Forests at the heart of a sustainable future

Key Messages From FAO's State of the World's Forests 2012

Rio+20 will examine the social, economic and environmental dimensions of sustainability. Sustainability implies a balanced cycle of consumption and production. The cycle is harmonious if key natural resources are not depleted and ecosystem functions are not impaired. Sustainability also entails balancing economic interests and social responsibilities with a sense of shared trust for the planet. It calls for a transition to a green economy approach that is low carbon, resource efficient and socially inclusive and that results in improved human well-being and social equity.

The tenth edition of FAO's "State of the World's Forests 2012 (SOFO 2012)" endeavors to reinforce a fundamental truth: forests, forestry and forest products are central to a sustainable future and they must play a critical role in our successful transition toward green economy. Forests are key to fulfilling the long-term objectives of sustainability at all levels, including through the provision of essential goods and services in a green economy. The forest sector has a rich experience in ensuring a balance between consumption and production and can provide an excellent illustration of how the growing demand for food, fibre and energy can be met while minimizing waste and reducing greenhouse gas emissions.

Sustainable forest management and the use of forest products also present important opportunities to address the issues of equity and justice. Equally, preservation of forest capital benefits future generations creating a constant or expanding stream of social benefits. SOFO 2012 presents insights into these themes and highlights where forests' contribution will be most important in the future of sustainable and greener development.

Forests as critical life support systems

- *SOFO 2012* brings essential information to explain how forests can help enhance ecosystem resilience and significantly reduce environmental risks. Forests perform a wide range of essential ecosystem functions such as regulating water supplies, buffering floods and droughts, and mitigating the adverse effects of greenhouse gas emissions. Trees and wood are still the world's best and proven ways to capture and store carbon. Storing about 289 gigatonnes of carbon in their biomass alone, they hold significant potential to mitigate climate change. Harbouring over two-thirds of the world's terrestrial biodiversity, forests also offer resilience for agriculture, rural industry, irrigation, and other sectors. Some of these functions and services are vital for the sustenance of life and life support systems and cannot be substituted by other forms of capital.

- As a result, forest restoration and reforestation have come to be recognized as critical means of addressing major challenges to food security such as desertification and soil degradation. Agroforestry and silvopastoral systems are some of the approaches that have been used as a way of capitalizing on many of the protective functions of trees and forests in order to enhance food production and farm productivity over time.

Forestry as an engine of economic development and equity

- *SOFO 2012* notes how forest use and economic development have strong linkages. A similarly strong relationship has been observed between the destruction of forests and economic decline. The publication provides a short regional overview of these effects and the history of how the concept of 'sustainability' was shaped by the forest sector nearly 300 years ago.

- *SOFO 2012* highlights how forests, forestry and forest products and services could be key to improving rural livelihoods, reducing poverty, and promoting equity. It explains, for example, how investments in wood-based enterprises will generate additional employment, create real and durable assets and help revitalize the lives of millions of people in rural areas. Noting that the value of woodcraft exports has more than doubled during the period 2002 to 2010 and farm forestry contributed up to 40% of farm income in certain areas, it highlights the importance of small and medium scale forest-based enterprises and the need for investment in creating an enabling environment to build and sustain such enterprises.

- Greening the economy with forestry can also open a wider realm of possibilities to rebalancing the present social, economic and regional asymmetries and inequalities. About 350 million of the world's poorest people, including 60 million indigenous people, depend on forests for their daily subsistence and long-term survival. They include the most disadvantaged and vulnerable, and often the politically weakest groups of our society. Low capital requirement and flexibility to adapt to diverse conditions and capacities are other attributes of investing in forestry that particularly benefit the poor.

Wood as a vital means to a sustainable future

- By volume, the most widely extracted good from forests is wood. Wood being intrinsically natural, recyclable, reusable, and biodegradable, holds tremendous potential for increased use in our journey towards a sustainable future. These prospects range from their use in green buildings and other infrastructure to recyclable parts in cars and computers. The unique characteristics of wood[1] lend it to be an excellent substitute for many consumer goods and products that are cheap but harmful to the environment and economy. Wood is comparatively light for transport, easy to transform yet durable. Wood products store carbon for extended periods of time. The environmental and sustainability credentials of wood and wood products are gaining importance and the global demand for wood and fibre is expected to almost double by 2030. Such transformation could be the best possible way forward – environmentally friendly, socially responsible and economically sound.

- *SOFO 2012* notes that the use of "good" wood should not be disadvantaged by programs arguing that it is not environmentally friendly. It calls for a changed public perception for enhanced usage of wood and other forest products meeting the conditions of business and social responsibility.

1. E.g., cyclic, solar, and safe. Cyclic: Different from a linear process of resource extraction, manufacture, consumption and disposal to a system where resource remains in use in perpetuity.

Forestry as a key component of greening the other sectors

- Forests, forestry and forest products could play a vital role in greening key sectors of the economy such as agriculture, energy, transport, and housing. Greening these sectors would entail more ecological and economic efficiency at all levels of the value chain. Integrating tree cultivation with farming is already gaining importance as a significant component of climate smart agriculture. Similarly forest products can substitute non-renewable, energy intensive raw materials in the housing industry. *SOFO 2012* illustrates several of these possibilities.

- Noting the use of forests as a crucial source of bioenergy throughout the history of humankind, *SOFO 2012* underlines the importance of this energy source. Wood energy is still the dominant source of energy for over one third of the world's population. With the intensification of the search for renewable energy sources, *SOFO 2012* notes considerable opportunities for forest biomass-based energy to emerge as a cleaner and greener alternative.

Forests as a source of cultural, aesthetic and recreational fulfilment

- With more leisure time and discretionary income, interest in recreational and other non-consumptive uses of forests has increased dramatically. The longing of the public to visit and cherish forest and wildlife areas is growing and as much as one-half of world tourism is now nature-based. As floods and water scarcities have become more frequent and severe, urban residents are also touched by the loss of forests. Urban forestry is receiving further impetus to offer a host of environmental services such as providing green spaces, recreation facilities, and aesthetics to urban and peri-urban residents.

SOFO 2012 calls for taking into account the above key messages to ensure successful integration of forests and forestry into future policies, programmes and investments that seek sustainability. It also emphasizes strong measures to spur dramatic changes to gain a wider acceptance of the role of forests in fostering bio-based green economies. They include, first and foremost, policies and programmes to provide entrepreneurs the requisite incentives to promote forests and sustainable utilization of forest resources. They also include removal of perverse incentives that result in deforestation and degradation and conversion of forests to other uses. Creating appropriate revenue streams for forest ecosystem services such as carbon sequestration can also encourage forest landholders and managers to protect and restore forests. Open and decentralized systems of management can help promote efficiency and transparency and offer a diversified range of opportunities for local entrepreneurs.

Forests, forestry and forest products will not solve all of the challenges of moving toward greener economies, but they certainly provide excellent examples and a source of hope for a sustainable future.

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