The Earth Summit 2012 and Forests

The Submission of the Collaborative Partnership on Forests to the Preparatory Process for Rio+ 20

Forests cover around one third of the Earth's land surface, and these ecosystems and their goods and services and related activities contribute to the objectives of the Earth Summit 2012 in multiple and essential ways. In the future—with pressures on land to meet increased food production projected to surge, the climate changing and energy prices rising—forests are going to be called upon extensively to garner solutions.

However forests offer more than immediate solutions—they provide some of the most insightful experiences the world has garnered so far as to how to practically operationalize the concept of sustainable development with respect to natural resources. Forests provide useful lessons for other sectors on how to approach 21st century challenges, including taking the aspiration of the Green Economy from rhetoric to reality.

The conservation and sustainable use of forests has been built from practical bottom-up experience rather than from conceptual theory. These experiences demonstrate time and again that the "so-called" social, economic and environmental pillars of sustainable development need to be treated as integral parts of a single system rather than being managed in isolation. In particular, the history of the conservation and sustainable use of forests illustrates that while some degree of specialization is possible—for example a protected area or a commercial forest—there is always a fundamental need to ensure that society benefits from a balanced supply of social, economic and environmental values.

In order to achieve such a balance, sustainable forest strategies need to be understood in terms of time and space. With respect to time this requires robust management and decision-making processes that not only satisfy societies' current needs but consciously ensure that future options remain open and are not foreclosed. In terms of space it requires an ability to think, plan and act at a broader "landscape level," making sure that inevitable "site-level" trade-offs do not jeopardize the broader approach. Landscape approaches facilitate the diversity and resilience of natural systems that true sustainability is built upon. Consequently there is no single blueprint for sustainability and no single approach can be relied upon to consistently deliver sustainable outcomes. Sustainability requires a process of dialogue,

negotiations and learning as well as the active participation and involvement of all the key actors.

Whereas most environmental services provide benefits to a wide range of society (the benefit of carbon absorption is global), forests provide particular benefits to an estimated 1.6 billion of the most disadvantaged rural and drylands populations. The value of direct benefits to them from forests is estimated at $130 billion per year—a figure that exceeds the totality of Official Development Assistance; and the global value of the environmental services provided by forests is still unknown but in the range of trillions of dollars, plus additional value that is added downstream. Governments and the private sector have mostly ignored these values.

The critical contributions of forests include:

- **Poverty alleviation, MDGs and rural development:** Forests are often one of the few locally available development resources; and they already provide a large proportion of rural income, GDP, food, medicine and cultural identity.
- **Climate change mitigation and adaptation:** Forests provide opportunities for ecosystem-based adaptation, to reduce greenhouse gas emissions from deforestation and forest degradation, to sequester additional carbon through forest restoration, and to capture social and environmental co-benefits—on a large scale.
- **Food security and agriculture including livestock:** New data shows that 25% to 30% of rural household income and food comes from off-farm resources, with forests providing a major share. A large proportion of forests' bounty provides nutritionally balanced wild protein, carbohydrates and vegetables to rural families. Forests also reduce soil erosion, optimize water supplies, filter and clean water, store water, and anchor an overall ecosystem that balances moisture, mitigating the severity of drought and water scarcity, as well as providing fodder for cattle during dry periods. Intensification of agriculture is a major opportunity not only to address the growing demand for food in developing countries but also for reducing and even reversing deforestation. Tenure reforms, capacity building and political priorities for agriculture are crucial.
- **Land use and land restoration**: Forests and tree cover stabilize soils, reduce water and wind erosion and enhance soil productivity. They are key to maintaining land productivity and restoring degraded lands.

Globally, over 2 billion hectares offer opportunities for such restoration, mostly in the tropical and temperate areas. About 50% of these are in degraded lands—equivalent to over 900 million hectares. The goods and services provided by drylands forests support livelihoods and contribute to poverty eradication and increased food security, targeting the poorest and most vulnerable groups, particularly women and children.

- **Biodiversity conservation:** A rich diversity of species can be conserved while livelihoods are sustained and improved. Maintaining and enhancing biodiversity in forest (production) systems and forest landscapes also contributes to their health and resilience, in addition to offering diversification of income possibilities. The value of healthy and functional natural and semi-natural forests for providing a wide range of ecosystem services to local communities, and also to societies globally, is increasingly recognized; and 'payment for ecosystem service' schemes are beginning to emerge. Forest conservation aims have been instrumental for developing these payment schemes, whether for water purification and storage, for storage of carbon, or for other ecosystem services. The most important contribution to biodiversity conservation is halting deforestation.
- **Renewable raw material, bioenergy supply and green growth:** Forests provide multiple renewable resources and can satisfy the needs of growing and changing markets for food, feed, fiber, fuel, shelter, and bio-based products originating from renewable resources and ecosystem services. Wood has a high additional potential to contribute to climate change mitigation by substituting materials and energy from non-renewable sources. Forest industries are expected to contribute very significantly to green growth jobs in forest rich countries; and the net benefits of halving deforestation could amount to $3.7 trillion over the long term.
- **Energy security:** Forests and trees are the most important source of renewable energy in the world, particularly in Africa, providing about 80% of the total primary energy supply of the continent. Globally, more than two billion people depend on fuel wood in rural settings and charcoal in urban areas for cooking and heating, and wood energy is often the only domestically available and affordable source of energy. Energy from forests is equivalent to about 20% of global crude oil production.

- **Trade:** Trade in forest products was worth over $200 billion in 2010, plus a value of additional non-timber forest products that is more difficult to quantify. Concerns about trade in forest products led to initiatives to ascertain the environmental and social impacts of trade. Getting government, industry and community support for approaches to addressing these concerns has taken the many years since Rio—but forest certification of sustainability and legality have become market instruments that have a major impact in both producer and consumer countries.

Forest ecosystems can play a central role in contributing to a green economy while their management can also benefit from a green economy. Furthermore, institutional frameworks provide a foundation for the contributions by forest ecosystems to sustainable development. A focused action agenda can deliver the benefits of sustainable development from forests and for forests. These action items include:

Green Economy

- Make development and management of forests and biodiversity a focus of poverty alleviation and the transition to a green economy.
- Cultivate the full range of climate benefits offered by forests, which include adaptation and carbon absorption and storage services, while recognizing that the values of forests are not limited to climate services.
- Bring the green value chain of forests and forest products to the service of sustainable development, including the value of recycling of fiber, the storage of carbon in housing and furniture, and a wide range of bio-products and ecosystem services.
- Manage forests to meet increasing demand for ecosystem goods and services including food, raw materials and renewable energy.
- Invest in a realistic target of restoring 150 million hectares of degraded lands by 2020 and thereafter focus on additional areas of the 2 billion hectares available for restoration globally (three quarters of which will be mosaic-based restoration and one quarter will be classic, wide-scale restoration).
- Commit to sustainable development goals on land use that will lead to a land-degradation neutral world with targets to achieve a zero net land degradation whereby the amount of land degraded

each year is offset by reclaiming and improving an equivalent amount of land.

- Invest in the dissemination and scaling up of sustainable land management techniques that promote forest growth, particularly agroforestry and evergreen agriculture, to capture multiple benefits for farmers including the ability to draw nitrogen from the air for fertilizer and provide fruits, medicines, livestock fodder, timber and fuelwood, shelter, erosion control, watershed protection, conservation of biodiversity, greater resilience to climate change, and carbon storage and accumulation.
- Assign a greater role in forest management to women, whose involvement has been shown to improve the condition and sustainability of forests.
- Invest in research and data collection on the full suite of forest ecosystem goods and services, particularly research on critical tipping points and thresholds.

Institutional Framework for Sustainable Development

- Engage in capacity building for forest management, education, and institutions.
- Optimize land use by understanding and resolving conflicting cross-sectoral land use policies and mainstreaming sustainable land management.
- Promote land planning at the landscape scale—using different decision making structures for local, regional, and international governance—to optimize the delivery of forest ecosystem goods and services from sustainably managed forests.
- Advance the establishment of a strong and effective science-policy interface in support of land restoration and sustainable land management.
- Facilitate the establishment of compensation for ecosystem services schemes to create incentives for sustainable use and investments in the management of forests.
- Devolve forest management rights to local communities that know their forests—and that have a vested interest in the decisions being made.

- Adopt coordinated and coherent polices and financing to address desertification and land degradation, climate change, biodiversity loss, poverty, water scarcity, food production, and food insecurity, by strengthening relationships among sectors and institutions.
- Minimize conflicting policies and measures by facilitating cross-sectoral and cross-institutional communication and understanding, notably with the agriculture, energy and trade sectors.
- "Green" the value chain between producers and consumers by promoting demand for legal and sustainable products and building capacities for good governance and law enforcement.

The transition to a global sustainable future is particularly important for forests. The action agenda above offers pathways for sustainable development and a green economy in which forests both contribute and benefit. Forests have much to offer to other sectors in the practice of sustainable development but they also need enabling policies that allow them to perform to their full potential. By adopting balanced policies and financing for effective institutional frameworks, we can support governance structures that will capture the multiple benefits of forests for sustainable development.

A future that does not incorporate forests and their essential values and services as key elements in a green economy would miss unique opportunities. Forests already offer a range of tested solutions to key topics in sustainable development such as climate change, biodiversity, livelihoods, soil and water, and could contribute in many ways to a green economy. A sustainable future in which forests play a central role would also empower some of the most disadvantaged people in society and facilitate their contribution to global sustainable development.