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The United Nations General Assembly defines sustainable forest management (SFM) as a “dynamic and evolving concept, which aims to maintain and enhance the economic, social and environmental values of all types of forests, for the benefit of present and future generations”.¹ The SFM concept encompasses both natural and planted forests in all geographic regions and climatic zones, and all forest functions, managed for conservation, production or multiple purposes, to provide a range of forest ecosystem goods and services at the local, national, regional and global levels.

Criteria and indicators developed for boreal, temperate and tropical forests provide a framework to assess, monitor and report on the implementation of SFM based on: the extent of forest resources; biological diversity; forest health and vitality; productive functions; protective functions; socio-economic functions; and the legal, policy and institutional framework. Certification processes and best-practices guidelines have been developed to guide, assess, attest to and monitor SFM at the forest management unit level.

There has been significant progress in implementing SFM, but many challenges remain. The objective of this series of fact sheets produced by the Collaborative Partnership on Forests² is to inform decision-makers and stakeholders about some of the issues and opportunities facing the implementation of SFM in the 21st century.³

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What is at stake?

Forest dependency. Many of the world’s poorest people depend on forests for their survival. An estimated 1.6 billion people living in poverty use forests for all or part of their livelihoods⁴; nearly 50 percent of all agricultural land used globally to generate food and income has at least 10 percent tree cover⁵; 60 million indigenous people live in tropical forests and depend on them for survival⁶; 150 million people obtain significant protein from bushmeat⁷; 2 billion people rely on biomass fuels, mainly derived from forests or trees outside forests, for cooking and heating⁸; 75–90 percent of people in developing countries depend on natural products (many from forests) as their only or main source of medicine⁹; and forestry provides 10 million formal jobs and informal income for 30–50 million people in developing countries.¹⁰

Increased consumption. The consumption of industrial roundwood is expected to increase by 50–75 percent by

2050¹¹, the use of solid biofuels – including wood – is predicted to grow by 300 percent by 2030¹², and the role of non-wood forest products (NWFPs) is also likely to increase substantially. The increasing consumption of agricultural products due to population growth and increasing per capita consumption adds to pressure to convert forests to agriculture. Globally, the average area of forest per capita halved from 1.2 hectares in 1960¹³ to 0.59 hectares in 2008.¹⁴

Multiple demands. The rural poor use forests in many ways, including for subsistence (e.g. fuelwood, medicines, construction wood, bushmeat, fodder, mushrooms, honey and edible leaves, roots and fruits); revenue generation (e.g. art, craft, food and wood); formal and informal employment; and other purposes such as security (e.g. as a refuge in war or civil unrest), cultural and spiritual customs, and recreation.¹⁵ Many urban dwellers also derive income from forests, and forests play an essential role in watershed protection and the prevention of land degradation, especially in montane ecosystems.

The multiple demands on forest goods and ecosystem services are unprecedented, but they are set to intensify with the increasing impacts of climate change, population growth and economic crises.

Key issues

Lack of awareness of forest roles. There is a lack of awareness of the roles that forest goods and ecosystem services play. Given the heavy dependence on forests of many of the world’s poorest people, sustainable forest management (SFM) has an important role to play in achieving the Millennium Development Goals (MDGs), especially ‘eradicating extreme poverty and hunger’ (MDG 1); ‘promoting gender equality and empowering women’ (MDG 3); ‘combating HIV/AIDS, malaria and other major diseases’ (MDG 6) and ‘ensuring environmental sustainability’ (MDG 7).¹⁶

Social and cultural heritage. In most developing countries, traditional forest-based food



production systems and social customs are culturally important. The transfer of the skills and traditional knowledge associated with these systems and customs contribute to community empowerment and constitute part of a social capital pool that is often undervalued. Increasing pressures on forests can degrade this social capital, leading to conflict.

Unclear forest tenure and over-use. The heavy dependence of the poor on forest goods and ecosystem services provides an incentive for conservation. However, when property rights are poorly defined or unrecognized, a combination of increasing population pressure, conflicts, population displacement, environmental

change and weak governance can lead to over-exploitation through over-harvesting, over-hunting, encroachment and excessive foraging.¹⁷ This creates a poverty cycle – degraded forests yield fewer goods and ecosystem services, placing an even greater burden on the poor. There is a need for improved management approaches that address the connections between people and natural resources.

Experience and knowledge

People-centred, pro-poor approaches. In the past, efforts to implement SFM focused heavily on harvesting wood, fibre, fuel and a range of non-wood products. In

recent decades, more attention has been directed towards understanding how people use forests, in combination with other natural resource assets, to achieve food security, alleviate poverty and sustain livelihoods. As a result, SFM has evolved as a process to safeguard and deliver a wide range of social, cultural, environmental and economic benefits, increasingly embracing people-centred and pro-poor approaches integrated with other sectors.¹⁸

Forests for agriculture. Forests boost agricultural productivity and provide key ecosystem services for agriculture, such as regulating local, regional and global climates, providing fresh water, and harbouring pollinators. The Amazon rainforest feeds water to

Good practices for forest-based food security and livelihoods

Evaluation

- Measure status of and change to forest ecosystems and related services, the users of forests, and other land uses through forest inventories and socio-economic surveys.
- Evaluate social, cultural, environmental and economic benefits for women and men at the landscape scale and incorporate peoples' livelihoods and uses of forests and other land in production and conservation planning and decision-making.
- Undertake social and environmental impact assessments to identify needs, and equitably share benefits and costs.
- Monitor forest dynamics and environmental and social impacts to provide feedback to forest policymakers, planners, managers and other stakeholders.
- Monitor the impact of SFM on national food security strategies.

Governance

- Link forest-related conventions, agreements, certification schemes and best practices guides to national and local policy, law enforcement, regulatory, planning and practice frameworks.
- Provide transparent, long-term policies, public investments and subsidies that support community, civil-society and private-sector investments in forest ecosystem services.

- Adopt multi-stakeholder participatory approaches to formulate policies and plans that include the free, prior and informed consent of indigenous peoples and local communities.

- Remove tenure policy and regulatory restrictions to facilitate the transfer of rights over public forest lands to local communities; balance customary and formal norms and institutions; recognize historic tenure rights; reduce legal restrictions on the management of trees on farms; and ensure law enforcement.
- Encourage community–private–public partnerships to achieve SFM and share benefits equitably.
- Encourage inter-sectoral and interagency collaboration to enhance the role of forests and trees in food security and poverty alleviation.
- Promote public understanding of the multiple roles of forest ecosystems, including enhancing food security, reducing poverty and sustaining livelihoods.
- Integrate forests into strategies for development, food security, poverty reduction, sustainable land use and climate change.

Management

- Adopt management plans and practices compatible with maintaining ecological, social, cultural, religious and other values important to local communities and to society.

- Adopt payment schemes for key ecosystem services (e.g. carbon sequestration and water, soil and biodiversity conservation) between resource providers and beneficiaries.

- Apply best practices for harvesting wood, fibre, biofuel and NWFPs.
- Designate riparian reserves and other buffer zones to protect ecosystem services important to local communities.
- Train and employ local people to carry out post-harvest silviculture, forest restoration, forest protection and other prescribed forest activities.
- Recognize the pivotal role of afforestation and reforestation in the provision of goods and ecosystem services, particularly wood, fibre, biofuel and NWFPs.
- Promote agroforestry and trees outside forests to enhance soil productivity and food security, sustain livelihoods in agricultural landscapes and reduce pressure on forests.
- Promote community-based forest management to improve food security, incomes and biodiversity conservation.
- Promote the development of small and medium-sized forest-based enterprises and facilitate market access.

Support

- Provide technical and financial support and capacity-building to strengthen institutional capability to enhance the role of SFM in food security and sustainable livelihoods in developing countries.

agriculture in at least five countries in South America¹⁹; coffee yields in Costa Rica have increased since shade trees and a mosaic of natural forests were interwoven with coffee plantations²⁰; and agroforestry practices with nitrogen-fixing species have the potential to double farm outputs, particularly in semi-arid zones.²¹

Good practices. The table on the previous page summarizes good practices for forest-based food security and livelihoods.²²

Challenges

Integration of policies. A major challenge for SFM is the adoption of pro-poor approaches that recognize the links between food security, livelihoods and forest ecosystem services.²³ These approaches require greater integration of policies and planning for forests, agriculture and other land uses.

Isolation. The forest-dependent rural poor tend to live in remote areas where the market economy has minimal influence and there is less access to new technologies. Public investment in services and infrastructure is often low. Commonly, forest-dependent people are socially and economically marginalized and have a weak political voice.

Lack of recognition. Despite their importance in the lives of the poor and marginalized, forests are often insufficiently accounted for in national policies on development, food security, poverty alleviation and climate-change adaptation. Even national poverty reduction strategy papers reporting progress towards the MDGs rarely recognize the role of forests and trees in food security and poverty reduction.

Trans-border forest ecosystems. Many tropical forest ecosystems, such as the Amazon, Congo and Mekong basins, are shared by several countries, yet there is often little policy coordination

between them. Moreover, local communities are rarely represented adequately in existing transboundary forums, reducing their ability to share knowledge, explore solutions to issues of common interest, and influence decision-making.

Wildlife as food source. In many cultures, forest-dependent wildlife species provide an essential source of protein and generate important income. However, increasing demand in cities, soaring food prices, and access to more destructive hunting techniques has led to a growing and often-unsustainable commercial wildlife meat trade that is undermining local food security, biodiversity and livelihoods.²⁴ In 2011, the Convention on Biological Diversity developed guidelines for the conservation and sustainable use of bushmeat to address this major cause of forest degradation.²⁵

Traditional knowledge and indigenous community safeguards. The rights, interests and knowledge of indigenous peoples and local communities (see fact sheet 4) are often undervalued, including in policies and programmes related to climate-change adaptation (see fact sheet 8) and mitigation. In international policy forums, a major challenge is to better engage forest-dependent indigenous peoples and local communities and to better incorporate traditional forest knowledge. Safeguards are also needed to ensure that global initiatives like REDD+ (see fact sheet 5) improve the food security and livelihoods of the vulnerable and poor.

Opportunities

Public and policy awareness. There is an opportunity to raise awareness of the role of SFM in food security, poverty alleviation and livelihoods and to develop livelihood strategies that do not jeopardize forest sustainability.

Payments for ecosystem services. There are increasing examples of payments being made to maintain or improve forest-based ecosystem services, such as water catchment protection and carbon sequestration. Properly directed, such payments can provide income for forest-dependent people, help alleviate poverty and provide an incentive for SFM.

Cross-sectoral policy and planning. A move towards landscape-scale approaches to planning is an opportunity to address poverty and contribute to food security and local livelihoods using participatory multi-stakeholder processes.²⁶ Integrating policies on climate change, population growth, natural resource management, national development and food security are crucial in balancing SFM, food security and sustainable livelihoods in developing countries.

What is still to be learned?

Better understanding is needed of:

- The linkages between food and energy production, livelihoods and forest-based ecosystem services.
- The impacts of accelerating demand for biofuel on the food security and livelihoods of forest-dependent communities.
- The role of payments for forest-based ecosystem services in food security and livelihoods.
- Options for shifting forest-dependent communities towards sustainable approaches to food security, poverty alleviation and livelihoods.



Key messages

- SFM can safeguard and deliver a wide range of social, cultural, environmental and economic benefits that support food security and livelihoods.
- Linking people-centred, pro-poor and landscape policy and planning approaches that integrate forests, agriculture and other land uses can enhance productivity and the provision of forest goods and ecosystem services.
- SFM can play an important role in integrating forests into strategies for development, food security, poverty reduction, sustainable land use and climate change.
- Payments for ecosystem services can enhance the provision of such services and support SFM.



 **CPF**
Collaborative Partnership
on Forests

The Collaborative Partnership on Forests consists of 14 international organizations, bodies and convention secretariats that have substantial programmes on forests. The mission of the Collaborative Partnership on Forests is to promote sustainable management of all types of forests and to strengthen long-term political commitment to this end. The objectives of the Partnership are to support the work of the United Nations Forum on Forests and its member countries and to enhance cooperation and coordination on forest issues.

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Endnotes

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- 2 Center for International Forestry Research (CIFOR), Food and Agriculture Organization of the United Nations (FAO), International Tropical Timber Organization (ITTO), International Union for Conservation of Nature (IUCN), International Union of Forest Research Organizations (IUFRO), Convention on Biological Diversity (CBD) Secretariat, Global Environment Facility (GEF) Secretariat, United Nations Convention to Combat Desertification (UNCCD) Secretariat, United Nations Forum on Forests (UNFF) Secretariat, United Nations Framework Convention on Climate Change (UNFCCC) Secretariat, United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), World Agroforestry Centre (ICRAF), The World Bank.
- 3 Topics: SFM and the multiple functions of forests; SFM and primary forests; SFM, food security and livelihoods; SFM and indigenous peoples; SFM and REDD+; SFM and biodiversity; SFM and gender; and SFM and adaptation to climate change. The Partnership hopes to periodically update these fact sheets and to prepare new fact sheets on other important topics, including financing.
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