

Realizing the Potential of Forest Biodiversity in a Changing World

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Introduction: unprecedented change in the forest sector-

The world we live in is changing at a breathtaking pace. Rapid changes in computers and cell phones epitomize the speed of technological discovery; our ability to share knowledge using the internet has changed the way we communicate and work; the emergence of new economic powers and the current global economic recession both demonstrate the interconnectivity of the financial world; and not least, climate change has reached increasingly into all our lives. Climate change and economic changes, in particular, are major influences on forests and the people that depend on them.

Yet, for many of those whose livelihoods are linked strongly to forests, these changes have brought little benefit. Indeed for millions of people the struggle to meet basic needs is the same for this generation as for previous ones. How should we respond simultaneously to both old and new challenges? To help set the scene for this thematic session I want to suggest four cornerstones that could help us adapt to change.

Now more than ever we need to take what we have learned, illustrate it with real examples of progress and demonstrate that forest biodiversity and the ecosystems services provided by this diversity provide real solutions to the fast-changing challenges we face.

Forest resources must be managed for the wellbeing of biodiversity and humanity, perhaps something that few in this audience would disagree with. Indeed, a growing body of evidence, including from respected economists such as Sir Nicolas Stern and Pavan Sukhdev, indicate that we have completely underestimated the impact of the mismanagement of forest ecosystems on both long-term and short economic development. We have not been active enough in countering the flawed logic of the so-called forest transition – that forest loss and degradation is an *inevitable* consequence of economic development until such time that countries are rich enough to begin the process of restoration. Proponents of this theory will point to the United States and Europe to validate their arguments – seldom do they look to the many countries that have lost or degraded vast tracts of forest land but whose citizens remain trapped in poverty. We must challenge this inevitability, and ensure that forested landscapes and the diversity they

contain are an integral part of the infrastructure on which development depends. We know much more now about how people interact with and take decisions about forests and we must demonstrate that countries that have conserved and managed their forests have benefited substantially. Given the rapidity by which climate change is manifesting itself and the impacts it will have on all our economies no country, neither rich nor poor, can afford to not look after their forests.

Much as this may make sense to us, we have failed to convince a skeptical world and not everyone agrees that Sustainable Forest Management is a viable approach. Earlier this year at a preparatory meeting for the Copenhagen climate negotiations, Sustainable Forest Management came under attack by several groups who rejected it as a framework for forest-based climate mitigation measures because they considered it to be 'a logger's charter'. It seems that the paradigm shift in forestry that many of you have fought hard to generate over the last thirty years – moving from narrow 'sustained yield' goals to broader, more inclusive approaches that safeguard all values and services that forests provide – has not been fully accepted. Yet, more than ever, the need for a broader understanding of what Sustainable Forest Management is, and how it can be delivered is of crucial importance.

So I ask you to consider four cornerstones to sustaining forests, their diversity *and* the livelihoods of people that depend on them, and in turn to consider what the cornerstones mean for the issues raised in the subsequent sub-sessions of this part of the Congress.

1. To begin with the most fundamental cornerstone – **forests must be managed as a matter societal choice**. This, of course is an echo of the First Principal of Ecosystem Management of the Convention on Biological Diversity, and it merits being put into a forest context.

The continued decline in forest area and quality, particularly in the tropics, has serious social, economic and ecological consequences. Loss of forest biodiversity and the ecosystem services that biodiversity supports has grave implications for the wellbeing of millions of people dependent on forests. Decisions on forest management should not be simply taken on short term economic grounds, but based on the implications for human well being and the ecological integrity of forests. Economic analysis must take its rightful place as a powerful tool that aids, rather than determines, societal decision making.

Sound forest management can only be achieved if broad platforms are created to include the views of all relevant actors and stakeholders in forest management decisions. Perhaps the greatest challenge that this entails is the recognition that those with most to gain or lose through managing forests, the rural poor, are often those least well equipped to take part in negotiations. The creation of multistakeholder processes will, therefore, require considerable investment in human and institutional development, but examples of success are at hand.

IUCN has learnt much in facilitating such processes, particularly in Ghana where a Voluntary Partnership Agreement for the export of timber to the European Union has been successfully brokered. To begin with we must understand that multistakeholder processes are a long-term investment. However, identifying short term material benefits may be key to making, poor, forest-dependent people more willing to join a dialogue. It is important that all parties enter these processes well informed and this will often entail a considerable investment in out-reach and information sharing. Once 'at the table' parties must feel empowered to raise their voices amongst stakeholders to whom they might previously have deferred, or even have feared. Given that forest governance failures have too often quite literally been a matter of life and death in many places, the empowerment of local voices is necessary for meaningful multistakeholder *dialogue*.

By necessity, the various subthemes in this thematic session are narrowly defined- but I suggest we do need to consider how to integrate the concerns and issues we raise here into wider processes among stakeholders, and to discuss how to accept and manage the trade-offs that such an approach must entail.

2. The second cornerstone is **Rights**. Closely associated with the right to a place at the negotiating table, is the right to access forest lands, and to use and trade forest products and services. Whatever agenda we have for forests it has to be one that makes sense to the 2 billion people who live on less than US\$2 a day - most of whom live in those very places where our forests still occur and who depend upon these forests for their livelihoods. 70% of the world's poor live in rural areas and depend directly on biodiversity for their survival, for example in Lao PDR, IUCN calculated that the value-added to livelihoods from non-timber forest product collection in 2000 was more than US\$185 million. Compare this to gross revenues from commercial round log harvesting (much of which is goes to stakeholders far from the forest) of around US\$50 million.

Unsurprisingly, few people are willing to invest in the multiple benefits that forests deliver unless they are confident that have the right to be amongst the beneficiaries. Perhaps we have failed to illustrate the powerful simplicity of this when it is put into action, however, time and again in IUCN's Livelihoods and Landscapes Strategy we do see its logic in action. Just one example will suffice here, appropriately also from the Lao PDR. In the southern Champassak Province, in the corridor between two protected areas, we are facilitating the development of a locally-lead harvesting permit, fee and penalty system for Malva Nut harvesting from naturally regenerating forests. Previously people from outside of local communities dominated extraction and, with no incentive to maintain the flow of product from any particular location, they felled whole trees to aid collection and suppress competition from other collectors. Local access rights to Malva Nut trees, which were already defined, are now enforced and in target villages felling has been reduced to zero. The result is that local benefits are enhanced and simultaneously the functioning of a biological corridor is improved, although much still needs to be done to overcome marketing constraints that work against local people.

A rights-based approach to Sustainable Forest Management puts forest owners, local communities and indigenous people, at the center of our concerns. Combined, these groups own or manage an important amount of the world's forest resources. However, lack of access to capital, outmoded regulatory frameworks, high transaction costs, fragmentation, weak managerial and technical capacity often leave communities poorly equipped to manage their forests sustainably. For this reason, The Forests Dialogue (TFD) in collaboration with Growing Forest Partnerships (GFP) in 2009 convened a scoping dialogue to discuss how investment in locally controlled forestry can be improved both in the global north and global south.

3. The third cornerstone is making markets work.

Like it or not, we live in a market driven world, and many forest stakeholders want more, not less, access to those markets. Unfortunately, the markets that are available to many forest dependent people are not always beneficial for forests or long-term socio-economic wellbeing. As Ken Chomitz of the World Bank has pointed out in his thoughtful paper "At Loggerheads?" – a lot of biodiversity has very little instrumental value for the people who have to bear the costs of its conservation. Getting markets to work for those who conserve and manage forests is therefore fundamental – and this means finding market opportunities which not only promote

sustainable forest use, but also enable economies to grow sustainably and help the poorest to permanently improve their prospects. The recent “Climate Issues Update” by The Economics of Ecosystems and Biodiversity (TEEB) provides an average value for ecosystem services provided by tropical forests at a staggering US\$6,000 per hectare per year. What is most interesting from this analysis is that regulating services such as climate, water flows and erosion constitute 72% of these values. Yet, in most cases markets do not currently pay for these regulating services. Imagine what more might be achieved if markets can be reformed to capture more of the value of ecosystem services for those who most rely on and conserve them.

Even when the remaining 28% is considered we realize that the majority of forest stakeholders are not in a position to capture a share of this. Regulations, access to credit and even in some cases certification have been developed to suit the needs of the large producer – not the small. That is not to say that we need less regulation or certification, but we need to consider how such measures can actively empower, not exclude, small forest owners, local communities, indigenous peoples and the forest dependant poor.

Connecting the poor to markets that reward people for forest conservation by generating real income gains is therefore fundamental to managing forest diversity. Forests *can* provide for the poor- but ask yourselves whether policy makers really understand this and are prepared to act on it? Again I will use an example from the Livelihoods and Landscapes Strategy, this time from Thailand. In the tsunami-affected Andaman coast, the value of mangroves and other forest for protecting impoverished coastal communities is no longer questioned- but increasing and diversifying revenue streams from these ecosystems is key to their restoration and conservation. Connecting community based organizations, principally women’s groups, to commercial tourism operators has helped to maintain the empowerment of women. Ecotourists now make ‘homestay’ visits to communities and explore trails through the mangroves and forests. Women’s cooperatives control the management and revenues from this trade, and make most of the handicrafts that visitors buy, thus increasing revenue generation. For many women in these communities these represent new opportunities to earn income in-keeping with their traditional lifestyles and hold out the promise that linkages between ecosystem services and financial benefits will contribute to increased post-tsunami community resilience.

4. The fourth cornerstone is resilience and restoration

Resilience relates to the capacity of forest ecosystems and forest dependent people to adapt to change. Resilience is generally seen as having three elements, *persistence* – the ability of the ecosystem to absorb shocks, *adaptability* – the ability of people to manage ecosystems and *transformability* – the capacity of people and nature to transform to new systems when ecological or socio-economic conditions make the existing system untenable.

Properly managed forest *landscapes* can provide a wide range of ecosystem services that support sustainable livelihoods, conserve biodiversity and enable resilience. But in many places deforestation and forest degradation have reduced the ability of the landscape to provide a broad range of ecosystem services, and threatened livelihoods and biodiversity. Forest Landscape Restoration provides an innovative approach to building resilience by restoring forests, and if the 2004 tsunami convinces us of anything, it is that ecosystems are a key part of the infrastructure on which resilience is built.

Quite clearly, forests have to compete in the landscape with other land uses – especially the need for land to grow food – forests cannot be seen in isolation from the overarching goal of feeding the world. A balance in a landscape has to be found by the people most directly concerned and this will not result in simple win-win situations- there will be negotiations and trade-offs between interests. However, often very simple measures are sufficient to remove the constraints that prevent communities building resilient landscapes. Making forestry subsidies accessible to indigenous communities (not just large landowners) in Guatemala has resulted in an improvement in watershed management; experimental modification of a logging ban in the Miyun watershed in China has demonstrated how to create incentives for small-farmer-led sustainable forest management; facilitating better control of grazing has enabled the use of tree planting for soil conservation by the Benet communities living around Mt Elgon National Park in Uganda. In each of these cases forest landscape restoration has complemented agricultural productivity, and other enhanced ecosystem services including the maintenance of biodiversity values.

To sum up, you have probably heard some of these arguments before, but now it is time to put them together and apply them. Let me illustrate with an example of how to use and communicate / cooperate in an issue that is already drastically altering forest management financing and politics: Reducing Emissions from Deforestation and Degradation (REDD).

It is widely accepted in international circles that forests play a major role in the carbon cycle. Currently the world is struggling not only over the long term challenges that climate change will have on economic growth (The Stern Review estimates that if we don't act, the overall costs and risks of climate change will be equivalent to losing at least 5% of global GDP each year, now and forever, and possibly as much as 20%) but also how we can possibly realistically stabilize greenhouse gases within one decade. There is a growing realization that forests are one of the few 'technologies' that are immediately available, scalable and relatively cost effective to mitigate climate change. Sustainable Forest Management has the potential to bridge the gap whilst other technologies are developed for reducing and removing emissions. The flawed argument that forest loss is inevitable as development proceeds is exposed:- economic development will be impaired if we do not *reverse* forest loss.

To make REDD work

1. **Societal Choice:** Carbon sequestration is one of many ecosystem services that forests can provide. The extent to which forests are used to sequester carbon versus their role in providing other ecosystem services must be a matter of societal choice rather than a decision taken on simple economic or carbon storage grounds. Only through broad and open negotiation can the right balance be found between stakeholder interests.
2. **Rights:** A rights based approach to REDD would emphasize securing forest rights for those people who are most dependent upon forests for their livelihoods. Whether intentionally or unintentionally, REDD must not be used to wrest control of forests from local people.
3. **Markets:** REDD offers an opportunity to develop a market mechanism that includes substantial benefits that flow to the people on the ground- not just to ministries or middle men.
4. **Resilience and restoration:** By the inclusion of forest restoration in REDD the Forest Landscape Restoration approach can provide a mechanism not only to capture and store carbon, but also to help build more resilient forests. This will entail enabling stakeholders to adapt forest management to climate change and to transform degraded landscapes into vibrant and productive systems that play a role in food security, water management, biodiversity conservation and improved mitigation of natural hazards.

To conclude, climate change has catapulted forests onto the international agenda after years of languishing in the dusty corridors of UN meetings. We must seize this moment to promote the sustainable management of forests and to develop sustainable livelihoods for the people who depend on forests. As the TEEB study says, “In addition to their significant role in carbon capture and storage, tropical forests offer enormous potential to deliver other positive social and environmental outcomes” (TEEB, 2009). We must realize this potential.

References

- Chomitz K M, (2007) At loggerheads? Agricultural Expansion, Poverty Reduction, and Environment in the Tropical Forests. The World Bank.
- Huitric M (Ed.) Walker B, Moberg F, Österblom H, Sandin L, Grandin U, Olsson P and Bodegard J. (2009) Biodiversity, Ecosystem Services and Resilience – Governance for a Future with Global Changes. Background report for the scientific workshop “Biodiversity, Ecosystem Services and Governance – targets beyond 2010” on Tjärno, Sweden, 4-6 September 2009. Albaeco, Stockholm Sweden.
- TEEB (2009) TEEB Climate Issues Update. September 2009.