



5.3 Certified timber production and landscape governance

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Natural tropical forests cover more than 1.6 billion hectares (ha) in 65 countries; more than half (887 million ha) of them are primary forests (ITTO 2012). Although deforestation rates have been reduced in some of these countries, e.g., Brazil and Mexico, they remain high. In addition, vast forest areas are degraded. Deforestation is mainly due to conversion for agricultural land; forest degradation is caused mostly by unsustainable logging practices, both legal and illegal.

The area subject to unsustainable forest exploitation is estimated to range between 0.85 and 1.1 billion ha; about 131 million ha are officially designated for commercial logging. It is estimated that only 31 million ha are managed under sustainable production schemes, and that even less (17 million ha) is managed by certified forest companies (ITTO 2012).

Since the pressures on natural forests in developing countries are likely to persist in the near future, many forest ecosystems are threatened by conversion or degradation, which impair the many services and benefits they provide. Recently, political efforts to cope with these threats have shifted in focus from the project level to the more comprehensive landscape level. It is considered to be an appropriate scale for managing and governing different but intricately linked land uses, including various forms of forest use, agriculture and settlements (Figure 1), and the dynamics within the landscape. Landscapes can be considered socio-ecological systems with demarcated boundaries and characteristics that are the result of the action and inter-action of bio-physical and socio-economic factors. The aim of landscape governance is to effectively address interlinked land use through comprehensive cross-sector policies within a jurisdiction.

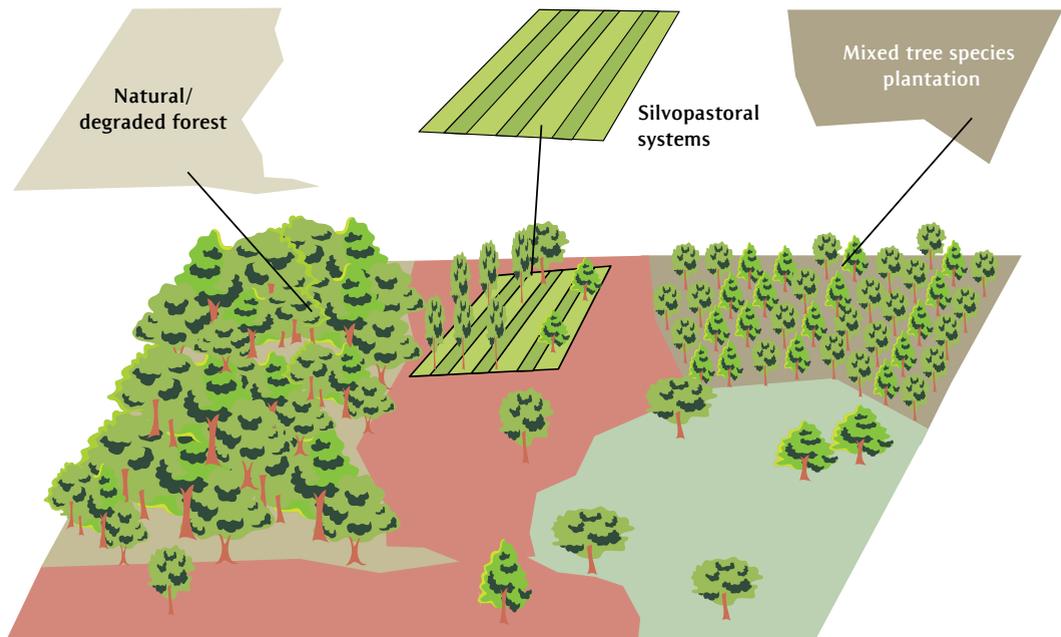


CERTIFIED COMPANIES THAT
MANAGE NATURAL FORESTS
ARE AN IMPORTANT ELEMENT
IN MORE EFFECTIVE AND
ENVIRONMENTALLY SOUND GOVERNANCE OF
PRODUCTIVE LANDSCAPES.

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Natural forests are still a core element of many landscapes. They are subject to different pressures and are more threatened by conversion and degradation than other land uses. This article identifies how natural forests dedicated to production in tropical landscapes can be better integrated in environmental governance. It is based on an empirical study commissioned by GIZ and carried out by UNIQUE¹ that identified and assessed the best management practices currently applied in natural forest areas designated for production. The study focused on large-scale management.²

Figure 1. Land-use elements of multifunctional production landscapes



The study

The study identified the best natural forest management practices in tropical regions. It was based on two main assumptions:

- a natural forest that is responsibly managed is closer to the natural dynamics of primary ecosystems than any other form of large-scale commodity production scheme. Natural forests can balance economic, ecological and social objectives in maintaining natural capital and ecosystem services; and
- certification and third-party verification are key to ensuring that forests dedicated to production within a landscape are managed sustainably and do not endanger the ecosystem functions — e.g., the hydrological services it provides for agriculture, drinking water and water retention — that are vital to the entire landscape.

Methodology

The study focused on companies that manage large areas of natural tropical forests (> 3,000 ha) and whose operations are certified by one of the globally recognized certification schemes: those of the Forest Stewardship Council and the Programme for the Endorsement of Forest Certification. Although small-scale forest management is important, these large companies should act as role models for production landscapes with large remaining portions of natural forests.

The study involved a thorough literature analysis. In addition, 187 companies in tropical Asia, Africa and Latin America were asked to respond to a detailed questionnaire on silvicultural production system and management practices; costs and revenues; social and environmental impacts; forest legislation and governance; and the effects of international policy developments to curb unsustainable forest use and illegal logging (e.g., REDD+, FLEGT and the U.S. *Lacey Act*). Of the 187 companies, 51 — local businesses, cooperatives, state-owned enterprises and multinationals — responded with detailed information about their activities, the relationship to their environment and the landscape context. The study team also visited six companies, and interviewed other stakeholders, in particular local communities and NGOs.

Best practices in practice

Although most enterprises (87% of respondents) operate in areas where land-use change is not permitted, many of them noted an increasing trend in their area to convert forest to other land uses.

Technical and economic elements

Integrated management planning is a requirement of certification schemes and is subject to audits. More than 80% of the companies who responded to the questionnaire apply the recommended management planning practices identified in the literature analysis. In terms of silvicultural practices, nearly all companies try to secure forest regeneration, either by managing natural regeneration (77%) or by enrichment planting (5%). However, less than 20% apply comprehensive silvicultural treatments to enhance forest productivity. Since harvesting is limited to only a few tree species, there may be a gradual shift towards a less commercially viable forest. In consequence, the sustainability of yield in terms of value generation might be jeopardized.

Reduced impact logging (RIL) is a prerequisite for certification and its principles are generally accepted by the companies studied. Most companies have RIL guidelines and procedures, but there were indications that on-the-job training, road construction and low-impact skidding leave room for improvement.

Harvested volumes seldom exceed one cubic metre/ha/year, which is significantly below the average annual increment of the respective forests. As noted, harvesting targets only some commercial species. Realizing the commercial potential of other tree species is considered a major challenge by most companies, which try to improve profitability in the value chain rather than through stimulating growth and sustainable yield.

Socio-economic and governance elements

Approximately 60% of the forestry companies are surrounded by communities where subsistence farming is the main activity. More than 40% reported conflicts with communities, mainly concerning illegal logging activities and encroachment on forests. More than 80% of the companies employ staff who are responsible for good relationships with communities, e.g., by involving them in management planning, conducting regular meetings with them, generating jobs or implementing out-grower schemes. Fair employment practices are widely applied, and the turnover in employees is low, despite hard working conditions. Employment conditions are a main aspect of certification schemes and are usually audited in detail.

Most of the companies who responded operate in countries that have a substantial informal sector (mainly related to illegal logging, but also to timber processing and commercialization) and often suffer from weak institutions that are susceptible to corruption. This problem is worsened by the remoteness of the management units. The majority of companies who responded to the questionnaire stated that informality (58%) and illegal logging (66%) were the main barriers to improving economic performance and to fair competition.. A similar percentage called for the formalization of the forestry sector, particularly through clearly defined regulations on land use and forest management and strong enforcement.

Environmental elements

Forest management practices have two main environmental aspects — designation and maintenance of protected areas, and minimizing the environmental impacts of management, especially harvesting operations. Most companies maintain protected areas within their forest management area and more than 80% have good relationships with or are actively supported by environmental groups. Less than 10% consider protected areas to be a barrier to their operations and approximately 20% perceive the respective monitoring obligations as too costly and complex. As required by the certification schemes, nearly all companies covered by the study apply RIL techniques and monitor environmental impacts.

Discussion

The study results reveal a high congruence between the elements defined as best practices and the practices applied on the ground. Some aspects of best practices are not applied by all companies, however, such as enhancement of productivity. Certification and third-party verification cannot guarantee sustainable management, but at least for the large enterprises studied, compliance with certification schemes contributes to balancing economic interests, environmental requirements and social aspects.

The sustainable management of forests is a prerequisite for effectively governing production landscapes and reconciling environmental and development objectives, and achieves three goals:

- it protects forest cover and helps safeguard essential ecosystem services;
- it provides employment and livelihood alternatives; and

- it serves as an example of how other land uses may be managed in a more sustainable fashion, including approaches for certification.

The study underlines that the companies that apply best practices perceive notable competitive disadvantages (due to significantly higher production costs) compared to those legal and illegal timber producers who harvest timber without the requirements of certification schemes. The study identified four key challenges that have the potential to be turned into opportunities for promoting sustainable management approaches in a broader production landscape context: reducing opportunity costs; enhancing productivity; improving marketing; and effective governance. These opportunities, which are interconnected, generally aim at both increasing the attractiveness of sustainable land use by stimulating its competitiveness and ensuring that the appropriate enabling conditions (legislation and governance) are in place.

One of the companies studied (FORCERPA in Paraguay) showed that well-managed natural forests can generate annual profits ranging between US\$ 60 and 80 per ha/per year. That is competitive with cattle ranching, but not with intensive land uses such as agriculture or plantation forestry. This is an important finding with regard to landscape governance, as many remote forested landscapes face increasing threats from conversion of natural forests into intensive land use.

Policies and measures that strengthen competitiveness are therefore an important step in reducing the pressure of conversion. This can be achieved on the supply side by reducing opportunity costs compared to other (presumably less sustainable) land uses, e.g., by enhancing productivity and optimizing silviculture practices. This allows for harvesting rates that can be more than 50% higher, depending on local circumstances, and consequently for a better economic performance (Grulke and Ortiz 2009).

The costs of silvicultural treatments are around US\$ 50 per ha (with one treatment every 10 to 20 years), which is equal to US\$ 3–5 per ha/per year. The treatment leads to a significantly higher yield.



The marketing of timber products can be improved through strategies for creating a favourable market environment and strengthening the demand for sustainably produced and certified timber. Companies should seek to identify marketable uses for tree species not previously identified as merchantable and/or find ways to integrate the value chain.

The market environment in which such enterprises operate is linked to effective forest legislation and governance. Crucial problems include unclear traditional user rights, land tenure issues and timber market distortions from illegally logged timber. International policies such as FLEGT, the U.S. *Lacey Act* and internationally accepted performance standards for investments help to create fair conditions for legally and sustainably producing forest companies. Uncertainties, informality and illegality are barriers to successfully promoting and implementing the responsible management of natural forests.

Dealing with these factors also helps to address the causes (e.g., through more and better employment) of some of the problems, such as illegal logging. Certified companies that manage natural forests are thus an important element in more effective and environmentally sound governance of production landscapes. They contribute significantly to sustainable landscape governance and to rural development objectives. For example, an integrated management approach creates more and better-paid jobs and requires more highly trained staff. It also ensures a more reliable supply for the local and regional timber processing industry. This is another important factor for rural development, since it improves the local value chain. Integrated management cannot, however, solve all land-use problems, such as corruption, weak institutions and the need for formalization. These need to be tackled through appropriate governance interventions, which should integrate or improve on other types of forest initiatives such as community forest management.

The study shows that best practices will not be sufficient by themselves. There is a particular need to cope with locally specific legislation and governance problems. The promotion of certified timber production from natural forests should receive greater weight in national and sub-national budgeting processes, international public investments and private-sector investments. Regulation and voluntary commitments by intermediary actors, such as banks, that commit to zero-deforestation and give loans only to certified companies committed to sustainable management of their forests are interesting options, as are any efforts that effectively cope with illegal logging. Such policy measures and commitments would also increase the attractiveness of such companies for investors — public or private enabling investors as well as asset investors — e.g., through national or multinational development banks (Elson 2012).

Conclusion

This study considered only those companies participating in forest certification schemes; these certification standards should broaden their focus to the broader landscape context. The study shows that the standards help to secure a balance between economic, environmental and social aspects. However, as depicted in Figure 1, natural forests are only one element in production landscapes. They compete directly with other land uses, and unless the externalities between sustainable and unsustainable management approaches are addressed (e.g., through regulations and certification) this form of natural resource management will remain the exception.

A broader consideration of sustainable management of all relevant land uses, as promoted in international policy discourses, could be a way to enhance the comprehensive and effective governance of these landscapes. A multiple land-use standard should build on the lessons learnt from forest certification, and also consider additional aspects: rural area and other development objectives, road and water infrastructure requirements, commodity chains and the protection or enhancement of the flow of ecosystem services. Such a landscape-level certification approach would make an important contribution to landscape governance.

Endnotes

1. UNIQUE forestry and land use GmbH is a consultancy and project developer in forestry and land use, with offices in Germany, Uganda and Paraguay and representatives in Argentina, China and India.
2. A similar empirical study on community forest management is in preparation.

References

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