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Vereniging Tropische Bossen

Sustainable forest management in the tropics.

Are we on the right track?

21 June 2007, Ede, the Netherlands

Seminar report

→ Sustainable forest management is possible, but patience is required ←

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1. Background, objectives and programme

The conservation and wise use of tropical forests is of global concern. Management of these forests is complex as it involves many stakeholders and asks for compromises between e.g. economic benefit, community interest and conservation, between local, national and global demands, or between free market and regulation.

The last decades have brought new views on forest policy and management and many initiatives and actions have been going on to stop uncontrolled deforestation and to enhance sustainable forest management (SFM). Both internationally (through multilateral agreements and instruments) and country level (through policy, legislation and implementation activities many efforts are taken to create the instruments, mechanisms and enabling conditions to get SFM on the ground. At the same time tropical deforestation and illegal harvesting is just continuing at alarming levels. Are all the measures to counteract these tendencies in vain? Is sustainable forest management really possible? Are we working on the right issues? Are we doing enough?

The seminar aimed to assess whether or not we are on the right track. Key scientists reviewed important issues in tropical forest management, with an emphasis on sustainable timber production and forest monitoring. Specialists working in forest policy and practice responded. For the programme of the seminar, see box 1. The seminar was attended by a broad audience of around 150 persons and included professionals working in different areas of tropical forest management (policy, conservation, industry, trade, science, advisory) and students; for the list of participants see annex 1.

The meeting was jointly organized by Utrecht University (Prince Bernhard Centre), Wageningen University (Forest Ecology and Forest Management), Tropenbos International, Dutch Association of Tropical Forests (VTB) and the ministry of Agriculture, Nature and Food Quality (department of Knowledge). Prof. Frans Bongers (Wageningen University) chaired the meeting.

In this report we summarize the highlights of the presentations and discussions. In addition the authors of this report have derived some key issues that emerged from the seminar and attempted to make a qualitative assessment of where we are standing now.

The summaries and PowerPoint's of the presentations and other information on the seminar are available on the seminar website: www.tropischebossen.nl/vereniging/seminar.html.

Box 1: Seminar programme

- 12.30 Registration with coffee
13.15 Welcome by Chair, Prof Frans Bongers (Wageningen University)
13.20 The power of (forest) knowledge: connecting people – Dr ir Wim de Haas, MT Department of Knowledge, Ministry of Agriculture, Nature & Food Quality
- Which track are we on? Current issues in science, policy and practice***
- 13.30 Changing perspectives on forests: Challenges for the future - Prof René Boot (Tropenbos Int. & Utrecht University)
13.45 The future of international forest policy – Dr. Ir. Flip van Helden, Department of Nature, Min. of Agriculture, Nature & Food Quality
14.00 Practical issues in tropical forest management - Ir. Tieme Wanders (FORM International)
14.10 Room for questions
- Are we pursuing the right sustainability?***
- 14.20 Sustaining timber yields vs. sustaining forests: Conflicts and compromises - Prof Francis Putz (Utrecht University & University of Florida, USA)
14.50 A reaction from the certification practice - Ir. Erik Lammerts van Bueren (ISAFOR)
15.00 Room for questions
- 15.10 Coffee / tea break
- Are we sustaining forests? The (uncertain) future of managed forests.***
- 15.40 Modern earth observation techniques for monitoring managed forests - Dr. Dirk Hoekman (Wageningen University/Sarvision)
16.10 A reaction from the conservation practice – Ir. Wim Ellenbroek (WWF)
16.20 Room for questions
- 16.30 ***What's the right track? Views on sustainable forest management.***
Discussion facilitated by Frans Bongers and René Boot.
17.00 Closure

2. Highlight of the presentations

Chair **Frans Bongers** sets the scene for the seminar illustrating the big changes that he saw occurring in Yucatan, Mexico where he has been working since 25 years. Most of the areas covered by old-growth forests those times have largely been converted now to agriculture and infrastructures. Deforestation is a fact of life in many areas and the past has learnt that the factors behind it are complex and difficult to change overnight. He mentioned also a successful forest project, el Plan Piloto Forestal in Yucatan. This project applies an integrated approach to communal forestry, including community participation, inventories low impact logging, certification and long-term technical and institutional support. These types of projects are important to find out what works well and what does not. He emphasized the importance of positive examples and the power of collaborative thinking.

In his presentation **Wim de Haas** (*ministry of Agriculture, Nature and Food Quality*) stated that knowledge and knowledge management must be about more than research (knowledge generation) and education (knowledge transfer). Knowledge sharing and co-creation among actor groups must complement these activities. In that way the utilization of knowledge will largely be enhanced. Interaction between policy, practice and knowledge institutions is vital in this respect. He emphasized the importance of enabling networks and Communities of Practice, of which the functioning is based on mutual interests, commitments and actions. The shift in focus - from knowledge generation based on supply towards knowledge utilization based on demand - can also be noticed in the Dutch government knowledge policy.

René Boot (*Tropenbos International*) described some trends in our perspectives on forests and the role they play in sustainable development. These changes in perspectives can be summarized as a shift from a forest-centred focus of earlier times to a more people's centred approach nowadays. Forests should not be seen or dealt with in isolation but as part of larger landscapes often composed of a mix of forests and other land uses subject to competing claims of different actors and influenced by different sectors.

Forests are also increasingly seen in the context of their contribution to development and to attain the Millennium Development Goals. Moreover, we see forests as ecosystems that produce multiple goods and services rather than “forest products”. 96% of the tropical forests are converted to agricultural land. Under the present conditions managing forest is financially not competitive to alternative land uses; short-term benefits prevail over long-term costs and outsider’s benefits often prevail over insider’s costs. The creation of financial mechanisms and improved governance are instrumental in the way forward.

Flip van Helden (*Ministry of Agriculture, Nature and Food Quality*) gave an update on the international forest dialogue, which currently focuses on UNFF, ITTO, UNFCCC, CITES and FLEGT as the most important forest-related processes. This diversity of processes reflects the different approaches to sustainable forest management and constitutes a challenge in terms of the coordination of the international forest dialogue. Van Helden notes that whereas the forest sector tends to be rather inward looking, most pressures come from outside the forest sector. He ended his presentation by sketching five trends that will change the forest dialogue in the near future: a) the increasing emphasis on regional cooperation; b) the focus on additional financial means and market incentives; c) the increasing use of market-based and trade measures; d) the growing attention for supplementary demand-side measures; and e) the role of technological change in meeting consumer information needs.

Tieme Wanders (*Form International*) highlighted some current practices in forest management planning and the main elements required establishing management plans for timber production. Current technical methods are based on sustained yield, existing practices of harvesting and on the natural dynamics of the forest keeping the forest mostly intact. A management plan must include information on a) biological characteristics of the forest; b) the socio-economic environment; c) the state of the forest: history, analysis inventory, and production; d) the proposed management measures; e) the participation of the indigenous peoples/local communities, and f) the financial balance. To prepare for the plan inventories (botanical, fauna), social studies and Environmental Impact Assessment are to be carried out. Good examples should be the starting point for the promotion of sustainable forest management. A first step could be the presentation of sustainably managed forests on a world map, e.g. on Google Earth.

Francis E. “Jack” Putz (*Utrecht University & University of Florida, USA*) stated that management of tropical forests for timber, if carried out properly, is compatible with biodiversity conservation and the maintenance of ecosystem functions. A specific problem Putz addressed in his presentation is the declining timber yields over time while maintaining forest value. A way out of this problem may be the “bundling” of revenues of multifunctional management, e.g. by combining revenues from logging and ecotourism; ecotourism and biodiversity conservation; or conservation of soil, water and microclimate with carbon sequestration and reduced emission. On lands where the opportunity costs of maintaining forests are high due to large potential incomes from more intensive land uses (e.g., soy bean farming, oil palm and pulpwood plantations, or cattle ranching), forest resources are only likely to be treated as renewable and not ruthlessly exploited if governance is strong, certification provides better market access and higher prices for wood from well managed forests, and the positive externalities of forest maintenance are captured by the people making land-use decisions. Continued and additional investments in forest management capacity building are needed both for industrial forest managers (e.g. reduced-impact logging training) and community forest managers (e.g. management planning and business skills).

Erik Lammerts van Bueren (*ISAFOR*) observed a new paradigm of looking at forests as to what extent conservation and sustainable management can contribute to sustainable development. It is based on two presumptions: a) Level playing field. Sustainability criteria should not be imposed only on forest use but equally on all sectors and particularly those sectors, which compete for forestland (e.g. biofuel production) and b) Forest conservation must offer a recognisable and valued contribution to sustainable development or, if sustainable development is not yet an operational concept, at least to the economic development of the country. Forest management that has been certified has internalised some of the (environmental, economic and social) costs that otherwise often are not accounted for. The incentive for certification is market access and in some cases higher timber prices. He concluded by questioning how long could certification in the tropics sustain in an overall context of disincentives?

Dirk Hoekman (*Wageningen University/Sarvision*) highlighted the usefulness of radar observation techniques. These are very useful for monitoring of deforestation processes, which he illustrated with examples from Sumatra, Central-Kalimantan and Papua. Google Earth has proven to be a successful Global Monitoring tool, as it distributes maps and information to a wide user community. However, at

present satellite images on Google Earth are often outdated. Linking recent radar images on tropical forests with the Google Earth offers a great opportunity, and could be operational within a year for the whole of Indonesia. Such systems are urgently needed for development of ecosystem services, conservation, fire prevention, peat swamp forest restoration, MEAs, carbon and timber certification.

Wim Ellenbroek (WWF) emphasized that South-East Asian forests are shrinking and degrading at a fast rate, mainly due to (large scale) conversion and illegal logging. This is a global concern as well as a regional and local concern. On the other hand, developing countries' economies are eager to grow too. Remote sensing information can support decision-making by governments, as well as creation of countervailing power from civic society. Multiple objectives are to be met: biodiversity conservation; sustainable development; water supply; good governance, etc. Targeted support for installing a remote sensing capacity in governments, regional institutions, NGOs etc. should be encouraged.

3. Highlights of the discussion

In the discussions after the presentations and in the last part of the seminar a number of issues were raised. These are summarized here. In addition several participants submitted observations in writing; these are presented in annex 2.

Increased role of the World Trade Organisation (WTO) in the international Forest Dialogue?

The WTO was not mentioned in the overview of the international forest dialogue, while it is playing an important role in the introduction of trade restrictions regarding unsustainably or illegally produced timber. The prevailing view of the WTO is that free trade stimulates economic growth, which again supports sustainable development. The WTO aims at the reduction of unnecessary trade obstacles. The WTO relates to the trade in all sorts of products. Since it has been proven that a ban on products produced with child labour is already impossible, trade restrictions in favour of the environment are thought to have little chance as well.

Forest cover in the tropics decreasing, but in temperate zones increasing

Worldwide 53 countries have recorded an increase in forest cover. Unfortunately that is hardly the case in the tropical zones, where most of the world's biodiversity and forests can be found. 87 countries have lost forest cover. With the influence of China on the world market, it was stated that the pressures on the temperate forest reserves are likely to increase as soon as the prices for forest products have gone up. One person stated that there might not be any forests left in Europe by 2100 because of the climate change: everything might have dried out.

Different perspectives on sustainable development and certification

Is sustainable development an idealism of the West? For developing countries balancing economic development with conservation is often unaffordable, unwanted or unrealistic. As long as society allows other land uses than forests to compete in an unfair way with sustainable forest management (e.g. soy bean production) forests will continue to be degraded and converted in other land uses. A level playing field for all land uses in terms of sustainability requirements is key to changing this. Sustainability certification must also be extended to the other land uses. Certification is a market-based instrument that complements laws and regulations. If laws and regulations were implemented and controlled correctly, certification may become superfluous.

Need for integrated land use planning

The WWF representative mentioned that WWF is not opposed to deforestation as such. Forestry and other land uses have to be seen in the light of their functions in the larger landscape and overall development; what do they mean to the different stakeholder groups? Stakeholder participation should result in an agreed land use planning.

Remote sensing techniques for monitoring

Remote sensing techniques can be a tool for the monitoring of restoration and regeneration after e.g. selective logging. There is a special type of radar that could provide such information. One would like to check this information several times a year, but this technique can generate information only once a year. Keep in mind that some timber species do not regenerate optimally under selective logging. These species (e.g. mahogany and azobe) need open spaces for regeneration. Also, remote sensing cannot easily distinguish "good" logging practices from "bad" ones.

The role of local communities in SFM

With the introduction of the new forest law in Bolivia, ten years ago, local communities have the right to manage their own forest resources. Two million hectares are since then under community management. These communities received only a fraction of the financial resources spent on the support of sustainable forest management. Some participants stressed that during this seminar the role of communities in sustainable forest management has been underexposed. Communities cannot be seen separately from the forest: for successful implementation of sustainable forest management, people have to be included. Achieving sustainable use of forests managed by communities is a long-term process.

Knowledge as a tool

Some participants stressed the need for more research. There is still much to be investigated about the ecology and management of forests and individual trees and about the socio-economic and policy conditions for sustainable forest management. At the other hand generating knowledge without having the mechanisms to get access and utilize it is not appropriate either. We should work on both tracks. Academics and knowledge institutions should give more attention to synthesizing information for policy makers and practitioners so that they can apply it.

Action research was mentioned as an appropriate tool for the creation of partnership and benefit sharing (exchange of information) with local people.

The right track?

At the beginning and end of the seminar, chairman Frans Bongers asked the audience the question “Are we on the right track?”. The results of this “poll” are presented in the table below.

	Beginning	End
Right track	10	14
Wrong track	30	34
No opinion	24	16
Total (from app. 150)	64	64

The perception about what to understand under “the right track” obviously differed among the participants. Considering the ongoing deforestation practices a lot of participants feel that the right track had not been found yet, though there are some positive steps to be mentioned, like forest certification, Reduced Impact Logging (RIL), monitoring and control of forests using remote sensing techniques and additional financing mechanisms for payment of ecosystem goods and services.

It was also discussed who is meant by “we”; is that the global community, the tropical or western countries or e.g. foreign forestry experts? Someone stated that the responsibility for the right track was solely in the tropics. This was heavily challenged, because developing countries have to operate in a globalized context and do not have so much choices; moreover the major demand for goods and services from tropical forests (and uses that compete with forests) is coming from outside. The interdependency is huge; therefore a global perspective is needed, e.g. through improving global governance with the help of conventions. We need to invest more in partnership approaches (“South - North”, “South – South”).

4. Key issues

Many field examples all over the world underpin that SFM can be applied successfully. However, several key problems have to be addressed to have these isolated and small-scale examples to grow out to good management of all tropical forests.

Some key issues that emerged from the seminar are (the central notions are “connectivity, integrality and integrity”):

- **“One World, One forest”.** The impacts from forests and on forests surpass national boundaries, both ecologically and economically. National forest policies and management has to be shaped within the globalized context of international treaties and markets. No 200 forests in 200 countries, but one global forest for which there is a global responsibility (based on reciprocity between countries). Enhancing the regional dialogue can help to bridge the gap between the global forest discussion and the implementation in the countries.

- **Forest governance and institutions are key.** The forest is an arena of conflict and competing claims of an increasing number of actors, rural and urban, local and global. SFM goes far beyond silviculture and has equally to deal with the principles of democracy and good governance of the institutions. This includes notions as accountability, stakeholder participation, equity, transparency, empowerment and capacity building. Poverty alleviation and active involvement of rural and indigenous groups must be at the heart of any forest policy and management plan.
- **Without a sound financial basis SFM is not possible.** The big challenge is to make SFM financially competitive to other (unsustainable) land uses and make it an attractive option for long-term investment. Timber alone will not save the forest. We will have to create revenue streams for all functions of the forest, whereby the consumers of these forest goods and services pay a fair price to those who manage the forests. Recognizing and valuing the multiple functions of tropical forests is the underlying principle.
- **SFM is a responsibility of society at large** (global, national, local). Most pressures come from other sectors, which too often are seen by the forest sector as a threat and an enemy rather than a stakeholder and a potential partner you have to deal with. SFM is also about managing trade-offs and arriving at negotiated deals. An intersectoral approach is needed both at the policy and landscape level, seeing the forest as an integral part of the "larger whole". Foresters have to get out of the forest and not just take the forest problems as a forester's problem and act proactively making their expert points toward the real world.
- **Don't forget the nature and dynamics of the forest itself** when developing policies and management regimes for forests. Good silviculture is a prerequisite for sustaining the integrity and multifunctionality of the forest. The actual functions and potential of secondary forests is largely ignored and underexploited.
- **ICT and Remote Sensing Earth Observation techniques are powerful tools for SFM.** Developments in this area are very rapid opening up new uses for all actors in society for independent and transparent monitoring, assessment and control as well as for information management and sharing, hence creating a global information network on a daily basis.
- **Third party certification is a society-based tool "of the future"** to monitor and control good forest management (i.e well managed within the best professional knowledge available) and forest law compliance; to create a level playing field sustainability monitoring and control must be extended also to other sectors.
- **The power of knowledge to connect people can be better utilized.** "Forests is not about trees but about people". For effective action we need to incorporate and utilize the best professional knowledge accessible to all stakeholders. Effective action is only possible if parties share a common problem, share objectives, responsibilities and expectations. Multi actor knowledge sharing and co-creation in Community of Practice-configurations are essential "lubricants" for policy development and implementation and the connection between the two.

5. Are we on track?

The overall conclusion from the seminar is that sustainable forest management is possible. Nevertheless the audience differed in their answer to the question whether we are on the right track and where we are now?

In attempting to answer these questions we may have to distinguish between the conceptual level, the political level and the implementation level:

1. **Conceptual (incl. Knowledge).** We have a reasonable understanding of the tropical forest problem (nature, extent and geographical spread), the main issues involved, how these (qualitatively) relate to each other and what must be the key elements for an integrated approach to address deforestation and degradation. We have quite some knowledge at hand that underpins this situation; a big challenge is to make this information and knowledge available in an applicable way and share it with end users (like policy makers and practitioners). Obviously we need much more additional knowledge (both fundamental,

applied and site specific), but with what we know already we can make forest use and management many times more unsustainable than is the case now.

Conclusion: we are on the right track but we must do (much) more.

- 2. Policy.** At the policy level there is also a lot going on, though the processes are rather slow. At the global various forest related conventions, agreements and processes (e.g. CBD, UNFF, ITTO, CITES, FLEG(T), UNFCCC) shape the international policy context, but these should better coordinate among themselves and with other conventions and processes that influence the fate of forests (e.g. WTO, ILO, agricultural, economic and financial treaties). In most countries forest policies and legislation are adequate, but monitoring and control of compliance is often lacking. A big problem in many countries is the low political priority and societal appeal of forests, which is often intertwined with the political-economy and (vested) powers of interest. There is a clear tension between environmental measures and free trade and there is a clear gap between what we agree to do and what we really do.

Conclusion: A lot has to be gained yet to make policies work. Transparent information and access to knowledge in the public domain play an important role in this.

- 3. Implementation.** The gap between knowledge and policy at one hand and implementation at the other is big. Sustainable forest management is only minor (around 5%) in the overall picture. Indeed there are a lot of successful initiatives all over the world. At this level an array of actors (communities, private sector, government) are active in complementary approaches (small scale, large scale), occasionally working in partnerships. For the time being however – but nevertheless important - these mainly consist of isolated, small-scale and/or experimental cases. They illustrate that sustainable forest management is possible and at the same time they indicate the conditions and key issues to address and the lessons that we can draw for policy and practice. The successful cases indicate that the constraints are not technical in the first place, but are rather related to prevailing financial-economic conditions, the political-institutional context, attitudes, power relations and access to knowledge and means. All of these factors are difficult to change in the short run. The challenge is how to scale up these individual cases and to create the economic, policy and institutional context needed for that.

Conclusion: We may be on the right track – with several encouraging examples -, but the way is still very long full of hurdles and obstacles. Where will we be in 10 years time?

Annex 2: Summary of Written comments

Given the limited time for discussion during the seminar, participants were invited also to give comments in writing. These comments and questions are given below.

- We are on the right track in theory, but that does not mean it's going to work in the practice.
- We are on the right track but the pressures are very huge to the forest to fulfill all kinds of interests.
→ So forests and forestry should be very flexible to accommodate all these things.
- We are on the right track, but we have to make sure that local people and (inter) national institutions are with us on that track.
- A right track is that we do action research (in partnership with local people) in the development of sustainable production and value chains of forest products.
- Forest management must take into account:
 - People
 - Forest & its nature
 - Socio-economic aspectsLooking at technical and theoretical aspects
- Wrong tracks: high-tech forest management put costs too high (certification, satellites, software) – no added value.
- FSC is a good initiative, but the market for FSC timber is completely dominated by a few large companies, making it difficult for others to even sell it.
- What is the balance of international SFM-projects in the tropics by international/academic organizations and the normal forests, which are most likely on the wrong track ('the pearls in the mud'?).
- SFM cannot solve all problems leading to deforestation. The solution should come from all users of the land (agriculture, livestock, forestry).
- We are not on the right track because the west/north is not adjusting its consumption patterns and not assisting sufficiently those who are trying to conserve their forest.
- Take the community into account before asking them to conserve their country for you.
- Think about services payment and reward for those people who struggle to save their land for the world.
- There are a lot of NGOs in my country, which work for saving forest, wildlife and who come from western countries. Why do they not succeed until now?
- We are not on the right track; SFM is beyond on what we are talking now. Economic and financial reasons are main causes of the problem. So solve the economic problem first. Western countries could help by economic incentives to improve people livelihoods in poor countries, e.g. education, community development etc.
- I notice that SFM is not going in depth to solve the social problems in developing countries. Economic aspects should get more attention to reduce deforestation or degradation, because economic reasons are the main cause what is happening now in the tropical forest. Incentives from western countries to take care for tropical forests via e.g. community development, creating income generation would be very useful for the local community. So not only monitoring or conservation but beyond that.

- Yes, we are on the right track with SFM with
 - Planning,
 - Reduced impact logging
 - Implementation
 - Certification

At the same time the needs are high to prevent conversion (= not SFM!). Technologies as GIS are available and helpful but the issue of deforestation needs more support and priority. With respect to SDFM monitoring is still weak. Translation of research results to practice is needed.

- We are not on the right track, and we will not become on the right track if our western lifestyle and increasing consumption demands continue to follow the same track.
- We are not on the right track:
 - SFM cannot provide the right answers yet to increasing claims on land by agriculture, including biofuels and biomaterials production.
 - We need to give more attention to the intermediate scale levels (high conservation value areas, proper land use planning at national and regional scales.
 - There is too little attention to the development of agroforestry systems.
 - The role of women in SFM and policymaking and science related to it is still very limited.
 - Large regions where FSC certified wood is produced are not owned and managed by local communities (e.g Bolivia).
 - Sustainably managed forests provide many ecosystem services to societies, which are not being paid for.
- On the right track? Maybe, but we are pretty slowly. Others are much faster in the wrong direction.