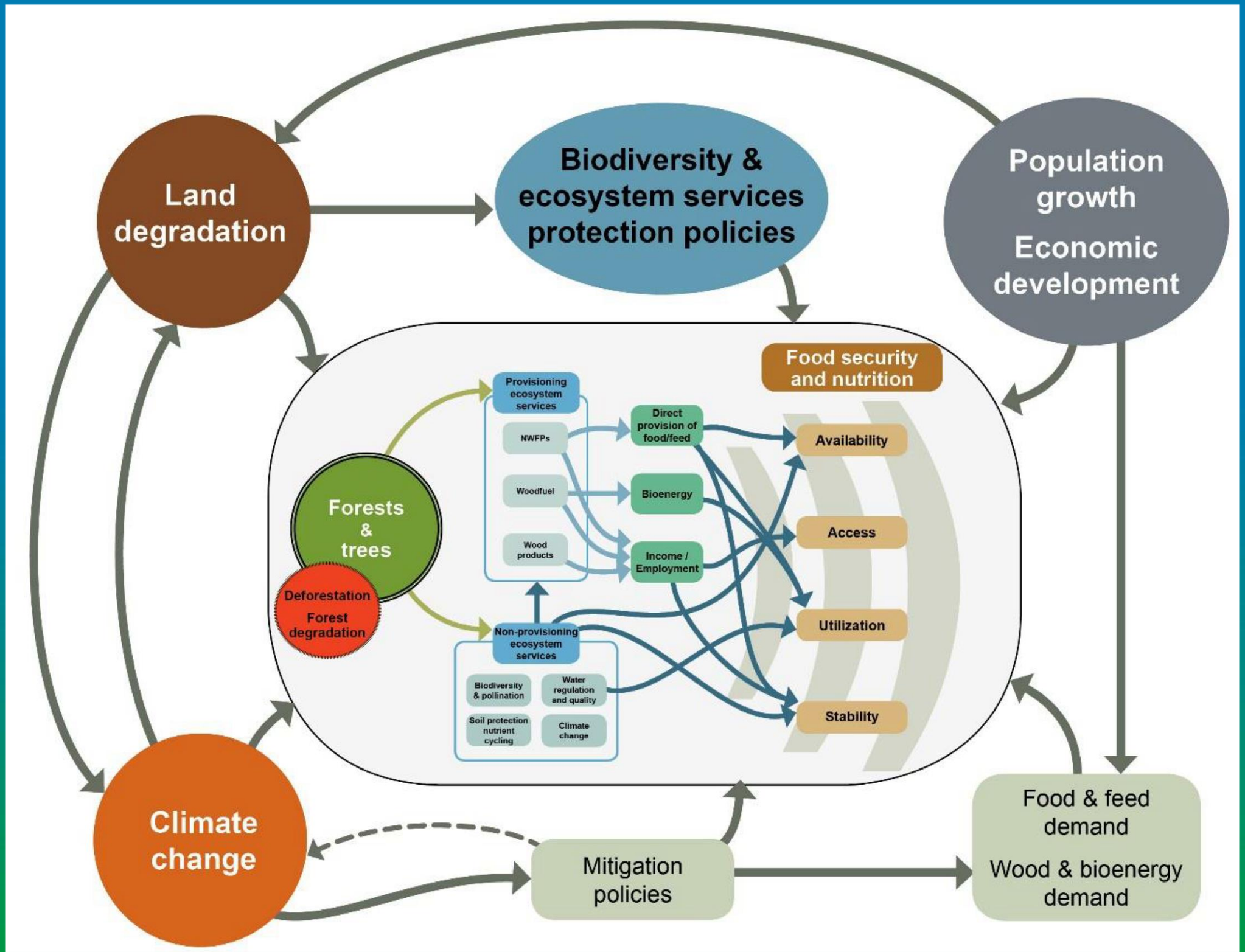
- Increased recognition of the protection roles of forests (for biodiversity, soil and water) and of their recreational, spiritual and cultural value.

This creates new challenges and opportunities.

Forests, trees, climate change and FSN

- Signs of climate stress are already apparent
- Healthy forests could play a crucial role to strengthen ecosystem and forest-dependent people's resilience to climate change.
- Forest mitigation potential could reach nearly 14 GtCO2 eq/year through reduced deforestation and improved forest management.
- Following the Paris Agreement, most countries have integrated forestry in their national determined contributions (NDCs).

Impacts of forest changes on FSN



4) How to optimize the contributions of forests and trees to FSN in a sustainable way?

Governance

Governance comprises three key elements:

- the rules themselves (including formal and informal ones),
- the process by which those rules are established, and the decision taken, and
- the way those rules and decisions are implemented, assessed and monitored. (HLPE, 2014b)

See: HLPE report on *Sustainable fisheries and aquaculture for food security and nutrition.*

Governance of forests and trees:

Forests and trees provide many different benefits, at different geographical and temporal scales.

As a shared resource, forests and trees are used by many different stakeholders, whether local or distant, with contrasting power, for many different purposes.

They are subject to a complex web of different property and use rights.

This diversity of perspectives, interests and objectives might generate tensions or pave the way for conflict.

Governance instruments:

- International agreements or processes related to forests and trees impact their contributions to FSN (REDD+, CBD, VGGT, UNSPF 2017-2030…).

- National rules define forest, determine property, access and use rights over forests and trees; respective roles and responsibilities of stakeholders; institutional organization for forest management at different scales.

- Certification schemes and voluntary standards, PES and other market-based instruments are increasingly used in the forest sector.

Ways forward: SFM for FSN

The report identifies a set of enabling conditions to SFM for FSN :

- Preserve permanent forest land and develop appropriate forest management plans.
- Promote an integrated landscape approach moving beyond the debate on land sparing vs. land sharing.
- Ensure full and effective participation of relevant stakeholders in forest policies and forest management.
- Adopt a rights-based approach.

Recommendations

1. Develop and use policy-relevant knowledge on the direct and indirect contributions of forests and trees to FSN

2. Enhance the role of forests in environmental processes at all scales without compromising the right to adequate food of forest-dependent people

3. Support the contributions of forests to improve livelihoods and economies for FSN

4. Promote multifunctional landscapes for FSN that integrate forests and trees as key components

5. Acknowledge the importance and strengthen the role of forests and trees in enhancing resilience at landscape, community and household levels for FSN

6. Recognize and respect land and natural resource tenure and use rights over forests and trees for FSN

7. Strengthen inclusive forest governance systems across sectors and scales for FSN

Thank you for your attention

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