

TFD Review



Intensively Managed Planted Forests

Toward best practice



Summary and Recommendations
from TFD's IMPF Initiative
June 2005 – June 2008

The Forests Dialogue

TFD's Steering Committee 2008

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TFD Review

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Summary



Intensively-managed planted forests (IMPF) are highly-productive plantation forests grown primarily for wood and fibre production. There are currently an estimated 25 M ha of IMPF globally, representing about a quarter of plantation forests and occupying c. 0.2% of global land area. IMPF are owned and managed at scales which range from large corporate estates of hundreds of thousands of hectares, to smallholders with less than one hectare.

The high productivity of IMPF is such that they contribute disproportionately – currently around 40% – to the world’s industrial wood supply. Growing demand for forest products, diminishing supply from natural forests, and the comparative advantage of IMPF in wood and fibre production are promoting IMPF expansion, especially of shorter-rotation IMPF grown primarily for pulpwood. Globally, IMPF expanded at nearly 2% per year in the first half of this decade – mostly in Asia, Oceania and South America.

IMPF developments can however be controversial. Proponents emphasize the economic, employment and infrastructure benefits that they deliver; critics emphasize the social conflicts and environmental costs associated with some IMPF. This controversy, and the growing significance of IMPF, prompted The Forests Dialogue to engage in a IMPF Dialogue process. This process comprised a Scoping Meeting in 2005, followed by dialogues and field visits in China (2006), Indonesia (2007) and Brazil (2008). A total of 143 people participated in the Dialogue process; representation was balanced across the business, social and environmental sectors, and 63% of participants were from the global South. Papers for and reports of each dialogue are available at TFD’s website.

This Review summarises the conclusions and learnings from TFD’s IMPF Dialogue process. The process sought, firstly, to understand how the forces driving IMPF expansion were translating into outcomes on the ground in regions where IMPF expansion is focused and, secondly, to learn from these about how IMPF projects might best be structured and implemented to deliver environmental and social, as well as economic, benefits.

It is apparent from the Dialogue process that IMPF projects of appropriate scale, designed and managed to promote benefit sharing, can deliver social benefits and can contribute substantially to delivering critical environmental services at a range of scales. Conversely, it is also apparent that IMPF projects of inappropriate scale, and those which are poorly-conceived or managed, are likely to generate environmental and social costs which outweigh their benefits.



TFD's IMPF Dialogue process engaged with the principles enunciated by FAO in its Voluntary Guidelines for Responsible Management of Planted Forests, and emphasised that their interpretation must be differentiated according to local contexts and realities and to the scale of IMPF activities. The Dialogue series highlighted the critical importance, to both specific IMPF projects and to the IMPF sector more generally, of:

- ▶ good governance, to achieve socially-just and environmentally-beneficial outcomes from economically-driven IMPF investments;
- ▶ high levels of corporate social responsibility on the part of IMPF businesses, particularly – but not only - where governance is weak;
- ▶ respect for the rights of indigenous peoples, based on recognition of the principle of free, prior and informed consent to activities affecting those rights
- ▶ empowerment of the forest workforce, including small holders and outgrowers through:
 - maximizing formal employment for workers engaged in “regular” work;
 - promotion of self-organization for small growers and contractors, and
 - honouring ILO core labor standards for all workers;



Group visiting conservation site near plantations in Indonesia

- ▶ effective integrated land-use planning – to protect areas of high conservation and cultural values, to integrate IMPF with other land uses and enterprises, and to mitigate against climate change;
- ▶ establishing and enabling dialogue and conflict resolution processes that address the interests and concerns of stakeholders, and promote mutually-beneficial partnerships;
- ▶ exploring and implementing models of IMPF-based development which give effect to these principles, such as those articulated by FAO for Responsible Management of Planted Forests.

The Review concludes by identifying a suite of practical actions which those engaged in IMPF investments and activities should undertake, as a means of giving effect to these principles. The contributions of the participants in each of the three regions that hosted TFD's IMPF Dialogue process emphasized the critical importance, and the urgency, of giving effect to these principles and practical actions – to enhance the benefits, and address the costs, of IMPF.

1. Introduction

PLANTED FORESTS

'Planted forests' comprise all forms and scales of forests resulting from deliberate tree planting. Planted forests include plantation forests, planted semi-natural forests, and various forms of agroforestry¹. Planted forests are established for many purposes, including amenity, environmental services, and fuel- or industrial- wood production. Just over half of the world's 270 million ha of planted forests are plantation forests, established for production or protection².

PLANTATION FORESTS

Plantation forests are typically even-aged monocultures of trees grown in blocks at regular spacing³, although their scale and form can vary⁴. Few plantation forests existed at the start of the 20th Century, but they have expanded rapidly since – particularly since the 1950s. There are 140 million ha of plantation forests globally, of which nearly 80% - 110 million ha – are production-oriented⁵. The global extent of plantation forests has been increasing by an average of 2% annually, with most new plantations being established primarily for wood production⁶. The proportion of the world's industrial wood sourced from plantation forests has increased from negligible a century ago to more than a third today; it is expected to continue to increase, to nearly 50% by 2040⁷.

INTENSIVELY-MANAGED PLANTED FORESTS

More than 25 million ha of plantation forests are “intensively managed” for industrial wood production. Intensively-managed planted forests (IMPF) are those of relatively high productivity⁸, in which the owner makes a sustained investment, over the life of the forest, to optimise industrial wood production⁹. The scale of IMPF varies - from the tens to hundreds of thousands of hectares owned by corporations or governments; to the estates of larger-scale private landowners, typically in the hundreds to thousands of hectares; to those of smallholders, whose plantings may be as little as 0.1 ha.

IMPF – AN EVOLVING CONCEPT

Today's IMPF have precursors in colonial plantations, particularly of teak, established in the 19th Century¹⁰. The forms and management of IMPF have evolved over the past century. Three categories are evident now:

The first generation of IMPF comprises mostly conifers in temperate regions, grown principally for solid wood production on rotations of 25 years or more. These IMPF now total c. 13 million ha, across all continents; their extent is relatively static.

A second generation of IMPF comprises mostly tropical acacias, and temperate and tropical eucalypts, grown primarily for pulpwood on shorter rotations of 5-15 years. These IMPF are also described as “fastwood¹¹” plantations; they also comprise c. 13 million ha globally, and are expanding rapidly in Asia, Oceania and South America.

A third generation of IMPF is the tropical estate crops grown originally for non-wood products, but now also yielding industrial wood and fibre. Rubberwood is the most important of these, with a global extent of 9 million ha¹²; coconut and oil palm stems also have established uses or potential for wood and fibre products. Both the extent and relative importance of these forms of tree crop are increasing, most markedly for oil palm¹³. These IMPF, grown primarily for non-wood products, are not the focus of this Review¹⁴ – although we suggest that the principles and conclusions discussed in this paper should apply similarly to these land uses.

The planning and management of each of these forms of IMPF have evolved over time, and there are many good examples of each; these have been described as “new generation” plantations¹⁵. However, as we discuss later, good practice is not yet universal and the wider impacts remain controversial.

IMPF – DISTRIBUTION AND SIGNIFICANCE

The regional extent of IMPF, and those of other forms of forest and land use, are summarised in Table 1. IMPF currently occupy c. 0.2% of global land area, which is equivalent to c. 0.5% of the world's agricultural area. They comprise almost a quarter of production plantation forests. Most IMPF, in terms both of extent and the proportion of plantation forests which they represent, are in South America (Fig. 1). The most rapid expansion of IMPF is occurring – and is expected to continue - in Asia and Oceania, and in parts of South America. There is potential for IMPF to expand in parts of East, Central and West Africa, and in Central America. In Europe and North America, the potential for IMPF expansion depends principally on the future of subsidies for agriculture and biomass for renewable energy. In some traditional plantation forestry regions, such as New Zealand or South Africa, IMPF area is contracting as a result of market forces or environmental constraints.

The continued expansion of IMPF, in response to the economic drivers we discuss in Section 2, means that it is likely IMPF will dominate global industrial wood supply, at least for pulpwood, by 2050, and in doing so shift the locus of industrial pulpwood supply from the natural forests of the global North to the planted forests of the global South¹⁵. This represents a significant change in the world's forest resources and for the forest industries.



Charcoal makers

TABLE 1 – REGIONAL EXTENT OF TOTAL FOREST AND AGRICULTURAL LAND

Region	Land area (M ha)	Agricultural area (M ha)	Forest area (M ha)	Forest designated for production (M ha)
Africa	2,963	610	635	193
Asia	3,098	1,674	576	255
Europe	2,260	478	1,001	732
N & C. Am	2,144		706	45
S. Am	1,754	581	832	96
Oceania	849	465	206	22
Total	13,067	4,968	3,952	1,343
Global proportion of:	Land area	38%	30%	10%
		Agricultural area	80%	27%
			Forest area	34%
				Production forest area

[Sources: Land area and forest area from FAO .2005. Forest Resource Assessment Global Tables - www.fao.org/forestry/fraz2005/en/; Agricultural area 2005 from FAOSTAT - faostat.fao.org/site/377/DesktopDefault.aspx?PageID=377 (totals may not add because of rounding).

Productive planted forest area (M ha)	Total plantation area ¹⁷ (M ha)	Production plantation area (M ha)	IMPF ¹⁸ (M ha)	Annual Rate of Plantation expansion 2000-5 (%)
12	13	11	1	0.7
86	65	44	5	3.1
63	28	22	0.5	0.8
28	18	18	6.5	1.0
12	14	12	9	1.3
4	4	4	3	2.1
205	140	111	25	1.9
1.5%	1%	0.8%	0.2%	
4%	3%	2%	0.5%	
5%	3.5%	3%	0.6%	
15%	10%	8%	2%	
Productive planted forest area	70%	54%	12%	
	Plantation forest area	79%	18%	
		Production plantation forest area	23%	

Production forest calculated from FAO 2005 Global Tables, Worksheet 7; Productive planted forest from del Lungo et al 2006, Table 11; IMPF area from Kanowski 2005; % expansion is for all plantation forests, del Lungo et al 2006, Table 5]

FIGURE 1. GLOBAL EXTENT OF PRODUCTION PLANTATION AREA AND IMPF AREA



LEGEND



Production Plantation Area



IMPF Area

Numbers in millions of hectares

See Table 1 for sources



IMPF are established and managed principally for industrial wood production. Their proportional contribution to industrial wood supply varies, from minor in some richly-forested countries such as Canada or Russia, to 100% in countries whose natural forests are reserved from wood production, such as New Zealand or South Africa. Globally, plantation forests provide more than a third of the world's industrial roundwood; estimates specifically for IMPF are imprecise, but it is likely that they currently contribute c. 40% of plantation wood supply¹⁹. We discuss the economic contributions of IMPF further in Section 5.1.

IMPF can have significant impacts on environmental values and services (see Box 1), and on societies. IMPF impacts are usually context-specific, and can be adverse, favourable or neutral; we discuss these further in Sections 5.2 and 5.3.

BOX 1: WHAT ARE ECOSYSTEM SERVICES?

The Millennium Ecosystem Assessment defines ecosystem services as the benefits that people obtain from ecosystems. These include *provisioning*, *regulating* and *cultural* services that directly affect people as well as the *supporting* services necessary to maintain other services:

- **provisioning services:** products obtained from ecosystems, e.g.. food, water, fiber, fuel, genetic resources.
- **regulating services:** regulation of floods, drought, air quality, erosion, climate, disease, and natural hazards.
- **cultural services:** recreational, spiritual, religious, and other nonmaterial benefits.
- **supporting services:** necessary for the production of all other ecosystem services; includes soil formation, photosynthesis, nutrient cycling, water cycling, and provisioning of habitat.

Source: <http://www.millenniumassessment.org//en/Products.Synthesis.aspx>



This context-specificity of IMPF impacts on the carbon balance illustrates this for the case of a significant environmental service. Because of their fast growth rate, IMPF sequester carbon quickly. An average annual rate might be c. 40 t/ha CO₂ equivalent²⁰; the potential global sequestration by all planted forests in 2050 is estimated at 38 Gt C²¹. However, the impact of IMPF on the carbon balance of a particular landscape depends also on prior land use and the processes used for plantation establishment. For example, the rehabilitation of degraded agricultural landscapes with plantation forests leads to an overall increase in carbon sequestration²². In contrast, it is estimated that conversion of tropical lowland forests in Riau Province, Indonesia, to plantations of oil palm, rubber, and acacia between 1990 and 2007 released 3.36 Gt CO₂, in comparison to the 0.24 Gt CO₂ which these plantations sequestered over this period²³.

More generally, there is at present inadequate information on the full life cycle impacts of IMPF that takes into account land-use change associated with plantation establishment; site preparation and management; harvesting and processing; use and disposal of products; and any 'leakage' effects. Addressing these knowledge and information gaps is an obvious priority for the forest industries and policy makers²⁴.



2. Debate and conflict about IMPF

The rapid expansion of IMPF over the past few decades has been accompanied by strong debate - locally, nationally, and internationally²⁵ - and, in some cases, by varying degrees of conflict between opponents and proponents of particular IMPF proposals or projects. In certain cases, this debate and these conflicts have generated dialogue, and the eventual resolution of differences between stakeholders; in others, differences between actors remain un-, or only partially, resolved. It was this history of debate and tension between stakeholders over some IMPF that motivated The Forests Dialogue to address IMPF; we discuss TFD's engagement with IMPF issues in Section 3.



DRIVERS OF IMPF

A conjunction of forces favours IMPF for industrial wood production. The principal of these are demand and supply factors: the growth in demand for forest products, as a result of both population increase and increasing per-capita consumption; the depletion of the world's natural forests; and, in some countries, the increasing reservation of some or all remaining natural forests from production. IMPF have comparative advantages over natural forests in wood and fibre production in terms of: biological productivity; the consistency and quality of wood and fibre products, and the suitability of these products for technologically-advanced processing; the economies of scale associated with large-scale production; and rapid technological advances in growing and processing, and the higher return on investment, enabled by shorter harvest cycles. As a consequence, IMPF form the resource base for capital-intensive, technologically-advanced forest products industries. The social contexts and implications of these industries vary; we discuss these issues further in Section 5.2.

Demand for wood products, particularly the pulp and paper products for which many IMPF are grown, is strongly correlated with population and GDP²⁶. Given the projected increase in global population, from 6.3 billion to 9 billion by 2050²⁷, and the growth of economies in Asia, Latin America and Russia, demand for IMPF products is expected to continue to increase. Market growth for IMPF products is expected to be greatest in

the emerging economies of the global South, rather than in those of the global North in which there are already high per capita and aggregate levels of consumption of forest products.

Although IMPF establishment is driven by demands for wood products, well-situated and -managed IMPF can also deliver environmental benefits²⁸ – such as landscape restoration, the protection of ecosystem services, and carbon sequestration. These environmental services benefits, which we discuss further in Section 5, may provide additional motivation for policymakers to encourage IMPF establishment. The emergence of markets and payments for environmental services²⁹ will also shape further IMPF establishment, favouring it in some cases and constraining it in others³⁰.

CONSTRAINTS TO IMPF

Critics of IMPF³¹ are concerned by the consequences of large-scale land use change and wood fibre-based industrialisation, especially for the rural poor, indigenous peoples, migrant and landless workers, women and other disadvantaged groups, and for the environment. As we discuss further in Section 5.2, the most prominent social concerns relate to those IMPF development models that exclude or marginalise the interests of indigenous peoples and local communities, or take place in areas where land tenure is unclear. There are also concerns about labour arrangements, whether IMPF benefits are distributed equitably, and the exacerbation of conflicts within local communities, sometimes associated with an influx of migrant labour.

Environmental concerns focus on the impacts of IMPF on natural assets and associated ecological processes – principally biodiversity, carbon, soil and water – especially where IMPF replace natural forests or grasslands, or might impact adversely on areas that are of high priority for conservation.

3. Enhancing the benefits of IMPF, and addressing the costs

A number of international processes have sought to identify principles to guide IMPF development and practice, to enhance the benefits of IMPF and address their real or potential costs. These processes include the development of ITTO's Guidelines for Planted Tropical Forests³²; those that have defined plantation forestry standards for forest certification under both PEFC and FSC processes, including FSC's Plantations Review³³; the development by FAO of Voluntary Guidelines for the Responsible Management of Planted Forests³⁴; and WWF's current New Generation Plantations Project³⁵. The principles enunciated by the FAO Guidelines are listed in Box 2.



Stewart Maginnis summarizing the discussion on forest conversion

Box 2: FAO PRINCIPLES FOR RESPONSIBLE MANAGEMENT OF PLANTED FORESTS

Institutional principles

1. Good governance
2. Integrated decisionmaking and multi-stakeholder approaches
3. Effective organisational capacity

Economic principles

4. Recognition of the value of goods and services
5. Enabling environment for investment
6. Recognition of the role of the market

Social and cultural principles

7. Recognition of social and cultural values
8. Maintenance of social and cultural services

Environmental principles

9. Maintenance and conservation of environmental services
10. Conservation of biological diversity
11. Maintenance of forest health and productivity

Landscape approach principles

12. Management of landscapes for social, economic, and environmental benefits

Source: FAO. 2007. Voluntary Guidelines: Responsible Management of Planted Forests. www.fao.org/forestry/plantedforestsguide/en/

Participants in The Forests Dialogue IMPF process engaged with FAO's consultative process to develop the FAO Voluntary Guidelines for Responsible Management of Planted Forests. The FAO Voluntary Guidelines have formed the basis of national guidelines in countries as diverse as New Zealand³⁶, China and Laos³⁷.

4. The Forests Dialogue's IMPF process

BACKGROUND AND DEVELOPMENT

TFD's IMPF dialogue series is an example of an international multistakeholder process that emerged from earlier international meetings and processes³⁸ that highlighted the significance of IMPF to sustainable forest management. In 2005, TFD held a scoping meeting hosted by IUCN in Gland, Switzerland, to identify the critical social, economic, and environmental factors related to IMPF. The Gland meeting report³⁹ noted that “the current challenge is to optimise future social, economic and environmental contributions from IMPF while mitigating associated negative impacts”, and the subsequent dialogue process sought “to explore management strategies and provide greater clarity on the requirements for increasing consensus and future cooperation between all stakeholders”. The scoping meeting participants agreed to explore these issues in greater depth through a series of case-study field visits and associated dialogues focused on key IMPF regions around the world.

The initial scoping meeting identified three principal themes as a framework in which to situate subsequent dialogues. These themes, which themselves evolved over the course of the series, were explored and refined in subsequent dialogues:

- ▶ under the right conditions, IMPF can provide a range of important benefits but there can also be costs;
- ▶ external drivers (such as credible certification, markets, and supporting legislation) determine how benefits and costs are realised and distributed; such drivers have the greatest influence in shaping IMPF design and in determining the impacts of IMPF operations;
- ▶ large-scale land use change has a significant impact, especially at the landscape and local levels, and landscape, ecosystems and communities are key focal issues within this context.

Field visits and dialogues followed in China (April 2006), Indonesia (March 2007) and Brazil (April 2008). These visits and dialogues included many local stakeholders as well as international participants. The programmes for, presentations to, and summaries of outcomes of, each set of field visits and dialogues are available at TFD's website⁴⁰. In addition to exploring country-specific opportunities and challenges in IMPF development, participants discussed more global issues and reviewed international planted forests initiatives – such as the development of FAO's Principles (Box 2) - currently in progress.

Over the three field visits and dialogues, participants visited planted forests on a range of scales, including industrial-scale corporate fibre plantations, state-owned forest plantations, and small-scale tree-growing by outgrowers and local communities. The TFD groups also visited local communities and indigenous peoples in the IMPF regions; sites of specific interest in both IMPF and other forest types and tenures in the regions, including those subject to encroachment; and processing facilities. Each field visit program was followed by two days of presentation and dialogue that included representatives of international leaders in the forest sector, the finance and investment sector, labour, the NGO community, academia, government, small-scale forest owners, indigenous peoples and rural communities.



Yaojian Xie leads Guangxi field tour

THE VALUE OF DIALOGUE

One of the key strengths of the IMPF dialogue process was the field component, which embedded the learning in local realities and enabled participants to learn directly from stakeholders about the impacts of IMPF. Representation from a range of sectors (see Figure 2) and countries allowed for both a holistic and a differentiated understanding of key drivers and consequences of IMPF development.

In total, 143 people participated in the three field tours and dialogues. Sixty-three percent (63%) of participants were from countries of the global South. Representation was balanced across the social, environmental and business sectors (Figure 2). Most representatives from business were from forestry companies; the investment sector was under-represented. Researchers, and representatives of governmental and intergovernmental agencies, each comprised less than 10% of participants. Women comprised 20% of participants.

Sectoral representation of IMPF dialogue participants

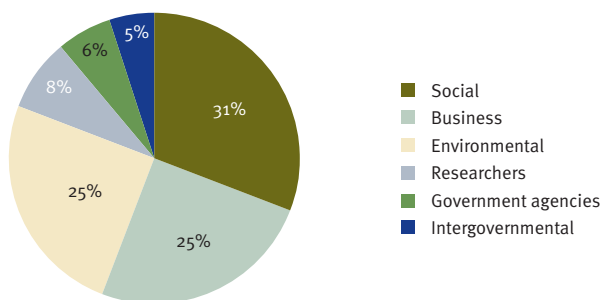


FIGURE 2

*The dialogue series operates under Chatham House rules of confidentiality and anonymity. Individuals quoted have granted consent for the use of their statements as presented here.



“I hope that the TFD process in Riau can bring global attention to the communities who are impacted by the damage happening to the forests here.”

- Radaimon,
Head of Tesso Nilo
Community Forum*



“I found the TFD visit to our community quite interesting, as your conversation and the issues you are considering are so relevant to us. I want to see what are the good things I can take from your debate back to my community.”

- Vilson Benedito de Oliveira, Coordinator of the Chiefs' Commission of Tupiniquim and Guarani Indians of Espirito Santo

TFD's IMPF Initiative challenged the Steering Committee and Secretariat to seek new and more effective means to engage with marginalised and remote stakeholder groups. TFD worked to ensure inclusion of stakeholders with a history of conflict with IMPF, and of those who felt a strong sense of exclusion from processes that determined the management of their traditional lands.

Engagement of these groups with the TFD process presented significant challenges to all parties and was accorded a high priority by the Dialogue's Steering Committee. Through proactive contact, transparent and adaptive processes, and a demonstrated respect for all stakeholders, TFD was ultimately able to engage key groups in each of the case study regions⁴¹.

TFD's Steering Committee learnt from each case study visit, and strove to diversify participation on successive tours through pre-planning, advance site visits, explicit links to related processes, and improved translation services. One outcome of this was that the number of women – although remaining significantly underrepresented overall — tripled over the course of the dialogue process. TFD was also successful in improving the representation and expression of local perspectives. In Indonesia and Brazil, the prominence of local and indigenous voices helped ensure that community views were expressed. The inclusive and adaptive process adopted by TFD led to a more formal development of a set of Principles of Participation (Box 3) to improve future dialogue series.

“Having the TFD group recognise the issues that we struggle with [as IMPF operators in China] has been affirming and has assisted us in prioritizing these same issues in our planning process. The group’s visit has provided a broader context and shared perspectives that have helped us focus our work. Overall it’s been a positive learning experience for our company.”

– Antti Marjokorpi, StoraEnso



Box 3: TFD’S PRINCIPLES AND PROCEDURES OF PARTICIPATION: AN INCLUSIVE AND ADAPTIVE PROCESS

In September 2008, the TFD Steering Committee unanimously agreed that TFD’s future work to promote, convene and follow up dialogue on key forest issues would be:

1. Inclusive of rights-holders and stakeholders
2. Respectful and consent-based
3. Pro-active in engaging with the issues of marginalised groups
4. Learning-based
5. Building on existing knowledge and capability
6. Transparent
7. Efficient, agile and rapid
8. Focused on practical ways forward
9. Reviewed and adapted



5. Principal conclusions emerging from TFD IMPF dialogues

TFD's three-year IMPF dialogue series challenged and refined participants' understanding of the issues facing IMPF policy and practice. The site visits and discussions with a broad range of stakeholders in each case study region helped participants address the challenge identified at the Gland scoping meeting to identify strategies through which all interested parties could 1) work together more effectively to optimise social, economic and environmental contributions from IMPFs and 2) recognise and address any associated negative impacts.

This section outlines the principal conclusions from the IMPF dialogues, from each of the economic, social and environmental perspectives.

5.1 ECONOMIC PERSPECTIVES

From a prospective investor's perspective, the economic dimensions of IMPF investments include: the increasing demand for wood and fibre from a growing global population and from growing economies; the dynamics of both domestic and international markets, and of resource supply; the financial returns and risks to shareholders and landowners from IMPF investments compared to alternatives; the policy contexts; and the sovereign and reputational risks associated with particular investments. From a public policy perspective, they also include a broader assessment of the economic, social and environmental benefits and costs associated with particular IMPF investments. All of these considerations will feature in investors' and governments' decisions about potential IMPF investments.

Good practice IMPF investment decisions will incorporate social (e.g. employment and skills development for the rural poor) and environmental (e.g. carbon balance, direct and indirect ecosystem services benefits) factors into decision frameworks and will accurately assess the full benefits and costs associated with IMPF investment options. In practice, such decision frameworks must take a differentiated approach that recognises the differences of scale of IMPF investments, and the respective and interdependent roles of each.



Andy White

Three categories of scale and role are evident:

- (i) **Large companies, or in some cases governments, that own or manage large-scale IMPF resources, typically from tens of thousands to hundreds of thousands of hectares.** These companies may be nationally-based (as in Brazil and Chile) or multinational, and typically also invest in capital-intensive processing facilities such as pulp mills. Businesses in this category benefit from economies of scale, and typically make substantial investments in human resources, physical infrastructure, research and development, resource protection, quality assurance, and marketing. They are also able to make substantial investments in processes such as certification, community engagement, and protection of environmental assets. The investment of this category of business in growing and processing IMPF is able to catalyse and enable the participation of those in the two categories of IMPF investor described below, in a form analogous to that of the “anchor tenant” in a shopping complex.
- (ii) **Independent growers and landowners, who typically own or manage hundreds to thousands of hectares.** IMPF investors in this category often aggregate as co-operatives, operate independently, or align themselves with customers to provide economies of scale, improve market access, and benefit from investments in research and infrastructure.
- (iii) **Small growers and landowners, whose individual resource base may be as little as a tenth of a hectare, and is often less than ten hectares.** These growers are increasingly important in IMPF enterprises worldwide. Some are organized into co-operatives or aligned with customers; those who are not may face challenges in accessing markets, resources and services. There are many initiatives, at scales from the local to the global, seeking to improve the opportunities for small growers to engage beneficially and sustainably with larger IMPF enterprises. Two such initiatives are those led by TFD in Forest Certification and Forests and Poverty Reduction⁴².

Good practice planning for IMPF investments will reflect the scale and complexity of the investment. An issue of particular significance is the timing of investments in large-scale processing facilities such as pulp mills, where project planning must ensure that wood supplies are secured prior to the commissioning of the processing plant. Examples exist where world-scale facilities based on IMPF have been established with appropriate social, environmental and resource planning; there are also counter-examples, where large-scale processing facilities have been commissioned before IMPF resources have been established, and without adequate assessment of the social and environmental consequences.



**Adenildo Coneicao
dos Santos**

The size and complexity of the IMPF should dictate the level of stakeholder participation in the planning and implementation stages. A robust partnership with relevant stakeholders should be developed and maintained throughout the life of the IMPF project, to ensure that IMPF investment and management decisions engage adequately with stakeholders and their interests.

PROPER ACCOUNTING OF BENEFITS AND COSTS

In a market economy, IMPF investments are made by private sector investors in competition with alternative investments. A full and proper assessment of alternatives necessitates a policy context that properly accounts for the social and environmental costs and benefits associated with all land uses.

It is common that governments favour particular land uses over others – for example, agriculture over forestry, or forest exploitation over forest conservation. A clear exposition of public policy, and the explicit treatment of alternative land uses within that context, is necessary to allow prospective IMPF investments to be judged properly in relation to others. For example, the environmental standards applied to IMPF operations often differ from those applied to agriculture. A full assessment, on a comparable basis, of the benefits and costs of IMPF and alternative land uses will promote a more accurate analysis of the



Oscar Artaza and
Christine Dragisic

social and environmental impacts of IMPF and alternative investments, more transparent outcomes, and a more level playing field for decisions. Within this context, where environmental services are properly valued by the market and the policy framework, the benefits and costs associated with land-use change will promote some IMPF investments and militate against others. For example, IMPF afforestation is likely to be favoured on anthropogenic grasslands without high conservation value, but not where it follows conversion of natural forests. Similarly, the impacts of plantation forests on water quality and yield will favour IMPF in some parts of catchments and landscapes, but not in others⁴³.

THE ECONOMIC BENEFITS OF IMPF INVESTMENT

The economic benefits of IMPF investments are often assessed largely in terms of returns to investors. Indicatively, a recent survey of returns on IMPF investments⁴⁴ reported internal rates of return of between 3-11% for the majority of investments in short-rotation pulpwood production, and of between 1-7% for the majority of longer-rotation solid wood production. In each case, the maximum return reported was another 50% higher than the top of these ranges.

IMPF investments can – and should – also deliver broader economic benefits to national and regional economies and to communities. However, there are few independent studies assessing the economic benefits of IMPF and related investments in a more complete sense; those that have been undertaken demonstrate that, as with other primary industries, most of the direct and indirect economic benefits associated with IMPF investments are those attributable to processing industries dependent on IMPF resources, rather than tree-growing itself⁴⁵. Conversely, the interdependence of resource base and processing investment suggests that evaluation across the value chain, from growing to market, is the most logical basis for evaluating the economic benefits of IMPF and assessing the value of those investments from a public policy perspective.

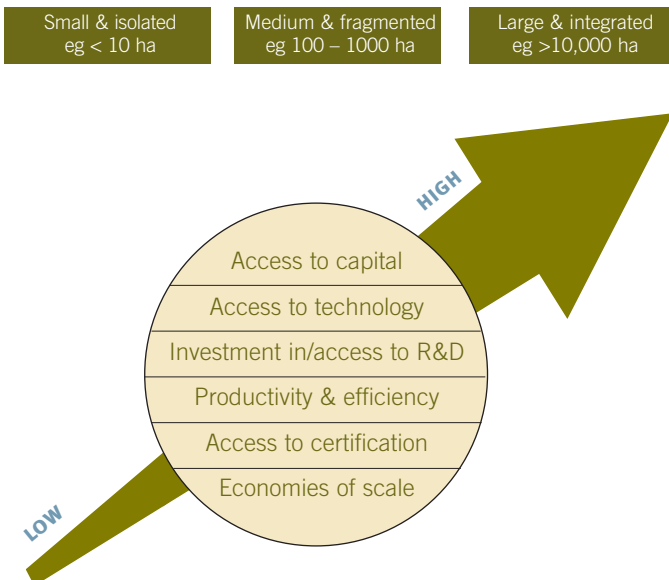
SHARING THE ECONOMIC BENEFITS OF TREE GROWING

As noted in Section 1, the growers engaged in IMPF may be classified as either large corporate or government entities, larger-scale private growers (including investment funds), or smallholders. The typical characteristics of each of these groups are illustrated in Figure 3. A considerable body of work⁴⁶ has investigated how the economic benefits from tree growing might most equitably and effectively be shared between the large entities, who typically have access to high levels of resources and technologies, and smaller growers, who do not. This work suggests these goals can best be realised by “moving towards more equal partnerships” characterised by “raising community bargaining power, fostering the roles of brokers and other third parties, and developing equitable, efficient and accountable governance frameworks”⁴⁷.



Jouko Virta

FIGURE 3. TYPICAL CHARACTERISTICS OF DIFFERENT SCALES OF IMPF GROWER



Box 4: MECHANISED VERSUS MANUAL SYSTEMS

The manner in which mechanical productivity-enhancing technology is introduced into less technologically based societies and cultures is more important than whether it is introduced. If technology is introduced that improves work conditions, reduces work hours, increases productivity, and enhances wages and benefits, then project owners, local communities and the local workforce will benefit.

If technological advancements are introduced that make working conditions more difficult and if the economic gains from the new technology are not shared with the workforce or the community, then the result will be fewer jobs and less wealth in the community.

5.2 SOCIAL PERSPECTIVES

The social consequences of IMPF are not unique to planted forests, but rather arise from the cultural and social contexts, and the national and sub-national governance frameworks, in which they are located. The capabilities of governance structures, the level of development of the region, and the approach taken by IMPF businesses, are critical in determining the social consequences of specific IMPF projects.

IMPF can help countries and regions achieve economic development goals, including the provision of significant rural employment and skills enhancement. IMPF can be a driver for both import substitution and export platform models of development. Planning and execution of IMPF projects play a key role in benefit-sharing; Box 4 presents an example in relation to the introduction of mechanization. If the IMPF project shares its productivity gains equitably with local communities, indigenous peoples, the forest workforce, and regional governments, then the local economies of IMPF project regions can be expected to develop and become more economically robust and complex⁴⁸.

If IMPF are located in countries and regions with strong social protections

such as the ILO core labour standards, clear recognition of customary rights and equitable and enforced land tenure law, then the economic and social benefits alluded to above will have a greater chance to be realised. If the IMPF is part of a vertically integrated project, the potential for economic development is enhanced but not guaranteed.

However, if the IMPF are located in countries or regions lacking strong social protections, respect for customary rights and appropriate land tenure laws, it is unlikely that the social benefits will be shared equitably;

rather, it is likely that social costs will exceed social benefits for significant portions of the population. These problems will be exacerbated if IMPF developers deliberately target locations with poor governance frameworks. As we discuss further below, planning and implementation of IMPF projects need to account for and address the social costs that projects generate.

“Nowhere in Indonesia does the legally required minimum wage equal the level of income required to meet the minimum living standard for a family. In some places it is only 50% of what is needed”.

- Rulita Wijayaningdyah, Treasurer
FSP Kahutindo, Indonesian Trade Union





Kari Tuomela

The larger the IMPF project and the less functional the national governance capacity, the greater the likelihood that social costs will be required to be borne by the IMPF project owner to create even minimal social benefits. There appears to be an IMPF project size above which social benefits are outweighed by social costs. When governance structures are ineffective and projects are put in place in a timeframe faster than the capacity of local institutions, cultures, and communities to adapt, the costs tend to outweigh the benefits for all parties except the project owners. The size that causes such social costs is not absolute but is based on:

- ▶ the capacity of the land to generate strong revenues from IMPF projects relative to other competitive land use projects;
- ▶ the profitability of vertically integrated activities;
- ▶ the ability of the workforce to bargain for wages and rates that generate sustainable and reasonable living standards (see Box 5);
- ▶ the appropriateness and enforcement of statutory laws and protections;
- ▶ the effectiveness of political, social, and cultural institutions;
- ▶ protocols within the locality;
- ▶ the advance notice and effectiveness of the planning of IMPF project owners.

Box 5: FORMAL VERSUS INFORMAL WORK

If the work organisation of the IMPF creates formal employment opportunities through either direct employment or indirect employment with specialty service companies (e.g. log hauling, tree harvesting), then workers gain, both through access to legal protections that exist in the sub region or country and through the ability to appeal to international standards such as the ILO core labour standards. If informal work is created through turning employees into contractors or 'disguised employees', then workers lose legal protections and communities and governments lose revenues required for effective governance.

In those IMPF projects located in countries lacking a robust and effective governance structure, the use of the principles and practices of **Corporate Social Responsibility may help mitigate many of the social costs by guiding the project owner about how to internalize more of the social costs.** Examples of this include IMPF where the project owner:

- ▶ has a commitment to engage with and respect the right of Indigenous Peoples to free prior and informed consent (FPIC)⁴⁹ to avoid and resolve conflicts
- ▶ recognises that the project may contribute to indigenous and/or migrant worker conflicts, and acts to avoid or resolve conflicts;
- ▶ operates with transparency in interactions with neighbouring communities, and its outgrowers;
- ▶ has a formal structure to identify social costs and acts to mitigate them, including using formal employment for all work;
- ▶ implements SFM practices that are recognized by a forest certification scheme with strong social protections, which include at minimum the ILO core labour standards and Convention 169;
- ▶ applies the above through its entire chain of production if it is a vertically integrated forest product company, and through its contractors, suppliers, and vendors if it is not an integrated forest products operation.



Laudinho Santos Souza

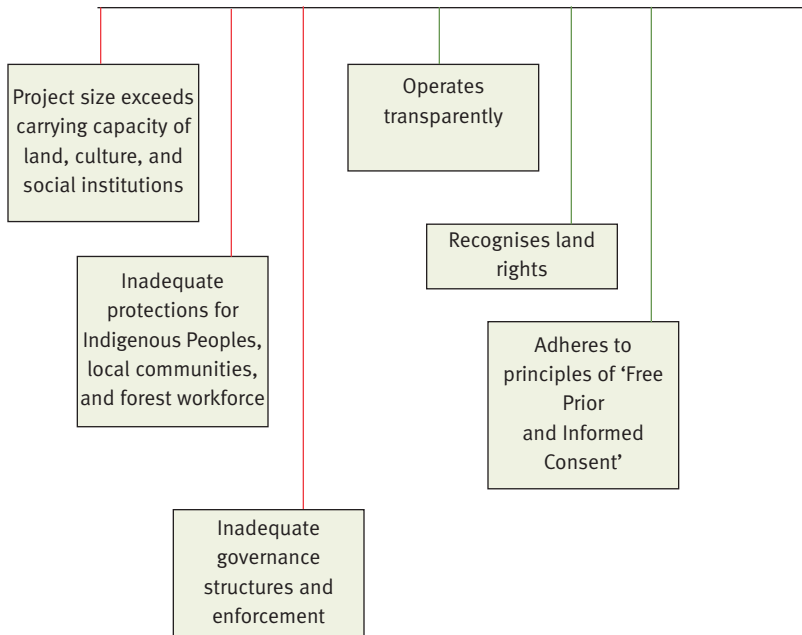
Figure 3 illustrates the key elements of IMPF project implementation along a continuum from net social costs to net social benefits.



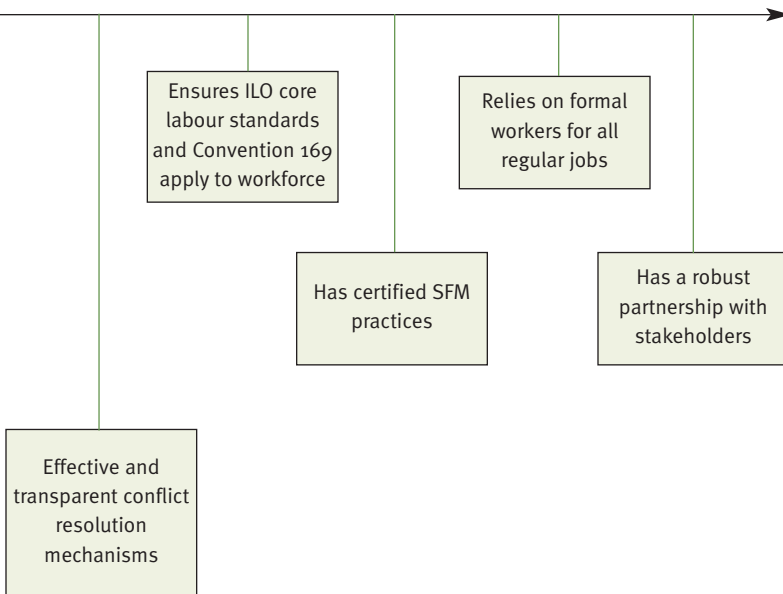
Peatlands management in Riau Province, Indonesia

FIGURE 3. KEY ELEMENTS OF IMPF PROJECTS DETERMINING THE BALANCE BETWEEN SOCIAL COSTS AND SOCIAL BENEFITS

Social Costs



Social Benefits





James Griffiths

5.3 ENVIRONMENTAL PERSPECTIVES

The environmental benefits and costs of IMPF vary according to several key factors:

- ▶ the nature of the landscape - i.e., whether it is already modified or frontier;
- ▶ landscape dynamics - whether changes are steady and progressive or fast-moving and erratic;
- ▶ the institutional and governance context - whether a basic governance system exists and is effective or not.

A full assessment of the environmental consequences of specific IMPF projects must also include interactions of each of these aspects with social and economic factors. Ecologically-sound IMPF management decisions will take a differentiated approach that reflect and are situated within the contexts of particular landscapes.

Depending on the context, such an approach may include consideration of the following issues: proactive protection of areas of high conservation value, and their incorporation within the plantation estate; maintenance or enhancement of ecosystem integrity, with consideration of landscape connectivity and linkages among protected areas; and maintenance of site productivity and health. Such an approach would incorporate biodiversity conservation practices within productive landscapes, as well as deliver other ecosystem services such as catchment protection, carbon sequestration, and emissions avoidance.

SITUATING IMPF IN THE LANDSCAPE

Spatial considerations vary according to the nature of the landscape. If the landscape has been in a highly modified state for a long period of time, as in Guangxi Province, China, the focus of conservation is likely to be at the stand level. Consequently, environmental protection-oriented activities will focus on management practices such as the protection of riparian zones, prevention of soil erosion, and maintenance of site productivity. The necessity to identify areas of high (biodiversity) conservation value is not likely to be a significant concern, with the exception of areas important for migratory species. However, IMPF establishment and management could contribute to site rehabilitation and landscape restoration (see Box 6), as part of an integrated program directed at these goals.

If the landscape has been highly modified within the past few decades, such as in Espirito Santo and Bahia States, Brazil, there is a strong imperative for the immediate application of the landscape approach⁵⁰ to optimise the value of remnant areas important for conservation. In these particular examples, remnant native forests have legislative protection and thus IMPF expansion is not occurring at the expense of native forests. In other cases where legislative protection may not be as strong, IMPF development should be guided by the landscape approach and protect all areas of high conservation value. The challenges in all these cases will be to rebuild and expand the biodiversity and ecosystem services base through both proactive and passive management - for example, to enhance connectivity between areas of native forest, and to enhance landscape functionality.



Christian Cossalter

BOX 6: THE ROLE OF IMPF IN LANDSCAPE RESTORATION: MONDI'S EXPERIENCE WITH SAINT LUCIA WETLANDS

Lake St. Lucia is the largest natural water body in South Africa and one of the largest estuarine systems on the African continent. The lake and its associated terrestrial, wetland and marine environments have long been regarded as valuable for nature conservation and were included in two Wetlands of International Importance under the Ramsar Convention in 1975. Mondi, an integrated paper and packaging company, was awarded the government privatization tender to lease and manage the public Safcol commercial timber plantations on the western shores of Lake St Lucia. The plantations were originally established by the state forest department four decades earlier, and parts were impacting negatively the biodiversity as well as the water resources of the area. Reduced flows of freshwater to the narrow lake outlet to the sea posed a particular threat to biodiversity.

Given the environmental, economic and social importance of the area, Mondi and the Greater St Lucia Wetland Park Authority appointed a representative team of technical specialists to define a new eco-boundary that recognized the importance and functionality of the extensive wetland systems of Lake St Lucia and the biodiversity requirements of the associated iSimangoliso Wetland Park. The key wetlands were delineated and returned to the park together with some of the prized former grassland areas where "sense of place" was an issue. The land is being rehabilitated to wetlands and grasslands, restoring soil and water conditions and encouraging biodiversity. Mondi retained enough of the commercial areas suitable for IMPF to establish a profitable plantation base, and the iSimangoliso Wetland Park gained 9,000 hectares (5,000 hectares from Mondi areas) of high conservation value ecosystems.

The net result is that today both the plantations and the park are thriving enterprises, and trust levels are high. Elephant, rhino, buffalo, cheetah and other game roam freely within the commercial forestry area, which forms a buffer between the Park, local communities and commercial farming areas. Sensitive wetland areas have returned to functionality and are supplying critical seep water for the St Lucia Lake system. Valuable ecosystems associated with the commercial plantation area have extended the habitat for many species in the iSimangoliso Park.



If IMPFs are being established in a frontier (or recently post-frontier) landscape such as in Riau Province, Indonesia, the imperative for application of the landscape approach is the greatest and, invariably, the most challenging; it is rarely applied as comprehensively or systematically as most stakeholders would wish. Key actions in such contexts include the identification of forests and other areas of high conservation value, and implementation of measures to ensure that these areas remain protected from conversion to other land-uses. In situations such as this, IMPF could be used effectively as a buffer for protected ecosystems. Decisions made at this stage of landscape transformation will have the greatest impact on the overall ecosystem integrity of the future landscape – both in terms of its biodiversity value (e.g. whether key species assemblages are maintained) as well as its supply of ecosystem services (e.g. hydrological cycle regulation, carbon balances).



Nursery worker

THE DYNAMIC OF LAND-USE CHANGE

Future options to maintain ecosystem integrity are shaped by the current dynamic of land-use change. The options available to community, private sector and government actors to implement landscape approaches that safeguard key biodiversity and ecosystem attributes are largely shaped by the underlying dynamic of land-use change. The nature of this dynamic - whether it is planned and progresses steadily, or is unplanned and consequently erratic - is determined by prevailing governance and institutional arrangements and by the drivers of land-use change. IMPF projects are proceeding in situations characterized by both extremes of this dynamic.

Where land-use change is planned and progressive, there are a variety of opportunities for IMPF to contribute to biodiversity conservation and enhancement⁵¹. For example, where there are numerous small and isolated remnant forest areas of high conservation value, well-designed IMPF can enhance the integrity of such areas compared to other alternative land-uses such as pasture or crop land. In such cases, best practice includes enhancing the quality of connectivity between areas of high conservation value through restoration with native species. Experience from several industrialised countries (see Box 7) shows that, over the long-term, appropriately-managed plantations can act as an important vehicle for enhanced biodiversity conservation activities. In other cases, where little remains of the original vegetation cover, and where land use pressure is high, opportunities for IMPF to contribute to biodiversity conservation in landscapes may be less obvious, but should nevertheless be explored.

If the land-use changes are relatively rapid, unplanned, erratic and opportunistic, as in the case of Riau Province, Indonesia, both the prospect and the implementation of considered land-use planning to safeguard existing ecosystem values - as well as to keep future options open - is much more difficult and uncertain. These situations are those where good land-use planning processes are most urgently needed, but the Riau situation⁵² reflects the scale of the challenges faced under these circumstances. The largely uncontrolled nature of land-use change in such circumstances often reflects weak forest and land-use governance that threatens to undermine IMPF companies' efforts for social and environmental responsibility.



APRIL's wetlands experts

For example, while the proposed reservation of a high conservation value forest area around Tesso Nilo National Park, in Riau Province, Sumatra, Indonesia, has the support of both an IMPF company and NGOs, it faces major challenges due to illegal and speculative conversion of forest to oil palm. Under such circumstances, using IMPF to “cordon-off” an ecologically important core may be the only realistic – albeit controversial⁵³ - strategy for safeguarding future options. A contemporary example is the case of the Kampar Peninsula (Riau Province, Sumatra), where the plantation grower APRIL is working to protect remaining conservation values by establishing a ring of acacia plantations around the peninsula's degraded perimeter⁵⁴.

There is no clear guidance of how principle should balance pragmatism in these challenging circumstances. One case in point is the application of the High Conservation Value Forest (HCVF)⁵⁵ concept. Many actors concede that much, if not all the remaining, natural forest in Riau would qualify as HCVF and are concerned that diagnostic processes intended to identify and conserve these forests regularly fall victim to political compromise. However, as illustrated by the Tesso Nilo case, the HCVF process means little if the HCVF forest, once identified, cannot be secured.



Mubariq Ahmad

Box 7: PLANTED FORESTS AND BIODIVERSITY RESTORATION

After experiencing large-scale forest loss, several industrialised countries embarked on ambitious planted forest schemes that have provided a matrix for national biodiversity conservation strategies. In England, over 1 million hectares of non-native softwoods were planted between 1925 and the 1980s on low-quality agricultural land that had been without trees for hundreds of years.

The 62,000-hectare Kielder Forest in northern England, originally planted with non-native Sitka spruce, was at one point the UK's largest (and among Europe's largest) manmade forest. In addition to its high timber yield – 1400 tonnes daily, responsible for supplying 5% of the UK's softwood requirement – Kielder has also played a role in wildlife and biodiversity conservation.

Since the 1980s, the planted forest has been restructured to form a mosaic that provides a multi-purpose forest landscape. Biodiversity enhancement efforts include planting of native broadleaf species, conservation and restoration of bogs, establishment of ponds and landscape corridors, and planting of tree species that provide food for endangered animal species. Conservation has become a key objective of forest management. A biodiversity assessment conducted by the Forestry Commission demonstrated that these planted forests offer favorable conditions to many native species, improve habitat quality, and make a significant contribution to future biodiversity in the UK.

Kielder Forest is also recognised as a key recreational asset to the estimated half a million visitors who come to utilize its extensive trail network. It serves as an example of the role that planted forests can play in wildlife conservation and recreation. Planted forest programs that have made contributions to biodiversity have also been implemented in South Korea and Japan.

Sources: WWF International, IUCN- The World Conservation Union, Forestry Commission of Great Britain, 2003. Global Partnership on Forest Landscape Restoration: Investing in People and Nature.

Demonstration Portfolio: Kielder Forest, UK.
http://www.unepcmc.org/forest/restoration/globalpartnership/docs/United_Kingdom.pdf

Humphrey, J.W., Ferris, F. and Quine, C.P. eds, 2003. Biodiversity in Britain's Planted Forests: Results from the Forestry Commission's Biodiversity Assessment Project. Forestry Commission, Edinburgh.

THE INSTITUTIONAL, POLICY AND GOVERNANCE FRAMEWORK FOR ENVIRONMENTAL PROTECTION

An individual company's Corporate Social Responsibility (CSR) principles and practices are important in determining the ultimate environmental impacts of an IMPF project, but the prevailing institutional, policy and governance frameworks are often more significant. During the TFD IMPF Dialogues, much discussion revolved around how a company's CSR influences environmental outcomes. It was also apparent that public policy, government decision-making processes, institutional capacity and the overall governance framework - or lack thereof - are often more important determinants of environmental outcomes than is how an individual company chooses to behave. Companies, for example, may put in place teams to act against illegal logging within the area of their control, but such efforts will have limited impacts if the responsible government agency is unable, or unwilling, to control it elsewhere. Similarly, a company may apply best practice by identifying and reserving areas of high conservation value, but this may be undermined by flawed land-use licencing, or industrial development plans that do not provide adequate protection for such areas.

This does not mean that companies should be less concerned about how diligently they apply their own CSR practices, or be held less accountable about the ultimate impacts of their activities. To the contrary, in such cases, there is an even greater onus on responsible companies to be fully aware of how the prevailing governance framework will shape or distort their own plans and actions and how these will be perceived by third parties. Perhaps this is most evident in a situation where a company establishes its fibre-processing capacity without first making adequate investment in its core plantation resource. Weak governance frameworks in such situations means that the land-use change process will inevitably be accelerated by pressures to access forest resources and the opportunities that arise as a result; in such circumstances, traditional and customary land rights and practices, many of which may have sustained environmental benefits, are typically ignored or overwhelmed, and the prospects for systematic, participatory and adequate land-use planning diminish.



Wang Xiaoping

Field visits conducted as part of the IMPF Dialogues emphasized the imperative of competent and effective land-use planning, recognising the interests of all stakeholders to achieving good environmental outcomes associated with IMPF development. It was also clear that such planning is primarily the responsibility of government, although it can be greatly assisted in this task by the constructive engagement of other actors, including IMPF businesses and environmental NGOs.

The field visits also revealed the linkages that can emerge between lack of recognition of local and traditional tenure and rights and environmental outcomes associated with IMPF development. For example, in Indonesia, where local and traditional tenure and rights were overridden by the national government assigning forest land to conversion for plantation development, some companies harvested the natural forest concessions but then declined to establish plantations because of the contested status of the land and rights to it. Companies preferred instead to seek concessions of additional natural forest areas, to compensate for their lack of plantation resource, rather than to reduce their production targets. Consequently, the environmental impacts of plantation development are magnified. This vicious circle has been partly responsible for driving deforestation in parts of Indonesia where IMPF are expanding.





Dialogue in progress in Vitória, Brazil

INTEGRATING ECONOMIC, SOCIAL AND ENVIRONMENTAL PERSPECTIVES TO OPTIMISE THE OUTCOMES, AND MITIGATE THE COSTS, OF IMPF INVESTMENTS

IMPF investments, in both established and new forests and processing facilities, are taking place in the context of larger economic, social and environmental changes. These include climate change, and the consequent need for both mitigation and adaptation strategies; the increasing pressure on environments and natural resources, with the consequent imperative to enhance sustainability at scales ranging from local to global; and the land-use changes associated with market forces, social dynamics and environmental change. Many of these changes are occurring at unprecedented rates. These contexts, which offer opportunities as well as challenges, emphasize the importance of designing and implementing IMPF in ways that integrate their economic, social and environmental dimensions. They also emphasize the urgency and importance of action. We discuss how these goals might be achieved in the next Section.



6. Conclusions - Learnings from TFD's IMPF Dialogue process

TFD's IMPF Dialogue process sought, firstly, to understand how the forces driving IMPF expansion were translating into outcomes on the ground in regions where IMPF expansion is focused and, secondly, to learn from these about how IMPF projects might best be structured and implemented to deliver environmental and social, as well as economic, benefits.

It is apparent that IMPF:

- ▶ will play an increasing role in meeting global demands for wood and fibre products, which are growing with population and economic development;
- ▶ projects of appropriate scale, designed and managed to promote benefit sharing, can deliver social benefits;
- ▶ could contribute substantially to delivering critical environmental services at a range of scales, and that these services are becoming more rather than less important;

Conversely, it is also apparent that IMPF projects of inappropriate scale, and those which are poorly-conceived or managed, are likely to generate environmental and social costs which outweigh their benefits.

Over the course of the three-year TFD IMPF Dialogue process, participants' understanding and perceptions of IMPF evolved. For example, the conclusion of previous work⁵⁶ that IMPF were a neutral technology became more nuanced as it became apparent that a range of factors – some external and contextual, and others within the authority of IMPF proponents - determined the extent to which any particular IMPF project was beneficial or detrimental to various stakeholders. The fundamental importance of clear and just land tenure laws to recognise and secure indigenous peoples' and local communities' rights and interests became apparent as the only means to avoid or address conflicts associated with large scale developments such as those based on IMPF. It also became apparent that many IMPF projects attract large numbers of migrant workers and rely on contract labour rather than workers in a longer-term



Peter Kanowski

employee relationship. Workers in these situations are typically more vulnerable to exploitation, and their rights and interests – as well as those of indigenous peoples and local communities – need to be recognised and addressed in IMPF-based development.

TFD's IMPF Dialogue process confirmed the relevance and the value of the principles enunciated by FAO for the responsible management of planted forests (Box 2), and emphasised that their interpretation must be differentiated according to local contexts and realities and to the scale of IMPF activities. The Dialogue series highlighted the critical importance, to both specific IMPF projects and to the IMPF sector more generally, of:

- ▶ good governance, to achieve socially-just and environmentally-beneficial outcomes from economically-driven IMPF investments;
- ▶ high levels of corporate social responsibility on the part of IMPF businesses, particularly – but not only - where governance is weak;
- ▶ respect for the rights of indigenous and local communities, based on recognition of the principle of free, prior and informed consent for activities affecting these rights
- ▶ empowerment of the forest workforce, including small holders and outgrowers through:
 - maximizing formal contracts and employment for workers engaged in “regular” work;
 - promotion of self-organization for small growers and contractors, and
 - honouring ILO core labor standards;
- ▶ effective integrated land-use planning – to protect areas of high conservation and cultural values, to integrate IMPF with other land uses and enterprises, and to mitigate against climate change;

- ▶ establishing and enabling dialogue and conflict resolution processes that address the interests and concerns of stakeholders, and promote mutually-beneficial partnerships;
- ▶ exploring and implementing models of IMPF-based development which give effect to these principles, for example as articulated by FAO for Responsible Management of Planted Forests.

TFD's IMPF process also identified a series of practical actions that those engaged in IMPF investments and activities should implement, in the context of these principles.



**Leodonia Costa Ferreira and
Cleusa de Brito Ferreira**

1. National and sub-national governments should:

- ▶ recognise principles such as those enunciated by FAO for Responsible Management of Planted Forests,
- ▶ implement integrated land-use planning processes addressing all land uses relevant to IMPF development; these processes should recognise and address the rights and interests of all relevant stakeholders,

2. Institutions financing or underwriting IMPF investments should:

- ▶ implement the Equator Principles⁵⁷, which are currently applied in only a minority of cases;
- ▶ institute more effective due diligence for IMPF-related investments;
- ▶ co-invest with governments to develop good governance structures and build capacity;
- ▶ encourage the use of independent certification as a means to assess social and environmental performance of the investments they support.



Marcus Colchester

3. Businesses⁵⁸ engaged in IMPF activities should:

- ▶ be proactive in exercising their corporate social responsibilities, in particular to address gaps in government's capacity and processes. This would include, but not be limited to:
 - ▶ responsible project planning, following a systematic approach such as that outlined in Box 8;
 - ▶ appropriate land use planning, comprising:
 - a thorough assessment of ecosystem services associated with the project – for example, through undertaking a Corporate Ecosystem Services Review (Box 9)⁵⁹;
 - land acquisition and management following the principle of FPIC, and with appropriate consultation with local communities and other stakeholders;
- ▶ adopting a resource-prudent approach that matches investment in processing capacity to IMPF resource supply, rather than using it to leverage resource supply;
- ▶ establishing effective stakeholder engagement and conflict resolution processes;
- ▶ advocating for the necessary basic legal infrastructure for engagement with, and participation of, indigenous peoples and local communities, and IMPF-based labour.

4. Governments, agencies, businesses and individuals engaged in IMPF activities should:

- ▶ pursue models of IMPF-based development that share benefits and costs equitably. This means, but is not limited to:
 - restricting investments to those where social and environmental costs do not exceed benefits;
 - accepting that some landowners, including those with traditional rights, may choose not to engage in IMPF activities;
 - fostering partnerships between stakeholders that promote and enhance the sustainability – on each of economic, environmental and social terms - of IMPF projects;
 - committing to sustainable forest management, and its verification through credible certification schemes;
 - developing locally-appropriate resource supply and labour participation arrangements that respect relevant ILO core labour standards;
 - building the capacity of local communities to benefit from IMPF activities on terms of their choice.



Kathia Vasconcelo

The contributions of the participants in each of the three regions that hosted TFD's IMPF Dialogue process emphasized the critical importance, and the urgency, of giving effect to these principles and practical actions – to enhance the benefits, and address the costs, of IMPF.



Gerhard Dieterle

Box 8: Sustainable IMPF Decision Support Framework for Use by Public, Private and Community IMPF Resource Owners, Managers, and Developers

The Decision Support Framework would:

1. Consider FAO's Responsible management of planted forests Voluntary Guidelines (2006)
2. Be available for use by any project developers on a voluntary basis
3. Primarily assist improved IMPF deployment in developing countries (which often lack planning and enforcement capacity relating to natural resources), but could also enhance IMPF project design and implementation in OECD countries
4. Primarily assist with new projects but could be used to mitigate impacts associated with existing IMPF resources.

The Decision Support Framework could consist of the following existing resource planning methodologies and tools and, as needed, be adapted for IMPF project development, e.g.

- Environmental Impact Assessment
- Social Impact Assessment
- Corporate Ecosystem Services Review Guide
- Measuring Development Impact Assessment
- Conflict Resolution Guide
- Social Engagement & Community Engagement Guides
- Outgrower/Contract IMPF Grower Guides
- Responsible Use Guidelines for Forest Biotechnology

It would fully leverage and reference existing FAO and ITTO forest management guides and tools. The Decision Support Framework could also be supported by Best Practice Case Studies to illustrate sustainable IMPF deployment. Overall, the Decision Support Framework would aim to assemble, compile, and integrate existing resources, rather than develop new tools or guides.

The benefits generated by the Decision Support Framework would include:

1. Reduced economic business risk
2. Improved resource permitting efficiency
3. Maximised social and community development benefits
4. Maximised direct and indirect ecological service provision and associated benefits

7. Next Steps

Although the TFD IMPF Dialogue series has concluded, participants who engaged with the process are committed to continuing to work, both together and with other actors, to implement and progress the outcomes discussed in this Review. There are many ways in which this can happen – for example, through:

- ▶ engagement with the development of national guidelines, or the equivalent, consistent with FAO's Voluntary Guidelines for Responsible Management of Planted Forests – as has happened in New Zealand, and is currently occurring in China, Laos and elsewhere;
- ▶ the development of resources and processes such as those suggested for a Sustainable IMPF Decision Support Framework, or its equivalent. Other processes already underway, such as WWF's New Generation Plantations Project⁶⁰, are consistent with, and would facilitate, this intention;
- ▶ implementation by IMPF businesses of the approach and assessments envisaged by the World Business Council for Sustainable Development's Corporate Ecosystem Services Review;
- ▶ further dialogue, exploration and resolution of critical issues identified in this TFD process under related processes, such as the TFD Dialogue on Forests and Poverty Reduction.



**Peter Holmgren and
Gary Dunning**

Box 9: THE CORPORATE ECOSYSTEM SERVICES REVIEW

The Corporate Ecosystem Services Review (ESR), developed by the World Resources Institute jointly with the World Business Council for Sustainable Development and the Meridian Institute, is a structured methodology that helps managers proactively develop strategies to manage their business risks and opportunities arising from their company's impact on ecosystems and dependency on critical ecosystem services. Five WBCSD member companies - Akzo Nobel, BC Hydro, Mondi, Rio Tinto, and Syngenta - tested the methodology. The ESR is available in Portuguese, Spanish and Japanese.

Source: www.wri.org/project/ecosystem-services-review; To download the ESR: www.wbcsd.org/Plugins/DocSearch/details.asp?DocTypeId=25&ObjectId=Mj5NjQ

Endnotes

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- ⁴⁹ FPIC refers to the right of indigenous peoples to give or withhold their free, prior and informed consent to activities that will affect their rights to their lands, territories and resources, including their intellectual property and cultural heritage. The right is affirmed in the UN Declaration on the Rights of Indigenous Peoples and in the jurisprudence of the international human rights treaty bodies including the Inter-American Court of Human Rights. The UN Declaration applies to States (i.e. governments) and is not a directly enforceable legal

obligation; however a number of voluntary standards have included it as a best practice for the private sector. Procedures for the application of the principle of FPIC are still evolving and vary according to legal and customary norms. In some countries, the underlying rights of indigenous peoples to which FPIC applies are established consistent with international norms through treaties and national law; in others there is a lack of clarity about the underlying rights and extent of the areas over which FPIC should be exercised, owing to a lack of clarity about which areas are subject to indigenous rights and/or because countries have plural legal regimes.

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⁵⁷ www.equator-principles.com

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The Forests Dialogue (TFD), formed in 1999, is an outgrowth of dialogues and activities that began separately under the auspices of the World Business Council for Sustainable Development, The World Bank, the International Institute for Environment and Development, and the World Resources Institute. These initiatives converged to create TFD when these leaders agreed that there needed to be a unique, civil society driven, on-going, international multi-stakeholder dialogue forum to address important global forestry issues.

TFD's mission and purpose is to bring key leaders together to build relationships based on trust, commitment and understanding and through them, generate substantive discussion on key issues related to achieving sustainable forest management around the world. TFD's dialogues serve as a platform to share aspirations and learning and to seek new ways to take collaborative action on the highest priority forest conservation and management issues.

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TFD is developing and conducting international multi-stakeholder dialogues on the following issues:

- ▶ *Forest Certification*
- ▶ *Illegal Logging and Forest Governance*
- ▶ *Intensively Managed Planted Forests*
- ▶ *Forests and Biodiversity Conservation*
- ▶ *Forests and Poverty Reduction*
- ▶ *Forests and Climate Change*

There are currently 23 members of the TFD Steering Committee. The Committee is responsible for the governance and oversight of TFD's activities. It includes representatives from private landowners, the forest products industry, ENGOs, retailers, aid organizations, unions, and academics.

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TFD's Mission

To address significant obstacles to sustainable forest management through a constructive dialogue process among all key stakeholders. The Forests Dialogue's approach is based on mutual trust, enhanced understanding and commitment to change. Our dialogues are designed to build relationships and to spur collaborative action on the highest priority issues facing the world's forests.