Mainstreaming biodiversity into the forestry sector

Forests hold the majority of the world’s terrestrial biodiversity. Tropical, temperate and boreal forests offer a diverse set of habitats for plants, animals and micro-organisms. However, these biologically rich systems are threatened, largely as a result of human activity. Two Aichi Biodiversity Targets are directly related to forest issues. Aichi Biodiversity Target 5 calls for the rate of loss of all natural habitats, including forests, to be at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced. Aichi Biodiversity Target 7 calls for areas under forestry to be managed sustainably, ensuring conservation of biodiversity.

Prospects for sustainable development will be greatly influenced by the state of diversity of forest ecosystems and species. Nearly one-third of the Earth’s land area—almost four billion hectares—is covered by forests. Forests provide food, carbon storage and other goods and services that are crucial to the survival and well-being of all humanity. These benefits are underpinned by biodiversity.

Forests provide a range of benefits to people which extend far past the provision of timber. The formal forest sector employs more than 13 million people while more than 40 million are employed in the informal sector. Forest products make a significant contribution to the shelter of 18 percent of the world’s population and about 2.4 billion people cook with fuelwood (about 40 percent of the population of less developed countries). The ecosystem services that forests provide are of particular importance for the poor and vulnerable, for example as a source of non-timber forest products, such as food, freshwater provision, fibre and medicine. Further, for many people, and in particular indigenous peoples and local communities, they are an essential element of cultural identity, spirituality and worldview.

Status of forests biodiversity globally

The ongoing changes to the world’s forests have implications for biodiversity and the continued provision of the ecosystems service on which all people depend. Globally, rates of deforestation are declining but are still alarmingly high and are increasing in many areas, particularly in the tropics. Since 1990, 38 million hectares of primary forest area has been lost. From 2010 to 2015, primary forest decreased by a net 6.6 million hectares per year. Plantation forests (including assisted natural regeneration) now account for 7 percent of total global forest area.

The loss of forest cover, and in particular the loss of primary forests, the use of exotic species in plantations, invasive species and the loss of ecosystem are among key issues affecting forest biodiversity and which threaten the long-term prospects for sustainable forest management and sustainable development generally. Currently, half of the forest species regularly utilized by countries are threatened by the conversion of forests to pastures and farmland, overexploitation, and the impacts of climate change. Further changes to forest area and condition over the past 25 years have resulted in the global carbon stocks in forest biomass being decreased by almost 17.4 gigatons. This reduction was mainly driven by the conversion of forests to other land uses and by forest degradation.
In business as usual scenarios, consumption and production of wood resources are expected to further increase to meet the rise in global population and wealth. Specifically, wood consumption is expected to increase 1.3 times, with total forested areas decreasing 1.5 million square kilometers from 2010 to 2050.

The way forward

Meeting growing demands for forestry products, while also meeting other global objectives, such as food security, ending poverty, and climate change mitigation and adaptation will not be possible unless changes occur to the ways forests are managed and viewed. A number of key strategic actions for accomplishing this, and which will be further explored during the thirteenth meeting of the Conference of the Parties to the Convention on Biological Diversity, are discussed below.

Proper consideration of biodiversity in decision making is essential to the continued provision of the multitude of benefits that forests provide. Over the long term, maximizing the provision of one benefit from forest ecosystems at the expense of the others is neither sustainable nor desirable from an environmental, social, or economic standpoint. Forest biodiversity conservation and sustainable use are not mutually exclusive and with proper consideration of both issues, forests could aid in the maintenance of ecosystem services and provide a route out of poverty for many.

Combinations of policy, legal, technical, spatial planning and financial measures will be required to effectively counter deforestation, fragmentation, degradation, and species loss. Solutions will need to be tailored to national realities as the mechanisms that cause deforestation, fragmentation and degradation are varied and operate at multiple scales. There is a need for governments to create enabling conditions that facilitate sustainable forest management and which encourage forest enterprises and forest owners to appropriately integrate biodiversity into forest management plans. There is also a need to strengthen monitoring of the impacts of forest activities on biodiversity. Many of these actions can be tackled nationally but some will likely require global coordination.

Overarching principles of sustainable forest management have been agreed to, and are stipulated in, a number of international instruments. These include mechanisms set out of under the United Nations Forum on Forests and the Food and Agriculture Organization of the United Nations among others. Biodiversity needs to be given consideration in these processes with a view to promoting a coherent and coordinated approach to support the achievement of forest-related multilateral commitments and goals. To be effective, such efforts need to target all stakeholders involved in forest management, including government and international agencies, indigenous peoples and local communities, certification bodies and the private sector.

Ultimately, biodiversity needs to be recognized as a fundamental element of healthy and productive forests. Sustainable forest management that views forests beyond the wood that can be extracted can be a driver of this. However, it will be impossible to sustainably manage forests unless biodiversity considerations are taken into account.
Questions to guide the discussions:

- What are some specific positive examples of biodiversity mainstreaming in the forest sector?
- What additional actions are needed to enable and support biodiversity mainstreaming in this sector? Budgetary, development of processes, legislation or policies actions?
- What are the biggest challenges and barriers to mainstreaming biodiversity into the forest sector? What are the biggest opportunities we have now?
- Who are the main actors that have a key role to play in achieving biodiversity mainstreaming in this sector?